PRACE NAUKOWE
Uniwersytetu Ekonomicznego we Wrocławiu

RESEARCH PAPERS
of Wrocław University of Economics

Nr 394

Local and Regional Economy in Theory and Practice

edited by
Elżbieta Sobczak
Beata Bal-Domańska
Andrzej Raszkowski

Publishing House of Wrocław University of Economics
Wrocław 2015

Copy-editing: Marcin Orszulak

Layout: Barbara Łopusiewicz

Proof-reading: Magdalena Kot

Typesetting: Agata Wiszniowska

Cover design: Beata Dębska

Information on submitting and reviewing papers is available on
the Publishing House's website
www.pracenaukowe.ue.wroc.pl
www.wydawnictwo.ue.wroc.pl

The publication is distributed under the Creative Commons Attribution 3.0
Attribution-NonCommercial-NoDerivs CC BY-NC-ND

© Copyright by Wrocław University of Economics
Wrocław 2015

ISSN 1899-3192
e-ISSN 2392-0041

ISBN 978-83-7695-512-4

The original version: printed

Publication may be ordered in Publishing House
tel./fax 71 36-80-602; e-mail: econbook@ue.wroc.pl
www.ksiegarnia.ue.wroc.pl

Printing: TOTEM

Contents

Preface 9

Dariusz Głuszczuk: Regional e-Platform of Proinnovative Online Loans – A model approach 11
Lech Jańczuk: The perennial financial forecasting as a tool for predicting performance-based budgeting 18
Małgorzata Karczewska: The gross expenditures on R&D and the economic growth level in the EU countries 27
Bożena Kuchmacz: Man as a source of local social capital 36
Alina Kulczyk-Dynowska: The spatial and financial aspects of a protected area as exemplified by the Roztocze National Park 45
Liliia Lavriv: Strategic approaches to the management of regional development in Ukraine: Current state and conceptual areas of improvement 54
Joanna Ligenzowska: The impact of innovation on the development of the Małopolska Region 64
Magdalena Łyszkiewicz: The regional differentiation of financial autonomy of Polish communes 72
Grygorii Monastyrskyi, Yaroslav Fedenchuk: Modernization of regional policy of Ukraine in European integration conditions 81
Artur Lipieta, Barbara Pawełek: Comparative analysis of Polish NUTS 2 level regions in terms of their use of EU grants in 2007–2013 91
Dariusz Perło: Clusters and smart specializations 100
Dorota Perło: The soft model of the regional labor market situation of the youth 109
Katarzyna Peter-Bombik, Agnieszka Szczudlińska-Kanoś: Young people on the labor market as a challenge for social policy in selected Polish voivodeships 118
Jan Polski: Gordian knots of the regional development in Eastern Poland 127
Andrzej Raszkowski: The strategy of local development as a component of creative human capital development process 135
Elżbieta Sobczak: Specialization and competitiveness of workforce changes in the sectors grouped according to R&D activities intensity in European Union countries 144
Jacek Sołtys: Typology of low developed non-metropolitan sub-regions in the European Union 153
Edward Stawasz: Determinants of knowledge transfer processes in a region 166

Andrzej Sztando: Workshops as a method of social consultations in the process of local strategic planning 175
Maciej Turała: Equalization of territorial units' incomes – A case study of Poland 187
Alla Vasina: Development of infrastructure as an important factor of regions' economy structuring 196

Streszczenia

Dariusz Głuszczuk: Regionalna e-Platforma Proinnowacyjnych Pożyczek Internetowych – ujęcie modelowe 11
Lech Jańczuk: Wieloletnie planowanie finansowe jako narzędzie predykcji budżetu zadaniowego 18
Małgorzata Karczewska: Nakłady na badania i rozwój a poziom rozwoju gospodarczego w Unii Europejskiej 27
Bożena Kuchmacz: Człowiek jako źródło lokalnego kapitału społecznego ... 36
Alina Kulczyk-Dynowska: Przestrzenne i finansowe aspekty funkcjonowania obszaru chronionego na przykładzie Roztoczańskiego Parku Narodowego 45
Liliia Lavriv: Podejścia strategiczne w zarządzaniu rozwojem regionalnym na Ukrainie: Stan obecny i koncepcja doskonalenia 54
Joanna Ligenzowska: Wpływ innowacji na rozwój regionu Małopolski 64
Magdalena Łyszkiewicz: Regionalne zróżnicowanie samodzielności finansowej polskich gmin 72
Grygorii Monastyrskyi, Yaroslav Fedenchuk: Modernizacja polityki regionalnej Ukrainy w warunkach integracji europejskiej 81
Artur Lipieta, Barbara Pawełek: Analiza porównawcza polskich regionów szczebla NUTS 2 ze względu na wykorzystanie funduszy unijnych w latach 2007–2013 91
Dariusz Perło: Klastry a inteligentne specjalizacje 100
Dorota Perło: Model miękki sytuacji osób młodych na regionalnym rynku pracy 109
Katarzyna Peter-Bombik, Agnieszka Szczudlińska-Kanoś: Młodzi ludzie na rynku pracy jako wyzwanie dla polityki społecznej wybranych polskich województw 118
Jan Polski: Węzły gordyjskie rozwoju regionalnego w Polsce Wschodniej ... 127
Andrzej Raszkowski: Strategia rozwoju lokalnego jako element procesu kształtowania kreatywnego kapitału ludzkiego 135
Elżbieta Sobczak: Specjalizacja i konkurencyjność zmian zatrudnienia w sektorach wyodrębnionych według intensywności nakładów na B+R w państwach Unii Europejskiej 144

Jacek Sołtys: Typologia nisko rozwiniętych niemetropolitalnych podregionów Unii Europejskiej 153
Edward Stawasz: Determinanty procesów transferu wiedzy w regionie..... 166
Andrzej Sztando: Warsztaty jako metoda konsultacji społecznych w procesie lokalnego planowania strategicznego..... 175
Maciej Turała: Równoważenie dochodów jednostek terytorialnych – studium przypadku Polski 187
Alla Vasina: Rozwój infrastruktury jako ważny czynnik strukturyzacji gospodarek regionalnych 196

PRACE NAUKOWE UNIWERSYTETU EKONOMICZNEGO WE WROCŁAWIU
RESEARCH PAPERS OF WROCŁAW UNIVERSITY OF ECONOMICS nr 394 • 2015

Local and Regional Economy in Theory and Practice ISSN 1899-3192
e-ISSN 2392-0041

Jan Polski
University of Maria Curie-Skłodowska, Lublin
e-mail: jaski@poczta.umcs.lublin.pl

GORDIAN KNOTS OF THE REGIONAL DEVELOPMENT IN EASTERN POLAND

WĘZŁY GORDYJSKIE ROZWOJU REGIONALNEGO W POLSCE WSCHODNIEJ

DOI: 10.15611/pn.2015.394.14

Summary: This article attempts to identify the main problems of regional development based on the example of Eastern Poland. These problems create different cooperating negative systems, known by popular metaphor as the Gordian knots. Here three basic types of these knots are distinguished, including sectoral, structural and spatial ones. The strengthening of the Gordian knots and their cooperation reduces the effectiveness of the allocation of the structural assistance of the European Union in the discussed part of the country. Therefore, an attempt at the identification of the most important knots and a description of their action in the three mentioned systems are justified. The morphological description of the knots is the basis for the choice of the fields of increased regional policy interventions, eliminating or neutralizing complicated tangles of development problems.

Keywords: development, Gordian knots, fields of intervention.

Streszczenie: Celem artykułu jest próba identyfikacji podstawowych problemów rozwoju regionów na przykładzie Polski Wschodniej. Problemy te tworzą różne współdziałające negatywne układy, zwane według popularnej metafory węzłami gordyjskimi. Wyróżnia się tu trzy podstawowe typy tych węzłów: sektorowe, strukturalne i przestrzenne. Umacnianie się węzłów gordyjskich i ich współdziałanie zmniejsza efektywność alokacji pomocy strukturalnej Unii Europejskiej w omawianej części kraju. Zasadna jest więc próba identyfikacji najważniejszych węzłów i opis ich działania w trzech wymienionych układach. Opis morfologiczny węzłów jest podstawą wyboru dziedzin wzmożonej interwencji polityki regionalnej, likwidującej bądź neutralizującej skomplikowane sploty problemów rozwoju.

Słowa kluczowe: rozwój, węzły gordyjskie, dziedziny interwencji.

1. Introduction

Polish regions are severely burdened with numerous problems of development. However, the scale and the structure of these problems are different. The largest load

of restrictions and developmental barriers is burdening regions of Eastern Poland, which are increasing distance to the rest of the country. However, this way to reduce the socioeconomic distance to the rest of the country is far and fraught with numerous obstacles forming continuous systems of negative interaction. They comprise a variety of historical conditions, even adverse divisions of land ownership. A part of them results from the maladjustment of the law to the needs of development regulating and its effective assisting. An example in this respect is the lack of an efficient system of spatial planning. Social inertia, including the lack of sufficient initiatives in the so-called business environment, is a complement to the circumstances of maintaining and enhancing the Gordian knots of regional development.

This article attempts to identify these problems and show their most important systems or knots and then it tries to identify countermeasures within the fields of the regional policy. Furthermore, the objective is to identify the leading dilemmas in implementing the new directions and tools of the regional policy.

2. Hexagon of useful notions

For several years there has been a debate on the new paradigm of Eastern Poland. In this and other areas of discussion the term "paradigm" is used in various meanings. Except for the review of various versions of its meaning, it is fitting to remind that according to the Dictionary of Contemporary Polish Language [*Słownik Współczesnego*… 1998], this notion usually determined variations of words in declension and conjugation. In its second meaning, "paradigm" means "adopted model in some field (e.g. acting, solve something)." Thus, according to the second meaning, it is possible also to create new concepts for the use of the regional policy, using also a scientific metaphor [Zeidler 2004].

The proposal of a new approach for the regional policy, especially for the use of lagging in the development of Eastern Poland, is introduced by A. Kukliński [2010] in the Lublin Project under the program "The Triple European Mezzogiorno." For studies and ongoing discussion under this program, some needed notions were introduced. In this case the six proposed useful notions, more or less well-known, were named "hexagon."

The first is the notion of "barriers of the development." This means the limits of development potentialities or its acceleration including all beneficial structural changes. Apart from that, one should here take into account not only the notion of "barriers" but also "problems of development."

The second notion in the framework of the presented hexagon is "Gordian knots." It is a highly complicated and difficult to solve (step by step) problem, disadvantageous to the development, the layout of forces within the various fields of the socioeconomic life or between them [Opala, Rybiński 2008]. The previous studies in the field of the socioeconomic development of regions and their parts or places in small extent focused on the morphology and anatomy of the Gordian knots.

The insufficient interest in the identification of the Gordian knots of the regional development leaves them to the free play of market forces on the principle of *laissez--faire*. The specific *laissez-faire* economic and spatial policy reinforces existing disadvantageous systems of forces, especially the outdated socioeconomic and spatial structure of regions. The free market mechanisms are not able to break this permanence. It is "the time of long duration" (the third notion of the hexagon) meaning a difficult to break streak of the effect of forces impeding development.

The time of long duration of the Gordian knots immobilizes not only the positive changes in the natural, social and economic environment. It destroys or significantly slows down the effectiveness of interventions, even with the help of the national or the EU funds. Through continuous, increasingly looped Gordian knots, the mechanism of "the vicious circles" (the fourth notion of the hexagon) is formed, the most noticed just in the regions of Eastern Poland. The vicious circles are rings or closed ranges of mutual destructive impact of the various areas of the socioeconomic life, resistance to all external intervention. The action of the very mechanisms reinforces a belief that in the regions of Eastern Poland it is not possible to provide an effective external assistance, mainly the EU. This part of the country is called the Polish Mezzogiorno, by way of example Southern Italy [Amoroso 2011]. For the three European Mezzogiorno also include Eastern Germany [Krull 2010].

The regions of Eastern Poland will require a new spatial and regional development policy based on the directions effectively stopping bad run duration and the mechanisms of vicious circles. These directions may be called "the new trajectories of the regional development" (the fifth element in the hexagon). The notion of the new trajectory is determined by an imaginary new path (track) course of action and ensuing events of development.

Finally, the sixth element of the discussed hexagon is the notion of "the Alexandrian cuts" as the bold ventures freeing the socioeconomic mechanisms from the complicated arrangement of forces inhibiting development. Selection of these cuts is difficult, requiring an extensive knowledge of the morphology and anatomy of the Gordian knots. The difficulty arises not only from the lack of sufficient knowledge. It is also due to the difficulty of changes in the legal system and public awareness. Society can easily notice the signs of problems, with more difficulty their causes and consequences.

The choice of new trajectories of the regional policy and its operating elements including the places and manners of the Alexandrian cuts requires a lot of courage. A. Kukliński [2011] emphasizes that one should not avoid thinking at the border of so-called Baron von Münchhausen paradoxes as some expected situations, relationships or consequences considered impossible can be possible.

3. The arrangements of the Gordian knots

The long list of problems including barriers and constraints to development of regions should be organized in arrangements of interrelations. This approach will enable an

identification of the most important Gordian knots and will allow exploiting them in the regional policy. As a result of various analyses and reflections, the author proposes organizing them in three main groups, which was already presented in the framework of the mentioned initiative "The Lublin Project" [Polski 2010]. Therefore, it is possible to group the set of the most important problems as the following knots:

1. sectoral,
2. structural and
3. functional-spatial.

Serious and difficult to solve tangles of problems exist and strengthen already within particular areas or sectors of the economy. Practically, they are more or less present within each sector. However, their importance in the burdening of the entire economy of regions is different. Due to the high charge of interconnected problems, it is possible to indicate problem sectors. In Eastern Poland this group may include the problem of agriculture and closely related spatially dispersed rural settlements. The serious looping problems strengthened also in the non-agricultural business sector. This is brightly visible in the low rate of its development as well as in the slight applying technological innovations.

The author calls the structural knots the connections of the brakes on development in a variety of cross-relationships. The example is the low propensity to invest in the industry, which inhibits the production demand in construction and thus the development of this sector. This model connection moves the brakes to other sectors of the economy and the supply of jobs. Then the high unemployment hampers the consumer demand for industrial and agricultural products and services. Such circulation of the destructive impact of some sectors on others constantly reinforces the high level of unemployment and thus the low absorptive capacity of the market in the both local and regional dimension.

The power of the Gordian knots is diversified spatially. In some regions their intensity is particularly high. These undoubtedly include the regions of Eastern Poland. Continuously they increase distance to the rest of the country [Szlachta 2010] despite the start for them in the past period the programming of the EU and continued at present the special Operational Program Development of Eastern Poland. The previous EU structural assistance failed to break the growing distance of the development toward other regions. It should be noted and emphasized that this distance existed in many last decades or even centuries. Thus, historical conditioning is a basis of the problems, mainly the low level of the urbanization in this part of the country. On this ground the fundamental economic and social problems accumulate including a relatively lower activity and economic culture.

4. Interrelations of the Gordian knots. The vicious circles

The passage of time more and more strengthens intra- and intersectoral Gordian knots. This strengthens also the spatial disorder and intraregional lack of the territorial

cohesion. Historically − adversely shaped space is dominated by typical traditional rural complexes forms of the settlement and more widely of spatial planning. The dominance of the rural settlement associated mostly with fragmented agricultural farms substantially blocks the development of the eastern regions. The overpopulation of villages prevents from enlargement as well as the efficiency rise of the agricultural farms. Therefore, this makes impossible the accumulation of equity of farmers and the ability of farms to implement the innovation and competitiveness of products. In the current state of population, building forms and structures of land ownership, the development of agriculture and rural areas is therefore blocked. Today, it is the most serious sectoral Gordian knot of the development of the following regions: Lubelskie, Świętokrzyskie and Podkarpackie.

The breaking of this knot via the support of the multifunctional development of the rural areas is, according to the author, a utopia fantasy. Often proposed in discussions tourism development is not able on a large scale to create an interesting offer as an alternative to farming. Many already recognized and interesting centers and tourist zones in the rural areas of these regions have too low a level of the diversification of their offers. Similarly, a small enterprise of the non-agricultural sector is not able to become an alternative to farming. In the farming and more widely in the rural areas, it is necessary to seek the breaking of the Gordian knot in other sectors: by opening cities to immigration settlement and giving access to jobs.

The non-agricultural enterprise grows so weak that it does not create a significant increase in jobs and income of the population. This is the second sectoral Gordian knot in the least developed regions. In this range the low evaluation of especially production entrepreneurship is justified, particularly industrial and building one, which is conditioned still by low local demand. The two mentioned Gordian knots (agricultural and non-agricultural enterprise) limit innovative activity.

Regions would be competitive if they created an innovative climate. It is an issue of not only creating but also implementing innovation. Innovation environment of a region consist of four "climates": educational, intellectual, business culture and collaboration with institutions of regional and local government [Kukliński 2010]. These four climates are not possible in continuous space regions. They are possible in places reaching a sufficient level of concentration, namely in cities. From these places they can spread activating the effect of entrepreneurship on their regional hinterlands.

The interactions of the two sectors mentioned here create the structural knot. It is possible to show many such examples of negative inter-sectoral influences. To the already discussed sectors of the production sphere one can add even the state of the development of technical infrastructure, the preparation of new investment areas, revitalization of the building development of degraded cities, the organization and the management of service centers and others. This creates a complex inter-sectoral network of the interconnected Gordian knots. On the top of that the third dimension of the knots is applied, which is constituted by disadvantageously developed regions space. The factor hindering the development is an excessive dispersal of settlements in

the rural areas. The urban network of the eastern regions is lacking a network of large cities about or above one hundred thousands of residents and able to develop services and other urban functions. In fact, multi-center rather than mono-centric (based only on region capitals) networks of large cities can create much better conditions to generate regional development not only in terms of innovation. This is the opening to the more absorbent and diversified local markets, for all economic and social activity as well as improving the environment on the regional scale, providing that rural population will be interested in the migration to cities, which is now considered to be a utopia or a paradox as the ones from the group of Baron von Münchhausen repeatedly citied in publications.

Three interrelated systems of the Gordian knots form the indivisible network metaphorically called "the vicious circles." Their breakdown is extremely difficult even if some Gordian knots could be undone in fragments. According to the author, sectoral or multi-sectoral interventions based on the help of the EU structural funds little weaken these vicious circles. This is evidenced by the allocation of this financial assistance in Eastern Poland both in the pre-accession period as well as in the two previous periods after the accession (2004–2006 and 2007–2013). These regions continue to increase the distance development to the rest of the country.

5. The long duration of the problems of Eastern Poland

The long duration of the mechanism of vicious circles in the economy of the most poorly developed regions will be very difficult to break. First of all, the disadvantageous space strengthens them including the dispersed rural settlement and fragmented agricultural farms. Trade in agricultural lands is low, which makes fast structural changes impossible in this sector and increase its competitiveness. Theoretically, there can be two ways out of this difficult situation. One is mass migration people to cities, the second is joining together of farmland pieces. Initiatives in merging taken by the heads of municipalities did not meet with the approval in the municipalities known to the author in the Lublin region.

Cities, in turn, are not prepared for the mass concentration of settlement. Two barriers stand here in the way including too high prices of real estate (housing and building lands), not only in big cities but also in small cities. Potentially interesting large cities are only the capitals of voivodeships. In addition, there is no visible opportunity for new mass jobs in the other medium-sized and small cities, and thus to increase their size. The public planning in the sphere of local government also does not create such a vision. Regional and more local development strategies do not declare the real opening to the concentration of the settlement and the economic activity. Also such places are not determined in the documents of regional spatial policies. Thus, regional and spatial policy in regions is passive. It determines only a futurological hierarchy of urban centers on the principle of a forecast rather than a plan.

The ongoing demographic decline in the regions of Eastern Poland spreads not only to rural but also to urban areas. The unfavorable proportions of the demographic potential between cities and villages remain. Such a state simultaneously keeps invisible costs of permanently wasted chances of accelerated social and economic development. More specifically, local external benefits that could come into existence mainly in the conditions of large and medium-size cities are lost. They could create automatic mechanisms agglomerating the settlement and entrepreneurship. The economy of the eastern regions imperceptibly loses the potential of these external effects in cities and, at the same time, it loses the economic potential of agriculture due to the lack of an adequate structural transformations in this sector.

The notion of the long duration of the unfavorable conditioning of the regional and local development can also be applied to the institutional-legal and political sphere. In the distribution of financial resources of the European Union in individual regions between communes the advantage of egalitarianism over the concentration is noticed. It is possible to accept it with reference to the pre-accession period and even up to the first period after the accession 2004–2006, when it was necessary to propagate the culture of using the financial EU assistance. In the period 2007–2013 it was already possible more clearly to apply the principle of the concentration on the centers in the chosen sites particularly important for the development of regions. In discussions of the scientific and institutional communities such a need is emphasized but regional self-government bodies subject to the pressure of the egalitarian treatment in distribution of this assistance to urban and rural communes. The dispersal of this assistance greatly reduces its effectiveness.

Next, the spatial arrangement of rural communes maintained from the time of the bygone era creates many difficulties and troubles at present especially in Eastern Poland. The first difficulty is the intermunicipal arrangements for the construction of new sections of local roads and connecting them to the ways of a higher category. The second is the local spontaneous spatial planning making available the excess of the areas for the construction in rural areas, which strengthens the dispersion of buildings. Finally, the third difficulty is the damaging egalitarianism of urban and rural communes. It is manifested in the opposition of the communes neighbouring cities to widen the administrative boundaries of cities. It is possible to mention here many examples of the institutional impediments of the development of cities even the "inviolability" of the private property in cities blocking the revitalization and changes in the old degraded building development.

6. Conclusions

The regions of Eastern Poland undoubtedly increase the distance of the development toward the remaining part of the country. The structural assistance of the European Union is widely regarded as less effective. However, the opinions as to further meaning of its holding on the current level are divided. The sceptics claim that

the structural funds granted to Poland should be invested in the regions and zones that already achieved the highest effectiveness, that is elite. The second group of attitudes advocates the principles of the public egalitarianism that all regions should be equally supported.

According to the opinion of the author, the structural assistance for the eastern regions should be maintained on the current level. It should be noted that the response time of the economic and social change (retardation) is here relatively longer. Effects should therefore be expected in the long term. However, one cannot rely solely on this argument. A question is still open of which areas of the socioeconomic development should focus this assistance. It is essential to analyze the morphology and anatomy of the problems related to complex Gordian knots. Taking into account the objectives of the regional and spatial policy, set out in the current government and self-government documents for the programming period 2014–2020 and especially the National Urban Policy (2014), there arises hope for the good choice of the new trajectories public support centers which can be the generators breaking the streak of bad luck of the regions of Eastern Poland.

References

Amoroso B., 2011, *Trzy przypadki europejskiego Mezzogiorno*, [in:] Artymowski P., Kukliński A., Żuber P. (eds.), *Rozwój regionalny, polityka regionalna – nowe interpretacje*, Ministerstwo Rozwoju Regionalnego, Warszawa, pp. 200–205.

Krajowa Polityka Miejska. Projekt, 2014, wersja 1, Ministerstwo Infrastruktury i Rozwoju, Warszawa.

Krull W., 2010, *From unification to global competitiveness. Two decades of regional development in East Germany*, [in:] Kukliński A., Malak-Pętlicka E., Żuber P. (eds.), *The Triple Mezzogiorno? Southern Italy – Eastern Germany – Eastern Poland*, Ministry of Regional Development, pp. 227–231.

Kulkiński A., 2010, *Southern Italy, Eastern Germany, and Eastern Poland – Triple Mezzogiorno?* [in:] Kukliński A., Malak-Pętlicka E., Żuber P. (eds.), *The Triple Mezzogiorno? Southern Italy – Eastern Germany – Eastern Poland*, Ministry of Regional Development, Warsaw, pp. 19–54.

Kukliński A., 2011*, Program Przyszłość regionów XXI wieku – doświadczenia i perspektywy*, [in:] Artymowska P., Kukliński A., Żuber P. (eds.), *Rozwój regionalny polityka regionalna studia regionalne – nowe interpretacje*, Ministerstwo Rozwoju Regionalnego, Warszawa, pp. 39–41.

Opala P., Rybiński K., 2008, *Gordian knots of the 21st Century*, [in:] Niżnik J., Gąsior-Niemiec A. (eds.), *The Individuality of a Scholar and Advancement of Social Science*, The Scholarship of Antoni Kukliński, Rowasz Publishing House, Pruszków, pp. 63–101.

Polski J., 2010, *Gordian knots in development of Eastern Poland's regions*, [in:] Kukliński A., Malak-Pętlicka E., Żuber P. (eds), *The Triple Mezzogiorno? Southern Italy – Eastern Germany – Eastern Poland*, Ministry of Regional Development Warsaw, pp. 347–369.

Szlachta J., 2010, *Experiences and prospects of Eastern Poland*, [in:] Kukliński A., Malak-Pętlicka E., Żuber P. (eds.), *The Triple Mezzogiorno? Southern Italy – Eastern Germany – Eastern Poland*, Ministry of Regional Development Warsaw, pp. 297–312.

Słownik Współczesnego Języka Polskiego, 1998, t. 2, Przegląd Reader's Digest, Warszawa, p. 15.

Zeidler P., 2004, *O roli ugruntowanych empirycznych metafor w naukowych programach badawczych*, Filozofia i nauka, Studia filozoficzne i interdyscyplinarne, t. 2, pp. 239–255.