PROBLEMS OF MACROECONOMICS AND SOCIO-ECONOMIC DEVELOPMENT

DOI: 10.15587/2312-8372.2019.155927

EVOLUTIONAL RESEARCH OF THE BANKING SYSTEM ON THE POSITIONS OF COMPATIBILITY, DYNAMICITY AND SELF-ORGANIZATION

page 4-9

Tkachuk Natalia, PhD, Associate Professor, Department of Finance, Banking and Insurance, Higher State Educational Institution «Banking University», Kyiv, Ukraine, e-mal: kamashik@ukr.net, ORCID: http://orcid.org/0000-0003-1947-7565

The object of research is the banking system as an economic system of micro-level, characterized by such features as: complexity, dynamism and ability to self-organization. One of the most problematic places is an understanding of the peculiarities of the steady development of the banking system from the standpoint of the synergetic approach, which allows to explain the transformational processes that were previously considered accidental, unpredictable and not subject to conceptualization.

During the study, methods of abstract-logical and system analysis were used in the theoretical substantiation of the features of the modern banking system. And the method of logical generalizations in identifying features of the characteristics of a complex economic system. The study of the functioning of a modern banking system should be based on the use of the theory of systems, the theory of complex systems and the theory of dynamic systems. It is proved that the processes of self-organization can occur only in those economic systems that have a high level of complexity, are dynamic and unpredictable in the long run, which should include the banking system.

It is proposed to understand the banking system as a complex, dynamic economic system:

- which has the mechanisms of self-organization;
- which can be described by integration, thermodynamic parameters, which fully reflect the exchange of material and financial resources with the environment;
- which is distinguished by the dynamism and unevenness of its development.

This provides an opportunity to understand the laws of the functioning of the banking system, which is a prerequisite for ensuring its viability and sustainability under the influence of various exogenous and endogenous factors. Compared with the well-known system analysis, the proposed use of synergetics makes it possible to explain the progressive development of the banking system to a certain extent by fluctuations that are difficult to predict, but which are inherent to the system itself. It is in the conditions of the existence of such fluctuations that spontaneous formation of new structures in the banking system occurs, that is, self-organization takes place.

Keywords: complex and dynamic economic system, banking system, system theory, synergetic approach.

References

- Bertalanffy, L. von. (1962) General System Theory A Critical Review. General Systems, VII, 1–20.
- Zghurovskyi, M. Z., Pankratova, N. D. (2005). Systemnii analyz: problemi, metodolohyia, prylozhenyia. Kyiv: Naukova dumka, 743.
- Tsvetkov, V. Ya. (2017). Sistematika slozhnykh system. Sovremennye tekhnologii upravleniya, 7 (79). Available at: http://sovman.ru/ article/7903
- Ashby, W. R. (1947). Principles of the self-organizing dynamic system. Journal of General Psychology, 37, 125–128. doi: http://doi.org/10.1080/00221309.1947.9918144
- Luhmann, N. (1975) System theorie, Evolutions theorie und Kommunikations theorie. Soziologische Gids, 22/3, 154–168.
- Luhmann, N. (2018). Soziologische Aufklärung 1. Aufsätze zur Theorie sozialer Systeme. VS Verlag für Sozialwissenschaften, 355. Available at: https://www.springer.com/de/book/9783658196554
- Wiener, N. (1989). The Human Use of Human Beings: Cybernetics and Society. Free Association Books, 208.

- 8. Russ, J. (1994). La marche des idées contemporaines: Un panorama de la modernité. A. Colin, 477.
- Nikolis, G., Prigozhin, I. (1990). Poznanie slozhnogo. Vvedenie. Moscow: Mir, 344.
- Tsvetkov, V. Ya. (2017). Emerdzhentizm. Mezhdunarodnyy zhurnal prikladnykh i fundamental'nykh issledovaniy, 2-1, 137–138.
- Prigozhin, I., Stengers, I. (2014). Poryadok iz khaosa. Novyy dialog cheloveka s prirodoy. Moscow: Editorial UKSS, 304.
- Sayama, H. (2015). Introduction to the Modeling and Analysis of Complex Systems. Open SUNY Textbooks, Milne Library. State University of New York at Geneseo, 498.
- 13. Principles of brain functioning: a synergetic approach to brain activity, behavior and cognition. (1996). Choice Reviews Online, 34 (1), 34–0287–34–0287. doi: http://doi.org/10.5860/choice.34-0287
- Balazs, N. L. (1989). Information and Self-Organization: A Macroscopic Approach to Complex Systems. Hermann Haken. The Quarterly Review of Biology, 64 (2), 243–244. doi: http://doi.org/ 10.1086/416345
- Nicolis, G., Prigogine, I. (1977). Self-Organization in Nonequilibrium Systems: From Dissipative Structures to Order through Fluctuations. Wiley, 512.
- Haken, H., Stadler, M. (Eds.) (1990). Synergetics of Cognition. Heidelberg: Springer, 440. doi: http://doi.org/10.1007/978-3-642-48779-8
- Levin, S. A. (2002). Complex adaptive systems: Exploring the known, the unknown and the unknowable. *Bulletin of the American Mathematical Society*, 40 (1), 3–20. doi: http://doi.org/10.1090/s0273-0979-02-00965-5

DOI: 10.15587/2312-8372.2019.162592

ANALYSIS OF THE FEATURES OF ECONOMIC RELATIONS OF THE EUROPEAN UNION WITH THE ASEAN (ASSOCIATION OF SOUTHEAST ASIAN NATIONS) COUNTRIES

page 10-15

Nycz-Wojtan Sylwia, Postgraduate Student, Vistula University, Warsaw, Poland, e-mail: sylwia.nycz@gmx.de, ORCID: https://orcid.org/0000-0002-2350-7328

The object of research is the features of economic relations of the European Union and countries-members of the ASEAN (Association of Southeast Asian Nations) union. One of the most problematic places is that European Union as a supranational institution is currently experiencing a crisis, on various levels. From economic problems beginning, especially with the so-called PIGS countries (Portugal, Italy, Greece, and Spain), through difficulties in concluding internal political consensus and «speaking» with one voice on the international forum, ensuring security of Europe on the eastern border.

In the process of research, general scientific and special methods of cognition were used: analysis of economic processes, generalization of analyzed features of economic cooperation of the European Union and countries-members of ASEAN. The structurally-functional method has allowed to highlight the main risks and areas of the program implementation strategy for cooperation with ASEAN members. The statistical method was used in assessing and analyzing the state of trade balance between the EU and ASEAN members.

In the course of the research it was identified that in the resolution of political or security difficulties, the European Community mainly depends solely on its own strength. In terms of economic matters there are a number of regions with which this closer cooperation seems to be a logical solution that may bring benefits in the near future. One of them is Southeast Asia. As a result of the research it is shown that ASEAN has been a rapidly growing organization in the region for many years and its trade potential for EU is increasing rapidly. Strengthening international cooperation on the European Union – ASEAN line may prove to be a very important alternative for European economies. In addition, such an alliance may be the basis for a broad exchange of technological and educational experience, creating the nucleus of future strategic relations.

The results of research shows not fully used potential with ASEAN members' cooperation. Abilities and areas of future cooperation of EU companies particularly and EU countries in general could be the ground for future investigations with ASEAN members.

Keywords: European Union, Association of Southeast Asian Nations (ASEAN), free trade zone, international cooperation, Asian countries.

References

- Żyła, A. (2014). Współpraca regionalna w ramach ASEAN przed i po 2015 r. – cele, strategie i wyzwania. Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 2 (369), 321–332. doi: http://doi.org/ 10.15611/pn.2014.369.2.28
- Basic facts about ASEAN (2007). China Daily. Available at: http://www.chinadaily.com.cn/cndy/2007-01/15/content_783167.htm
- Skulska, B. (2017). Proces integracji gospodarczej Chin z krajami ASEAN. Studia Ekonomiczne, 4 (67), 383–412
- EU-ASEAN: Natural Partners. (2013). Available at: http://eeas.europa. eu/archives/docs/asean/docs/eu_asean_natural_partners_en.pdf
- Cooperation Agreement between Member Countries of ASEAN and European Community Kuala Lumpur, 7 March 1980. Association of Southeast Asian Nations. 2012. Available at: https://asean. org/?static_post=external-relations-european-union-nuremberg-declaration-on-an-eu-asean-enhanced-partnership-nuremberg-germany-15-march-2007
- Willa, R. (2015). Unia Europejska na arenie międzynarodowej międzynarodowe relacje bilateralne. Toruń: Wydawnictwo Adam Marszałek. 212.
- Bonikowska, M. (2015). ASEAN buduje wspólny rynek. Centrum Stosunków Międzynarodowych, 12, 1–15.
- Dziembała, M. (2008). Stosunki gospodarcze i polityczne Unii Europejskiej z krajami ASEAN na początku XXI wieku. Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 13, 94–105.
- Żukrowska, K. (2008). Stan zaawansowania integracji w ramach ASEAN a stosunki z Unią Europejską. Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 13, 106–120.
- Kozłowski, P. R. (2008). Polityka ASEAN wobec mocarstw. Życie polityczne Azji. Realia i dążenia. Toruń: Wydawnictwo Adam Marszałek, 291.
- Blue Book 2018. (2018). EU-ASEAN Cooperation. Available at: https://ec.europa.eu/europeaid/sites/devco/files/eu-asean-blue-book-2018_en_1.pdf
- ASEAN-EU Plan of Action (2018–2022) (2017). Association of Southeast Asian Nations. Available at: https://asean.org/storage/ 2017/08/ASEAN-EU-POA-2018-2022-Final.pdf
- EU-ASEAN Business Sentiment Survey 2018. Available at: http://www.eccp.com/storage/app/media/downloads/EU-ASEAN %20 Business %20Sentiment %20Survey %202018.pdf
- **14.** Gross domestic expenditure on R&D (GERD) (2018). *Eurostat*. Available at: https://ec.europa.eu/eurostat
- Błaszczuk-Zawiła, M. (2015). Stosunki gospodarcze Unii Europejskiej z krajami ASEAN – Wietnam. *Unia Europejska.pl*, 5 (234), 7–17.
- Walkowski, M. (2017). Chiński model rozwoju społeczno-gospodarczego i jego potencjalna adaptacja w Europie. Przegląd Strategiczny, 10, 335–365.
- Sporek, T. (Ed.) (2016). Międzynarodowe stosunki gospodarcze integracja regionalna w Europie i na świecie. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach. Katowice, 292.

DOI: 10.15587/2312-8372.2019.163919

CALCULATION OF THE INDEX OF PREREQUISITES FOR THE FUNCTIONING OF THE EUROPEAN INSURANCE SPACE IN THE CONTEXT OF INTEGRATION DIRECTIONS OF UKRAINE

page 16-22

Bunin Serhii, Assistant, Department of Foreign Economic Relations, V. N. Karazin Kharkiv National University, Ukraine, e-mail: IRTB@i.ua, ORCID: http://orcid.org/0000-0002-4707-1813

The object of research is the European insurance environment, which unites the national insurance markets of European countries, including Ukraine, and has significant regional development differentiation. One of the most problematic places for the development of the European insurance environment is the reduction of the influence of countries on their financial system and the non-permanent

nature of development, where the law of uneven economic development manifests itself through various prerequisites for the functioning of national insurance markets.

The current state of the Ukrainian insurance market are analyzed through quantitative indicators (the number of insurance companies, the dynamics of insurance premiums, the structure of net insurance premiums by type of insurance) and also because of the quality indicators (political, economic, social and technological components of the external environment). With the help of classical general scientific research methods, statistical processing methods, PEST analysis, the index method and the Pareto principle, it is found that the functioning of the insurance market of Ukraine at the present stage does not have a stable growth dynamics. This is due to a number of political, economic, social and technological factors affecting the external environment.

Thanks to the selected indicators, an index of prerequisites for the functioning of the European insurance environment is calculated with the aim of further developing a mechanism for attracting Ukraine to the global insurance environment. The ranking of the countries of the European Union and Ukraine according to the state of development of the insurance environment is carried out and its differentiation is revealed. This is due to the fact that all components of the insurance environment are in close relationship. The increase in the volume of monetary savings of the population and free funds of enterprises contributes to the expansion and revitalization of the credit market and the securities market. And the issue of securities reduces the need for financing the economy through loans and accumulates temporarily free funds of investors.

Keywords: insurance market of Ukraine, European insurance space, human development index, index calculation method.

References

- Petryk, O. I.; Heiets, V. M. (Ed.) (2008). Shliakh do tsinovoi stabilnosti: svitovyi dosvid i perspektyvy dlia Ukrainy. Kyiv: UBS NBU, 369.
- Bilorus, O. H., Lukianenko, D. H. et. al. (2001). Hlobalizatsiia i bezpeka rozvytku. Kyiv: KNEU, 736.
- Brigham, E., Gepanski, L. (2011). Financial Management Theory and Practice. Chicago: The Dryden Press, 1184.
- Lyaskovets, G. M. (2011). Doslidzhennya rozvitku svitovogo finansovogo rinku v umovakh tsiklichnosti svitogospodars'kogo rozvitku. Problemy i perspektivy razvitiya sotrudnichestva mezhdu stranami yugo-vostochnoy Evropy v ramkakh chernomorskogo ekonomicheskogo sotrudnichestva i GUAM, 425–433. Available at: http:// www.nbuv.gov.ua/portal/soc_gum/pips/2011_1/tom1/425.pdf Last accessed: 14.11.2018
- Ratowska-Dziobiak, E. (2011). Impact of European Integration on the Functioning of the Insurance Market in Poland. Comparative Economic Research, 14 (1). doi: http://doi.org/10.2478/v10103-011-0005-3
- Peroni, G. (Ed.) (2014). Index of Insurance-Related Services. Index of Insurance Associations and Governing Bodies. *Canadian Insurance Claims Directory* 2014. University of Toronto Press.
- Marano, P. (2017). Sources and Tools of the Insurance Regulation in the European Union. Insurance Regulation in the European Union. Springer International Publishing, 5–29. doi: http://doi.org/10.1007/978-3-319-61216-4_2
- Carey, M., Kashyap, A. K., Rajan, R., Stulz, R. M. (2012). Market institutions, financial market risks, and the financial crisis. *Journal* of Financial Economics, 104 (3), 421–424. doi: http://doi.org/ 10.1016/j.jfineco.2012.02.003
- Hagelin, N. (2000). Index option market activity and cash market volatility under different market conditions: an empirical study from Sweden. *Applied Financial Economics*, 10 (6), 597–613. doi: http:// doi.org/10.1080/096031000437953
- Sarwar, G. (2014). U.S. stock market uncertainty and cross-market European stock returns. *Journal of Multinational Financial Manage-ment*, 28, 1–14. doi: http://doi.org/10.1016/j.mulfin.2014.07.001
- Bond, P., Leitner, Y. (2015). Market run-ups, market freezes, inventories, and leverage. *Journal of Financial Economics*, 115 (1), 155–167. doi: http://doi.org/10.1016/j.jfineco.2014.08.008
- 12. Informatsiia pro stan i rozvytok strakhovoho rynku Ukrainy. Available at: https://www.nfp.gov.ua/ua/Informatsiia-pro-stan-i-rozvytok-strakhovoho-rynku-Ukrainy.html Last accessed: 14.11.2018
- The Global Competitiveness Report 2016–2017. Available at: https://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1 Last accessed: 14.11.2018

- Index of Economic Freedom. Available at: http://www.heritage.org/ index/download Last accessed: 14.11.2018
- Europe: Quality of Life Index by Country 2017. Available at: https://www.numbeo.com/quality-of-life/rankings_by_country.jsp?title=2017®ion=150 Last accessed: 14.11.2018
- Human Development Index (HDI). Human Development Reports. Available at: http://hdr.undp.org/en/content/human-development-index-hdi Last accessed: 14.11.2018

DOI: 10.15587/2312-8372.2019.164069

RESEARCH OF RESERVES OF STRENGTHENING THE INCOME BASE OF BUDGETS OF UNITED TERRITORIAL COMMUNITIES IN DECENTRALIZATION CONDITIONS

page 23-28

Kvasnytsia Oksana, PhD, Associate Professor, S. I. Yurii Department of Finance, Ternopil National Economic University, Ukraine, e-mail: o.kvasnytsia@tneu.edu.ua, ORCID: http://orcid.org/0000-0003-3003-7616

Rusin Viktor, PhD, Associate Professor, S. I. Yurii Department of Finance, Ternopil National Economic University, Ukraine, e-mail: viktor.rusin@gmail.com, ORCID: http://orcid.org/0000-0002-4155-189

The object of research is the theoretical and practical aspects of the formation of the revenue base of the budgets of the united territorial communities in the context of decentralization. One of the most problematic places of the object of research is the redistribution of powers and sources of formation of financial resources for their implementation between levels of the budget system. The process of decentralization is associated with the complexity and duration of the implementation of an effective system of providing the population with public services of an adequate level and quality. The work establishes the number of communities voluntarily united and what area of the territory and population of Ukraine is covered. The analysis of the current state of the formation of the revenue base of the budgets of the united territorial communities in the context of the implementation of the decentralization reform is carried out.

In the process of research, general scientific and special research methods were used in their interrelation and interaction. In particular, abstract-logical techniques allow to find out what caused the problems arising in the process of forming the revenue base of the budgets of the united territorial communities. Among them there is a lack of professional staff in territorial communities and inadequate organization of cooperation between the executive bodies of companies and other participants in the budget process.

The directions of strengthening the revenue base of the budgets of the united territorial communities are determined, which envisage measures:

- on unshadowing the incomes of employees and developing entrepreneurship in the community, will provide an opportunity to increase revenues to the budget from paying personal income tax;
- aimed at improving the administration of local taxes and fees, in particular, on setting rates and benefits;

- aimed at the legalization of excisable goods by retail entities;
- on the effective use of the property of the company;
- aimed at expanding the list of administrative services.

Due to this, local governments of the united territorial communities will receive more resources in their budgets, which they can use to create comfortable living conditions in society.

Keywords: decentralization conditions, budget revenues, local budget, integrated territorial community, local taxes and fees.

References

- Monitorynh protsesu detsentralizatsii vlady ta reformuvannia mistsevoho samovriaduvannia. 10.11.2018 (2018). Ministerstvo rehionalnoho rozvytku, budivnytstva ta zhytlovo-komunalnoho hospodarstva Ukrainy. Available at: https://storage.decentralization.gov.ua/uploads/library/file/333/10.11.2018.pdf
- Oates, W. E. (1972). Fiscal Federalism. New York: Harcourt Brace Jovanovich Inc., 256.
- Buchanan, J. M., Musgrave, R. A. (1999). Public finance and public choice: Two contrasting visions of the state. Cambridge: MIT Press, 272. doi: http://doi.org/10.7551/mitpress/5688.001.0001
- Bahl, R. (1999). Implementation Rules for Fiscal Decentralization,
 Available at: http://siteresources.worldbank.org/INTDSRE/ Resources/3p.pdf
- Tsimmermann, Kh. (2003). Munitsipal'nye finansy. Moscow: Delo i Servis. 352.
- de Mello, L. (2007). Local Government Finances: The Link between Intergovernmental Transfers and Net Worth. OECD Economics Department Working Papers, No. 581. Paris: OECD Publishing. doi: http://doi.org/10.1787/18151973
- Vasylyk, O. D. (1993). Pro finansovu nezalezhnist orhaniv mistsevoho i rehionalnoho samovriaduvannia. Aktualni problemy upravlinnia terytoriiamy v Ukraini. Kyiv, 120–122.
- Tkachuk, I. H. (1994). Ekonomichna samostiinist rehionu. Kyiv: Naukova dumka, 227.
- 9. Kyrylenko, O. P. (Eds.) (2015). *Mistsevi finansy*. Ternopil: Ekonomichna dumka TNEU, 2015. 448.
- Kyrylenko, O. P. (2001). Finansova nezalezhnist mistsevoho samovriaduvannia. Finansy Ukrainy, 1, 34–39.
- Kent, E., Kai, K., Smoke, P. J. (2011). The Political Economy of Decentralization Reforms: Implications for Aid Effectiveness. *Directions in Development. Public sector governance*. Washington: World Bank, 92. Available at: http://siteresources.worldbank.org/EXTDSRE/Resources/DecentralizationReforms.pdf
- 12. Analitychna dopovid do shchorichnoho Poslannia Prezydenta Ukrainy do Verkhovnoi Rady Ukrainy «Pro vnutrishnie ta zovnishnie stanovyshche Ukrainy v 2018 rotsi» (2018). Available at: http://www.niss.gov.ua/ doslidzhennya/naukovi-vidannya/poslannya-prezidenta-ukraini/ analitichna-dopovid-do-schorichnogo
- Almy, R. (2014). Valuation and Assessment of Immovable Property. OECD Working Papers on Fiscal Federalism. No. 19. OECD. doi: http://doi.org/10.1787/5jz5pzvr28hk-en
- Pure alcohol consumption, litres per capita, age 15+. European Health Information Gateway (2018). Available at: https://gateway.euro.who. int/en/indicators/hfa_426-3050-pure-alcohol-consumption-litres-percapita-age-15plus/
- 15. Percent of regular daily smokers in the population, age 15+. European Health Information Gateway (2018). Available at: https://gateway.euro.who.int/en/indicators/hfa_421-3010-of-regular-daily-smokers-in-the-population-age-15plus/

REPORTS ON RESEARCH PROJECTS

DOI: 10.15587/2312-8372.2019.161209

RESEARCH OF THE FORMATION AND DEVELOPMENT OF FABLAB AS A FORM OF INTERACTION OF SCIENCE AND MANUFACTURE IN UKRAINE

page 29-32

Kozyk Vasyl, PhD, Professor, Head of Department of Economics of Enterprises and Investments, Lviv Polytechnic National University, Ukraine, e-mail: vasyl.v.kozyk@gmail.com, ORCID: http://orcid.org/0000-0003-4204-6026

Danylovych Taras, PhD, Associate Professor, Department of Economics of Enterprises and Investments, Lviv Polytechnic National

 $\label{lem:university} \begin{tabular}{ll} \it University, \it Ukraine, \it e-mail: taras.b.danylovych@lpnu.ua, \it ORCID: \it http://orcid.org/0000-0003-3316-4856 \end{tabular}$

Mrykhina Oleksandra, Doctor of Economical Sciences, Associate Professor, Department of Economics of Enterprises and Investments, Lviv Polytechnic National University, Ukraine, e-mail: oleksandramrykhina@gmail.com, ORCID: http://orcid.org/0000-0002-0567-2995

Havryliak Anatolii, PhD, Associate Professor, Department of Economics of Enterprises and Investments, Lviv Polytechnic National University, Ukraine, e-mail: anatolii.s.havryliak@lpnu.ua, ORCID: http://orcid.org/0000-0003-1389-2784

The object of research is the process of interaction between science and production on the basis of the development of FabLab in Ukraine, the subject is the theoretical and applied bases of the formation and development of FabLab. During the processing of the research problems, the authors applied the methods and approaches: a systematic approach, methods of grouping and generalization, the method of retrospecting, methods of analysis and synthesis. The prerequisites for the emergence and spread of FabLab in the world are considered, a retrospective analysis of their development is carried out and the current state is assessed. The principles of creating FabLab are studied (requirements for the organizational structure of laboratories, management approaches, specific features of production and training activities, commercial and non-commercial functioning models, legal aspects, definition of a set of tools and tools for invention, features of FabLab created on the basis of universities, etc.). The problems of formation and reasonable prospects for the development of FabLab in Ukraine are analyzed. In particular, FabLab is considered as important elements of the innovation infrastructure of the region, designed to provide answers in the early stages of innovation. From such positions in the work, the possibilities that FabLab in Ukraine can provide are investigated. First, to promote a balanced solution of the problem of creating new jobs in the region, creating new innovative structures. Secondly, to organize the space where innovative products are generated, embodied in prototypes and tested that becomes the basis for business development on innovative principles. Thirdly, to increase the level of training of future specialists through the use of unique resources FabLab. Fourth, to promote the growth of the level of successful employment of students, interest and involvement of schoolchildren in the choice of engineering specialties, stimulation of youth entrepreneurship, and the like. Based on the results of the analysis of macroeconomic indicators, the work substantiates the role of FabLab in Ukraine in the context of the challenges of the modern technological world in revising traditional approaches in production, management and other

Keywords: FabLab, research and development, innovative technology, digital economy, digital laboratory.

References

- Kozyk, V. V., Mrykhina, O. B. (2017). Aktualizatsiia roli transferu tekhnolohii u systemi «Universytet – Vlada – Biznes» v Ukraini. Visnyk Kyivskoho natsionalnoho universytetu tekhnolohii ta dyzainu «Ekonomichni nauky», 2 (109), 29–35.
- Guerra, A. G., de Gómez, L. S. (2016). From a FabLab towards a Social Entrepreneurship and Business Lab. *Journal of Cases on Information Technology*, 18 (4), 1–21. doi: http://doi.org/10.4018/icir/2016100101
- Kohtala, C. (2016). Making «Making» Critical: How Sustainability is Constituted in Fab Lab Ideology. The Design Journal, 20 (3), 375–394. doi: http://doi.org/10.1080/14606925.2016.1261504
- Results from the Innovation Research Interchange's Annual Survey. R & D Trends Forecast (2016). Research-Technology Management Journal, 61 (1), 23–34. doi: http://doi.org/10.1080/08956308.2018.1399021
- 5. Fab Labs list. Available at: https://www.fablabs.io/labs/map
- Gershenfeld, N. (2012). How to Make Almost Anything. The Digital Fabrication Revolution. Foreign Affairs, 91 (6), 43–57.
- 7. Directory for the Fab Lab ecosystem. Available at: http://fablab.org/
- 8. Nauka, tekhnolohii ta innovatsii. Obstezhennia innovatsiinoi diialnosti v ekonomitsi Ukrainy (za mizhnarodnoiu metodolohiieiu). Derzhavna sluzhba statystyky Ukrainy. Available at: http://www.ukrstat.gov.ua/druk/publicat/kat_u/publnauka_u.htm
- 9. Vyshchi navchalni zaklady. Derzhavna sluzhba statystyky Ukrainy. Available at: http://www.ukrstat.gov.ua/operativ/operativ2005/osv_rik/osv_u/vuz_u.html
- 10. Stvorennia ta vykorystannia peredovykh tekhnolohii ta obiektiv prava intelektualnoi vlasnosti na pidpryiemstvakh Ukrainy. Derzhavna sluzhba statystyky Ukrainy. Available at: https://ukrstat.org/uk/metaopus/2014/0115003 2014.htm
- Schwab, K. (Ed.) (2018). Global Competitiveness Report 2018. Geneva: World Economic Forum, 671.
- Global Innovation Index. Available at: https://www.globalinnovationindex.org

DOI: 10.15587/2312-8372.2019.161206

RESEARCH OF THE GASTRONOMIC BRAND OF ODESA AND PRACTICAL RECOMMENDATIONS FOR SOLVING KEY PROBLEMS

page 33-35

Kharenko Dmytro, PhD, Associate Professor, Department of Hotel and Restaurant Business, Odessa National Academy of Food Technologies, Ukraine, e-mail: Kharenko1980@gmail.com, ORCID: http://orcid.org/0000-0001-7978-3287

Dyshkantiuk Oksana, PhD, Associate Professor, Department of Hotel and Restaurant Business, Odessa National Academy of Food Technologies, Ukraine, e-mail: dyshkantyuk.oksana@gmail.com, ORCID: http://orcid.org/0000-0001-9812-1916

Salamatina Svitlana, PhD, Associate Professor, Department of Hotel and Restaurant Business, Odessa National Academy of Food Technologies, Ukraine, e-mail: salamatina-svetlana@i.ua, ORCID: http://orcid.org/0000-0002-1584-2265

Khalilova-Chuvaeva Iuliia, PhD, Associate Professor, Department of Hotel and Restaurant Business, Odessa National Academy of Food Technologies, Ukraine, e-mail: julik6446@gmail.com, ORCID: http://orcid.org/0000-0002-1935-7793

Kovalenko Liliia, Assistant, Department of Hotel and Restaurant Business, Odessa National Academy of Food Technologies, Ukraine, e-mail: ivychuklilia@gmail.com, ORCID: http://orcid.org/0000-0002-1330-0702

This work is aimed at studying the process of forming a gastronomic brand to enhance the attractiveness of the tourist destination. Formation of a competitive gastronomic brand is an effective strategy in the struggle for international markets, providing a stable tourist flow and economic development of the region. The object of research is the gastronomic brand of multicultural tourist destination on the example of the city of Odesa (Ukraine). One of the biggest problems in the formation of the gastronomic Odesa brand is the lack of interaction of its main components. In this process, the interaction should involve all stakeholders and market participants. In addition, the city of Odesa has not yet developed an effective strategy for the formation of a regional gastronomic brand. It is necessary to identify the main participants in the gastronomic life of the city, their role in shaping the brand and form a strategy for mutually beneficial development. As a result of the use of methods of content analysis and expert interviewing, it is concluded that the large unrealized potential of the gastronomic brand of Odesa, both internationally and nationally, is concluded. It is also found that restaurant business and gastronomic festivals are extremely important elements in the formation of the gastronomic brand as a source of gastronomic culture. The key issues related to the formation of the gastronomic brand of the city are identified. For their decision, the idea is put forward for the creation of gastronomic card-guides of the city of Odesa, which will inform tourists and residents of the city about the gastronomic life of the region. These information systems will allow all market participants to interact effectively with each other. The ways of forming a brand based on the cultural and culinary traditions of the city and region have also been developed. The practical value of the carried out research is that it can serve as the basis for further research and form an effective strategy to promote the city of Odesa as a tourist destination.

Keywords: gastronomic brand, gastronomic tourism, creation of a destination brand, tourist destination.

References

- Pine, B. J., Gilmore, J. H. (1998). Welcome to the experience economy. Harvard Business Review, 76 (4), 97–105.
- Bessiere, J., Tibere, L. (2013). Traditional food and tourism: French tourist experience and food heritage in rural spaces. *Journal of the Science of Food and Agriculture*, 93 (14), 3420–3425. doi: http://doi.org/ 10.1002/jsfa.6284

- Henderson, J. C. (2009). Food tourism reviewed. British Food Journal, 111 (4), 317–326. doi: http://doi.org/10.1108/00070700910951470
- Hjalager, A. M. (2004). What do tourists eat and why? Towards a sociology of gastronomy and tourism. *Tourism*, 52 (2), 195–201.
- Richards, G. (2002). Gastronomy: an essential ingredient in tourism production and consumption? *Tourism and Gastronomy*, 11, 3–20.
- Scarpato, R., Daniele, R. (2003). New global cuisine: tourism, authenticity and sense of place in postmodern gastronomy. Food Tourism Around The World, 296–313. doi: http://doi.org/10.1016/b978-0-7506-5503-3.50020-8
- Martin, C. A., Torres, J. M., Aguilar, R. M., Diaz, S. (2018). Using Deep Learning to Predict Sentiments: Case Study in Tourism. Complexity, 2018, 1–9. doi: http://doi.org/10.1155/2018/7408431
- Fuchs, M., Höpken, W., Lexhagen, M. (2017). Business intelligence for destinations. Advances in Social Media for Travel, Tourism and Hospitality, 290–310. doi: http://doi.org/10.4324/ 9781315565736-24
- Robinson, R. N. S., Getz, D. (2014). Profiling potential food tourists: an Australian study. *British Food Journal*, 116 (4), 690–706. doi: http://doi.org/10.1108/bfj-02-2012-0030
- Kharenko, D., Dyshkantiuk, O., Salamatina, S., Kovalenko, L. (2018).
 Research of the gastronomic brand of tourist destination. *Technology Audit and Production Reserves*, 3 (5 (41)), 15–21. doi: http://doi.org/10.15587/2312-8372.2018.135484

DOI: 10.15587/2312-8372.2019.163288

MODELING THE INFLUENCE OF INFLATION ON THE LEVEL OF NON-PERFORMING LOANS IN CYPRUS COMMERCIAL BANKS

page 36-38

Ptasica Tatjana, Baltic International Academy, Riga, Latvia, e-mail: tatjana.ptc@inbox.lv, ORCID: http://orcid.org/0000-0002-6771-3449

The object of this research is the commercial banks of Cyprus. The paper examines the impact of macroeconomic changes, in particular inflation, on the level of non-performing loans in commercial banks. The macroeconomic indicators studied include inflation rates. The research methodology is based on theoretical and methodological analysis of the scientific literature, statistical and econometric methods, as well as observation, comparative method, description, measurement, analysis and modeling. To develop a statistical model that represents the relationship between inflation rates and non-performing loans in Cyprus, the author uses simple linear correlation and data analysis methods such as the correlation coefficient and the determination coefficient.

The research results show that the resulting econometric model is acceptable, since the determination coefficient is equal to 0.504, and inflation indicators are decisive for the level of non-performing loans. This is due to the fact that the correlation coefficient between these variables is -0.710, and according to the Chaddock scale the coupling magnitude is high. In addition, the correlation coefficient of inflation and non-performing loans in Cyprus is statistically significant, since the value of the correlation coefficient is beyond the limits of critical values of |0.468|. Also from the research results it is found that in the case of Cyprus, inflation rates are negatively associated with non-performing loans, since the resulting correlation coefficient is a negative number. The resulting model is not used to compile a short-term forecast, due to the insufficient value of the determination coefficient (50.4 %). In general, it is proposed that policy makers devote considerable attention to the determinants of non-performing loans, as the deteriorating conditions of non-performing loans will affect not only banking institutions, but also the general state of the financial system of Cyprus. The practical significance of the research cited in the work lies in the fact that the research results can be used as reference material for business, government and education.

Keywords: state of the financial system of Cyprus, non-performing loans, commercial banks, linear correlation.

References

 Bernanke, B., Gertler, M., Gilchrist, S.; Taylor, J., Woodford, M. (Eds.) (1999). The Financial Accelerator in a Quantitative Business Cycle

- Framework. Handbook of Macroeconomics. Vol. 1. Elsevier Science, 1341–1393. doi: http://doi.org/10.1016/s1574-0048(99)10034-x
- European Parliament (2018). Non-performing loans in the Banking Union Stocktaking and challenges. BRIEFING. Available at: http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/614491/IPOL_BRI(2018)614491_EN.pdf
- Carling, K., Jacobson, T., Lindé, J., Roszbach, K. (2007). Corporate credit risk modeling and the macroeconomy. *Journal of Banking & Finance*, 31 (3), 845–868. doi: http://doi.org/10.1016/j.jbankfin.2006.06.012
- Nkusu, M. (2011). Nonperforming Loans and Macrofinancial Vulnerabilities in Advanced Economies. *IMF Working Papers*, 11 (161). doi: http://doi.org/10.5089/9781455297740.001
- Klein, N. (2013). Non-Performing Loans in CESEE: Determinants and Impact on Macroeconomic Performance. *IMF Working Papers*, 13 (72). doi: http://doi.org/10.5089/9781484318522.001
- Shu, C. (2002). The impact of macroeconomic environment on the asset quality of Hong Kong's banking sector. Hong Kong Monetary Authority Research Memorandums.
- Ghosh, D., Vogt, A. (2012). Outliers: An evaluation of methodologies. Survey Research Methods Section – JSM, 3455–3460.
- Touny, M. A., Shehab, M. A. (2015). Macroeconomic Determinants of Non-Performing Loans: An Empirical Study of Some Arab Countries. American Journal of Economics and Business Administration, 7 (1), 11–22. doi: http://doi.org/10.3844/ajebasp.2015.11.22
- Baboucek, I., Jancar, M. (2005). Effects of Macroeconomic Shock to the Quality of the Aggregate Loan Portfolio. Czech National Bank, Working Paper Series, 1, 1–62.
- 10. Fofack, H. (2005). Non-performing loans in Sub-Sahara Africa: Casual analysis and macroeconomic implications. World Bank Policy Research Working Paper. No. 3769. Washington: World Bank. Available at: http://documents.worldbank.org/curated/en/446961468104639856/Nonperforming-loans-in-Sub-Saharan-Africa-causal-analysis-and-macroeconomic-implications
- Hoggarth, G., Sorensen, S., Zicchino, L. (2005). Stress tests of UK banks using a VAR Approach. *Bank of England Working Paper*, 882. doi: http://doi.org/10.2139/ssrn.872693
- Khemraj, T., Pasha, S. (2009). The Determinants of Non-Performing Loans: A Case Study of Guyana. New York: Routledge, 25.
- Skarica, B. (2014). Determinants of non-performing loans in Central and Eastern European countries. *Financial Theory and Practice*, 38 (1), 37–59. doi: http://doi.org/10.3326/fintp.38.1.2
- Abid, L., Ouertani, M. N., Zouari-Ghorbel, S. (2014). Macroeconomic and bank-specific determinants of household's non-performing loans in Tunisia: A dynamic panel data. *Procedia Economics and Finance*, 13, 58–68. doi: http://doi.org/10.1016/s2212-5671(14)00430-4
- Quagliariello, M. (2007). Macroeconomic uncertainty and banks' lending decisions: The case of Italy. Bank of Italy Economic working papers No. 615. doi: http://doi.org/10.2139/ssrn.970293
- Akinlo, O., Emmanuel, M. (2014). Determinants of non-performing loans in Nigeria. Accounting & Taxation, 6 (2), 21–28.
- Tanasković, S., Jandrić, M. (2015). Macroeconomic and Institutional Determinants of Non-performing Loans. *Journal of Central Banking Theory and Practice*, 4 (1), 47–62. doi: http://doi.org/10.1515/jcbtp-2015-0004
- 18. System of National accounts 2008 (2009). The United Nations, the European Commission, the Organisation for Economic Co-operation and Development, the International Monetary Fund and the World Bank Group. Available at: https://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf
- Measuring inflation the Harmonised Index of Consumer Prices (HICP). European Central Bank. Eurosystem. Available at: https:// www.ecb.europa.eu/stats/macroeconomic_and_sectoral/hicp/html/ index.en.html
- Creswell, J. (2012). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. Pearson, 338.
- **21**. *Correlation Coefficient*. Available at: https://www.statisticssolutions. com/pearsons-correlation-coefficient
- **22.** Correlation Coefficient: Simple Definition, Formula, Easy Steps. Available at: https://www.statisticshowto.datasciencecentral.com/probability-and-statistics/correlation-coefficient-formula
- Higgins, J. (2006). The Radical Statistician: A Beginners Guide to Unleashing the Power of Applied Statistics in The Real World. Jim Higgins Publishing, 173–205.

- Interpretation of Correlation. Available at: http://statisticalconcepts. blogspot.com/2010/04/interpretation-of-correlation.html
- **25.** Table of Critical Values for Pearson's r. Available at: http://users.sussex.ac.uk/~grahamh/RM1web/Pearsonstable.pdf
- **26.** Republic of Cyprus, Ministry of Finance. Available at: http://mof.gov.cy/en/ministry-of-finance
- International Monetary Fund. Available at: https://www.imf.org/ external/index.htm
- 28. Central Bank of Cyprus. Available at: https://www.centralbank.cy

DOI: 10.15587/2312-8372.2019.160934

ANALYSIS OF INFLUENCE OF FACTORS ON INCOME TAX IN UKRAINE

page 39-42

Shkulipa Ljudmyla, PhD, Assosiate Professor, Department of Accounting and Taxes, National Academy of Statistics, Accounting and Auditing, Kyiv, Ukraine, e-mail: job.shkulipa@gmail.com, ORCID: http://orcid.org/0000-0002-4784-9955

The object of research is the factors that can directly or indirectly affect the income tax both at the local and macro level. In the study of the dynamics of changes in the income tax in Ukraine, under the influence of various factors, an abstract-logical method is used, which investigated the significant place of the income tax in the national economy of the country. It is obtained that the tax on the profits of enterprises in Ukraine can be characterized as an analogue of the corporate profits tax in the world. This is due to the fact that large taxpayers, of which less than 1 % of legal entities in Ukraine as a whole, are of great fiscal importance, in particular, provide about 55–59 % of income tax revenue in the consolidated budget. Compared with the EU countries from 2011 to 2016, the income tax rate in Ukraine decreased from $25\,\%$ to $18\,\%$, although the country's income has not decreased. The share of income tax in GDP, according to statistics, has tended to decline and is approaching the average level in the countries of the Organization for Economic Cooperation and Development. Factors influencing the income tax and current reforms are considered: the size of the tax rate, GDP, expenditures on scientific and technical work, the volume of financial results of production institutions and organizations before taxation, their seasonal characteristics. Profit tax dynamics significantly influenced the economy of the country, its income and cash flows as a result of all tax changes. The system of taxation of profits of enterprises requires further reform to establish the optimal rate of recovery from profits, eliminate unreasonable benefits, integrate the dividend taxation system, and improve administration. Thus, in 2015–2016, the number of reasons for receiving tax benefits decreased by 4 times – to 24 and 22, respectively.

Keywords: income tax, budgetary funds, tax reforms, growth dynamics, fiscal policy, tax revenues.

References

- Pysmennyi, V. V. (2015). Corporate income tax: problems of distribution between different levels of budget system. Svit finansiv, 1, 23–33.
- Sydorovych, M. Ya. (2010). Osoblyvosti modeliuvannia nadkhodzhen podatku na prybutok pidpryiemstv na suchasnomu etapi rozvytku finansovoi systemy Ukrainy. Naukovi zapysky. Ekonomichni nauky, 107, 78–85.
- Zvit Derzhavnoi fiskalnoi sluzhby Ukrainy za 2017 rik. Sait Derzhavnoi fiskalnoi sluzhby Ukrainy. Available at: http://sfs.gov.ua/diyalnist-/plani-ta-zviti-roboti-/237691.html
- Podatok na prybutok pidpryjemstv v Ukraini u 2011–2016 rokakh (2017). Ofis z finansovoho ta ekonomichnoho analizu u Verkhovnii Radi Ukrainy. Available at: https://feao.org.ua/wp-content/uploads/2017/11/feao_podatok_na_prybutok_a5_02.pdf
- Top-100 naibilshykh platnykiv podatkiv v Ukraini za 2016 rik (2017). Visnyk DFS Ukrainy, 12, 14–19.
- Podatkovyi kodeks Ukrainy vid 02.12.2010 No. 2755 VI (2010). Verkhovna Rada Ukrainy. Available at: https://zakon.rada.gov.ua/laws/show/2755-17
- Dovidnyky pilh, nadanykh chynnym zakonodavstvom po splati podatkiv, zboriv, inshykh oboviazkovykh platezhiv. Sait Derzhavnoi fiskalnoi sluzhby Ukrainy. Available at: http://sfs.gov.ua/dovidnikireestri--perelik/dovidniki-/54005.html
- 8. Taxation trends in the EU. Official site of Eurostat of European Commission (Eurostat). Available at: http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat
- 9. Podatkovi nadkhodzhennia. Sait «Tsina derzhavy». Available at: http://cost.ua/budget/revenue/
- Revenue Statistics OECD countries: Comparative tables. Available at: https://stats.oecd.org/Index.aspx?DataSetCode=REV
- Bashirova, G. (2019). Nalogooblozhenie dividendov nalogom na pribyl' v Azerbaydzhanskoy Respublike i Ukraine: sravnitel'niy analiz. Rozvytok systemy obliku, analizu ta audytu v Ukraini: teoriya, metodolohiya, orhanizatsiya: zbirnyk tez dopovidei uchasnykiv XVII Vseukrainskoi naukovoi konferentsiyi. Kyiv: DP «Inform. – analit. ahentstvo», 81–84. Avaialble at: http://194.44.12.92:8080/ jspui/handle/123456789/3765