



DEVELOPMENT OF PRODUCTIVE FORCES AND REGIONAL ECONOMY

DOI: 10.15587/2312-8372.2018.129074

RESULT OF IMPLEMENTATION OF RESOURCE-SAVING SYSTEM IN AGRO-INDUSTRIAL COMPLEX

page 4–11

Gerasymchuk Iurii, PhD, Kyiv, Ukraine, e-mail: m407@ukr.net, ORCID: <https://orcid.org/0000-0003-4545-9483>

Popyk Pavlo, PhD, Department of Engineering Reliability, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine, e-mail: GTP2002@ukr.net, ORCID: <https://orcid.org/0000-0002-1320-3603>

Gerasymchuk Nataliia, Doctor of Economic Sciences, Associate Professor, Department of Marketing, Economics, Management and Administration, National Academy of Management, Kyiv, Ukraine, e-mail: 90999nag@gmail.com, ORCID: <https://orcid.org/0000-0002-3931-5320>

Shtuler Iryna, Doctor of Economic Sciences, Associate Professor, Department of Finance, Accounting and Fundamental Economic Disciplines, National Academy of Management, Kyiv, Ukraine, e-mail: shkirka2002@ukr.net, ORCID: <https://orcid.org/0000-0002-0852-8526>

Lisun Yanina, PhD, Associate Professor, Department of Marketing and Advertising, Kyiv National University of Trade and Economics, Ukraine, e-mail: yanalw@ukr.net, ORCID: <http://orcid.org/0000-0002-5250-2809>

The object of research is the result of the introduction of resource saving in the agro-industrial complex (AIC), in particular in the first area – machine building for agriculture. One of the most problematic places is the systematic implementation of resource-saving in the agro-industrial complex. To overcome this problem, the authors propose a scheme for selecting a resource-saving project for the maintenance of the agro-industrial complex in order to assess the effectiveness of resource-saving technologies.

The aim of the authors is analyze the effectiveness of implementing resource-saving measures in the complex of the first sphere of the agro-industrial complex. To detail the aim, a task was set to approximate a scheme for selecting a resource-saving project for the maintenance of the agro-industrial complex for analyzing resource efficiency in enterprises, and determining the effectiveness of resource-saving measures. As a result, the multi-criteria rationale for increasing the resource efficiency of agribusiness enterprises is assessed as such, which is adequate for assessing the efficiency of production and the level of resource saving.

The technology of fuel-air mixture optimization, optimally depleted fuel-air mixture with an excess air factor $a \geq 1.1–1.15$ ensures the operation of the gasoline engine with the minimum content of harmful components in the exhaust gases. In particular, the NO_x concentration is significantly lower than when the mixture is mixed with a stoichiometric mixture.

The economic efficiency of the resource-saving technology of the sowing device with the reserve dosing device is calculated. The average annual increase in profit from the introduction of a modernized precision seeding machine for the main tilled crops (corn, sunflower, soybeans, beets) is 1216.45 c. u. on sowing one hectare. The total annual income for a seed drill for the year is 956 thousand c. u. On the example of sowing one of the crops, maize yields the greatest economic effect – 1600,000 in a year, the smallest – sunflower (266 thousand c. u.). At the same time, the best prototype shows itself when soybean was sown, reducing losses by 99 % in value terms.

Keywords: resource-saving type of agro-industrial complex, engine with power regulation by switching off individual operating cycles.

References

- Boiko, A. I., Popyk, P. S., Bannyi, O. O. (2015). Vplyv shvydkosti peremishchennia dozuiuchoho elementa z kerovanyim vektorom prysmoktuvannia na poiavy propuskiv ta dviinykiv pry vysivi nasinnia. *Silskohospodarski mashyny*, 33, 3–7.
- Meyers, W. H., Westhoff, P., Fabiosa, J. F., Hayes, D. J. (2010). The FAPRI Global Modeling System and Outlook Process. *Journal of International Agricultural Trade and Development*, 6 (1), 1–19.
- Zaburanna, L., Gerasymchuk, N. (2014). Optimization of agriculture production on the basis of resource saving strategy. *Modern Management Review*, 2, 233–247.
- Zhao, Q., Huang, J. (2011). Roadmap of Resource Saving Agricultural Science and Technology Development. *Agricultural Science & Technology in China: A Roadmap to 2050*, 80–99. doi:10.1007/978-3-642-19128-2_6
- Nazarbaev, N. A. (1992). *Strategiya resursosberezheniya i perekhod k rynku*. Moscow: Mashinostroenie, 352.
- Vovk, I. P. (2012). Osoblyvosti vprovadzhennia zakhodiv resursozberezhenia ta metodyka vyznachennia yikh efektyvnosti na mashynobudivnykh pidpriemstvakh v konteksti resursonomiky. *Visnyk Sumskoho derzhavnogo universytetu. Seriya: Ekonomika*, 4, 107–117.
- Starytska, O. P. (2005). Resursozberezhenia v systemi ekonomichnoho mekhanizmu pidvyschennia efektyvnosti silskohospodarskoho vyrobnytstva. *Naukovi zapysky TDPU im. V. Hnatiuka. Seriya: Ekonomika*, 18, 199–205.
- Yermoshenko, M. M., Hanushchak-Iefimenko, L. M. (2010). *Mekhanizm rozvytku innovatsiinoho potentsialu klasteroobiednanykh pidpriemstv*. Kyiv: Natsionalna Akademiia Upravlinnia, 234.
- Yerokhin, S. A. (2002). *Strukturna transformatsiia natsionalnoi ekonomiky (teoretyko-metodolohichni aspekty)*. Kyiv: Svit Znan, 528.
- Kondratenko, N. O. (2010). *Stratehiia resursozberezhenia rehionalnykh ekonomichnykh system*. Kharkiv: NTM, 362.
- Liashenko, I. O. (2012). Specifics and perspectives of resource saving in Ukraine. *Efektivna ekonomika*, 11. Available at: <http://www.economy.nayka.com.ua/?op=1&z=1537>
- Andrushkiv, B. M., Vovk, Yu. Ya., Pohaidak, O. B. et al. (2012). *Resursonomika: teoretychni ta prykladni aspekty*. Ternopil: TzOV «Terno-hraf», 456.
- Sotnyk, I. M. (2006). *Resursozberezhenia ta ekonomichni rozvytok Ukrainy. Formuvannia mekhanizmu perekhodu sub'ektiv hospodariuvannia Ukrainy do ekonomichnoho rozvytku na bazi resursozberihaiuchykh tekhnolohii*. Sumy: Universytetska knyha, 551.
- Gerasymchuk, Y. (2015). The method of calculation of economic efficiency of repair of details. *Ukraina-Bolgariya-Evropeyskiy Soyuz: sovremennoe sostoyanie i perspektivy*. Varna: Nauka i ikonomika, 16–20.
- Filippov, A., Beshun, A., Gerasymchuk, Y., Gluhovska, O., Evchenko, L. (2005). Dynamics of a diesel engine with the power controlled by switching-off separate working cycles. *MOTROL: Motoryzatsiia i Energetyka Rolnictva*, 7, 83–91.
- Gerasymchuk, N. A. (2015). *Podpriemnytskiy mekhanizm resursozberihaiuchoho rozvytku APK*. Kyiv: TsP «Komprint», 464.

DOI: 10.15587/2312-8372.2018.129111

RESEARCH OF THE ESSENCE OF SOCIAL RISK MANAGEMENT

page 11–17

Berezina Svitlana, PhD, Associate Professor, Department of Insurance, Banking and Risk Management, Taras Shevchenko National University of Kyiv, Ukraine, e-mail: svieta_berezina@ukr.net, ORCID: <http://orcid.org/0000-0002-9737-0651>

The object of research is the essence of social risk management in terms of determining its main features. It is shown that the research object is multidimensional and consists of:

- 1) factors that induce social risks;
- 2) the most risks, as a reflection of problems in scientific thought;

3) organizational, economic and creative processes that accompany risk management and constitute its essence.

The shortcomings of the object of research include inaccuracies in the definitions and the absence of a unified approach to risk management in national bodies and in private, corporate and public organizations.

The study uses a generalization method based on abstraction. This approach is associated with the availability of disparate information on the stated topic. By generalization, invariants containing the essence of social risk management are sought.

As a result of the research, the main features of the research object are identified, logically linked and formulated. The general nature of the uncertainty of risks is revealed, which can't be minimized by human efforts. Human efforts should be directed to the development of a stream of concrete (though not entirely correct, if not erroneous) solutions in conditions of uncertainty and unpredictability. The characteristic differences between institutions dealing with social risk management are clarified. The corresponding classification is offered on the example of Ukrainian institutes. It is concluded that there is a need to strengthen existing institutions of social risk management in Ukraine and increase the professional training of existing managers.

The work is of interest to scientists who study problems of social risk management and representatives of government bodies of all levels.

Keywords: management of social risks, optimization of social risks, risk management, risk management institutions in Ukraine.

References

1. Germaniya: sotsial'noe gosudarstvo ot Bismarka do Adenauera. (2014). *Golos russkoyazychnoy Ameriki*. Available at: www.forumdaily.com/germaniya-socialnoe-gosudarstvo-ot-bismarka-do-adenauera/
2. *Dekret Soveta Narodnykh Komissarov. Polozhenie o Sotsial'nom Obespechenii trudyashchikhsya*. (1918). RFSFR. Available at: <http://istmat.info/node/31921>
3. *ISO 31000-2009. Risk management*. (2009). Available at: http://www.amu.kz/fotos-news/vstrecha_rectora_so_stud_31_oct/ISO%2031000-2009.pdf
4. Felenchak, Yu. B. (2010). *Ryzyky demohrafichnykh vtrat rehionu*. Lviv: Instytut rehionalnykh doslidzhen. Available at: https://other-referats.allbest.ru/economy/00577854_0.html
5. Shaporenko, O. I. (2014). Ekonomiko-ekolohichni ryzyky: vyznachennia, otsinka, menedzhment i pryntsypy. *Vcheni zapysky univertsytetu KROK*, 35, 182–189.
6. Maievska, N. V. (2008). *Ekolohichni ryzyky v systemi derzhavnogo rehliuvannia ekonomikoiu*. Available at: http://www.rusnauka.com/8_NIT_2008/Tethis/Economics/27576.doc.htm
7. Ponomarenko, Ye. H. (2016). *Strakhuvannia ekolohichnykh ryzykiv*. Kharkiv: KhNUMH, 28. Available at: <https://core.ac.uk/download/pdf/33759798.pdf>
8. Nadraha, V. I. (2015). *Sotsialni ryzyky v trudovii sferi*. Kyiv: Instytut demohrafii ta sotsialnykh doslidzhen, 471.
9. Pashkov, V. (2010). Riziki zaprovadzhennya reform u sferi okhoroni zdorov'ya. *Ezhenedel'nik Aptekea*, 45 (766). Available at: <https://www.apteka.ua/article/61844>
10. Shelpiakova, T. V. (2015). Strakhuvannia yak sposib upravlinnia ryzykamy vsferi okhorony zdorovia. *Chasopys Kyivskoho univertsytetu prava*, 2, 222–225. Available at: http://nbuv.gov.ua/UJRN/Chkup_2015_2_55
11. Kaleniuk, I., Kuklin, O. (2015). Ryzyk-menedzhment u systemi vyshchoi osvity Ukrainy. *Visnyk Kyivskoho natsionalnoho univertsytetu imeni Tarasa Shevchenka*, 5 (170), 23–28.
12. Ivashko, O. (2015). Finansova bezpeka Ukrainy v umovakh kryzovykh yavyshch v ekonomitsi. *Ekonomichni chasopys Shkhidnoevropeiskoho natsionalnoho univertsytetu imeni Lesi Ukrainky*, 2, 61–66.
13. Yarova, L. (2013). «Sotsialnyi menedzhment» ta «sotsialna derzhava» u tradytsii yevropeiskoi teorii ta praktyky. *Visnyk Natsionalnoho tekhnichnoho univertsytetu Ukrainy «Kyivskiy politekhnichnyi instytut»*. *Politolohiia. Sotsiolohiia. Pravo*, 2, 36–40. Available at: http://ela.kpi.ua/bitstream/123456789/7601/1/06_yar.pdf
14. Nadraha, V. I. (2014). Sotsialnyi zakhyst v systemi minimizatsii sotsialnykh ryzykiv. *Visnyk ekonomichnoi nauky Ukrainy*, 2, 99–103. Available at: <http://dspace.nbuv.gov.ua/bitstream/handle/123456789/77145/19-Nadrage.pdf?sequence=1>
15. Mykhailovska, I. M., Nelipovych, O. V. (2011). Systema sotsialnoho zakhystu naselennia v Ukraini: Sutnist, osnovni skladovi ta napriamky vdoskonalennia. *Visnyk Khmelnytskoho natsionalnoho univertsytetu*, 4 (6), 255–260. Available at: http://journals.khnu.km.ua/vestnik/pdf/ekon/2011_6_4/255-260.pdf
16. Kart, A. M. (2014). *Risk-menedzhment v sisteme obespecheniya ekonomicheskoy ustoychivosti kompaniy*. Moscow, 165. Available at: [http://old.fa.ru/dep/ods/autorefs/Dissertations/%D0%9A%D0%B0%D1%80%D1%82%20%D0%90.%D0%9C.%20\(11.02.2015\)%20f84bd8bf17db9ce3dc67584475368496.pdf](http://old.fa.ru/dep/ods/autorefs/Dissertations/%D0%9A%D0%B0%D1%80%D1%82%20%D0%90.%D0%9C.%20(11.02.2015)%20f84bd8bf17db9ce3dc67584475368496.pdf)
17. Kryukova, O. G. (2014). Risk prevention as a condition of a company stable development. *Effective Crisis Management*, 3, 74–78. doi:10.17747/2078-8886-2011-3-74-78
18. *Standarty upravleniya riskami v finansovykh uchrezhdeniyakh*. (2012). Moscow: IFC, 60. Available at: <https://www.ifc.org/wps/wcm/connect/675390804c9ef4c697bbd7f81ee631cc/ECACR-RiskGovernanceStandards-RU.pdf?MOD=AJPERES>
19. *Risk Management Guidelines Companion to AS/NZS 4360:2004*. (2005). Wellington, 120. Available at: bch.cbd.int/database/attachment/?id=12285
20. Lan, K. Y. (2011). The Structure of Social Risks in Korea: Are Social Risks Democratic or Hierarchical? *Discourse* 201, 14 (3), 57–88. doi:10.17789/discou.2011.14.3.003
21. Li, Q. (2017). Risks of Human Resource Management Outsourcing in Enterprises and the Precautions. *DEStech Transactions on Social Science, Education and Human Science*, 519–523. doi:10.12783/dtssehs/icss2016/9010

DOI: 10.15587/2312-8372.2018.129119

IMPROVEMENT OF ECONOMIC AND INFORMATION MECHANISMS OF SOCIAL-ECONOMIC DEVELOPMENT OF MOUNTAIN TERRITORIES

page 18–23

Kryshchanovych Myroslav, Doctor of Science in Public Administration, Professor, Department of Pedagogy and Social Management, Lviv Polytechnic National University, Ukraine, e-mail: mf0077@ukr.net, ORCID: <https://orcid.org/0000-0003-1750-6385>

Kholiavka Volodymyr, PhD, Associate Professor, Department of Economics, Management and Hotel and Restaurant Business, Lviv State University of Physical Culture, Ukraine, e-mail: vkholiavka@ukr.net, ORCID: <http://orcid.org/0000-0003-0045-0020>

Kryshchanovych Svitlana, PhD, Associate Professor, Department of Economics, Management and Hotel and Restaurant Business, Lviv State University of Physical Culture, Ukraine, e-mail: skryshchanovich@gmail.com, ORCID: <http://orcid.org/0000-0002-2147-9028>

Gul Ioan, PhD, Associate Professor, Department of Economics, Management and Hotel and Restaurant Business, Lviv State University of Physical Culture, Ukraine, e-mail: gul_ioan@ukr.net, ORCID: <http://orcid.org/0000-0003-4043-7007>

The object of research is the socio-economic development of the mountain territories of the Carpathian region (Ukraine). One of the most problematic places is the existing mechanisms of state management to address the problems of mountain territories. Limited resources, insufficient information need to strengthen the attention of local executive bodies and local self-government, as well as further improve existing instruments of state regulation. The following research methods are used: analysis, extrapolation, SWOT analysis and systemic generalization.

In the course of the study, an analysis of the socio-economic development of mountain territories was made. This helped determine the priority industry, namely tourist and recreational. A model of a tourist-recreational cluster is proposed. This will allow creating conditions for effective activity and cooperation of all business entities. In particular, it will contribute to the development and implementation of measures to stabilize and improve the demographic situation in mountain territories, and to reduce the scale of emigration of local residents.

Effective mechanisms for the development of the mountain territories of the Carpathian region, namely, a mechanism for monitoring and forecasting factors, mechanisms for implementing state mining

policy, mechanisms for influencing the effective use of available resources are determined. This will ensure the harmonization of the interests of all economic entities and will contribute to the growth of the economic potential of the mountain territories of Ukraine.

The economic and information mechanisms of state management of the socio-economic development of mountain territories are improved, in which, in addition to the steps for each of these mechanisms, specific actions are indicated. That is, their orientation, security, as well as the final goal and conditions of implementation are given.

Thanks to the proposed economic and information mechanisms, the peculiarities of the Carpathian region will be taken into account. Mechanisms contribute to the development of sectoral clustering, the introduction of innovative technologies, taking into account environmental security, the development of the region's infrastructure, increasing employment, social protection of the population and the popularization of the Carpathian region, both inside and outside Ukraine. The essence of the relationship between these mechanisms lies in the fact that the state should regulate those spheres and processes to which the market affects insufficiently or little effectively. This will guarantee the effective development of mountain territories.

Keywords: mountain territories, economic mechanism, information mechanism, socio-economic development, public administration, cluster, model.

References

- Matviishyn, Ye. H. (2009). Napriamy derzhavnoi pidtrymky rozvytku vidstalykh i depresyvnnykh terytorii: zarubizhnyi dosvid. *Demokratychnye vriaduvannia v konteksti hlobalnykh vyklykiv ta kryzovykh sytuatsii*. Lviv: LRIDU NADU, 48–51.
- Lundgren, T. (2005). *The determinants of economic growth in the Swedish mountain region the role of the forest and tourism sector, and protected land*. Available at: https://www.researchgate.net/publication/228455341_The_determinants_of_economic_growth_in_the_Swedish_mountain_region-the_role_of_the_forest_and_tourism_sector_and_protected_land
- Dukov, D. F. (2015). Analiz sutnosti poniattia «mekhanizm derzhavnoho upravlinnia» ta pobudova yoho uzahalnenoho vyznachenia. *Publichne upravlinnia: stratehiia reform 2020*. Kharkiv: KharRI NADU «Mahistr», 77–79. Available at: <http://www.kbuapa.kharkov.ua/e-book/apdu/2015-1/doc/1/05.pdf>
- Yeroshkina, O. O. (2009). Biudzhetnyi mekhanizm rozvytku depresyvnnykh rehioniv. *Derzhava ta rehiony. Seriya: Derzhavne upravlinnia*, 4, 111–115.
- Porter, M. (1998). Clusters and the New Economies of Competition. *Harvard Business Review*, 11–12, 77–90.
- Deili, H. (2002). *Pozna zrostanniam. Ekonomichna teoriia staloho rozvytku*. Kyiv: Intelsfera, 312.
- Stratehiia rozvytku hirs'kykh terytorii lvivskoi oblasti na 2018–2022 roky*. (2017). Lviv, 96. Available at: <http://sts-rrada.gov.ua/wp-content/uploads/2017/11/Strategiya-rozvytku-girs'kyh-terytoriy-1.pdf>
- Krainyk, O., Bil, M. (2009). Turystychnyi klaster rehionu yak forma sotsialnoho dialohu: upravlyns'ky aspekt. *Demokratychnye vriaduvannia*, 4. Available at: http://tourlib.net/statti_ukr/krajnyk.htm
- Pietrzyk, I. (2000). *Regionalna polityka UE*. Warszawa: Wydawnictwo Naukowe PWN SA, 311.
- Beni, M. C. (2003). *Globalizacao do Turismo: Megatendencias do Setor e a Realidade Brasileira*. Sao Paulo: Editora Aleph, 180.
- Shandova, N. (2017). Investigation of organizational and management specifics of health tourism development. *Technology Audit and Production Reserves*, 3 (5 (35)), 4–8. doi:10.15587/2312-8372.2017.100915
- Dushko, N. H.; Bobrovska, O. Yu. (Ed.). (2010). Derzhavno-privatne partnerstvo yak perspektyvnyi instrument sotsialno-ekonomichnoho rozvytku terytorii. *Stalyi rozvytok terytorii: problemy ta shliakhy vyri-shennia*. Dnipropetrovsk: DRIDU NADU, 51–53.
- Sillence, G. (2009). *Gothenburg Symposium on Tourism and Travel in the Green Economy Final Report*. ETC, 14.
- Shkarupa, O. V. (2015). Management of region's social and economic development environmental modernization. *Economic Annals-XXI*, 7–8 (2), 57–60.
- Melnikovych, M., Nijnik, M., Soloviy, I., Nijnik, A., Sarkki, S., Bihun, Y. (2018). Social-ecological innovation in remote mountain areas: Adaptive responses of forest-dependent communities to the challenges of a changing world. *Science of The Total Environment*, 613–614, 894–906. doi:10.1016/j.scitotenv.2017.07.065
- Keeton, W. S., Angelstam, P. K., Bihun, Y., Chernyavskyy, M., Crow, S. M., Deyneka, A. et al. (2013). Sustainable Forest Management Alternatives for the Carpathian Mountains with a Focus on Ukraine. *The Carpathians: Integrating Nature and Society Towards Sustainability. Environmental Science and Engineering*. Berlin: Springer, 331–352. doi:10.1007/978-3-642-12725-0_24
- Angelstam, P., Roberge, J.-M., Axelsson, R., Elbakidze, M., Bergman, K.-O., Dahlberg, A. et al. (2013). Evidence-Based Knowledge Versus Negotiated Indicators for Assessment of Ecological Sustainability: The Swedish Forest Stewardship Council Standard as a Case Study. *AMBIO*, 42 (2), 229–240. doi:10.1007/s13280-012-0377-z
- Schubert, U., Stormer, E. (Eds.). (2007). *Sustainable development in Europe: concepts, evaluation and applications*. Edward Elgar Publishing, 340. doi:10.4337/9781781007587

DOI: 10.15587/2312-8372.2018.129861

FORMATION OF THE INTEGRAL INDICATOR OF ECONOMIC SECURITY OF THE REGION BY TAXONOMY METHOD

page 24–30

Ivanova Natalia, PhD, Associate Professor, Department of Marketing, Management and Public Administration, Donetsk National University of Economics and Trade named after Mykhailo Tugan-Baranovsky, Kryvyi Rih, Dnipropetrovsk region, Ukraine, e-mail: ivanova@donmuet.edu.ua, ORCID: <https://orcid.org/0000-0002-5010-2668>

The object of research is the economic security of the regions of Ukraine. One of the most problematic places is the lack of a generally accepted methodology for assessing the economic security of regions. Therefore, the aim of this research is an attempt to form an integral indicator of economic security of regions by the taxonomy method.

To achieve this aim, methods of theoretical generalization, analysis and synthesis, logical generalization, analogies, comparative comparison, the method of taxonomic analysis are applied. The method of taxonomic analysis makes it possible to construct a general estimation of a complex object or process, namely, the indicator of economic security of regions. The method of retrospective analysis makes it possible to study the dynamics and determine trends in the changes in the integral index of economic security in the regions of Ukraine.

The integral index of economic security of regions is calculated by the method of taxonomy for the period 2008–2015. Based on the results of the calculations, it is concluded that Dnipropetrovsk region holds the first place for almost the whole period of the study: 2008 – 0.67; 2009 – 0.58; 2010 – 0.7; 2011 – 0.72; 2012 and 2013 – 0.67; 2014 – 0.59 and 2015 – 0.65 points. An exception is 2009, when a high value of economic security was recorded in the Donetsk region (0.62). Throughout the study period, the low value of the economic security indicator was recorded in the Chernivtsi region, except for 2015 with the lowest value of 0.05 in the Luhansk region. The discrepancy between the maximum and minimum values of the integral index of economic security fluctuates on the average at the level of 0.55 points from 0.49 (2014) to 0.6 (2015). This is a rather significant deviation. At the same time, based on the results of the calculations, it is possible to assert that there is a tendency to increase disproportions in ensuring economic security of the regions.

Applied nature of the proposed methodology is justified by its practical application according to the actual data of social and economic development of the regions of Ukraine for 2008–2015. The disadvantage of the proposed methodology is the absence of a mathematical model for calculating the integral index of economic security of the regions, but the results of the study allow in the subsequent studies to develop regression forecast models for assessing regional economic security.

Keywords: economic security of the region, taxonomic analysis, social and economic development, integral indicator.

References

- Heiets, V. M., Kyzym, M. O., Klebanova, T. S., Cherniak, O. I. et al.; Heiets, V. M. (Ed.). (2006). *Modeliuvannia ekonomichnoi bezpeky: derzhava, rehion, pidpriemstvo*. Kharkiv: INZhEK, 240.

2. Sukhorukov, A. I., Moshenskyi, S. Z., Petruk, O. M.; Sukhorukov, A. I. (Ed.). (2010). *Natsionalna ekonomichna bezpeka*. Zhytomyr: Ruta, 384.
3. Holovchenko, O. M. (2008). *Ekonomichna bezpeka rehionu v harantuvanni stabilnosti natsionalnoi ekonomiky*. Odessa: Bukaiev V. V., 399.
4. Babets, I. H. (2012). Vyrobnyno-tehnologichni zahrozy ekonomichnii bezpetsi rehionu v umovakh interrehionalnoho spivrobitnytstva. *Naukovyi visnyk Lvivskoho derzhavnogo universytetu vnutrishnikh sprav. Seriya ekonomichna*, 2, 199–209. Available at: http://nbuv.gov.ua/UJRN/Nvldu_e_2012_2_24
5. Bilyk, R. V. (2015). Instytutsionalne zabezpechennia ekonomichnoi bezpeky rehioniv Ukrainy. *Ekonomika i rehion*, 4, 96–102. Available at: http://nbuv.gov.ua/UJRN/econrig_2015_4_19
6. Tulchinskiy, R. V. (2017). Strategic management principles of economic security in the regions. *Economic bulletin of NTUU «KPI»*, 14. doi:10.20535/2307-5651.14.2017.108741
7. Sukhorukov, A. I., Kharazishvili, Yu. M. (2013). *Efektivnist sotsialno-ekonomichnoho rozvytku ta ekonomichna bezpeka rehionu (na prykladi Zakarpatskoi oblasti)*. Kyiv: NISD, 32.
8. *Pro zatverdzhennia metodyky rozrakhunku rivnia ekonomichnoi bezpeky Ukrainy*. (2007). Order of the Ministry of Economy of Ukraine No. 60 from 02.03.2007. Available at: <http://consultant.parus.ua/?doc=03WN62B99B>
9. Pilko, A. D. (2004). *Modeliuvannya protsesiv upravlinnia ekonomichnoiu bezpekoiu rehionu*. Kyiv: KNEU, 21.
10. Pilko, A. D., Savchuk, N. V. (2015). Modeling the Process of Evaluation of the Level of Economic Security of Region. *Biznes Inform*, 8, 77–84. Available at: http://nbuv.gov.ua/UJRN/binf_2015_8_14
11. Knysh, M., Smaliychuk, A. (2017). Integral assessment of economic security of a borderland region (the case of Lviv Oblast). *Journal of Geography, Politics and Society*, 7 (2), 98–107. doi:10.4467/24512249jg.17.020.6636
12. Ivanova, N. (2017). Ensuring of the economic safety of the region through the early warning and response threats. *International Scientific Journal «Internauka». Series: «Economic Sciences»*, 1 (8), 50–54. doi:10.25313/2520-2294-2017-8-3206
13. *State Statistics Service of Ukraine*. Available at: <http://www.ukrstat.gov.ua/>. Last accessed: 25.10.2017.

PROBLEMS OF MACROECONOMICS AND SOCIO-ECONOMIC DEVELOPMENT

DOI: 10.15587/2312-8372.2018.128651

ANALYSIS OF CONCEPTUAL ASPECTS OF INSTITUTIONAL AND TECHNOLOGICAL DESIGN

page 31–36

Omelyanenko Vitaliy, PhD, Department of Business Economics and Administration, Sumy State Pedagogical University named after A. S. Makarenko, Ukraine, e-mail: omvitaliy@gmail.com, ORCID: <http://orcid.org/0000-0003-0713-1444>

The object of research is the methodology of institutional and technological design. One of the most problematic places is the inability of economic and social institutions to adapt to change. Therefore, institutional transformations must take into account the specifics of technological dynamics and innovative development priorities that allow to proceed to the development of the scientific foundations of the methodology of institutional and technological design.

To determine the goals of institutional and technological design, adapted decision-making methods are used based on the optimization of performance indicators. Methods based on the analysis of schemes for the strategic development of innovation systems and intersectoral high-tech complexes are also used. And also methods of searching for innovative ways of development and methods of integrated economic analysis of development policy.

The conceptual foundations of institutional and technological design as a mechanism for creating an institutional and innovative environment are presented, which will support the life cycle of high-tech products and create a positive image of the country's technological capabilities and prospects. A conceptual scheme of institutional and technological design based on the evaluation of current technological trends and foresight is proposed to select appropriate institutional innovations (innovation packages) and develop institutional projects for their implementation in the existing institutional matrix.

Institutional and technological design is characterized by an orientation toward obtaining synergistic effects due to technological factors of development and structural reorganization of the innovation system.

The integral result of institutional and technological design should be the increase in the effectiveness of the management system by optimizing the functional responsibilities of organizational structures, the use of information and communication technologies and the creation of an effective monitoring system with a view to balanced development of the innovation system.

Keywords: institutional and technological design, innovative networks, high-tech, institutional and innovative environment.

References

1. Tolkachev, S. (2011, October 7). Innovatsionnaya konkurentsya: rol' institutsional'noy sredy. *Kapital strany*. Available at: http://kapitalrus.ru/articles/article/innovatsionnaya_konkurenciya_rol_institutsionalnoj_sredy/
2. Nelson, R. R. (Ed.). (1993). *National Innovation Systems a Comparative Analysis*. New York-Oxford: Oxford University Press, 541.
3. Nelson, R. R. (2002). Bringing institutions into evolutionary growth theory. *Journal of Evolutionary Economics*, 12 (1–2), 17–28. doi:10.1007/s00191-002-0108-x
4. Hargrave, T. J., Van De, A. H. (2006). A collective action model of institutional innovation. *Academy of Management Review*, 31 (4), 864–888. doi:10.5465/amr.2006.22527458
5. Raffaely, R., Glynn, M. A.; Shalley, C. E., Hitt, M. A., Zhou, J. (Eds.). (2015). Institutional Innovation. Novel, Useful and Legitimate. *The Oxford Handbook of Creativity, Innovation, and Entrepreneurship*. Oxford: Oxford University Press, 407–420. doi:10.1093/oxfordhb/9780199927678.013.0019
6. Hagel, J., Seely Brown, J. (March 12, 2013). Institutional innovation. *Deloitte series on innovation*. Available at: <https://www2.deloitte.com/insights/us/en/topics/innovation/institutional-innovation.html>
7. Committee on Homeland and National Security of the National Science and Technology Council. (2016, May). *A 21st Century Science, Technology, and Innovation Strategy for America's National Security*. Washington, D.C.: Executive Office of the President National Science and Technology Council, 13. Available at: http://www.defenseinnovationmarketplace.mil/resources/National_Security_ST_Strategy_2016_FINAL.PDF
8. Omelyanenko, V. A., Kudrina, O. Y., Volodin, D. V. (2017). Conceptual principles of development resources security analysis. *Marketing and Management of Innovations*, 2, 280–287. doi:10.21272/mmi.2017.2-26
9. Omelyanenko, V. (2016). Innovation priorities optimization in the context of national technological security ensuring. *Marketing and Management of Innovations*, 4, 226–234.
10. Zhou, J., Tang, C., Lu, T. (2013). Institutional Design and Operation for Building up the Innovative Enterprises in China. *Proceedings of PICMET 2013: Technology management in the IT-driven services*. Available at: <http://ieeexplore.ieee.org/document/6641751/>
11. Rubvalter, D. A., Rudenskiy, O. V. (2007). Finland: science, technology, and innovation. *Informatsionno-analiticheskiy byulleten' TSISN*, 4, 3–53.
12. Payson, D. B. (2010). Institucionalnoe proektirovanie v raketno-kosmicheskoi promyshlennosti. *Ekonomicheskaya nauka sovremennoy Rossii*, 2 (49), 64–72.
13. Zagitov, I. L. (2015). Innovatsionno-sinergeticheskoe proektirovanie proizvodstvennykh sistem v mashinostroenii. *Ekonomicheskaya sinergetika*, 4. Available at: <http://synergy.esrae.ru/197-922>

14. Omelyanenko, V. (2017). Development of national security strategy components based on the technological institutionalism ideas. *Organic combination of social partnership and individual identity as the main factor in ensuring the self-preservation and development of the society*, London: IASHE, 86–89
15. Krapivny, I., Omelyanenko, V., Vernydub, N. (2015). International innovation networks as new stage of innovation development. *Economic Processes Management*, 1. Available at: http://epm.fem.sumdu.edu.ua/download/2015_1/2015_1_17.pdf

DOI: 10.15587/2312-8372.2018.129856

AGRICULTURAL DEVELOPMENT OF UKRAINE AS THE BASIS FOR ENSURE ITS FOOD SECURITY

page 37–44

Iatsukh Olena, PhD, Associate Professor, Department of Finance, Banking and Insurance, Tavria State Agrotechnological University, Melitopol, Ukraine, e-mail: yatsuh@ukr.net, ODCID: <https://orcid.org/0000-0002-8007-2009>

Demchenko Ivan, PhD, Senior Lecturer, Department of Finance, Banking and Insurance, Tavria State Agrotechnological University, Melitopol, Ukraine, e-mail: ivanvd@ukr.net, ODCID: <https://orcid.org/0000-0002-0358-3016>

Zakharova Natalya, PhD, Associate Professor, Department of Finance, Banking and Insurance, Tavria State Agrotechnological University, Melitopol, Ukraine, e-mail: oleg_zaharov@ukr.net, ODCID: <https://orcid.org/0000-0002-5491-492X>

Tsap Volodymyr, PhD, Senior Lecturer, Department of Accounting and Taxation, Tavria State Agrotechnological University, Melitopol, Ukraine, e-mail: tsap_vladimir@ukr.net, ODCID: <https://orcid.org/0000-0001-8059-3122>

The object of research is agriculture in Ukraine in the context of providing its food security. Given the urgency of the problem of the growing population and finding its place in the global world economy, Ukraine represents agriculture as the basis of export potential and a driving force for further development.

One of the most problematic places is the heterogeneity of business entities operating in the industry. Agricultural enterprises are characterized by different values of assets and agricultural areas. However, for almost all, the problem of complex access to financial resources is characteristic. In turn, this situation reduces the efficiency of the industry. In addition, the abolition of most direct support programs for agricultural commodity producers and the reduction of the mechanisms of indirect state support pose an additional threat to the country's food security.

In the course of the study, general scientific and special research methods were used. In particular, the method of observation, abstract reassessment and statistical analysis allowed to reveal the main regularities and trends of the agricultural sector development of the Ukrainian economy. In turn, the graphical method allows to visualize the obtained results.

The qualitative characteristic of the interrelationship of the agricultural sector of the economy and food security of the country is obtained. This includes the direct interest of the government, which is responsible for the strategic development of the country. Food security is formed as a result of profitable activities of agricultural entities and the direct or indirect measures of state support. The latter allow to avoid numerous threats of management, typical for enterprises in the industry. At the same time, it should be noted that households have a significant potential for food security and self-sufficiency.

Thanks to the combination of entrepreneurial initiative and state support, sustainable agriculture sector development is ensured. The consequence will be the realization of opportunities of the industry, reduction of business risks, strengthening of export potential of Ukraine and ensuring its food security.

Keywords: food security, agriculture, agricultural producer, government support, price development.

References

1. *Konstytutsiia Ukrainy*. (1996). Law of Ukraine No. 254k/96-VR from 28.06.1996. Available at: <http://zakon3.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80>. Last accessed: 16.02.2017.
2. Iftikhar, S., Mahmood, H. Z. (2017). Ranking and relationship of agricultural credit with food security: A district level analysis. *Cogent Food & Agriculture*, 3 (1). doi:10.1080/23311932.2017.1333242
3. Batrakova, T. I., Sineoky, A. O. (2016). Devaluation occurrence causes of the hryvna and ways to overcome it. *Young Scientist*, 1 (28). Available at: <http://molodyvcheny.in.ua/files/journal/2016/1/3.pdf>
4. Luchka, O. (2016). *5 naybilshykh ahrokompanii Ukrainy za rozmirom zemelnoho banku*. Available at: https://lb.ua/economics/2016/01/13/325366_5_naybilshih_agrokompaniy_ukraini.html
5. Hopko, H. (2011). *Chym nebezpechnyi neprozoryi ta chy obov'iazkovi rynok zemli*. Available at: <http://www.pravda.com.ua/articles/2011/03/15/6016450/>
6. *Obzor agroproduktivnoy tovarnoy politiki v postsovetskikh stranakh 2014–2015*. (2016). *Prodoval'stvennaya i sel'skokhozyaystvennaya organizatsiya obedinennykh natsiy*. Available at: <http://www.fao.org/3/a-i5433r.pdf>
7. *Iedyna kompleksna stratehiia rozvytku silskoho hospodarstva ta sil'skykh terytorii na 2015–2020 rr*. Available at: <http://minagro.gov.ua/node/16025>
8. Kent, G. (2002). Africa's food security under globalization. *African Journal of Food, Agriculture, Nutrition and Development*, 2 (1). doi:10.4314/ajfand.v2i1.19119
9. Galhena, D., Freed, R., Maredia, K. M. (2013). Home gardens: a promising approach to enhance household food security and wellbeing. *Agriculture & Food Security*, 2 (1), 8. doi:10.1186/2048-7010-2-8
10. Joseph, D. A. (2015). Food Security and Indian Agriculture. *SSRN Electronic Journal*. doi:10.2139/ssrn.2614265
11. Martin, W., Perkin, K. (2016). Food safety and food security: Mapping relationships. *Journal of Agriculture, Food Systems, and Community Development*, 6 (2), 13–24. doi:10.5304/jafscd.2016.062.001
12. Pozniak, S. P. (2016). Chernozems Of Ukraine: Geography, Genesis And Current Conditions. *Ukrainian Geographical Journal*, 1, 9–13. doi:10.15407/ugz2016.01.009
13. *Sil'ske hospodarstvo Ukrainy: naperedodni prodovalchoi kryzy. Yak poznachytsia podatkovna reforma na silhospyrobnykakh?* (2015). Available at: <http://forbes.net.ua/ua/opinions/1401679-sil'ske-gospodarstvo-ukrayini-naperedodni-prodovalchoyi-kryzi>
14. *Sil'ske hospodarstvo Ukrainy: statystychnyi zbirnyk*. Available at: http://www.ukrstat.gov.ua/druk/publicat/Arhiv_u/07/Arch_sg_zb.htm
15. Pro shkvalennya Stratehiyi rozvytku ahrarnoho sektoru ekonomiky na period do 2020 roku. (2013). Order of the Cabinet of Ministers of Ukraine No. 806-r from 17.10.2013. Available at: <http://zakon2.rada.gov.ua/laws/show/806-2013-%D1%80>
16. *Vedenie agramogo biznesa v Ukraine*. (2016). Available at: http://ucab.ua/files/Survey/Doing/Doing2016_rus_web.pdf

DOI: 10.15587/2312-83722018.129864

IMPROVEMENT OF THE EMISSIONAL COMPONENT OF THE BANKING SYSTEM AS THE FACTOR OF ACTIVATION OF THE INVESTMENT PROCESS

page 45–50

Kovalenko Mykola, Doctor of Public Administration Sciences, Associate Professor, Department of Economic Theory and Finance, Kharkiv Regional Institute of Public Administration of the National Academy of Public Administration attached to the Office of the President of Ukraine, Ukraine, e-mail: kovnn1@gmail.com, ORCID: <https://orcid.org/0000-0003-2845-6993>

Ziuz Dmytro, Postgraduate Student, Department of Economic Theory and Finance, Kharkiv Regional Institute of Public Administration of the National Academy of Public Administration attached to the Office of the President of Ukraine, Ukraine, e-mail: 31036@ukr.net, ORCID: <https://orcid.org/0000-0002-5825-6696>

Nakisko Oleksandr, PhD, Associate Professor, Department of Accounting and Audit, Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine, e-mail: Nakisko307@gmail.com, ORCID: <http://orcid.org/0000-0003-3789-2455>

Rudenko Serhii, PhD, Senior Lecturer, Department of Accounting and Audit, Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine, e-mail: oblikua7@gmail.com, ORCID: <http://orcid.org/0000-0002-2874-1957>

Ryzhikova Natalia, PhD, Associate Professor, Department of Accounting and Audit, Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine, e-mail: goncharenkonat@gmail.com, ORCID: <http://orcid.org/0000-0002-3019-8172>

The object of research is the banking system aimed at supporting the investment processes of the national economy of Ukraine. It is promising to conduct a study on developing proposals for the speedy reform of the banking system. This system should provide the national economy with the necessary volume of domestic investments aimed at stimulating the development of high-tech industries and a significant increase in output with high added value, the development of import substituting industries, increasing employment,

In the course of the research, the interdisciplinary approach to the study of external factors of influence and institutions for the implementation of the issuing policy by the banking system is widely used based on the organization of a mixed type of economic system aimed at:

- stimulating the development of the real sector of the economy;
- improving the quality of targeted use of credit;
- optimization of intergovernmental fiscal relations;
- strengthening the financial solvency of enterprises;
- transition of the banking system to innovative forms of functioning;

– reconciliation of external and internal calls;
– activation of investment processes at enterprises of the national economy of Ukraine.

The proposed measures to improve the issuing policy on the part of the National Bank (refinancing) and commercial banks (lending) aimed at targeted financing of investments in the real sector of the national economy should lead to a drastic change in the institutional role of the banking system of Ukraine. The money emitted by the banking system, under the strict guidance of the state, should be directed to the implementation of investment projects of the national economy, where they materialize and are backed by newly created products. Thanks to this, there is wide support for own modern production aimed at producing products with high added value and should provide the population with decent jobs and wages. All this will enable us to build a fair society, increase the sovereignty of the state, mobilize the available resource potential of the economy as much as possible, facilitate the early transition to a new technical and economic structure based on innovation-investment public reproduction.

Keywords: banking system, money issue, domestic credit, investment process, national economy, social and economic development, public administration.

References

1. Emisiia hroshei. *National Bank of Ukraine*. Available at: https://bank.gov.ua/control/uk/publish/article?art_id=123306
2. Protsentni stavky za aktyvnymy i pasyvnymy operatsiiamy NBU. (2018). *National Bank of Ukraine*. Available at: <https://bank.gov.ua/control/uk/allinfo>
3. Stiglitz, J. (2016). Joseph Stiglitz Says Standard Economics Is Wrong. Inequality and Unearned Income Kills the Economy. *Economics*. Available at: <http://evconomics.com/joseph-stiglitz-inequality-unearned-income/>
4. Kozak, Yu. H., Shapoval, S. S. (Ed.). (2012). *Osnovy ekonomichnoi teorii*. Kyiv: Tsentri uchbovoi literatury, 264.
5. Keynes, J. M. (2011). *The General Theory of Employment, Interest, and Money*. Available at: <https://cas2.umkc.edu/economics/people/faculty/pages/kregel/courses/econ645/winter2011/generaltheory.pdf>.
6. Kovalenko, M. M. (2015). Nove traktuvannia sutnosti ta funktsionalnoho skladu hroshei. *Teoriia ta praktyka derzhavnoho upravlinnia*, 1 (48), 70–78.
7. Turkan, M. (2017). Heterogeneity across emerging market central bank reaction functions. *Central Bank Review*, 17 (3), 111–116. doi:10.1016/j.cbrev.2017.06.002
8. Pelin, O. G. (2016). Does the central bank directly respond to output and inflation uncertainties in Turkey? *Central Bank Review*, 16 (2), 53–57. doi:10.1016/j.cbrev.2016.05.001
9. Brinkmeyer, H. (2014). A new view: Implications of financial innovation for bank lending. *Drivers of Bank Lending*, 35–43. doi:10.1007/978-3-658-07175-2_4
10. Durham, B. (2003). Foreign Portfolio Investment, Foreign Bank Lending, and Economic Growth. *FRB International Finance Discussion Paper No. 757*, 35. doi:10.2139/ssrn.382063
11. Kozmenko, O., Kuzmenko, O. (2013). Modeling the stability dynamics of Ukrainian banking system. *Banks and Bank Systems*, 8 (2), 55–62. doi:10.21511/bbs.8(2).2013.01
12. Kolupaieva, I. V., Gavkalova, N. L. (2016). Deregulation Of The Ukrainian Economy: Problems and Peculiarities of Further Implementation. *Horizons international scientific journal. Series A – Social Sciences and Humanities*, 20, 389–397.
13. Ukraine. IMF Country Report No. 15/69. (2015). *International Monetary Fund*. Available at: <https://www.imf.org/external/pubs/ft/scr/2015/cr1569.pdf>
14. Kovalenko, M. M. (2017). «Surrency board» chy «absoliutni hroshei» – rabstvo chy volia. *Publichne upravlinnia XX st.: tradytsii ta innovatsii*. Kharkiv: KharRI NADU «Mahistr», 378–382.
15. Savchuk, N., Grydzhuk, D. (2017). Modern tendencies of the Ukrainian banking system development. *Banks and Bank Systems*, 12 (4), 105–113. doi:10.21511/bbs.12(4).2017.10