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WAWRZYNIEC RUDOLF\*, ALMIRA YUSUPOVA\*\*

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**Relational Resources As A Source Of Regional Competitive Advantage. Illustrated By The Examples Of The Lodzkie Voivodship And The Novosibirsk Oblast<sup>1</sup>**

**Abstract**

*The paper aims to show relational resources as an increasingly significant factor in the competitiveness of territories. The authors argue that regions trying to increase their competitive position should undertake actions to facilitate the creation of a knowledge base and an institutional environment. This elaboration relies on the resource-based theory, used especially for analyzing relations between an organization and its environment. The paper presents theoretical considerations based on the desk research methodology and worldwide literature. Descriptive characterizations of two cases complete the presentations.*

*The paper presents examples of two regions from different socio - economic systems, illustrating the role of relational resources in their development policy. These regions are the Lodz Voivodeship in Poland and the Novosibirsk Oblast of the Russian Federation. In their home countries, both of them had a strong economic position before the 1980's, and in the time of*

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\* Ph.D., University of Lodz, Faculty of Management, Department of City and Regional Management

\*\* Professor, Novosibirsk State University, Faculty of Economics; Leading researcher, Russian Academy of Sciences, Siberian Branch, Institute of Economics and Industrial Engineering

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*today's recession are considered as regions with a slightly above-average potential for growth and good prospects for the development of their economy. Their current competitive positions in the investment market, in comparison with other regions in their countries, are also presented.*

*The paper presents evidence that activities aimed at supporting relational resources (innovation policy, cluster development, cooperation between authorities and regional stakeholders) are conducted on a large scale. It also shows the importance given to relational resources in the developmental strategies of both regions. However, determinants resulting from the socio-economic system and regional qualifications in the area of development management provide different opportunities to use these resources in practice.*

**Keywords:** *regional competitiveness, relational resources, economic institutions, regional stakeholders*

## **1. Introduction**

The growing trend towards globalization and regionalization forces regions in different parts of the world to take on the increasingly difficult challenge of finding their optimal national or international position, enabling them to compete effectively for mobile growth factors. This position is influenced not only by tangible resources, but increasingly also by knowledge and expertise, as well as the existing relations, i.e. the ties and networks which allow for the transfer and diffusion of knowledge within the region. For the purposes of this paper, we assume that regions operate in the territorial market, where the market constitutes the resource allocation mechanism which allows to employ the concepts of competitiveness-building developed in the corporate sector. The paper concentrates on the so-called relational resources of regions, understood as lasting ties and contacts between entities in the region, as well as ties between regional actors and the external environment. The authors, based on the available literature, provide justification for the fact that in the new paradigm of territorial development, relational resources have become increasingly important, while the role of traditional resources, i.e. tangible ones such as natural resources, transport infrastructure, etc., ceases to be crucial for the success of a region. There are signs that this trend is permanent.

## 2. Competitiveness of regions from the perspective of the resource-based view

Regional competitiveness is defined as the ability of a region to adapt to changing environmental conditions. We define the region as a meaningful and relevant entity that affects the behavior and performance of local organizations (Boschma 2004, pp.1001-1014). Regions compete with other regions to maintain or improve their market position. T. Markowski (1996, p. 10) distinguishes two categories of competition. The first, called direct competition, is competition for access to a variety of external benefits, including those offered by incoming investors. It occurs when regions specialize in the same or similar activities and have a strong market position (Boschma 2004, p. 1005). The other category, called indirect competition, includes the activities of regional authorities aimed at creating favorable conditions for the operation of enterprises, which is supposed to translate into better business performance, and consequently, into the entire region's economic results (Markowski 1997, p. 39). In the period of 2014-2020, sectoral regional specializations (the so-called 'smart specializations') have become one of the pillars of the new policy to support regions in the European Union.<sup>2</sup> The obligation to delineate the said smart specializations, imposed by the European Union on regional authorities, has become a pretext for active discussion at the regional level - including in Poland, which has resulted in more precise setting of development directions than in the previous programming period (2007-2013).

B. Winiarski rightly points out that the desire to increase regional competitiveness is an indirect goal of development policy (Winiarski 1999, p. 19). In his view, the realization of this objective to the extent required only opens the way to implementation of the final objectives of regional development policy, formulated taking into account social and environmental premises. It is important that these actions should be reflected in the quality of life of residents and be subordinated to the values recognized by these residents.

S. Korenik and A. Zakrzewska-Póltorak (2011, p. 86) point out that the theories of regional development belonging to so-called 'classical economics' were based on simplifying assumptions. These assumptions include: full access to market information, full knowledge of the situation related to location, lack of impact of institutional factors (e.g.: the regional policy run by the state or the region),

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<sup>2</sup> Smart Specialization or RIS3 (Research and Innovation Strategies for Smart Specialization) is a strategic approach to economic development through targeted support for research and innovation. It involves a process of developing a vision, identifying the place-based areas of greatest strategic potential, developing multi-stakeholder governance mechanisms, setting strategic priorities and using smart policies to maximize the knowledge-based development potential of a region, regardless of whether it is strong or weak, high-tech or low-tech, (<http://www.nordregio.se/Publications/Publications-2012/Smart-Specialisation-for-All-Regions/>) (Accessed: 14 .07.2014).

excluding technical progress, rationality of decision-making, etc. from the analysis. Modern theories of regional development depart from many of the assumptions, thereby bringing these theories closer to reality. It is assumed that factors of production are non-homogeneous, quality-based competition plays an important role, the market is not perfect, and that deviations from equilibrium lead to a non-standard increase or decrease, causing spatial spread and backwash effects.

In the area of regional development, with the advent of the analysis of transaction costs and externalities, the following areas have become an object of research: cooperation of entities, connection networks and collaboration, i.e. specific assets (Jewtuchowicz 2013, p. 111). Modern theories of regional development highlight the importance of such factors as knowledge and innovation. It is said that a region competes as a whole, in contrast to competing on the basis of individual resources. According to T. Markowski (1999, pp. 102 – 105), in order to be considered competitive in the long term a region as a whole should have the ability for so-called expanded reproduction of intellectual resources, namely the creation of added value, known as a club good. This added value grows, especially in an environment created by networks of operators. These are the so-called positive externalities, or intellectual resources in the form of knowledge, resulting from cooperation between the entities incorporated into the network (Markowski 1999, pp. 102 – 104). In our study we pay special attention to these resources, which we call relational resources.

The **resource-based theory** indicates the important role of resources in the development of an organization (Pfeffer, Salancik 1978). This theory is based on the assumption that organizations are governed by their environments. According to this theory, the analysis of relations between the organizations within a network can help managers to understand the power relations and interdependences occurring between their organization (i.e. a territorial organization) and its institutional stakeholders. Such knowledge allows the management of the organization to anticipate possible centers of influence in its environment and suggest ways to offset their impact. In our paper we use the term "territorial organization", understood as the regional administration along with its leadership (executive authorities of the region). Its primary objective is to ensure that collective needs of residents of the territory or the region are met. The scarcity of public resources, the complex system of competences, and the multitude of institutional stakeholders in the environment that have an impact on the satisfaction of the region's inhabitants require entering into relationships with them in order for a territorial organization to develop. According to this theory, the susceptibility of a territorial organization to the impact of its environment depends on its demand for resources (material, natural, physical, human, social, political, cultural, intellectual/knowledge) (Koliba, Meek, Zia 2011, pp. 87 –

88), which are needed to stimulate the region's development. In this paper we concentrate on social resources and intellectual resources.<sup>3</sup> We show that regions will not be able to effectively build a long-term sustainable competitive position without developing strong relationships with their stakeholders (municipalities in the region, NGOs, local business associations, universities, etc.), oriented towards common objectives.

The fact that the resource-based theory is formulated at the level of analysis appropriate to the level of the organization weighs in favor of this theory as the proper theoretical reference for research on the development of regional competitiveness (Hatch 2002, p. 97). It represents the point of view of local authorities and territorial administration management looking to the outside, in the direction of their institutional environment. J. Pfeffer and G. R. Salancik, considered to be the pioneers of the resource-based view, see organizations as coalitions of interests which change the goals and directions of their activity when changes occur in the coalition structure (Hatch 2002, pp. 22–23). Internal coalitions are groups operating within an organization (e.g.: organizational units in regional administration and units subordinated to regional authorities, combining certain functions). External coalitions, on the other hand, include the following stakeholders: residents and their non-profit associations, authorities of other territorial entities, universities, business environment institutions, and other interested parties. The above-mentioned authors attribute a crucial role to external coalitions in influencing the behavior of the organization. They believe that "in order to properly describe the behavior of organizations, the coalition nature of organizations and the way in which organizations respond to pressures from the environment need to be addressed" (Hatch 2002, p. 24).

The first step in taking into account resource dependence is an in-depth understanding of the network of relations in which a territorial organization participates, as well as what resources among those which it brings into these relations are highly valued by its partners, and what resources are scarce, i.e. are sourced from the partners. The second step will be to find ways to avoid dependence on or subordination to other participants in the environment of a given organization (Hatch 2002, pp. 94-95).

Therefore, organizations search for ways to control their dependence on resources. In the case of territorial organizations, headed by public authorities, political resources can be considered as assets, as they can be translated into a more favorable position from which to develop relations with stakeholders. In this theory, emphasis is placed on the environment due to the fact that the

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<sup>3</sup> Social resources mean social trust, reciprocity, and durability built up between two or more actors that allow for the development of human knowledge (...). Intellectual/knowledge resources – knowledge, information, intellectual property (...). (Koliba, Meek, Zia 2011, p. 87-88)

survival of a territorial organization ultimately depends on its ability to obtain resources and support from external coalitions. Thus, from the perspective of the resource-based theory, regional authorities offer various incentives to their institutional stakeholders through the development policy they implement, in exchange for the contribution of these organizations in the form of resources which are at their disposal, as well as support in various dimensions, including the political one. Among the incentives, financial resources from institutions at the central level come to the fore, as their distribution is coordinated by the territorial organization. However, the contribution of various institutional stakeholders is not equally valued by a territorial organization. Hence, coalitions of stakeholders (associations of local governments, business associations or mixed groups integrated in the context of a joint project) have the opportunity to gain a greater influence and control over the territorial organization. In order to maintain the support of external coalitions, the territorial organization needs to negotiate the terms of exchange which will ensure a continuous supply of the desired resources (Hatch 2002, p. 27). At the same time, the organization has to remain flexible enough to be able to react to situations arising from changes in the environment, which is not easy in the existing institutional system of public organizations to which administrative regions belong. The model of resource dependence treats organizations as "structures of coordinated behavior", whose ultimate goal is to obtain from the environment the support necessary to survive (Pfeffer, Salancik 1978, p. 32).

Further reflections will focus on the analysis of selected factors of competitiveness. We have chosen those factors that contribute the most to the development of relations between entities in the region, as well as to building networks and establishing collaboration between these entities, etc. Further considerations are therefore concentrated on the importance of networks and outward cooperation for regional competitiveness.

### **3. Relational resources and their role in building a region's position in the territorial market**

As shown above, regional competitiveness depends on many development resources and the institutional system which allows their use. T. Marszał and T. Markowski point out a general relationship between a region's material resources and its economic development. At the same time, they argue that above a certain level, further development takes place mainly on the basis of intangible resources, e.g. knowledge and expertise (Marszał, Markowski 1998, p. 134).

Intangible resources and the existing relations in a region thus need to be subject to a more thorough analysis in our further considerations. Hence the regional knowledge base will be analyzed first, then the institutional environment and the territorial organization's relations will be considered.

### **3.1 Knowledge resources in a region as a factor of investment attractiveness**

Knowledge and expertise resources are related to the human factor, hence they have the ability to multiply – disseminating and spreading to other organizations. It is also assumed that externalities associated with knowledge are somewhat limited geographically. This means that companies operating in the vicinity of sources of knowledge achieve greater benefits from externalities of knowledge and are likely to exhibit better performance in terms of innovation and higher productivity than companies located elsewhere (Audretsch, Feldman 1996, pp. 630 – 640). Access to information plays an important role in this respect. Thanks to co-location in the region, successful innovations of local companies do not remain unnoticed. In addition they are willingly disseminated, virtually without the need to incur additional costs. This results in the formation of a network, and the more sources of knowledge located in a given area, the greater the benefits for local entities.

It should be noted that a larger number of sources of knowledge in a region usually means a greater amount of (potential) connections with the outside world. It also means more information for each of the local agents, available through additional regional ties. It follows that the benefits of access to the information stream are not limited to a particular region. This happens due to the fact that local partners can benefit from links with the outside world through other local actors.

It should be noted that the effective transfer of knowledge and interactive learning are not just a matter of the existing connections. The ability to absorb knowledge is also important. Local companies having similar expertise in specific areas of knowledge will be characterized by a greater ability to absorb it, as well as the ability to learn from it, than companies from outside the region. This is related to the specific nature of so-called tacit knowledge (Howells 2002, pp. 871 – 884). An effective transfer of tacit knowledge requires a common knowledge base, personal interactions, as well as mutual understanding and trust. This does not mean, however, that geographical proximity is a prerequisite for the transfer of tacit knowledge (Rallet, Torre 1999, pp. 373 – 380). Social networks can also be a media for this transfer. However, due to the fact that social networks are often localized geographically, the resulting effects of diffusion of knowledge tend to also be territorial in nature (Boschma 2004, p. 1006).

For the emergence of new impulses and innovative ideas, a region should provide economic entities with broad access to the so-called universal knowledge base. This means that organizations would have access to diverse but complementary sources of knowledge from the same region, or obtained through cross-regional ties. Therefore, we may define clusters as robust and highly competitive groups of enterprises with a specific business profile as their surrounding institutions (scientific, service oriented, administrative).

Regions may and should initiate and foster cooperative links in the region (clusters) using a number of instruments, such as: organizing training programs, workshops and conferences, undertaking promotional activities aimed at soliciting new enterprises to participate in the cluster, consulting on the preparation of plans for the cluster's development and expansion, and purchasing assets (and intangibles).

In light of the above-presented considerations, it can be concluded that regions can and should play an important role in the innovation process. They can gather knowledge and build a competence base. Not only do they provide access to local and non-local information, they also provide a base where the regional potential, characterized by a high degree of tacit knowledge, is collected, reproduced and transformed through actions and interactions of local actors. This results in a further increase in the level of diversity of the region. This diversity plays a fundamental role, both as a potential source of new products as well as a valuable asset providing complementary capabilities. Thus, the process of knowledge creation and learning has been extended from the level of an organization to the territorial level.

### **3.2 The region's institutional environment**

The above-presented base of knowledge is not enough for the integration of businesses and creation of an interactive learning process. According to Carlsson et. al. (2002, pp. 233 – 245), various mechanisms (e.g.: markets, networks) are necessary to coordinate activities within and among organizations, making an important contribution. In addition to economic entities, there is a wide range of other actors and organizations such as research institutions, universities and other educational units, NGOs, etc., that provide a complementary contribution necessary for the implementation of the innovation process. Regional competitiveness depends not only on the presence of competent organizations within the region, but also on the ability to coordinate the activities of these organizations. It should be particularly emphasized that the more developed are the relations between different parts of the system, the more dynamic the system is.

Transfer of knowledge is undoubtedly the most important relationship in the innovation system. There are different channels through which knowledge can be shared, such as labor mobility and company mergers (Capello 1999, pp. 353 – 365). At the same time, many other mechanisms, such as markets or networks, may be indicated that can facilitate the formation of such ties, enabling knowledge transfer through the previously mentioned channels. Basically, innovative companies can buy the necessary knowledge and other forms of contribution on the market. It is more preferable, however, to acquire such knowledge through networking relationships that are based on trust and that can bring beneficial results for all the network's participants. The way in which these relationships are managed can be strongly conditioned by the existing institutional environment specific to a region.

It should be emphasized that the intensity and nature of the process of knowledge creation and learning mechanisms, such as the nature of cooperation between companies, are affected by the institutional environment (Edquist 1997, p. 20). The environment usually consists of an independent set of institutions in a particular region. Their actions are often complementary in the sense that the effectiveness of one institution increases the profits of other complementary institutions (Williamson 1998, pp. 104 – 105). The institutional environment characteristic of a given region also influences the intensity of the relations, and hence the degree of interactive learning and economic performance of local companies. There is a quite common view that institutions existing in old, industrialized regions have contributed to the inability to transition from one developmental trajectory to another. This sort of situation is called an institutional closure. At the same time, a regional institutional environment characterized by mutual trust is treated as an added value of a region, which supports processes of learning and innovation.

According to P. Maskell and A. Malmberg (1999, pp. 9 – 25), in this latter type of environment information is transferred much easier if partners have common cultural elements, such as a common language or system of values. This is clearly contrasted with an institutional environment characterized by low levels of social capital, which does not stimulate networking or inter-organizational learning and does not provide a sound basis for carrying out effective market transactions. The level of trust is an important dimension of the efficient formation of partnership relations.

Regions gradually build different types of institutional environments, which act as incentives and selection mechanisms. Institutions affect not only the nature and intensity of the existing relations, but also the capacity of regions to upgrade, transform or restructure specific institutions (including legal and administrative solutions) required for the development of new economic

activities (Boschma 2004, p. 1008). Therefore institutions should be flexible and open to change. The implementation of new solutions and their dissemination often requires deep modernization of old institutions, or the establishment of new ones. There is no doubt that the above-mentioned ability of institutions to change significantly affects the long-term competitiveness of regions.

The two previously-mentioned intangible regional resources, i.e. the knowledge and expertise base, as well as regional relational resources, have a positive impact on regional competitiveness in the long term. An institutional system based on relations is particularly important due to its systemic nature, hence in this paper it has been equated with relational resources. Both of these categories of intangible resources are difficult to mimic or imitate in other regions. Informal institutions (e.g. a culture of mutual trust), resulting from years of tradition or specific determinants of a given region, can serve as one such example. Such institutions cannot be purchased on the market, they also cannot be quickly changed in the process of implementing a development policy. However, consistent efforts of a territorial organization's management towards engaging regional institutional stakeholders in the joint implementation of the development policy may result, in the long run, in the creation of a culture of mutual trust and greater stability in the adopted directions of territorial development.

#### **4. Investment attractiveness of regions and development based on relational resources**

Two examples of regions functioning in different socio-economic systems are presented. The liberal market economy system is represented here by a Polish region (the Lodzkie Voivodeship) and the market system with remaining elements of a centrally planned economy is represented by a Russian region (the Novosibirsk Oblast). The choice of the regions to illustrate the processes shown in the paper was purposeful. It was decided to choose regions which used to be leading industrial centers up until the 1980s, and then lost their economic position and fell into decline. After the period of transition they are characterized by an above-average investment attractiveness in their respective countries and by a potential that allows for international growth. The choice was also impacted by the academic entities localized there, represented by the respective authors, and their participation in the project FOLPSEC, fulfilled in 2012-2015 as part of the Seventh EU Program (PEOPLE).

The authors realize that there are substantial differences between typical European regions on the NUTS 2 level and regions in Russia, as in the latter case regions are relatively larger in terms of area and are characterized by

a lower population density. Therefore it can be assumed that the direct benchmark for the Novosibirsk region is all of Siberia, as all of Poland is the same benchmark for the Lodzkie Voivodeship. In contrast, the Russian Federation and the entire European Union could also comprise similar benchmarks for the presented regions. Both regions also represent similar competitive advantages, such as their geographical location, education & research potential, and the diverse structure of the regional economy.

#### **4.1 Lodzkie Voivodeship (Poland)**

The Lodz region (Lodzkie Voivodeship) consists of an 18,218.95 sq km area and is located in the center of Poland. Its population is 2.5 million and its density is 138 persons/sq km (Local Data Bank 2014). The region emerged in its current shape in 1999, as one of sixteen voivodeships in Poland. Prior to that time there were 49 voivodeships and their considerable fragmentation did not allow for carrying out an effective regional policy. The establishment of so-called 'big regions' was aimed at simplifying economic integration processes with the European Union and at enabling the regions to more fully absorb funds from the EU cohesion policy. Poland became a recipient of such funds at the time it joined the European Union in 2004. In 2014 the Lodz region is one of 274 NUTS 2 regions in the European Union.

The key influence on the economic structure of the voivodeship is exerted by the strong cultural and manufacturing traditions shaped throughout the last century. Already in the 20th century the Lodzkie Voivodeship (especially the metropolitan area and its neighboring area) were considered one of the strongest industrial centers in the country. At that time there were many enterprises operating in the light industries (textiles, clothing), machines, power engineering, wood, metallurgy, graphic arts, chemistry, food and paper. Although over time these sectors have lost their developmental momentum, they are still significant for the regional economy. The industrialization of the voivodeship is not evenly distributed; industry is focused mainly in the big city areas, especially in the Lodz Metropolitan Area. In 2013, 925,303 people were employed in the Lodzkie Voivodeship. It is a traditional typical industrial region, although the recent changes have led to the development of both services and agriculture. In 2003 almost 40% of employees worked in industrial companies. The share of workers in market-based non-financial services, where the index has exceeded 50%, is increasing. Also agriculture has a significant share in gross value added generated in the voivodeship.

The investment attractiveness (Hildebrandt et al, 2014) of the voivodeship has been maintained on the medium level in the country, and this situation has not changed much over the past 10 years – the Lodzkie Voivodeship has remained in its number eight position in Poland (among 16 regions), although the financial crisis which began in 2008 caused a temporary lower position in the ranking for four years. The following regions have the highest positions in the ranking: Śląskie (1), Mazowieckie (2), Dolnośląskie (3), Małopolskie (4), Wielkopolskie (5), Pomorskie (6), Zachodniopomorskie (7). Below the Lodzkie Voivodeship are relatively smaller regions, such as Opolskie (9), Kujawsko-pomorskie (10), Lubuskie (11); and five voivodeships located in the eastern part of Poland: Podkarpackie (12), Świętokrzyskie (13), Warmińsko-mazurskie (14), Lubelskie (15) and Podlaskie (16). The investment attractiveness analysis has been prepared by the Institute for Market Economics (Instytut Badań nad Gospodarką Rynkową) each year since 2005. The following characteristics of the region comprise the synthetic index that this rating is based on: transport availability, labor resources, market absorption, economic infrastructure, social infrastructure, level of economic development, condition of the environment, public safety level, voivodeship's activity towards investors.

The analysis of social and economic situation shows that the Lodzkie Voivodeship is not an internally integrated area. In many fields its intra-regional disproportions have continued unabated and in some cases even strengthened in the first decade of the 21st century. This has been caused mostly by the voivodeship's uneven economic development, inconsistent infrastructure, weak cooperative links in the economy (particularly at the local level), and a disintegrated system of public intervention. At the same time the region is one of the most promising territories in Poland and has potentially wide possibilities of development in view of the European integration process. The Lodz region's central location and new infrastructure connections create favorable conditions for it to expand its activity and progress into the territory of the whole country. Particularly significant is the fact that the region is situated at the intersection of the two most important international communication routes: east and west (the A2 corridor), as well as of north and south (the A1 corridor). By implementing a multidimensional process of social integration and consolidation of the activities of public and social entities, it is possible to shape Poland's role in Central Europe so that the national social and economic activity, within the scope of the European economic sector, could be concentrated in this region. The main center of this polarization can be the bipolar structure of Warsaw and Lodz (the so-called Central Macro region). This vision, taken as a destination aim for development of the Lodzkie Voivodeship in 2020, presents the region as: *open to the world, with*

*its educated and active society, an area of competitive economic sector, open to international cooperation, easily available, yet having its own cultural and economic identity* (Development Strategy 2006, p. 13).

The reform of the territorial division introduced in Poland in 1999 provided local self-governmental authorities with many competences in the area of conducting their development policy, and in the following years this competence has expanded. Today it provides regions with a wide array of possibilities for building regional partnerships for development in areas such as: mutual assistance in building and progressing cluster initiatives, engaging socio-economic partners in the process of creating and implementing the strategy for regional development, and progress in international cooperation in terms of generating socio-economic development. It is worth mentioning that the notion of relational resources appears in the analytical part of the development strategy of the Lodzkie Voivodeship 2007-2020 (Development Strategy 2006, pp. 8-12). In the SWOT analysis, formulated as early as in 2006, most of the same notations can be found in the part which pertains to the region's weaknesses. Thus, it can be seen that this is an area which needs to be improved in the upcoming years. Two notations concern relational resources defined in terms of "opportunities" can be found, which indicates an awareness of their role in development processes among the authorities and administration.<sup>4</sup>

Below we present some examples of knowledge resources and elements of the institutional environment established in the Lodzkie Voivodeship. This indicates the increasing role of relational resources in the region's development and in its current competitive position.

### **Selected knowledge resources in the Lodzkie Voivodeship**

- Universities and research centers in the Lodz region (34 university-level education institutions). The University of Lodz, Lodz University of Technology and Medical University are among the best in Poland
- Research and development centers established by private investors from different industries (i.e.: B/S/H, Indesit, Fujitsu, Samsung Electronics)
- Effective and resourceful institutional stakeholders in the region (local self-governments, non-profit organizations, businesses) and their mutual links (for example, strong inter-organizational relations between the regional authorities along with their administration and Lodz Special Economic Zone (an independent entity functioning on grounds of separate provisions).

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<sup>4</sup> *Development Strategy for the Lodz Region for the years 2007-2013, (2006), file:///C:/Users/Wawrzyniec/Downloads/dev\_strategy\_lodz\_region\_07\_20%20(3).pdf, Łódź. (Accessed: 11 .07.2014).*

- The potential of the promising regional specializations in the following industries: modern textiles and fashion; advanced building materials; medicine and pharmacy; cosmetics; energy (including renewable energy sources); innovative agriculture and food processing; information technology and telecommunications.

#### **Selected elements of the institutional environment of the Lodzkie Voivodeship**

- The consultative organizational structures (bodies) established to facilitate the process of development policy at the regional level (the Scientific Council, the Monitoring Committee, the Regional Territorial Observatory). These involve institutional stakeholders from the public, social and private sector in planning the implementation of the development policy.
- Fostering the cluster structure in the region's territory and expanding the clusters to reach beyond the region's administrative borders. The basis of such operations is the Regional Innovation Strategy. It is worth noting that at present there are twelve cluster initiatives operating in the area of the Lodzkie Voivodeship in the following industries: textiles, clothing; food industry; eco-energy, IT and electronics; tourism; construction; and biotechnology. However, they are relatively new structures, which calls their future development into question.
- The infrastructure for enterprise development (the Industrial and Technological Park of Bełchatów and Kleszczów, the Kutno Agro-Industrial Park, the BioNanoPark, the Boruta Zgierz Industrial Park).
- The Lodzkie Voivodeship acquired the majority share of the most important organization in the region's business environment (the Lodz Agency of Regional Development), which is an expression of its intentions to lower its dependence on external entities functioning in the area. This enabled the region to conduct its development policy with the use of this entity, oriented especially towards building relations with the sector of small and medium-sized enterprises.
- The active participation of the Lodz regional authorities in the national structures of regional cooperation (the Convent of Marshals of Voivodeships, the Union of the Provinces of the Republic of Poland) has led to the development of a common position of the 16 regions towards the Polish government and the European institutions. The directors of individual departments in the regional administration participate in cyclical meetings which group together people fulfilling similar functions from all 16 regions in Poland.
- A strong international partnership network, developed over the 15 years of the functioning of the region in its current shape, in the form of partner regions from different geographical areas. The Lodzkie Voivodeship carries out formalized

cooperation with 15 regions in the West (Austria, France, Spain, Germany, Switzerland, the United Kingdom, Italy), in the East (Belarus, Russia, the Ukraine) and in the South (the Czech Republic, Hungary).

- Creating the Regional Office of the Lodzkie Voivodeship in Brussels, providing a link with the European Union institutions and regions from other European countries. Representing the Marshal of Lodzkie Voivodeship in the Committee of the Regions in Brussels. Taking part in regional international cooperation organizations.

It is worth noting that many of the above-mentioned activities have been undertaken over the last few years and are directly related to Poland's accession to the European Union, where a participatory approach and relational potential building is a principle popularized as a value added of the EU cohesion policy. This shows how important the conduct of development policy is at both the European and the national level. Nevertheless, the regional level has been also growing in importance and the creative regional initiatives may strengthen the relational potential of the region.

#### **4.2 Novosibirsk Oblast (Russia)**

The Novosibirsk region has a very strong background as it was one of the most dynamically developing territories of the Soviet Union and Russia since the middle of the 20th century. Under the current Russian administrative system, the Novosibirsk region is called the Novosibirsk Oblast and is recognized as a separate entity of the Russian Federation system. During the transition period, the economy of the region faced serious problems, with the output of such dominant industries as machine building and electronics greatly decreased. The region's specialization was changed, and it began to become a center for services, finance and transport activities.

At the beginning of the 21st century, a great deal of effort was put into achieving the region's previous leading positions. The regional economy was modernized towards technical renovation and production of competitive products. These efforts led to rather positive results. According to official statistical data, the GRP of the Novosibirsk Oblast in 2012 was 659.5 billion rubles, and it increased by 10.2% compared to the previous year, with a growth of about 80% in comparison to 2007.<sup>5</sup> More than 230 large and medium sized industrial companies operate in the Novosibirsk region, most of which concentrate their activities in high-tech areas. The region's economy is based on

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<sup>5</sup> Администрация Новосибирской области, [http:// www.nso.ru](http://www.nso.ru) (Accessed 20.09.2014)

a combination of transport and communications, construction, agriculture, and trade, and its developed industrial sector which is oriented to both the B2B and consumer markets.

The regions GRP rates and its industries' growth in general exceeded the average national level by 30%; hence the position of the Novosibirsk Oblast in Siberia has improved significantly. The growth in construction could be compared with such leading Russian territories as Moscow, Saint Petersburg and Tatarstan (Kolomak, 2014, p.728-740). However, there still are many indicators according to which the region's position is not so attractive. The insufficient development of a business environment is a factor which limits its ability to attract new investors and does not facilitate the growth of local businesses. (Novoselov, Volyanskaya 2014, pp. 312 – 319)

According to the regional policy of the Russian Government, all territories have to develop strategies of social and economic development projected till 2020. The strategies were prepared by researchers, experts and businessmen and then approved by the regional authorities in 2004-2007. Some examples from the Novosibirsk region's strategy are presented below. They indicate an official understanding of regional positions and problems. We consider them to be a more or less adequate reflection of the existing reality.

At the moment of the strategy's development (2007), the region occupied *leading positions* (top 5 or top 10 among 89 regions) in terms of the following indicators:

- Number of organizations doing research and development,
- Number of small enterprises,
- Number of highly educated people per 1000 persons,
- Production of grain and meat,
- Volume of retail turnover and services,
- Volume of trucking and passenger shipping (by railroads and planes).

The region occupied middle positions (top 30 or top 40) in terms of the following indicators:

- Innovative activities,
- Foreign economic activities.

The region occupied low positions (top 50 or lower) in terms of the following indicators:

- Share of population with low revenues,
- Integrated level of region's relative creditability,
- Density of hard-surface roads.

It should be noted that all the positions listed above were determined according to official statistical data of 2006-2007.

While a great deal of effort has been made since that period and resulted in some improvements, nevertheless the regional economy still suffers serious problems. Some figures showing the regional situation at the end of 2012 are presented below in Table 1.

**Table 1. Positions of Novosibirsk Oblast in 2012**

Criterion	Place among regions (total number 85)
Space	19
Population	17
Level of unemployment	37
Average monthly income	29
Number of students per 10000 of population	11
GRP per capita	41
Level of investments per capita	44

Source: Федеральная служба государственной статистики (Росстат), <http://www.gks.ru/>.

It is interesting to note that within the analytical part of the Strategy of the Novosibirsk Oblast only one element was classified as an opportunity for development. This was: “inter-regional and international cooperation and integration”. According to the regional authorities, the future development of the regional economy is supposed to be connected with relational resources, and their influence on the region’s competitive position will increase. Some examples of knowledge resources and elements of the institutional environment which could be observed in the Novosibirsk Oblast are presented below.

### **Selected knowledge resources in the Novosibirsk region**

- A high number of universities and higher education institutions; 16 state universities, 13 private institutes and 3 military institutes are currently operating in the Novosibirsk region. Novosibirsk State University is one of top four Russian universities, listed in well-recognized international ranking systems (Times Higher Education World University Rankings, QS World University Rankings, Webometrics, Worldwide Professional University Rankings Rank Pro).
- A high number of research units; Siberian divisions of the Russian Science Academy, as well as the Russian Medical and Agricultural Academies are based in Novosibirsk. All areas of research are developed in academic institutes. Some of them – the Institute of Nuclear Physics, the Institute of Catalysis and others – have leading positions in the world.

- Research and educational units and programs of companies operating in different industries; While previous elements of knowledge resources were mainly governed by the state, these units are established by private business.
- Various non-profit and self-government organizations; these units are of both international and local origin. Though they do not play a crucial role in the regional development at this time, they have a rather high potential.

It is possible to define three main competitive advantages of the Novosibirsk region. They are as follows:

- High research educational potential based on the concentration of academic activities. Convenient geographical location in the center of Russia at the intersection of important transportation routes.
- Diverse structure of its regional economy, which creates favorable conditions for the development of different industries from agriculture to construction and transport.

All the above-mentioned advantages are reinforced by the important role of small and medium-sized businesses and a well-developed banking system. It should also be noted that Novosibirsk is a well-known IT center, with many worldwide known companies. High tech companies located in the Novosibirsk Oblast provide 75% of all means of disease diagnostics produced in Russia, 60% of X ray equipment and about 90% of software for hosting virtualization.

Innovative development is one of the main regional activities. An effective regional innovative system is being constructed, which includes: technical and research education; a knowledge generation system; infrastructure for innovations; a system of state support for innovative business; and other elements (Kravchenko, Untura, 2011, pp. 253-255).

The oblast's regional development is associated with the creation of several clusters which should support significant growth. The region's strategy covers the creation of such clusters in the transport-logistics, construction, electro-technical and electro energy machine building and consumer sectors.

Based on the examples mentioned above, it is possible to conclude that knowledge resources could be considered one of the main drivers of the regional economy. A special institutional environment is required for this type of development, some elements of which are already being developed.

### **Selected elements of the Novosibirsk region's institutional environment**

- A number of special bodies established by the regional authorities in order to support innovative development (councils, committees, etc);
- A set of official documents approved in order to facilitate the regional economy, including cluster development (strategies, programs, etc.);
- A diverse infrastructure for innovations in the form of several technoparks (“Academgorodok”, “Novosibirsk”, a biotechnopark) and special areas for innovations;
- A diverse infrastructure for the development of industrial production, represented by a logistic and industrial park and special logistic centers;
- A number of activities have been undertaken by the regional authorities in order to promote extended cooperation at the regional level and at the level of companies (exhibitions, conferences, workshops, etc);

It is difficult to find any other industrial center in the Eastern part of Russia where all the competitive advantages which are deemed important from the long term perspective are combined. However, it should be noted that they are not being used yet. Positive regional development is impossible without inter-regional cooperation and integration. It should be pointed out that effective regional development requires significant investments. Total investments in the economy and the social sphere of the Novosibirsk Oblast reached 174.6 billion rubles in 2013. The level of foreign investments was about \$859.5 million, which is 111.4% of the 2012 amount.<sup>6</sup> The investment rating of the region, estimated by the well-known Russian agency Expert RA, is assessed as 2B, which means medium investment potential and moderate risk.<sup>7</sup> Many investment projects concerning the logistics, energy, high tech and retail sectors have been implemented in the region in recent years.

Relational resources, partnership cooperation, and formal and informal integration are very important for the competitive position of the Novosibirsk Oblast. Each large scale industrial enterprise can be characterized by a system of complicated partnership relations. A number of business associations (BA) are currently operating in the region. Our research results show that BA membership helps leading firms to use and to improve their market power (Yusupova 2012, p. 78). We have found that BAs also help to develop small innovative businesses, as they provide informational support and different opportunities.

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<sup>6</sup> Администрация Новосибирской области, <http://www.nso.ru> (Accessed 20.09.2014).

<sup>7</sup> Стратегия социально-экономического развития Новосибирской области до 2025 года, <http://www.nso.ru/page/2412> (Accessed 20.09.2014).

## 5. Conclusions

The competition between regions for mobile growth factors is a challenge for their authorities and administration. Regions today operate in a dynamic market environment, which stimulates them to create and pursue their competitive position in both the national and international dimensions. A region's relational resources have become increasingly important in creating this position. Regions should gather knowledge and build their competence base. They should provide access to local and regional information and provide a base where the regional potential is collected, reproduced and transformed through the actions and interactions of local actors.

A region's competitiveness also depends on its ability to coordinate the activities of different organizations – its institutional stakeholders. The more developed the relations are between different parts of the system, the more dynamic the system is. Therefore, regions should build their institutional environment emphasizing both its incentives and mechanisms. These are institutions which affect the nature and intensity of the existing relationships and the ability of regions to modernize, transform and restructure certain legal institutions and administrative solutions.

The two selected cases of regions definitely have some common features. At the same time, these regions develop in a different environment. It has been mentioned that the Polish economy is strongly influenced by the EU regulation, and by rules and models which have proved effective in the countries of Western Europe. Siberian regions in general, and the Novosibirsk Oblast in particular, are developing more or less independently; they do not receive much support from the federal government and are rather flexible. It should be noted that most elements of knowledge resources and the institutional environment are, in the case of Russia, represented by public entities. The role of private business and capital at the moment is rather modest. The Polish situation is quite different, as it has significantly strengthened its knowledge base and the institutional environment thanks to support from the EU. The financial support, as well as the support in the form of diffusion of experiences between regional administrations from different states and regions and its institutional stakeholders, has resulted in improved competence in this field.

A certain role of relational resources in economic development can be perceived in the case of the Novosibirsk Oblast. In its long-term development strategy and the dimension of national and international cooperation was observed as one of three “possibilities” included in the SWOT analysis in the strategy prepared in 2007. The development of the second-after-Moscow academic center, and its attempt to combine its potential with business is

impressive. However, there has not been enough space for governance processes in economic development in the investigated case. The Lodzkie Voivodeship in Poland has proved its commitment to creating many links with institutional stakeholders within the region, at both the national and international levels. It is worth noting that the international position of the region may be strengthened by its attempts to integrate with the neighboring region – Mazowieckie. The coordination of functional links between the two regions will result in a strong bipolar European macro region.

Both cases demonstrate the growing importance of relational resources. Nevertheless, the determinants derived from the socio-economic system of each country result in different possibilities in terms of their use of relational resources in practice.

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## Streszczenie

### ZASOBY RELACYJNE JAKO ŹRÓDŁO PRZEWAGI KONKURENCYJNEJ REGIONÓW NA PRZYKŁADZIE WOJEWÓDZTWA ŁÓDZKIEGO ORAZ OBWODU NOVOSYBIRSKIEGO

*Artykuł ma na celu pokazanie zasobów relacyjnych, jako nabierającego na znaczeniu czynnika konkurencyjności terytoriów. Autorzy starają się wykazać, że regiony chcące zwiększyć swoją przewagę konkurencyjną powinny podejmować działania, aby ułatwić tworzenie bazy wiedzy oraz otoczenia instytucjonalnego. W artykule oparto się na teorii zależności od zasobów, wykorzystywanej zwłaszcza dla analizowania relacji pomiędzy organizacją a jej otoczeniem. Opracowanie ma charakter teoretyczny z wykorzystaniem metody desk research przy użyciu szerokiej, światowej literatury przedmiotu. Rozważania kończy prezentacja dwóch deskryptywnych studiów przypadku.*

*W opracowaniu przedstawiamy przykłady dwóch regionów z różnych systemów społeczno – gospodarczych, ilustrujące rolę zasobów relacyjnych w ich rozwoju. Są to: Województwo Łódzkie z Polski oraz Obwód Novosybirski z Federacji Rosyjskiej. Oba regiony posiadały silne pozycje gospodarcze do lat 90-tych XX w., a obecnie, po okresie recesji, uważane są za jednostki posiadające nieco ponadprzeciętny potencjał rozwojowy w swoich krajach oraz dobre rokowania co do rozwoju gospodarki. Pokazano ich aktualne pozycje konkurencyjne na rynku inwestycyjnym na tle innych regionów z ich macierzystych krajów. Zaprezentowano dowody na to, że działania zorientowane na wspieranie zasobów relacyjnych (polityka innowacyjności, rozwój klastrów, współpraca władz z interesariuszami) są prowadzone z dużym rozmachem.*

*Pokazano również, jakie znaczenie nadano zasobom relacyjnym w strategiach rozwoju obu regionów. Natomiast uwarunkowania wynikające z system społeczno-gospodarczego oraz kompetencje w zakresie zarządzania rozwojem dają różne możliwości wykorzystania tych zasobów w praktyce.*

**Słowa kluczowe:** konkurencyjność regionu, zasoby relacyjne, instytucje ekonomiczne, regionalni interesariusze