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СІЛЬСЬКИЙ ТУРИЗМ ТА ВІДПОЧИНОК – ВИДИ СТАЛОГО РОЗВИТКУ В ПРОВІНЦІЇ СІБІУ

Чудове географічне розташування, чистота природи, доступність місць, багатство і різноманітність культурної спадщини, зробили провінцію Сібіу областю з великим туристичним потенціалом. Площа провінції займає більш ніж 30% від загальної площі Сібіу. Хоча це й сільська місцевість, туристичні пропозиції є різноманітними та активними (туризм і відпочинок, традиційна кухня, культурний туризм і охоплення бізнес-сегменту за допомогою спеціальних засобів, все це на додаток до відпочинку), і ступінь комфорту збільшується. У провінції Сібіу, агротуризм і сільський туризм створює можливості для місцевого та регіонального економічного зростання та створення нових робочих місць шляхом освоєння культурної і природної спадщини. Крім того, важливою частиною нових робочих місць, створених являє собою можливість для регіональної жіночої зайнятості. Звідси необхідність для реалізації багатьох проектів, які висувають на перший план стабілізацію активного населення в сільській місцевості, капіталізація природного і антропоного туристичного потенціалу в контексті екологічної економіки, і, таким чином, підвищення рівня життя.

Ключові слова: стійкість, сільський туризм, агротуризм, розвиток.

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СЕЛЬСКИЙ ТУРИЗМ И ОТДЫХ – ВИДЫ УСТОЙЧИВОГО РАЗВИТИЯ В ПРОВИНЦИИ СИБИУ

Замечательное географическое расположение, чистота природы, доступность мест, богатство и разнообразие культурного наследия, сделали провинцию Сибиу областью с большим туристическим потенциалом. Площадь провинции занимает более 30% от общей площади Сибиу. Как и сельская местность, туристические предложения разнообразны и активными (туризм и отдых, традиционная кухня, культурный туризм и охват бизнес-сегмента с помощью специальных средств, все это в дополнение к отдыху), и степень комфорта увеличивается. В провинции Сибиу, агротуризм и сельский туризм создает возможности для местного и регионального экономического роста и создания новых рабочих мест путем освоения культурного и природного наследия. Кроме того, важной частью новых рабочих мест, созданных представляет собой возможность для региональной женской занятости. Отсюда необходимость для реализации многих проектов, которые выдвигают на первый план стабилизацию активного населения в сельской местности, капитализация природного и антропоного туристического потенциала в контексте экологической экономики, и, таким образом, повышение уровня жизни.

Ключевые слова: устойчивость, сельский туризм, агротуризм, развитие.

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BETWEEN THE WEST AND THE EAST: UKRAINIAN ECONOMIC THOUGHT AS THE CROSSROADS

Ukrainian economists, similarly to Ukrainian society, are in the middle of the process of turning from the East to the West. However, the visibility of their work remains low both in the East and the West. The analysis of their publication activity (using data from the Web of Science and eLibrary) confirms these assumptions. It is argued that the first step in this eventual transition consists in building the space for economic debates at the national level. Active and healthy debates at the national level will increase chances of Ukrainian economists to be heard internationally.

Keywords: economic sciences, Ukraine, publication activity, content analysis.

Introduction. The process of nation-state building is still ongoing in today's Ukraine. It started with the Act of declaration of independence of Ukraine in 1991, but it is far from being over a quarter-century later. The country is still defending its independence, including by military means. The military and geopolitical dimensions of the fight for independence tend to overshadow its intellectual dimension, however. An element of the sustainable (as opposed to failed) nation-state refers to a space for economic debates at the national level that may eventually contribute to the emergence of a distinctive economic thought. This article discusses the current state of intellectual debates in the area of economic sciences and argues that Ukrainian economists tend to contribute to scholarly discussions either in the West (in Western Europe and North America) or in the East (in Russia). As a result, an existing potential for economic debates at the national level that would be focused on the particular problems and challenges that Ukraine faces remains untapped.

Data and methods. The article uses statistical data about publications of scholars affiliated with Ukrainian scientific organizations in the West, in Russia and in national scholarly journals. As a source of information about publications of economists with a Ukrainian affiliation in Western Europe and North America, the Web of Science, WoS, core

collection was chosen. WoS is the most respected and authoritative source of information on publications in the most rigorously peer-reviewed periodicals in the world. More specifically, 35 journals in economics with the highest impact factor in 2014 were selected for the study (their list is available from the author upon request). The search covered the period from 1991 through 2015.

As a source of information about contributions of economists affiliated with Ukrainian research centres eLibrary (Russian Index of Scientific of Scientific Citation) was used. Compared with WoS, eLibrary is far less selective: it includes almost all periodicals published in Russian language. 10 economic journals with the highest citation index in this database were searched: Вопросы экономики, Мировая экономика и международные отношения, Российский Журнал Менеджмента, Journal of Institutional Studies, Финансы, Проблемы прогнозирования, Проблемы теории и практики управления, Общество и экономика, Инновации и Менеджмент в России и за рубежом. The search covered the period from 2003 through 2015 (eLibrary was created in 1999 and it does not offer a comprehensive coverage for the early period of its existence).

Ukraine does not have a national database of scientific publications similar to eLibrary in Russia or Persée in France. Thus, contributions published in a single Ukrainian

periodical, *Actual Problems of Economics* (Актуальні проблеми економіки), were analyzed. This journal arguably has the highest international visibility (being indexed in Scopus and, for a short period of time, in WoS), but it is run by a Ukrainian research center and publishes contributions mostly in Ukrainian (contributions in Russian are also accepted, yet they constitute a relatively small fraction of the published materials – 13% of the shortlisted papers from this periodical). Taking into consideration that *Actual Problems of Economics* is a monthly publication, the search covered the period from 2013 through 2015, which produced a sample of 278 publications.

The data about scholarly contributions of researchers affiliated with Ukrainian scientific organizations in the West (WoS), in the East (eLibrary) and in their own country (*Actual Problems of Economics*) was analysed using methods of descriptive statistics and content analysis. "Content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" [4, p.18]. In the circumstances, titles of the shortlisted contributions were content-analysed using the computer program QDA Miner with the module WordStat. The content analysis allowed identifying the most common words and their combinations, which, in turn, helped describe common themes in the publications.

Statement of the problem. The well-known maxim in science, publish or perish, has had a particular translation for Ukrainian scientists in general and economists in particular: in order to survive in academia, one must publish either in Russian scholarly journals, or, even better, in scholarly journals published in Western Europe and North America. As a result, scientific life in Ukraine tends to be externally oriented. It comes as no surprise that studies of today's Ukrainian academic milieu are rare. How to study something that has not taken yet a well recognizable and particular shape? Scientific community in this country lives according to the rules and norms that are externally generated and imposed. These rules and norms are set either by people vested with political power [11] or simply "imported" from abroad. Members of the academic community in Ukraine have not managed to elaborate, defend and enforce their own rules in a bottom up manner. In the other words, the academics have not succeeded to find internal sources of the institutional development in science (D. North defines institutions as "the rules of game" [6, p.3] in a particular area of human activity, namely, science).

The vulnerability of science to external influences is not specific to Ukraine. The autonomy of science cannot be taken for granted even in the most developed – judging by the level of research productivity and the size and scope of scientific output – countries. For instance, in the United States science has been subject to attacks from business on several occasions, especially in the 19th and the early 20th centuries [1]. Business people repeatedly attempted to impose their own rules of the game on scientists, which would have allowed transforming scientific organizations into profit-making enterprises like any other firm. T. Veblen complained: "The university is conceived as a business house dealing in merchantable knowledge. Placed under the governing hand of a captain of erudition, whose office it is to turn the means in hand to account in the largest feasible output" [10, p.62].

What makes the Ukrainian situation specific is the fact that in addition to the attempts of politicians (people vested with political power) and business people (people vested with economic power) to undermine the autonomy and integ-

riety of scientific institutions, national institutions of science are weak compared with foreign institutions of science. The fact that Ukrainian scholars consider the publication of their contributions abroad as a first-best choice means that there is no "game" at the national level, i.e. little or no interaction supported by national institutions of science. Let us consider the situation in economic sciences as an example.

In the West, efforts to make economics a paradigmatic science abound. T. Kuhn defines scientific paradigm as "the body of beliefs (one) could take for granted" [5, p.88]. The body of beliefs that mainstream economists tend to take for granted includes "stable preference, rational choice, and equilibrium structures" [2, p.5]. For an emerging economy that is far from conditions of stability these assumptions seem to be too restrictive. Attempts to remain within the range of beliefs that the other mainstream economists would share also explains the drift into predominantly applied research that avoid asking difficult theoretical questions.

In the East, economists have their own priorities regarding the topics that are important and publishable. The ideas of sovereignty and empire-building – political, but also economic – attract Russian social scientists' attention. For instance, eLibrary lists (as on 26.08.2015) 188 articles on the topic "sovereign democracy" and 120 articles on the topic "sovereign market". The issue of sovereignty certainly rings a bell for those interested in studying the process of nation-state building.

Two obstacles prevent Ukrainian economists to contribute to this discussion of sovereignty in Russia, however. First, the Russian discussion focuses almost exclusively on the sovereignty of Russia itself. It is not excluded that Russia can enhance its sovereignty at the expense of the sovereignty of the other countries thus attempting to rebuild an empire. Second, sovereignty represents only one form of nation-state building. M. Foucault differentiates in this regard sovereignty, discipline and security as three alternative techniques that power holders may use in order to assert their control over a country. "Sovereignty is exercised within the borders of a territory, discipline is exercised on the bodies of individuals, and security is exercised over a whole population" [3, p.11]. In the other words, the exclusive focus on sovereignty prevents social scientists from studying the entire range of techniques of power that underpin the process of nation-state building. The issues of territory (including the question of reshaping or protecting national borders) then overshadow everything related to the control of human bodies and various processes.

The concept of security looks particularly promising for economic research. With its help one can show, for instance, how to control individuals and their behaviour by shaping interactions on the market in a particular manner. Instead of explicitly allowing or prohibiting certain actions, it is possible to design interactions on the market in such a manner that they will bring outcomes desired by the power holders. The strategy of gatekeeping is a case in point: by controlling access to the market (or any other field of interactions) the power holders decide the ratio of buyers and sellers, which enables them to capture rents and to further enhance their power [7]. The concept of security also allows finding strategies of resistance to the power that takes mostly unobservable and indirect forms.

This paper aims to confirm that sciences in Ukraine are still not embedded in national institutions and, consequently, Ukrainian scholars play the game whose rules they neither set nor influence. More specifically, the present paper discusses the following research questions us-

ing economic sciences as an example. First, what characterizes current patterns in the publication activity of economists affiliated with research organizations in Ukraine? Second, how do these patterns relate to particular problems and challenges that Ukraine currently faces?

Results. Among the articles that scholars affiliated with Ukrainian universities and academic institutions published

in the scholarly journals indexed in WoS, economic manuscripts represent a tiny fraction (Table 1). This pattern is common for the most post-socialist countries, however. Some gains made during past five years do not suffice for changing it, apparently. Works of economists with a Ukrainian affiliation are not highly visible in eLibrary either.

Table 1. Number of scholarly publications included in the Web of Science core collection, selected countries, 1991-2015

	Ukraine	Russia	Poland	Lithuania	Kazakhstan
Total	125159	739018	430229	36695	8910
In the area of economics (% of Total)	1535 (1.2%)	2778 (0.4%)	3771 (0.9%)	2017 (5.5%)	313 (3.5%)
Past five years, 2011-2015 (% of all publications in the area of economics)	924 (60.2%)	1049 (37.8%)	1817 (48.2%)	843 (41.8%)	264 (84.3%)

Source: WoS as on 26.08.2015

The situation with publications in top economic journals turned to be even less promising. Scholars affiliated with Ukrainian scientific organizations published 77 articles in top 35 economic journals included in WoS and 114 articles in top 10 economic journals included in eLibrary. The distribution of these contributions by year of publica-

tion and periodical title shows that, on one hand, in 2011-2012 and 2014-2015 the number of studies reported in WoS actually exceeded the number of studies reported in eLibrary (Figure 1). More time is needed to confirm if this fact reflects the re-orientation of Ukrainian economists from the East to the West.

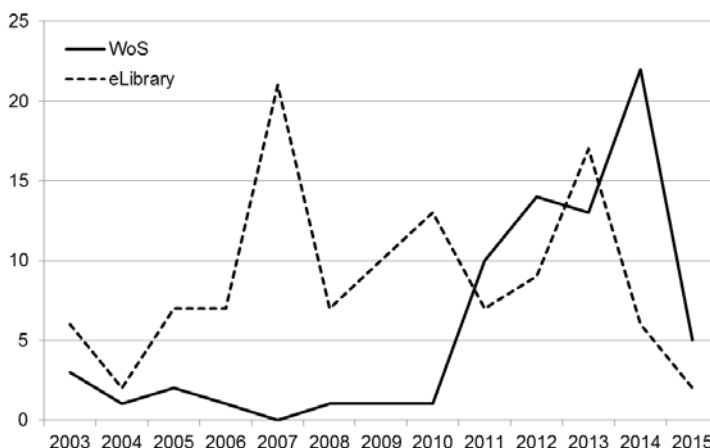


Fig. 1. Number of scholarly articles published in top 35 economic journals included in WoS and in top 10 economic journals published in eLibrary, 2003-2015

Source: WoS and eLibrary as on 29.09.2015

On the other hand, in both cases publications tend to appear in only few periodicals from the list of top journals. For instance, 93.5% of all articles of authors with a Ukrainian affiliation were published in a single periodical from the WoS list, Value in health. 44% of all articles of scholars from Ukraine appeared in Инновации, a St. Petersburg based periodical included in eLibrary. These periodicals publish results of mainly applied research in rather narrow areas of

economic knowledge (namely, pharma-economics and economics of innovation and technology). Furthermore, all contributions published in Value of health were authored by people affiliated with a single research center, namely Lviv National Medical University named after Danylo Halytsky. Thus, the visibility of Ukrainian economists abroad can be attributed to a particular culture and research networks that progressively emerged in selected places.

Table 2. Frequency of the most popular words in publication titles, WoS, eLibrary and Actual Problems of Economics

World of Science		eLibrary		Actual Problems (in Ukrainian)		Actual Problems (in Russian)	
Ukraine	57	Украины	50	Розвитку	61	Развития	5
Analysis	26	Инновационн*	21	Економічн*	44	Анализ	4
Cost	22	Развития	20	Систем*	32	Аспекты	4
Treatment	19	Проблемы	15	Економіки	25	Управления	4
Pharma-economics	9	Экономики	10	Управління	23	Экономических	4

Table 2 (continued)

World of Science		eLibrary		Actual Problems (in Ukrainian)		Actual Problems (in Russian)	
COPD (chronic obstructive pulmonary diseases)	8	Перспективы	9	Формування	23	Инновационных	3
Costs	8	России	7	Підприємств*	20	Менеджмента	3
Evaluation	8	Экономическ*	11	Аналіз	19	Систем	3
Therapy	8	Деятельности	6	Країн*	17	Эффективности	3
Patients	7	Промышленности	5	Інноваці*	13		
Based	5	СНГ	5	України	11		
Drugs	5	Состояние	5	Умовах	10		
Effectiveness	5	Формирования	5	Діяльності	9		
Formulary	5	Института	4	Політики	9		
Acute	4	Контексте	4	Теорії	8		
Children	4	Новые	4	Визначення	7		
Consumption	4	Технологий	4	Досвід	7		
Direct	4	Управления	4	Забезпечення	7		
Economic	4			Засади	7		
Results	4			Зростання	7		
				Контексті	7		
				Оцінювання	7		
				Поняття	7		
				Проблеми	7		
				Ринку	7		
				Туризму	7		

The content analysis of publication titles further confirms that the contributions to WoS refer to the narrow area of pharma-economics. Results reported in Table 2 also suggest that priorities set in publications by authors with affiliations in Ukraine differ depending where they publish their papers, in Russian language periodicals included in eLibrary or in the national language periodical Actual Problems of Economics. For instance, references to system approach and concept, theory, institution, or model "building" are more common in the contributions addressed to the Ukrain-

ian readers. Divergent accents in the contributions made to WoS, eLibrary and the Ukrainian audience are further illustrated by the most frequent clusters of words in publication titles (Figures 2-4). In the case of eLibrary, one of the clusters contains words "problems", "economy" and "Ukraine". In the case of WoS, "Ukraine", "treatment" and "cost" form a common cluster. In the contributions to Actual Problems of Economics, emphasis is made on "building", "development" and "transformation".

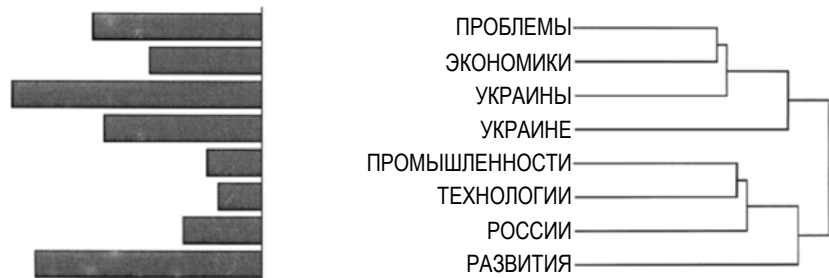


Fig.2. Dendrogram reflecting co-occurrence of the most popular words in publication titles, eLibrary, fragment

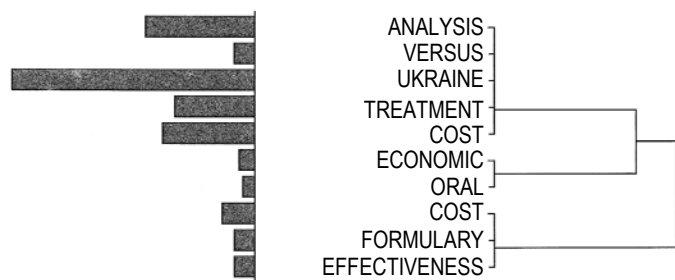


Fig.3. Dendrogram reflecting co-occurrence of the most popular words in publication titles, WoS, fragment

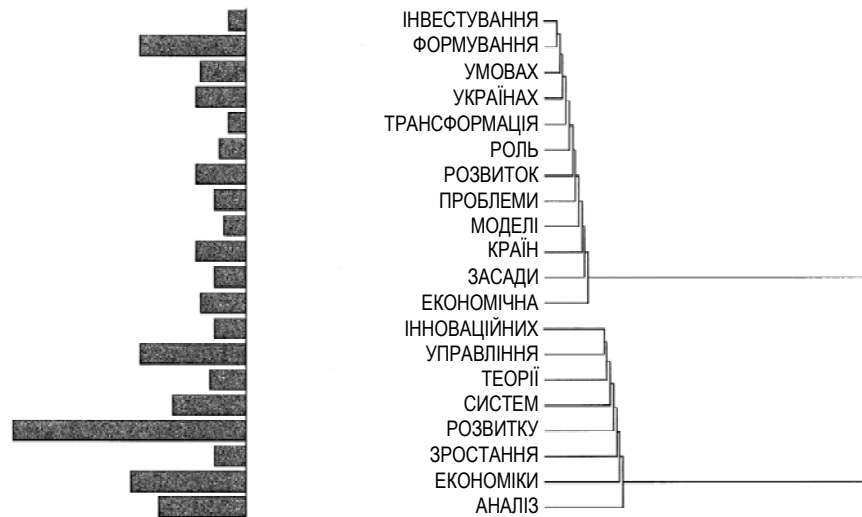


Fig.4. Dendrogram reflecting co-occurrence of the most popular words in publication titles, Actual Problems of Economics, fragment

Discussion. Works of Ukrainian economists are highly visible neither in the West nor in the East. An explanation for this lack of visibility (not to speak about the impact of their works measured, inter alia, by the number of citations) refers to the differences in priorities at the international and national levels. Internationally, economists affiliated with Ukrainian research institutions found a rather narrow niche of purely applied research in very specific branches of economics. The search for concepts that would help better understand the process of nation-building in Ukraine does not have much chance to attract attention of foreign readers unless this search is fuelled by healthy and active discussions at the national level. It is not enough to say that particular concepts or models are needed – they have to be proposed, criticized, eventually rejected, and subsequently improved etc. There is currently no national economic debate in Ukraine, as the content analysis shows, on the economic theory and consequences of war (which is quite surprising, keeping in mind the annexation of Crimea and the ongoing military conflict in Eastern Ukraine). Only one article (published in Actual Problems of Economics) discusses corruption, the second most urgent problem that Ukraine faces. The list of omitted, forgotten or tabooed topics does not stop here.

In the present conditions Ukrainian economists have three options: (i) to accept rules of the game on the Western market for scholarly publications by deliberately omitting most issues relevant to the process of nation-state building; (ii) to accept rules of the game in the Russian academia by denouncing the idea of the Ukrainian nation-state and ignoring several important aspects of nation-state building and (iii) to develop their own intellectual space for discussing economic aspects of nation-state building in the Ukrainian context as well as in the other national contexts [9]. By choosing the third option, Ukrainian social scientists and economists in particular would be able to intellectually contribute to the ongoing process of nation-state building in their country. A nation-state without its own intellectual life and debates is hardly possible.

The option of developing the space for Ukrainian economic debates does not exclude the publication of Ukrainian economists' works either in the West or in the East. The opposite is true: the existence of vivid and healthy intellectual debates at the national level would eventually attract attention of foreign scholars and increase their willingness to

learn more about these debates. After all, the issues of nation-state building could be of interest not only in the post-soviet countries, but also in Latin America, Africa, Middle East, and the Balkans, to list just a few macro-regions.

Conclusions. Practical steps toward creating a space for economic debates at the national level might eventually include the following. First, the creation of a national scientific database indexing publications in the leading Ukrainian scholarly journals will reduce information costs of searching relevant information. The experience of eLibrary suggests that such database shall not be too inclusive, nevertheless. On the other hand, it is necessary to avoid considerations of personal and group loyalties when selecting periodical titles (and, eventually, monographs and dissertations) to be indexed in the database.

Second, there is a need for reforming the process of peer-review. Open intellectual debates are possible when the only criterion for participating in them refers to the merit of a contribution as opposed to the considerations of network membership, administrative resources and so forth. The system of random selection of reviewers might eventually help minimize the impact of reviewers' personal and group biases [8]. The other solution refers to open on-line review as a step preceding the formal publication.

Third, in the current conditions research subventions and grants are scarce. The scarcity of research funds only increases the importance of transparency and fairness in their distribution. In order to minimize the impact of personal/group loyalties when awarding research grants, it is necessary to rely on open competition and the reformed process of peer-review, as outlined above.

Fourth, truly free debates are impossible without the security of jobs in academia. The system of tenure (permanent employment after 4-6 year trial period) represents an institutional precondition for academic freedom [8].

To summarize, the way to the West that Ukraine seems to start might well have its beginning in building the space of intellectual debates in general and economic debates in particular at the national level. Without the deep embeddedness of economic thought in national institutions of science chances to succeed outside few narrow niches are minimal, if they exist at all.

References

1. *Debouzy M.* Le capitalisme "sauvage" aux Etats-Unis: 1860-1900 / M. Debouzy – Paris: Seuil, 1992. – 238 p.

2. Eggertsson T. Economic Behavior and Institutions / T. Eggertsson – Cambridge: Cambridge University Press, 1990. – 385 p. DOI: <http://dx.doi.org/10.1017/CBO9780511609404>

3. Foucault M. Security, Territory, Population. Lectures at the Collège de France, 1977-1978 / M. Foucault – Basingstoke and New York: Palgrave Macmillan, 2007. – 456 p. Translated by G. Burchell

4. Krippendorff, K. Content Analysis: An Introduction to Its Methodology / K. Krippendorff – Thousand Oaks, CA: Sage, 2004. – 413 p. DOI: <http://dx.doi.org/10.4135/9781412961288.n73>

5. Kuhn T.S. Scientific Paradigms // Sociology of Science: Selected Readings [Kuhn T.S.], edited by Barnes B. – Harmondsworth: Penguin Books, 1972. – pp. 80-104.

6. North D.C. Institutions, Institutional Change and Economic Performance / D.C. North – Cambridge: Cambridge University Press, 1990. – 152 p.

7. Oleinik A. The Invisible Hand of Power: An Economic Theory of Gatekeeping / Oleinik A. – London: Routledge, 2015. – 205 p.

8. Oleinik A. Knowledge and Networking: On Communication in the Social Sciences / Oleinik A. – New Brunswick, NJ and London: Transaction Publishers, 2014. – 238 p.

9. Oleinik A. The value of freedom: a case study of Ukraine / Oleinik A. // Southeast European and Black Sea Studies. – Vol.15, No.3. DOI: <http://dx.doi.org/10.1080/14683857.2015.1015316>

10. Veblen T. The higher learning in America: a memorandum on the conduct of universities by business men / T. Veblen – New York: Sagamore Press, 1957 (1918). – 209 p. DOI: <http://dx.doi.org/10.2307/1835848>

11. Осин В. Академия и политический режим: неопатримониальная наука в Украине (и Молдове) / В. Осин // Ab Imperio. – 2014 – №3. – С. 295-360.

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МІЖ ЗАХОДОМ ТА СХОДОМ: УКРАЇНСЬКА ЕКОНОМІЧНА ДУМКА НА ПЕРЕХРЕСТІ ДОРІГ

Українські економісти, як і суспільство в цілому, знаходяться в процесі переорієнтації зі Сходу на Захід. Однак репрезентативність і вплив їхніх робіт як у Росії, так і на Заході залишаються низкими. Запропонований аналіз публікаційної активності авторів, афілійованих з українськими науковими організаціями (з використанням даних Web of Science і eLibrary) підтверджує дані спостереження. У статті запропоновано в якості першого кроку в процесі переорієнтації сконцентруватися на створенні простору для економічних дебатів на національному рівні. Активні і здорові дебати на національному рівні здатні збільшити шанси українських економістів бути почутими за кордоном.

Ключові слова: економічні науки, Україна, активність публікації, контент аналіз.

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МЕЖДУ ЗАПАДОМ И ВОСТОКОМ: УКРАИНСКАЯ ЭКОНОМИЧЕСКАЯ МЫСЛЬ НА ПЕРЕКРЕСТКЕ ДОРОГ

Украинские экономисты, как и общество в целом, находятся в процессе переориентации с Востока на Запад. Однако репрезентативность и влияние их работ как в России, так и на Западе остаются низкими. Предложенный анализ публикационной активности авторов, аффилированных с украинскими научными организациями (с использованием данных Web of Science и eLibrary) подтверждает данные наблюдения. В статье предложено в качестве первого шага в процессе переориентации сконцентрироваться на создании пространства для экономических дебатов на национальном уровне. Активные и здоровые дебаты на национальном уровне способны увеличить шансы украинских экономистов быть услышанными за рубежом.

Ключевые слова: экономические науки, Украина, публикационная активность, контент анализ.

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THE IMPORTANCE OF INVESTING IN EDUCATION FOR SUSTAINABLE HUMAN DEVELOPMENT. THE CASE OF ROMANIA

In this article, we expect to underscore the importance of investment in education for sustainable human development by analysing the degree of correlation and interdependence that exists in Romania, between the Human Development Index and two different factors: the public spending for education and the public and private investment in the form of R & D expenditure.

Keywords: education, sustainable human development, HDI.

Introduction: Knowledge capital – the major challenge of the XXIst century

The stage in which we find ourselves is characterized by "the economy, organization and management based on knowledge" (Nicolescu, 2004). The novelty of these concepts is the translation of the organization assets issues, from tangible to intangible, in the present the firm performance being reflected by the share of the intangible assets in total. In the new economy, intangible assets such as knowledge become the new core skills. We can say that in this period (and in the near future) it will occur a "creative destruction", but very much needed to progress. Indeed, this process of knowledge revolution, that consists in the transition from the economy dominated by natural resources, to the economy dominated by knowledge, is particularly extensive and profound, producing essentially changes, analogous to the ones produced by the Industrial

Revolution, according to experts (Brailean, 2001; Draganescu, 2003; Drucker, 1999a, 1999b, 2004; Hesselbein, Goldsmith, Beckhard, 2000; Nicolescu, 2007, 2011; Oprean, 2008; Oprean, 2014; Rosca, 2006 and others).

We live in a world that stresses the monetary estimation of intangible resources. We are managing with "cognitive domain" in which ideas are worth billions, while all products cost less. In the vision of Peter Drucker (2004), in the future other factors will be effective: "the traditional factors of production – land, work and capital – have not vanished. But they have become secondary. Knowledge is the main asset that is truly important today". The new economy requires a re-examining of the hypothesis of production factors. Knowledge is a fundamental part of the system of economic and social contemporary development. Dispersion of innovations and high technology conver-