



## **INSTITUTIONAL ECONOMICS IN THE RESEARCH OF LOCAL AND REGIONAL DEVELOPMENT PROCESSES – A THEORETICAL AND PRACTICAL CONTEXT**

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This paper is an attempt to present the multidisciplinary nature of the research of local and regional development processes, with a special emphasis on institutional economics. Regional science, regional studies or urban economics are fields of social sciences which refer to the economic dimension of human decisions, concerning the location patterns of industrial activities, places for living, visiting, as well as the impact of political decisions on spatial structures. Since decisions of this kind always appear in territorially specific legal, social, relational or cultural – in other words institutional – conditions, it opens a possible way for linking regional science and institutionalism together. However, one of the biggest challenges for the institutional economics lays in using its theoretical framework for empirical analyses, which occur to be particularly difficult in relation to research on local and regional level. Analysis of two highly recognizable indices measuring some institutional factors supporting economic activities – Doing Business and Human Development Index – show that they can also be applied on sub-national level.

**Keywords:** Regional, Local, Institutional economics, Doing business, HDI.

### **Introduction**

There is some field of science still finding its definition and still not easy to include them in formal classifications. This field looks for its place in the domains of economics, geography, sociology, and political science. The only thing being not doubtful here is the subject of research, which is a place, but again – broadly defined. The latter means that even the definition of geographical scope for this field of science can be either narrow (very small units) or broad (international spaces of economic or international flows). This field of science appears predominantly under the name of *regional science*, but it also competes with *regional studies* term. Both of them, however, are classified as a field of social sciences concerned with analytical approaches to problems that are specifically urban, rural, or regional. All of them refer very directly to the economic dimension of human decisions, concerning the location patterns of industrial activities, places for living, visiting, as well as the impact of political decisions on spatial structures.

Interdisciplinary character of this field of science allows to derive from socio-economic geography, sociology, architecture and urban planning or, last but not least, from economics. Referring to the recent one, the emerging field of economic studies – institutional economics – seems to be particularly promising area of scientific exploration of the processes of local and regional development. Unlike

mainstream economic approaches, it underlines social and historical dimensions of human decisions. The methods of managing enterprises, the role of trust in economic transactions, regional and international differences of lifestyles as a source of demand diversification, or even the will of paying taxes to the government – are only few interesting research domains of institutional economics.

In this context, can be institutional economics helpful for local and regional development issues? Does local and regional institutional environment (both formal and informal) affect strongly enterprises' competitiveness and human well-being? What are the institutional reasons that people and enterprises prefer to concentrate in some places while escaping from the other? These are the main questions arising from the role of economic institutions in explaining regional development processes.

The aim of this paper is to explicate and arrange the relationships between institutional economics and regional science, taking into account both theoretical and practical context of this issue. To illustrate this subject, the presentation and overview of *Doing Business* indices counted for the regional levels, as well as so-called Local Human Development Index is applied. This extensive international research, dedicated to the regulations of economic and social relations, is a good description of an important role of institutions for economy and society on the local and regional level.

### **Regional and Urban Economics – Origins and Areas of Research**

The roots of the economic perspective in the research on cities' and regional development can be identified in the works conducted at the beginning of 19<sup>th</sup> century (land-rent mechanism by D. Ricardo<sup>1</sup>, analyses of the value of rural land around cities by J. H. von Thünen).<sup>2</sup> These methods were further developed but the early models from the beginning of 20<sup>th</sup> century, using methods employed by social geographers and economists (e. g. W. Christaller's reflections on the evolution of the settlement hierarchy<sup>3</sup> or A. Lösch's general spatial order theory<sup>4</sup>).

These works have contributed to the development of so-called "regional science and urban economics" developing dynamically in the second half of the 20<sup>th</sup> century. They were initiated by the model of the city by W. Alonso explaining the behavior of households and businesses in the urbanized areas.<sup>5</sup> Also, E. M. Hoover's<sup>6</sup> works on agglomeration economies defined as economic benefits of geographical concentration of population, buildings, industries and services on a relatively small area<sup>7</sup>, stand for a significant contribution here.

From the very beginning, studies on local and regional development or in other words – sub-national dimension of socio-economic processes had a multidisciplinary nature. Therefore, they were the subject of interests of specialist of such areas, like economics, geography, sociology, but also architecture and urban planning, or anthropology. However, we can agree that this area of scientific exploration lays mainly in the "intersection of geography and economics. Economics explores the choices people make when resources are limited. (...) Geographers study how things are arranged across space, answering the question, where does human activity occur. Urban economics puts economics and geography together, exploring the geographical dimension of location choices of utility-maximizing households and profit-maximizing firms."<sup>8</sup> Putting it in more detail, the scope of regional and local economics refers to the following issues:

<sup>1</sup> D. Ricardo, *On the Principles of Political Economy and Taxation*, London 1817, chapter II

<sup>2</sup> H. J. Thünen, *Der isolierte Stadt in Beziehungen auf Landwirtschaft und Nationalökonomie*, Hamburg 1863

<sup>3</sup> W. Christaller, *Die zentralen Orte in Süddeutschland*, Gustav Fischer, Jena 1933

<sup>4</sup> A. Lösch, *Die räumliche Ordnung der Wirtschaft. Eine Untersuchung über Standort, Wirtschaftsgebiete und internationalem Handel*. Fischer, Jena 1940

<sup>5</sup> W. Alonso, *A Theory of the Urban Land Market*, "Papers and Proceedings of the Regional Science Association", vol. 6 (1), 1960, pp. 149-158.

<sup>6</sup> E. M. Hoover, *The location of Economic Activity*, McGraw Hill, New York 1948

<sup>7</sup> Ph. McCann, *Urban and Regional Economics*, Oxford University Press 2001, pp. 55-63.

<sup>8</sup> A. O'Sullivan, *Urban Economics*, McGraw Hill-Irwin, New York 2007, p. 1.

1. Analysis where economic activities and households locate
2. The role of transportation costs in location of economic activity
3. The role of proximity in economic relations
4. Why and where people migrate.

Regional and urban economics also has its normative character, mainly by formulating the recommendation for various policies, such as transport policy, regional development policy (e. g. European cohesion policy), social policy, crime policy, or housing policy. In the sphere of public goods supply in the cities, it also concerns such issue as public spaces management.

The basic subject of research in this field of knowledge is a territorial unit called “region”. There is a vast literature on its definition of this notion in economic terms.<sup>9</sup> They tend to define „region” as functionally coherent spatial unit, distinguished from the surrounding areas in terms of selected criteria, being a part of the country but not necessarily coinciding with its formal administrative division (or even crossing its borders). However, recently the concept of both local and regional development concerns not so much the size and spatial extent of the area, but rather a “philosophy” of perceiving space and its dwellers as a coherent economic entity, with its own vision of the future. In other words, the “territoriality” of development is always associated with a specific geographical, economic and social space.<sup>10</sup> Thus, region can be perceived as a separate administrative unit, but much more often it can be treated as informal spatial arrangement treated as a whole, from the point of view of certain criteria.

In consequence, in contemporary regional science and regional studies, the adjective “regional” or “local” are enriched by the adjective “territorial”, exemplified in the merger of geographical, cognitive, but also social and institutional dimensions of space. Territory is, therefore, no longer identified with physical space only (analyzed by the traditional location theories in terms of the cost of land, capital, labor and transport), but represents the meeting place of market relationships and social regulation forms.<sup>11</sup>

In this context, studies on urban, local and regional development can draw from the intellectual heritage of institutional economics which assumes the historical trajectories of development, as well as internal social relations, determine the ways in which economic entities reach their goals. In a broader context, the institutional environment (especially these shaped in the conditions of spatial proximity) is not only a framework, but it can also be a source of new ideas and contribute to sustainable growth and competitiveness.

### **Institutional Economics – can be the Emerging Field of Economic Studies Helpful for Regional Development Issues?**

In economics, institutionalism and in particular institutional economics are perceived as one of the most prolific theoretical trends. They are based on the assumption that a specific social, relational or cultural conditions are largely responsible for the differences in the functioning of such entities like companies, countries or regions. Thus, institutionalism can effectively explain not only the basic causes of spatial

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<sup>9</sup> E. M. Hoover, *Location Theory and the Shoe and Leather Industries*. Harvard University Press. Cambridge, Mass. 1937; R. E. Dickenson. *City, Region and Regionalism* Routledge and Kegan Paul, London 1947 ; J. Friedman, W. Alonso (eds.). *Regional Development and Planning: A Reader*, The MIT Press, Cambridge, Mass 1967; M. E. Edwards, *Regional and Urban Economics and Economic Development. Theory and Methods*, Auerbach Publications, Taylor and Francis Group, New York 2007, p. 13.

<sup>10</sup> A. Bailly, *Territoires et territorialités*, [in:] J.-P. Auray, A. Bailly, P. H. Derycke, J.-M. Huriot, *Encyclopédie d'économie spatiale : concepts, comportements, organisations*, Economica, Paris 1994, pp. 274–279; M. Le Berre, *Territoires*, [in:] A. Bailly, R. Ferras, D. Pumain (red.), *Encyclopedie de géographie*, Paris 1992, p. 622; A. Jewtuchowicz, *Terytorium i współczesne dylematy jego rozwoju*, University of Lodz Press, Lodz 2005, p. 6.

<sup>11</sup> G. Garofoli, *Modelli locali di sviluppo*, Franco Angeli, Milan 1991; [cited in:] G. Garofoli, *Economic development. Organisation of production and territory*, „Revue d'Economie Industrielle” 1993, vol. 64 no. 64, p. 24.

disparities in economic development, but also the nature of the processes that are behind them.<sup>12</sup> It is because different countries and different regions are repeatedly finding “different routes for the same purpose”. It does not mean, however there are better or worse routes, since everyone emerges from different spring – and this is the reason territorially rooted institutional context of local, regional and national development matters.<sup>13</sup>

Institutional economics consists of various sub-disciplines and differs internally. It is a complex conglomerate of various approaches and research methods and continuously develops, allowing for more and more precise explanation of such occurrences, as the impact of historical, cultural or spatial conditions on economic processes. It also explains the ways of cooperation among economic actors both on markets and within organizational structures, or the impact of social relations on the economic effectiveness.<sup>14</sup>

Institutional economics, with its variety of research approaches seems to be a rich and undoubtedly useful branch of economic science, also from the point of view of the studies on local and regional development. Moreover, it provides a wide range of application possibilities, so it also has a normative character, usable for the decision-making processes (regional policy issues). What is important, in many cases research on territorial development are already reaping the achievements of institutionalism, whereas in other cases more widespread use of it has to be discovered.

Within institutional economics, institutions are defined in a broad sense as strongly rooted and established elements of social order and universally accepted norms of behavior. Wherefore, among institutions there are traditions, rules and norms (both informal customs and formal rights), which at the same time shape and limit human action. These elements form patterns, according to which acts every human being belonging to a given institution (culture).<sup>15</sup>

In consequence, in relation to the economic activities, analysis of the institutional system should refer to the three mutually conditioning elements<sup>16</sup>:

1. Institutions – organizations (e. g. government and self-government agencies, financial entities, foundations, association, enterprises, etc.)
2. Formal (legal) regulations (e. g. constitutions, civic codes, criminal codes, economic laws, financial laws, tax laws, properties regulations, etc.)
3. Non-formal institutions (e. g. cultural patterns, norms of behavior, level of trust, propensity to obey the law and contracts, tendency to networking considered as “social capital”, etc.)

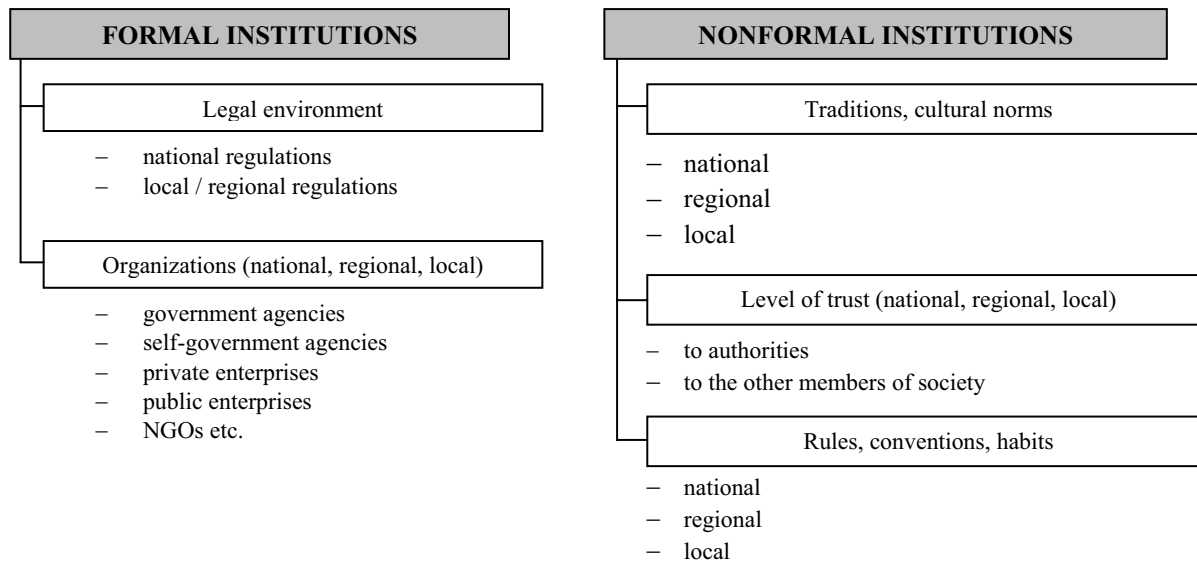
<sup>12</sup> Pointing to the importance of institutional arrangements in economic processes (in most cases interpreted implicitly), is not a new phenomenon. One of the first scientists who stresses it was Hungarian American historian K. Polanyi, who already in the forties of 20<sup>th</sup> century emphasized the interrelations between the market and the society. Polanyi supported his theses by the analysis of the evolution of capitalism since the Congress of Vienna to the outbreak of World War I (see: K. Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, Beacon Press, Boston 1971).

<sup>13</sup> M. E. Sokołowicz, *Territorial Context in the Research on the EU Cohesion. One-Speed or Multi-Speed Europe?*, „Studia Regionalia”, vol. 33, 2012, p. 9.

<sup>14</sup> See e. g.: M. E. Sokołowicz, *Institutional Economics – a Potential Tool of the Research on Socio-economic Development of Regions*; [in:] Новоселов А. С. (ed.), Проблемы социально-экономическим развитием регионов сибиря. Collection of academic papers of the Institute of Economics and Industrial Engineering of the Siberian Branch of Russian Academy of Science, Novosibirsk 2013, pp. 294-307. Available: <http://dSPACE.uni.lodz.pl:8080/xmlui/bitstream/handle/11089/2694/Sokolowicz%20M.%20E.%20Institutional%20economics.%20A%20potential%20tool%20of%20the%20research%20on%20socio-economic%20development%20of%20regions.pdf?sequence=1>. Accessed 21.07.2014.

<sup>15</sup> G. M. Hodgson, *What are Institutions?*, “Journal of Economic Issues”, Vol. 40, No. 1, 2006, pp. 2-5.

<sup>16</sup> Z. Staniek, *Zróźnicowanie ekonomii instytucjonalnej*. Available <http://www.e-sgh.pl/niezbednik/plik.php?id=27233173&pid=1081>. Accessed 21.07.2014.



**Figure 1.** Classification of institutions.  
Source: own study.

First two elements can be classified as formal institutions while the third remains in the sphere of a non-formal regulations (Figure 1). This classification remains very useful from the point of view of a better understanding of the role of institutions in economics and regional science, and has its consequences in a number of attempts to “measure” the elements of the institutional environment. However, this research approach, given the social and dynamic nature of the institutions themselves, is not an easy issue – especially at local and regional level. Thus, attempts to cope with institutional development are still in the initial phase, and only few international research programs of this kind have been launched recently.

### ***Doing Business Index and Local Human Development Index as Examples of Measuring Institutional Variables on Sub-National Level***

One of the biggest challenges for the institutional economics lays in using its theoretical framework for empirical analyses. Difficulties in this field derive mainly from the specificity of theoretical constructs (e. g. ambiguity in defining institutions, variety of institutional trends, blurred concept of informal institutions). There are also difficulties in operationalization of hypotheses and thus – proper composition of empirical data (various attempts to substantiate the concept of “transaction costs” within New Institutional Economics seems to be a best example here).<sup>17</sup> Above barriers are revealed especially when conducting research on the lower than the national level of data aggregation, due to both the scarcity of empirical material and difficulties in ensuring the comparability of results between different territorial units.

Despite the above difficulties, one can find more and more examples of research that fit the patterns and basic assumptions of institutional economics. What is more, research of this type do not concern only national but more and more often also regional and local level. Among the most recognizable one may

<sup>17</sup> The overview of various methods of measuring transaction costs can be found in the work of L. McCann et al. (L. McCann, B. Colby, K. William Easter, A. Kasterine, K. V. Kuperan, *Transaction cost measurement for evaluating environmental policies*, “Ecological Economics”, vol. 52, 2005, pp. 527-542).

indicate Doing Business index and first attempts to calculate Human Development Index (HDI) on the local level.

First of them – Doing Business – is an extensive international survey devoted to the regulations for enterprises, with particular emphasis on small and medium-sized firms. It is being implemented since 2002, under the auspices of the International Finance Corporation – part of the World Bank Group. The first Doing Business report covered five topics and 133 economies. Doing Business for national economies in 2014 has covered already 11 topics and 189 national economies (see table 1).

**Table 1.** Topics and national economies covered by successive *Doing Business* reports.

Topic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Starting a business*</b>											
Employing workers											
<b>Enforcing contracts*</b>											
Resolving insolvency											
Getting credit											
<b>Registering property*</b>											
Protecting investors											
Paying taxes											
Trading across borders											
<b>Dealing with construction permits*</b>											
Getting electricity											
<b>Number of economies</b>	<b>133</b>	<b>145</b>	<b>155</b>	<b>175</b>	<b>178</b>	<b>181</b>	<b>183</b>	<b>183</b>	<b>183</b>	<b>185</b>	<b>189</b>
* Topic included into sub-national research.											

Note: Data for the economies added to the sample each year are back-calculated to the previous year. The exception is Kosovo, which was added to the sample after it became a member of the World Bank Group.

Source : <http://www.doingbusiness.org/methodology/methodology-note>. Accessed 19.07.2014.

Methods of Doing Business project are based primarily on the analysis of legal regulations (formal institutions), related to the conduct of business, verified by experts (lawyers, business consultants, accountants, freight forwarders, government officials and other professionals) afterwards. In the process of constructing an index for the year 2014, more than 10,200 local experts were involved.<sup>18</sup> Generally, Doing Business project uses two types of data: 1) readings of laws and regulations in each economy, and 2) indicators on the complexity and cost of regulatory processes (i.e. the number of procedures, time spent when dealing with business issues officially, costs of procedures, etc.).

Major advantages of *Doing Business* methodology include transparency, reliance on direct sources of information, relatively low cost of the studies and comparability across countries. From the institutional economics point of view, it also provides a composite index capturing the key elements of institutional formal environment for making business.

Among the weaknesses of the study, one can indicate its limited scope (indicators are non-exhaustive from the point of view of the institutional approach, and focus only on formal institutions), and lack of sufficient sensitivity to the territorial specificities of individual countries and regions and the assumption

<sup>18</sup> <http://www.doingbusiness.org/methodology/methodology-note>. Accessed 19.07.2014.

of infallibility both respondents and entrepreneurs. For example, it is assumed that entrepreneurs carry out all activities in the shortest possible time, without committing mistakes).<sup>19</sup>

Despite the above, Doing Business research is undoubtedly most developed project aiming at capture of the institutional conditions for the economy. Due to well-established, and yearly series of data, it also assures their international compatibility. Thus, extension of the study on the sub-national level seems to be a natural step in the development of the project. However, only few countries have been covered by sub-national Doing Business research studies yet. On the other hand, from year to year, their number is dynamically growing. Among them, one can mention a first sub-national study in Brazil 2006, and then among the followers such countries like India (2009), Colombia (2008, 2010, 2013), Indonesia (2010, 2012), Mexico (2007, 2009, 2014), Philippines (2008, 2011), Russia (2009, 2012), Italy (2013), Egypt (2014), and other.<sup>20</sup>

One of the biggest national economies being the subject of sub-national studies of formal institutional conditions for doing business was Russia. In this country, two sets of research were made, in 2009 and 2012. Russia, as the biggest country in the world (17,098,242-sq km), and population of 142,470,272 in July 2014 (10<sup>th</sup> in world ranking)<sup>21</sup>, experiences significant development disparities.<sup>22</sup> These disparities, together with a federal character of the country introduced by the subsequent reforms (especially adoption of the new Constitution of Russian Federation in 1993 and further reorganisation of the local government in the Russian Federation in 1995 and 2003<sup>23</sup>), imply a significant institutional difference in the organization of the state and its regions, and consequently the conducting economic activities by enterprises.

Reading of data coming from the Doing Business study of Russian Federation shows that there is no one Russia in terms of starting a business, dealing with construction permits, registering property and getting electricity (table 2). For example, in case of Saint Petersburg, opening new economic activity needs 7 procedures during 17 days, at the cost of 2.1% of income per capita. Opening the same type of enterprise in Novosibirsk Oblast demands 4 procedures more (11), 22 days and the cost of 2.3% of income per capita. Only in a case of paid-in min. capital, no significant regional differences in Russia occur. Table 2 reveals even bigger “institutional disparities” for the procedures concerning building permits for companies. For instance in Irkutsk or Kaliningrad, 17 procedures for building permits are necessary, while, in the capital of Russia, businesses need to pass 47 administrative procedures. Also the cost of getting building permits vary across country, from 47,1% of yearly income *per capita* in Stavropol Krai to 417,9% of yearly income *per capita* in Samara Oblast.

<sup>19</sup> <http://www.doingbusiness.org/~media/FPDKM/Doing%20Business/Documents/Annual-Reports/English/DB12-Chapters/About-Doing-Business.pdf>. Accessed 19.07.2014.

<sup>20</sup> See: <http://www.doingbusiness.org/Reports/Subnational%20Reports>. Accessed 19.07.2014. It must be noted here, that sub-national studies are conducted in rather large countries. Applying Doing Business methodology for smaller countries are nearly impracticable due to the lack of data for their administrative units or due to not statistically significant sub-national disparities. In case of smaller countries, however, so called regional Doing Business studies are being made, e. g. *Doing Business in South East Europe 2011*, *Doing Business in OHADA 2012*, *Doing Business in the Arab World 2012*, *Doing Business in the East African Community 2013*, etc. (See: <http://www.doingbusiness.org/Reports/Regional%20Reports>. Accessed 19.07.2014)

<sup>21</sup> <https://www.cia.gov/library/publications/the-world-factbook/geos/rs.html>. Accessed 20.07.2014.

<sup>22</sup> Such territorially big countries as Brazil, Russia, India or China all have wide internal disparities of GDP *per capita*. For example, if the top quartile of regions in the European Union countries have GDP *per capita* 2.8 time higher than the bottom quartile, the same relation for Russia in 4.8 (E. von Breska, *Investing in Europe's future. Fifth report on economic, social and territorial cohesion*, European Commission, Directorate-General for Regional Policy, Publications Office of the European Union, Luxembourg 2010, p. 5).

<sup>23</sup> M. Kalisiak-Mędelska, *Self-Government in Poland and Russian Federation – Introductory Remarks*; [in:] Sokołowicz, M. E. (ed.), *Functioning of the Local Production Systems in Central and Eastern European Countries and Siberia – Case Studies and Comparative Studies*, University of Lodz Press, Lodz, forthcoming 2015.

**Table 2.** Disparities in the institutional environment for economic activity in chosen Russian regions and cities – Doing Business ranking for 2012.

City	Region	Starting a Business				Dealing with Construction Permits			Registering Property			Getting Electricity		
		Procedures	Time	Cost	Paid-in min. capital	Procedures	Time	Cost	Procedures	Time	Cost	Procedures	Time	Cost
		(number)	(days)	(% of income per capita)	(% of income per capita)	(number)	(days)	(% of income per capita)	(number)	(days)	(% of income per capita)	(number)	(days)	(% of income per capita)
Irkutsk	Irkutsk Oblast	10	19	2,1	1,6	17	215	141	3	34	0,3	9	228	573,6
Kaliningrad	Kaliningrad Oblast	8	16	2,4	1,6	17	239	86,3	5	27	0,5	9	308	641,6
Moscow	Moscow	9	30	2,1	1,6	47	392	171,5	5	43	0,2	10	281	1852,4
Murmansk	Murmansk Oblast	7	25	2,2	1,6	16	357	137,4	5	35	0,2	10	328	375,6
Novosibirsk	Novosibirsk Oblast	11	22	2,3	1,6	20	248	146,7	5	37	0,2	10	265	815,9
Saint Petersburg	Saint Petersburg	7	17	2,1	1,6	18	361	51,3	5	44	0,2	9	238	1080
Samara	Samara Oblast	10	19	2,5	1,6	30	200	417,9	3	35	0,2	6	290	1153
Saransk	Republic of Mordovia	11	20	2,3	1,6	30	191	67,3	3	35	0,2	9	123	269,2
Stavropol	Stavropol Krai	7	23	2,2	1,6	23	216	47,1	4	29	0,2	7	238	443,5
Vladivostok	Primorsky Krai	8	23	2,3	1,6	26	218	169,4	3	32	0,2	9	260	852,4

Source: Own composition, based on data from World Bank, *Doing Business in Russia 2012*, The International Bank for Reconstruction and Development / The World Bank, Washington 2012, pp. 50-51.

One of the latter sub-national Doing Business study was conducted in Egypt. It proves that also in case of developing countries, one can observe significant differences in institutional conditions for economic activity. With the area 7 time smaller than Russia (1,001,450-sq km – 10<sup>th</sup> world's rank) and the population in July 2014 of 86,895,099 inhabitants (16<sup>th</sup> in the world)<sup>24</sup>, it is still treated by political geographers as belonging to the group of big countries. However, with the value of GDP of \$6,600 *per capita* in 2013 (comparing with \$18,100 in Russia for the same year), its level of development is relatively low, which also has its consequences in relatively high regional income and wealth disparities.<sup>25</sup>

In consequence, Egypt similarly to Russia, experiences “institutional differences” on the sub-national scale, although they are more than twice lower. In other words, taking into account 15 Egyptian administrative regions, they vary in terms of starting a business, dealing with construction permits, registering property, and getting electricity (table 3).

<sup>24</sup> <https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html>. Accessed 20.07.2014.

<sup>25</sup> According to the regional statistics of income disparities, there is a significant correlation between the level of economic development measured by GDP and the level of these inequalities (having the shape of an inverted “U”). Countries noting a low level of economic development show higher inequalities which increase until they reach the average level of development. Further reduction in inequalities can be caused by continued economic growth (J. G. Williamson, *Regional Inequality and the Process of International Development: a Description of Patterns*, “Economic Development and Cultural Change”, vol. 13, no. 4, 1965, pp. 10.



**Table 3.** Disparities in the institutional environment for economic activity in Egyptian regions and cities – Doing Business ranking for 2014.

City	Region	Starting a Business				Dealing with Construction Permits			Registering Property			Getting Electricity		
		Procedures	Time	Cost	Paid-in min. capital	Procedures	Time	Cost	Procedures	Time	Cost	Procedures	Time	Cost
		(number)	(days)	(% of income per capita)	(% of income per capita)	(number)	(days)	(% of income per capita)	(number)	(days)	(% of income per capita)	(number)	(days)	(% of income per capita)
Alexandria	Alexandria	7	8	9,7	0	19	220	200,3	7	50	0,7	42	923	26,2
Assuit	Assuit	8	9	9,7	0	15	218	71,4	8	52	0,7	42	965	26,2
Aswan	Aswan	8	11	10,5	0	19	213	222,3	8	62	0,7	42	745	26,1
Cairo	Cairo	7	8	9,7	0	21	179	108	8	63	0,7	42	1,01	26,2
Damietta	Damietta	7	10	10	0	18	123	81	8	130	0,7	42	810	18,2
Fayoum	Fayoum	7	9	9,9	0	23	163	150,2	7	35	0,7	42	830	18,2
Giza	Giza	7	8	9,7	0	19	148	108	7	65	0,7	42	810	25,7
Ismailia	Ismailia	8	9	9,7	0	20	109	59,5	7	52	0,7	42	706	20,7
Kharga	New Valley	8	11	9,9	0	17	169	60,4	7	28	0,8	42	946	23,2
Mansoura	Dakahlia	7	9	9,9	0	14	120	100,3	7	29	0,7	42	1,05	25,7
Port Said	Port Said	8	11	9,8	0	16	193	107,4	7	24	0,7	42	964	19,5
Sohag	Sohag	8	10	9,9	0	17	153	114,4	7	18	0,7	42	915	22,5
Suez	Suez	8	10	9,8	0	13	144	58,9	8	51	0,7	42	845	25,7
Tanta	Gharbia	7	10	9,8	0	17	129	106,2	7	58	0,7	42	830	24,6
Zagazig	Sharqia	7	10	9,8	0	17	170	92,5	7	56	0,7	42	1,105	25,7

Source: Own composition, based on data from World Bank, *Doing Business in Egypt 2014*, The International Bank for Reconstruction and Development / The World Bank, Washington 2013, pp. 60-61.

One can observe biggest differences for doing business in the fields of getting building permission and registering properties. In the first case, region of Assuit offers formal institutional arrangements making building permits possible within 15 procedures but in 218 days, while, in Cairo, the same effect can be achieved by 21 procedures and 179 days on average. In the case of registering property, all 8 procedures in the region of Damietta requires 130 days, while in Sohag it takes only 15 days.

This very general review of the Doing Business indices on the sub-national level leads to conclusion that institutions undoubtedly matter in building regional competitiveness. Even when investigating only few elements of the institutional environment, and even when omitting non-formal institutional variables in this research, it forms a base for further studies, especially those aiming at exploration of the relations between institutional environment as input and economic performance of cities and regions as an output.

Of course, local and regional Doing Business studies are not free from limitations. Among them, one should mention primarily:

1. Reduction to four of 11 Doing Business topics analyzed in national research of this kind. This limitation is a consequence of the fact that remaining 7 topics are usually not locally or regionally diversified

2. Omission of the factors affecting the quality of doing business, like security, bribery and corruption, market size, macroeconomic stability (including whether the government manages its public finances in a sustainable way), the state of the financial system or the level of training and skills of the labor force<sup>26</sup>
3. Omission of the non-formal institutions, which are territorially embedded and thus, including only formal part of the economy.

Above difficulties also make comparing data on an international scale hampered. However, these limitations not weaken the value of this kind of research significantly and can contribute substantially to the dissemination of the institutional approach in regional and urban economics.

The second of the research identified as valuable for “measuring institutions” on a local scale, is Human Development Index (HDI), with the first attempts of applying it for sub-national level. One of the latest examples of computing Local Human Development Index (LHDI), was made and published in Poland.

HDI is considered today the most recognizable “alternative” for Gross Domestic Product (GDP), as the measure of socio-economic development. It was designed in 1990 as the effect of United Nations Development Programme’s efforts, mainly to raise awareness about the challenges faced by countries at different levels of development, as well as to promote public policies aimed at improving the quality of life at both the national and international level. The difference in relation to GDP refers mainly to a composite character of Human Development Index, which, next to including gross domestic product *per capita* as only one component, measures also the level of education, and life expectancy rate. Thus, genuine HDI methodology (computed for the national level) suggests that the measurement of social development should focus on the three essential elements of human life: health, knowledge, and wealth.

Referring to the above, United Nations Development Programme Office in Poland has merged its efforts with Polish Ministry of Regional Development and Warsaw School of Economics, to create and compute similar index, fitting to the local level. In this way, a Local Human Development Index (LHDI) was obtained. LHDI adopts a similar formula and uses the following data:<sup>27</sup>

1. For the area of health measurement: life expectancy at birth, and Crude Death Rate Index,
2. For the area of education measurement: Pre-school Education Index (computed for the children aged 3-4), Performance in Lower Secondary School Education Index (for mathematics and natural sciences)<sup>28</sup>,
3. For the area of wealth measurement: the average level of the residents’ income.<sup>29</sup>

In addition, LHDI index programme in Poland introduced Local Human Development Index for the policy input, including the effects of the public sector activity. LHDI – Policy Input index included the following data<sup>30</sup>:

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<sup>26</sup> World Bank, *Doing Business In Italy. Smarter Regulations for Small and Medium-Size Enterprises*, International Bank for Reconstruction and Development / The World Bank 2013, pp. 9-10.

<sup>27</sup> United Nations Development Programme, *National Human Development Report Poland, 2012. Regional and local development*, UNDP Project Office in Poland, Warsaw 2012, p. 34-44.

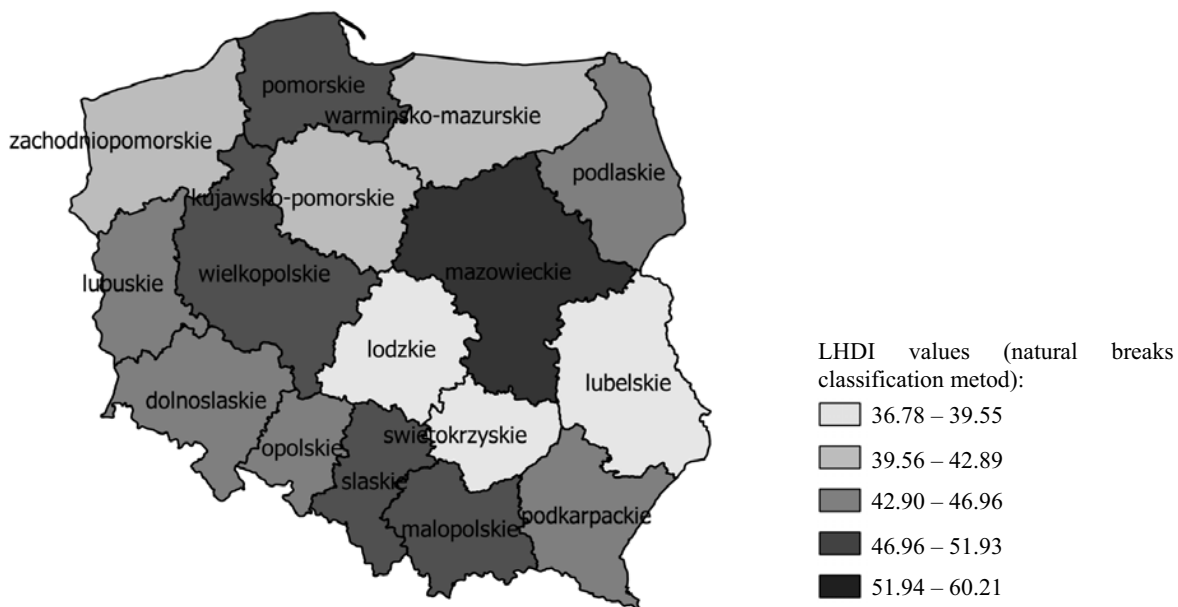
<sup>28</sup> Due to the lack of data used for general HDI (Expected Years of Schooling Index, Mean Years of Schooling Index), on local level different that original HDI components for Education Index were used.

<sup>29</sup> Differently than in case of HDI, income is calculated as the sum of all income from: work, retirement, and from individual social benefits, calculated per capita. Deciding to replace gross domestic product as a measure of welfare, by disposable income, Authors skirted the problem of data availability at the local level but also referred to the postulates of providing “more precise” measure of wealth, underlined by: J. E. Stiglitz, A. Sen, J-P. Fitoussi, *Report by the Commission on the Measurement of Economic Performance and Social Progress*, Paris 2008, [http://www.stiglitz-sen-fitoussi.fr/documents/rapport\\_anglais.pdf](http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf), p. 12. Accessed 19.07.2014.

<sup>30</sup> United Nations Development Programme, *National Human Development Report Poland, 2012. Regional and local development*, UNDP Project Office in Poland, Warsaw 2012, p. 45-50. Available: [http://issuu.com/undp\\_poland/docs/lhdi\\_report\\_poland\\_2012\\_eng#](http://issuu.com/undp_poland/docs/lhdi_report_poland_2012_eng#). Accessed 19.07.2014.

1. Health Index Policy Input (including number of doctors per 100,000 inhabitants and nurses and midwives per 100,000 inhabitants)
2. Education Index Policy Input (including expenditure on education per pupil / student in playschools, elementary schools, middle and secondary schools, as well as number of pupils per one teacher in elementary and middle schools)
3. Local Expenditures Index Policy Input (including expenditure of local self-government budgets reduced by expenses reimbursed by external funds and grants).

The methodology described above has been applied to Polish statistical local territorial units, and revealed significant differences in the level of socio-economic development. Even aggregated to the higher level of territorial division (Polish regions), one can observe disparities between mazowieckie (the capital region) with the value 60.21 computed for 2010 data and lubelskie, lodzkie, and swietokrzyskie regions (with the LHDI values respectively 39.55, 39.28 36.78).



**Map 1.** Disparities in socio-economic development measured by LHDI values for Polish regions in 2010.

Source: own composition, based on data from United Nations Development Programme, *National Human Development Report Poland, 2012. Regional and local development*, UNDP Project Office in Poland, Warsaw 2012, p. 14-15. Available: [http://issuu.com/undp\\_poland/docs/lhdi\\_report\\_poland\\_2012\\_eng#](http://issuu.com/undp_poland/docs/lhdi_report_poland_2012_eng#). Accessed 19.07.2014.

Disparities of LHDI values in Poland are even higher on the basic (local) level of data aggregation (see table 4). For instance, Local Human Development Index value for Warsaw – the capital of Poland (87.63), was 2.3 times bigger than in Torun (the capital of kujawsko-pomorskie) region (37.7). It is worth noting that differences in LHDI values depends on each of its three components (health, education, wealth). However, what contributes mostly to these disparities in case of Poland, these are mainly variations in the education achievements and the level wealth.

Disparities described above reveal processes which HDI for the national level does not capture. It helps to identify more deeply some of the institutional conditions for local and regional development. What is more, a direct reference to the HDI methodology offers opportunities for its further development, including possibly also international comparisons in the future.

**Table 4.** Disparities in socio-economic development measured by LHDI values for Polish regions and choose cities in 2010.

Voivodhip / Polish region	LHDI rank	LHDI rank 2007-2010 change	LHDI total	Health index	Education Index	Wealth Index
mazowieckie	1	0	60,21	58,18	61,68	60,84
małopolskie	2	0	51,93	69,1	57,65	35,15
pomorskie	3	0	51,14	71,28	47,16	39,79
wielkopolskie	4	0	50,22	63,32	50,19	39,86
śląskie	5	0	49,54	48,39	53,92	46,59
opolskie	6	0	46,95	59,76	55,94	30,96
dolnośląskie	7	0	46,34	47,61	48,79	42,84
podlaskie	8	1	44,4	66,08	51,6	25,67
lubuskie	9	2	44,36	54,72	47,21	33,79
podkarpackie	10	0	43,77	72,28	48,15	24,09
zachodniopomorskie	11	-3	42,89	52,31	42,51	35,48
warmińsko-mazurskie	12	0	42,33	58,61	41,85	30,93
kujawsko-pomorskie	13	0	41,22	49,17	42,31	33,67
lubelskie	14	1	39,55	48,61	46,46	27,4
łódzkie	15	1	39,28	31,48	52,25	36,85
świętokrzyskie	16	-2	36,78	45,95	39,18	27,62
<b>Chosen cities</b>						
Warsaw	1	0	87,63	68,97	97,75	99,83
Cracow	5	-1	72,05	69	88,47	61,27
Wroclaw	14	-4	66,53	56,94	82,43	62,74
Szczecin	47	-13	56,3	55,13	69,53	46,56
Lodz	115	201	44,96	25,17	70,9	50,92
Torun	201	17	37,7	61,4	29,35	29,74

Source: United Nations Development Programme, *National Human Development Report Poland, 2012. Regional and local development*, UNDP Project Office in Poland, Warsaw 2012, p. 14-15 and 182-191. Available: [http://issuu.com/undp\\_poland/docs/lhdi\\_report\\_poland\\_2012\\_eng#](http://issuu.com/undp_poland/docs/lhdi_report_poland_2012_eng#). Accessed 19.07.2014.

Among more general conclusions that LHDI research in Poland derives one can also indicate, that the highest level of social development occurs in metropolitan areas while the lowest level occurs in rural areas. Also, most of the areas with the lowest LHDI is located on the site of the former Russian occupation on the 19<sup>th</sup> century (in contrast to the lands annexed at this time by the German and Austro-Hungarian empires), which suggests the historical processes of economic and social *path-dependency*.<sup>31</sup>

Studies on Local Human Development Index support also institutionalism theses that level of development depends not only on the income and wealth of the inhabitants, but also on such territorially differentiated aspects as the level of human capital development and health. Finally, it revealed that negative demographic changes associated with aging also differ substantially as they are far less important in rich metropolitan areas and are a major problem primarily in eastern Poland.

<sup>31</sup> United Nations Development Programme, *National Human Development Report Poland, 2012. Regional and local development*, UNDP Project Office in Poland, Warsaw 2012, p. 12-13. Available: [http://issuu.com/undp\\_poland/docs/lhdi\\_report\\_poland\\_2012\\_eng#](http://issuu.com/undp_poland/docs/lhdi_report_poland_2012_eng#). Accessed 19.07.2014.

## Conclusions

Even when various measures of socio-economic development on a national level can show that more and more countries are becoming similar in terms of wealth and economic performance, there are paradoxically growing sub-national disparities observed. Finding the reasons of these differences, as well as recommending public action to reduce them, are the subject of interest of regional studies and urban economics. As the latter is a multidisciplinary field of science, it can use, among others, the achievements of institutional economics.

However, literature on institutional economics itself is full of various theoretical strands. Their diversity determines a presence of a wide scope of methodological approaches to the study of economic processes. Many studies undertaken in the spirit of institutionalism take a form of different rankings. Among them, one can mention those referring both to national and sub-national levels.

Analysis of one the most recognizable rankings of the quality of the institutional environment for business and socio-economic development (sub-national Doing Business and Local Human Development Index) indicate that institutional factors – even very cursorily measured – determine significantly spatial differences in the level of competitiveness of territorial units. Although such research is in the development phase, one can hope for their further development and in consequence – the successful marriage of institutional economics with local and regional development studies. This field of scientific exploration, due to the multiplicity of “localities” as well as territorial and institutional dynamics, seems to be almost unlimited.

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