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SHAPING THE NEW ECONOMY VERSUS SPACE

KSZTAŁTOWANIE SIĘ NOWEJ GOSPODARKI A PRZESTRZEŃ

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Summary: The modern economy is characterised by turbulent, multi-directional transformations which are the result of the formation of the new economy. In the new economy, the role of the ICT sector is increasing and simultaneously the role of industry is declining. As part of the changes, the role of space is also changing. The new economy prefers spaces with multifunctional, modern structures that adapt to existing transformations.

Keywords: new economy, globalization, space, spatial development.

Streszczenie: Współczesna gospodarka cechuje się gwałtownymi, różnokierunkowymi przekształceniami będącymi efektem kształtowania się jej nowej formy zwanej nową gospodarką. Wzrasta w niej rola sektora ICT, a maleje rola przemysłu. W ramach zmian ewoluje także rola przestrzeni. Nowa gospodarka preferuje przestrzenie o wielofunkcyjnych nowoczesnych strukturach adaptujących się do zaistniałych przekształceń.

Słowa kluczowe: nowa gospodarka, globalizacja, przestrzeń, rozwój przestrzenny.

1. Introduction

Space, as a three-dimensional continuity, in which all physical phenomena occur, has been present in economic considerations for many years. Its significance but also the conceptual scope has changed over time. Undoubtedly, it is a fundamental form (except the time) that conditions any activity. However, as an economic

category, its concept is fuzzy and ambiguous. As Zaucha points out, this is due to its interdisciplinary nature. First of all, it can be regarded as a rare resource (e.g. it could be agricultural land, but also the localization), which is difficult to renew (original, but also capital effort). Secondly, it is a source of value and it is indispensable in the economic process. Space is also the final rare good, primarily of a public nature e.g. landscape, transport infrastructure, open space. Zaucha [Zaucha 2007, pp. 12, 13] also indicates space as a determinant of development (distance, proximity), as a value and as an instrument regulating various spheres of life.

With the formation of the new economy and the change of the paradigm of production (Fordism has been replaced by post-Fordism), one observe the revaluation of many economic categories. The volatility and turbulence that characterize today's economy have left their mark on all areas of life, and the approach to space in the source literature and in empiricism has also changed.

The aim of the article is to identify the role and importance of space in the rapidly evolving realities of the new economy. To achieve this goal, a method based on critical literature studies and a descriptive method are used.

2. New economy – basic determinants

The end of the 20th century and the beginning of the 21st century in socio-economic realities were characterized by numerous changes. The scale of these changes and their intensity mean that the thesis about the emergence of a new economy is appearing more and more frequently. This is because the largest scope and intensity of transformations occurred in the economic sphere of developed countries. The term 'new economy' began to define phenomena that occurred in the realities of the US economy at the end of the 20th century. Since then, many synonyms and similar terms have appeared in the literature, such as knowledge-based economy (KBE), knowledge-driven economy, digital economy, creative economy, network economy, new economic order, naked economy (nude economy), attention economics, and Kornai's economy of surplus. Despite such extensive variations in the proposed names, the importance of information, multimedia and the Internet have come to the fore. In practice, the process of shaping new economic realities results in an increase in the complexity of socio-economic structures and in the principles of their functioning, resulting in new management models. This brings an inability to fully clarify and describe phenomena occurring in contemporary economic realities, based on the current theoretical achievements of economics. As an example of this approach, the Solow paradox (1987) can be mentioned, concerning the US economy, the country where the symptoms of the new economic realities first occurred. At the beginning of the transformation, the implemented investments in the latest IT and telecommunications technologies showed a decrease in productivity by the sectors implementing them, and this negative tendency was only reversed in the following years.

The transformations taking place within the shaping of the new economy have left their mark on the functioning of various elements of the socio-economic structure, including spatial units. The processes of globalization have begun to intensify rapidly in the field of economics, thus creating a global economy. This is manifested by the increasing interdependence of economic phenomena on a global scale, while the deregulation of individual national economies, as a consequence, promotes the flow of capital and technology (including innovation). Therefore it can be concluded that the process of globalization enables (and in some situations even initiates) changes in economic processes and creates in effect the basis for the formation of the new global economy – where the ultra-modern technology bonds everything together. Globalization is therefore identified as one of the main reasons for the emergence of the new economy, in which services and significant investments in intangible production factors begin to dominate – and it is supported by an increase in employment in knowledge-intensive sectors of the economy (mainly related to the information and telecommunication technologies). This is possible because the global economy is becoming more and more open, which also results in a growing international competitiveness, which is shaping the principles of the functioning of individual markets. In such conditions, where the participation of ultra-modern technologies (especially in the ICT sector) increases significantly, one can observe transformations in economic activities, which result in revolutionary structural changes, including increasing prosumer attitude. As a result, the source of value becomes a universality, not a rarity, because the value of a particular good increases with the number of its users. It is not the allocation of scarce resources, but the creation of economically useful knowledge that becomes the foundation of success. As a consequence, this knowledge as a form of an effort (its accumulation), combined with fixed assets, becomes the basis for deferring the pace and level of economic development [Zienkowski 2003, p. 16].

3. Space in KBE and in globalization processes

All the above-mentioned transformations and other accompanying examples result in the creation of the so-called Information Society (SI). Members of this society are characterized by the ability to use ICT technologies, i.e. to search (information), collect (information), remotely process, (information) send (information) and communicate. Information technology plays an important role in all areas of life and forms the basis of living standards and civilization's development. Every member of this society is a part of the network. The creation of an information society, in which knowledge becomes one of the most important production factors, has initiated profound changes in all areas of life. Changes taking place in society are also manifested in empowerment and an emphasis on participation, which results in a change in the current legal and political status of local and regional communities.

As indicated by D. Bell, the paradox of the modern state is that it is itself too small to deal with global challenges, and at the same time too large to effectively solve regional (local) issues [Szczepański 1992, pp. 155-156]. As a result, the spatial unit gradually acquires some of the competences previously reserved for the center and this is done in a slow decentralization process. This phenomenon results from, firstly, the greater flexibility of the structures of these units and, secondly, high potential adaptability, as a response to the intensification of multidirectional changes in the environment and increasing competitive pressure. At the same time, such an entity becomes (apart from economic entities) a new participant in the market game, where it must face independently, among others, increasing competition. For these reasons, competitiveness as an element of the functioning of a spatial unit has become not only a fact, but also a standard of their activity. At the same time, at the level of this unit and in light of the change in the state's role, it is necessary to restore social ties and a sense of community. This should be a response not only to the blurring the state's structures, but also to the increasing turbulences in the environment and thus the rise in the scale of uncertainty. Therefore, the main task of the authorities of a given spatial unit is to undertake such actions that aim at activating endogenous social potential, primarily in order to direct it to the creation of a regional and local entrepreneurial climate. Based on these considerations, it is reasonable to conclude that the ability of local communities to create development processes through the use of specific endogenous resources becomes the basis for the success of the spatial unit [Gaczek, Komorowski 2005, p. 51]. In the past, this type of attitude was not reflected in the records of economic theory. This may be due to the fact that these phenomena did not correspond to the slowly competitive stationary equilibrium models [Zauchka 2007, pp. 14-15], therefore they did not find the right place in the models of these theories. As a consequence, analyses devoted to spatial development were conducted on the margins of mainstream economics, which resulted that, for example, they were not included in Marshall's *Principles of Economics* (1925). This fact explains their many years of absence in the canon of economic science. As M. Blaug emphasizes, which is very surprising, after the year 1800 this problem did not occur in economic considerations, whereas the entire mainstream of economic theory was devoid of significant analysis of spatial development until around 1950 [Blaug 2000, p. 650]. M. Blaug, in the attempt to explain this mystery of the economic doctrine, at the end of his deliberations, points out the cause by writing that "(...) it could be that solving the whole secret is simpler than we imagine. If Ricardo had based his ground rent theory on the benefits of location rather than differences in soil fertility (...) the whole block of classical location theory would have found its place in the Marshall Principles" [Blaug 2000, p. 633]. While explaining the dominance of time in economic research and the lack of space, it is pointed out that this temporal conceptualization of socio-economic life results from the fact that the analysis of relationships in space is more difficult than in time, because time does not abound in as many formal structures as space [Chojnicki 1999, pp. 249-264]. P. Krugman,

by pointing out the historical reluctance to recognize space by economists, points to the problem of theoretical operationalization of its issues. Developed by, among others, P. Krugman assumptions of the concept of New Economic Geography in the late 20th century (despite numerous objections to its assumptions) enabled the inclusion of issues described in spatial development in the mainstream of economics. Researchers have begun more and more willingly to consider problems related to, for example, the business location. Referring to the theoretical achievements of spatial development, it should be pointed out that traditional localization theories (especially the German or Isard school), which focused on the relation between costs (especially transport, e.g. in relation to Fermat's triangle problem) and benefits, stopped being sufficient to explain spatial problems. Lösch had already pointed out that under economic forces, the homogeneous space is economically diversified. The development of this thread is found in the assumptions of the model of the new economic geography, where spatial diversity has its source in economic processes. The feedback model of the new economic geography for European solutions (called the U-shaped relationship) – where the participation of individual regions is gradual – does not take into account the development of a knowledge-based economy. In a situation where the conditions for this economy appear, convergence would only occur at high exchange costs and at low polarization. It should be remembered that the acquisition of knowledge is associated with large expenditure, which in turn extrapolates to a growing tendency to agglomerate related activities. It is also important to know that innovation is now assumed to be an endogenous resource – this results in a cumulative feedback effect. Knowledge, in this approach, is understood as an intertemporal external technological effect. Intertemporality combining previous and subsequent connections of activities in enterprises (today's investments in research lead to knowledge in the future) is a characteristic element of the KBE, which distinguishes this economy from the assumptions of neoclassical economics. In this approach, creating innovation (new knowledge) becomes a feature of the accumulated knowledge resource in a specific location. As a result, the concentration of modern economic activity in a specific, strictly designated location, is beneficial to economic growth, in conditions of growing barriers of knowledge globalization. In an era of a knowledge-based economy, the key issue for the development of individual areas is the proximity of sources of knowledge. This is a reference to Glaeser's original theorem (1992), according to which human capital and rare qualifications are important factors influencing the maintenance or acceleration of economic growth, especially in urban areas. In this situation, the key problem is the introduction of institutional changes that use local resources of this kind to strengthen development enabling solutions.

Regional and local coherence, and the integration and cooperation of entities operating at intermediate levels are therefore the basic conditions for overcoming the threats posed by global competition in a period of market instability. It should be emphasized that contemporary global spatial development conditions are associated

with technological progress, progressive integration, the region's place in the global, continental and national economy, externalized by products and services provided by this region.

One of the phenomena that has intensified along with the progressing globalization is the relocation of economic activity. Modern capital acquires the features of nomadism in many cross-sections. In assessing this phenomenon, it is necessary to consider whether it is unequivocally negative (how often it occurs in various types of politicians' statements) and who loses and who gains. The experience of the first decades of the 21st century indicates that relocation for developed countries is a favorable phenomenon, because low-skilled jobs are replaced by these demanding high qualifications – it causes changes in the structure of employment, but also consumption, behavior patterns, etc. The basis of the development of underdeveloped areas (where the digital gap occurs) are capital-intensive investments in IT infrastructure, which unfortunately are expensive, moreover in many cases they are a further priority, especially in communities with low levels of education and high digital inclusion. With regard to the benefits, as the American National Intelligence Council (NIC) states, these communities can be identified as beneficiaries of this process – they have access to the latest ICT technology (they benefit from it fully), and in addition, they quickly adapt new solutions in this field (*Mapping...*, 2004, p. 11). At the same time, globalization is increasing the phenomenon of the unification of attitudes and behaviour, including consumption patterns, and these changes are not only quantitative, but also qualitative.

Location advantages are becoming one of the most important criteria in the functioning of international enterprises in a globalizing economy. Undoubtedly, the direct investment of a large international company is an element stimulating the influx of innovation to underdeveloped areas, provided however, that the investment is not based on simple production factors with low acquisition costs. This is due to the fact that in modern economic realities, the immobile location advantages are very diverse. They include both simple and low-cost production factors, as well as specific, unique and often non-quantifiable and intangible elements, that are related to the features of a given place, they cannot be found in other places of the location, at least not in such scale and quality. This is confirmed by models that are based on the knowledge capital model, which assume that the location of knowledge-based assets, whose production cost is the largest, is possible in isolation from production [Cieślak 2005, pp. 53, 54]. As a result of this assumption, it can be seen that the influx of foreign investment results in the inflow of innovation only when knowledge capital is present in the area of location.

To put it simply, the primary determinant of the location of ultra-modern investments is the presence (or lack) of knowledge in a given area. This situation in practice means that the largest flow of innovation (knowledge) is observed in relation to investments occurring between highly developed economies and ones well equipped with knowledge capital. This capital also strongly correlates with

local socio-economic networks. This is manifested in mutual beneficial relationships implemented in horizontal flexible cooperation of various units and institutions occurring in a given area. These relations and relationships are the product of the local 'climate', which is a variety of a cultural, social, institutional etc. nature. It is manifested in accepted norms and social habits that cause local communities to have a different approach to economy activity. However, it should be remembered that in contemporary reality, Marshallian externalities are still an important element of explaining the differences in the development of individual areas, while the understanding of these effects is changing. As a result, the final occurrence (or not), of the positive external effects of the inflow of foreign investment depends on local conditions. In relation to the development of the concerned area, it should be remembered that it is currently conditioned by many factors, including endogenous, and that direct foreign (external) investments can strengthen this process, in order to achieve benefits from its existence.

As a side note, it should be noted that in the globalizing world and the progressive internationalization of economic activity, in the near future there will be no mention of foreign, but rather external investment. Thus, the spatial-departmental economic structure largely determines not only the development of a given spatial unit, and its level of competitiveness, but also the inflow of foreign investment. This also affects their technological and capital connection (empowerment) with local resources and the final consequences of this fact for the local and regional community. As a result, the impact of external investments on the area in which they are located, largely depends on local, primarily endogenous conditions, characterizing the given location. This is why, in practice, areas with high-quality production factors, modern infrastructure and these adapting the rules of economic activity on their own market to the principles of the new economy benefit most [Zorska 2002, p. 25]. Obviously, each new investment causes processes induced in this area, but its positive impact is conditioned by many endogenous factors, including increasingly qualitative ones.

The phenomenon of global resourcing (understood as the decision-making process of transnational corporations) results in a large range of new location possibilities (as well as outsourcing and offshoring), which may include local entities in economic networks, thus affecting the development of a given area [Korenik 2013, p. 101]. At the same time, as M. Poniatowska-Jaksch notes, locations in places with a higher level of development are often considered more to be more favorable, due to the size of the internal market, as well as their temporary accessibility [Poniatowska-Jaksch 2006, p. 140]. In particular, communication of a place using modern infrastructure (modern highways, airports, the Internet) is very important because then additional external effects appear, which can be described as extraordinary benefits of accessibility.

Intraregional integration space is also of great importance. The occurrence, or what is worse – the growing disparities in space, are reflected in the widening civilization gap, which results in the spatial disintegration of space's economic structures.

An extreme manifestation of this phenomenon is the so-called 'glocal node' emerging as ultra-modern enclaves in urban areas of large backward agglomerations. These places are connected using optic fibre connections and modern telecommunications systems with the dominant business centers of developed countries and are isolated in turn from the immediate environment [Castells 2003, p. 266-267]. Another negative trend in urban areas is the segregation of an urban space by creating isolated settlements and the pauperization of others. Negative phenomena occurring in space are often explained by the occurrence of a lock-in effect, which leads to the closure of the area, its isolation and, as a consequence, the recession. This phenomenon is accompanied by a low degree of adaptability to new operating conditions.

Summing up the considerations so far, it can be stated that, firstly, the basic criterion for the contemporary development of the area concerned is the adaptability of its spatial structures to changes occurring in the global cross-section and – secondly – this development has its source in the shaping of the new economy. Better developed spaces react more quickly to these new realities by adapting their structures to them, which leads to the concentration of production factors in areas characterized by multifunctionality. In the face of growing developmental pressure, in a given area activities aimed at raising the level of qualifications and education (lifelong learning), increasing expenditure on R&D, and preferring to use the latest ICT achievements in the development of local infrastructure, are becoming important. These changes result in the improvement (transformation) of institutional systems related to space management and its individual elements.

The growing dominance of science causes significant changes in the functioning of the spatial unit community. This requires undertaking actions related to the preparation of these communities to understand the undergoing transformations and, more importantly, to accept them. This is difficult, because knowledge as a new factor of production has led to an overvaluation of classic factors. It should be remembered that changes caused by these transformations often are the reason of the re-evaluation of existing value systems or attitudes. The inclusiveness is to be a consequence of the increase of knowledge capital transforming into social capital or, in another situation according to E. Mączyńska [Mączyńska 2017], the chrematistic effects (profit and enrichment) become the goal and not the effect – which leads to the phenomenon of the social exclusion of individuals/groups from the local community. Only the creation of an inclusive economy in which dominate the bonds of partnerships and conscious interdependence can guarantee the sustainable development of the spatial unit. In new economic realities it has been widely accepted that useful knowledge is becoming the fourth factor of production by making transformations, i.e. the reorientation and recombination of other factors of production. Knowledge is not the subject to substitution and during usage it is not consumed like other factors of production and moreover – knowledge can only be improved. Changes in other factors are manifested primarily in the field of labour and capital because in contemporary considerations the resources of the labour force

are not taken into account, but rather human capital. This change not only boils down to moving away from the quantitative category in favor of quality, but also combines these two factors. At the same time, the notion of capital has expanded considerably – intellectual capital, not financial, is undoubtedly becoming important. It should be noted however, that reducing this phenomenon to agriculture production is clearly wrong. This is because in human activity the categories of distance and area are always, and will be, an important criterion. Admittedly, there are publications devoted to the issue of geographical rent, but in the mainstream economics of considerations this is not a very popular problem.

Summing up the considerations so far, it should be emphasized that today, whether wanted or not, it is the knowledge that by becoming one of the most important factors of economic activity reevaluates the others, which in consequence leads to their recombination in the Schumpeter approach. At the same time, as Toffler justifies, it is a universal substitute for all other production factors (primarily material and transport resources) [Toffler, Toffler 1996, p. 40]. From an economic point of view, this is an important element of economic infrastructure and market processes, and it is a public good materializing in artifacts and realizing itself in the education of individuals [Domański, 2004, p. 269]. In recent years, we have observed the intensification of the process of creating new knowledge (this applies to both scientific studies and the implementation of new technologies), even in this field the existence of human activity relations described by the law of Moore is mentioned [Frejtag-Mika 2006, p. 36] (this applies to integrated circuits which double their capacity every 18 months). That is why in the new reality it is important not only to create knowledge, but also to create conditions for transferring it to business practice (this is called ‘pro-innovation policy’).

4. Conclusions

It can be summarized that, despite some opinions, the issue of space is significant, and its importance will continue to be so. This is confirmed by A. Lisowski – he points out that “space issues will probably be the subject of scientific debates for a long time” [Lisowski 2003, p. 10]. In turn, P Cooke stated that “the forecasts of the fall of the significance of distance and the end of geography, associated with the introduction of all these inventions, were greatly exaggerated. This also applies to the last, erroneous prophecies related to the era of the Internet age” [Cooke 2006, pp. 21, 22]. K. Kelly also states that proclaiming the end of the meaning of space in the economy is one of the biggest mistakes at the turn of the century [Kelly 2001, p. 85]. As a consequence, contemporary space is becoming a qualitatively new category in today’s economy, but closely related to the classic space already described by Ptolemy. Although virtual space (or e-space) is more and more often mentioned in the latest research, and also in practice, it is a certain, and sometimes new, type of space.

This is due to the fact that space is primarily a social category, among others, it is subject to the same change as the whole of civilization. Examples of new approaches to space elements are real estate solutions, especially in large metropolises (USA, Sweden, Denmark and Norway), regarding their inclusion in 3D – called spatial plots. Three-dimensional property rights are a solution that meets the development needs of modern urban spaces (metropolises), for example one of the solutions is the introduction in the US of transfer of development rights [Felcenloben 2013, p. 7]. This type of transformation indicates that along with economic changes, regulations and practical solutions in the field of space management change, and space itself is present in the economy in ever new dimensions. As a consequence, it should be realized that the importance of space in the descriptions of the above phenomena will increase.

In general, it can be stated that an important element conditioning the proper functioning of the new economy is the adaptive susceptibility of spatial structures to changes. Referring to the more developed areas, it should be noted that they tend to react more quickly to new realities by adapting their spatial structures, which results in the concentration of production factors leading to their multifunctionality. In turn, the dominance of one element, especially related to natural resources of space, may cause the Dutch disease. It should be emphasized that the process of globalization is selective, which means it occurs with varying intensity, at different points in space. Areas that have adequate knowledge and capital resources, including highly qualified human capital, become leaders in this process and the place where innovations are created. As a result, innovations that are absorbed in the entire global economy are in practice produced in a small number of closed local systems. On the other hand, territories that lack, or have a shortage of these factors, are beginning to lose contact with the leading areas, becoming only the recipient of products and services, provided that, as part of the progressive flexibility of spatial structures [Kuciński et al. 2002, p. 50], services and products are subject to globalization, so that their production is restricted to strictly designated spaces. At the same time, leading areas are usually characterized by the location in their territory of a large modern urban center that creates a metropolitan area around it. In these spatial units, economic activity begins to accumulate, in line with scientific research and ultra-modern services.

References

- Blaug M., 2000, *Teoria ekonomii. Ujęcie retrospektywne*, PWN, Warszawa.
- Castells M., 2003, *Galaktyka Internetu. Refleksje nad Internetem, biznesem i społeczeństwem*, Dom Wydawniczy REBIS, Poznań.
- Chojnicki Z., 1999, *Podstawowe problemy filozoficzne i metodologiczne przestrzeni i czasu*, [in:] Z. Chojnicki (ed.), *Podstawy metodologiczne i teoretyczne geografii*, Bogucki Wydawnictwo Naukowe, Poznań.

- Cieślak A., 2005, *Geografia inwestycji zagranicznych*, Wydawnictwo Uniwersytetu Warszawskiego, Warszawa.
- Cooke P., 2006, *Bliskość, wiedza i powstawanie innowacji*, *Studia Regionalne i Lokalne*, no. 2(24).
- Domański R., 2004, *Geografia ekonomiczna, ujęcie dynamiczne*, PWN, Warszawa.
- Felcenloben D., 2013, *Czasowo-przestrzenne obiekty ewidencyjne w wielowymiarowym katastrze nieruchomości – perspektywa zmian istniejącego modelu*, *Acta Scientiarum Polonorum, Geodesia et Descriptio Terrarum*, no. 12(1).
- Frejtag-Mika E., 2006, *Teoria i praktyka ekonomii a konkurencyjność gospodarowania*, Difin, Warszawa.
- Gaczek W.M., Komorowski J.W., 2005, *Kapitał ludzki i społeczny regionu jako element rozwoju gospodarki opartej na wiedzy*, [in:] M. Gaczek (ed.), *Innowacje w rozwoju regionalnym*, Zeszyt Naukowy no. 57, Wydawnictwo Akademii Ekonomicznej w Poznaniu, Poznań.
- Kelly K., 2001, *Nowe reguły nowej gospodarki*, WIG-Press, Warszawa.
- Korenik S., 2013, *Rozwój przestrzenny we współczesnych realiach*, Biblioteka Regionalisty, no. 13.
- Kuciński K., Kudłacz T., Markowski T., Ziobrowski Z., 2002, *Zintegrowany rozwój aglomeracji a konkurencyjność polskiej przestrzeni*, *Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, t. CXI, Warszawa.
- Lisowski A., 2003, *Koncepcje przestrzeni w geografii człowieka*, Uniwersytet Warszawski, Warszawa.
- Mapping the Global Future*, 2004, report of the National Intelligence Council's 2020. Project, Pittsburgh.
- Mączyńska E., 2017, *Inkluzywna gospodarka*, <https://mycompanypolska.pl/artukul/948/felieton-inkluzywna-gospodarka> (23.08. 2019).
- Poniatowska-Jaksch M., 2006, *Przemysłowe bezpośrednio inwestycje zagraniczne źródłem konkurencyjności regionu*, Szkoła Główna Handlowa, Warszawa.
- Szczeptański M., 1992, *System światowy: między globalizmem a lokalizmem*, *Przegląd Socjologiczny*, t. XLI.
- Toffler A., Toffler H., 1996, *Budowa nowej cywilizacji*, Zysk i S-ka, Poznań.
- Zaucha J., 2007, *Rola przestrzeni w kształtowaniu relacji gospodarczych*, Fundacja Rozwoju Uniwersytetu Gdańskiego, Gdańsk.
- Zienkowski L., 2003, *Gospodarka „oparta na wiedzy” – mit czy rzeczywistość?*, [in:] L. Zienkowski (ed.), *Wiedza a wzrost gospodarczy*, Wydawnictwo Naukowe Scholar, Warszawa.
- Zorska A., 2002, *Globalizacja we współczesnej gospodarce*, [in:] A. Zorska (ed.), *Korporacje międzynarodowe w Polsce. Wyzwania w dobie globalizacji i regionalizacji*, Difin, Warszawa.