



PROBLEMS OF MACROECONOMICS AND SOCIO-ECONOMIC DEVELOPMENT

RESEARCH OF TAX STIMULATION OF THE SMALL BUSINESS IN THE INDUSTRY

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It has been analyzed the statistical reporting data regarding development of the small industrial business. It has been found that the time series results were not true in 2006 and 2012. The article gives coverage of the rapid increase in the dynamics of the volume of industrial products of small businesses with a slight increase in the number of small industrial businesses.

The use of regression analysis and correction factor allowed to smooth out the dynamics of statistical data of the sales volume of industrial production of small businesses and reflect the real picture of the small business in the industry development.

It has been found the strong inverse relationship between the rate of income tax and the volume of industrial production. There have been calculated the predicted values of small business industrial production volume by using the special income tax rates.

Keywords: small business, sales volume, income tax, correlation and regression analysis.

References

1. Statystychna informatsiia. *Holovne upravlinnyia statystyky u Dnipropetrovs'koy oblasti*. Available: <http://www.dneprstat.gov.ua/>
2. Vorotina, L. I., Vorotin, V. Ye., Martyniuk, L. A., Cherniak, T. V. (2004). *Malyi biznes ta pidpriemnytstvo v rynkovykh umovakh hospodariuvannia*. Ed. 3. Kyiv, 308.
3. Kyrychenko, O. P., Tytarenko, M. A. (2015). Osoblyvosti opodatkuvannia maloho biznesu v konteksti podatkovoho kodeksu Ukrainy. *Ekonomika ta upravlinnia pidpriemstvamy*, 1, 81–85.
4. *Tax Guide for Small Businesses 2014/15*. (14.01.2016). Available: <http://www.sars.gov.za/AllDocs/OpsDocs/Guides/LAPD-IT-G10%20-%20Tax%20Guide%20for%20Small%20Businesses%20-%20External%20Guide.pdf>
5. *Entity Choice and Effective Tax Rates*. (14.01.2016). Available: http://www.s-corp.org/wp-content/uploads/2013/08/Quantria_Study_ETR_8-6-13_Final_pm.pdf
6. Dmytriieva, V., Zakharchuk, Ya. (2011). Tendentsii rozvytku malykh pidpriemstv v Ukraini: vrakhuvannia osoblyvosti danykh statystychnykh dzherel. *Ekonomichniy analiz*, Vol. 8, Part 1, 66–73.
7. Kiriazova, T. O. (2013). Problemy rozvytku promysloвого maloho pidpriemnytstva v Ukraini. *Ekonomichni innovatsii*, 55, 56–60.
8. Krystyniak, M. B. (2015). Otsinka efektyvnosti funktsionuvannia malykh promyslovykh pidpriemstv v Ukraini. *Naukovi zapysky. Seriya: Ekonomichni nauky*, Vol. 2, 87–93.
9. Pro vnesennia zmin do deiakyykh zakonodavchykh aktiv Ukrainy z pytan rehuliuвання pidpriemnytskoi diialnosti. *Law of Ukraine from 18.09.2008 № 523-VI*. Available: <http://zakon2.rada.gov.ua/laws/show/523-17>
10. Pro rozvytok ta derzhavnu pidtrymku maloho i serednoho pidpriemnytstva v Ukraini. *Law of Ukraine from 22.03.2012 № 4618-VI*. Available: <http://zakon1.rada.gov.ua/laws/show/4618-17>
11. Hordiienko, V. O., Hryhorash, O. V., Tymoshenko, M. V. (2010). Shliakhy pidvyshchennia efektyvnosti maloho pidpriemnytstva u rehioni. *Ekonomika: problemy teorii ta praktyky*, № 257, Vol. VI, 1534–1546.

ASSESSMENT OF MARKET ACCESS FOR AGRICULTURAL GOODS IN THE EU REGIONAL TRADE AGREEMENTS

page 9–14

Based on the analysis of the tariff regime the assessment of market access for agricultural products in regional trade agreements (RTAs) with the EU was made. It was established that the principles of agricultural protectionism formed and continue to

determine the development of the EU agricultural markets and the position of the EU in the RTAs. The majorities of the EU RTAs are signed and valid within the countries which aren't strategic partners in agricultural trade. Their tariff regime is characterized by low rates with a high proportion of tariff lines which are not imposed by tariff and also by list of goods for which tariff quotas are fixed. For the EU strategic partners (which are currently trading with the EU in the standard GSP) high tariff rates are combined with a low percentage of tariff lines that are not imposed by tariffs. In case of signing RTAs there is a significant potential of liberalization of the tariff regime for them. Non-tariff instruments dominate in agricultural trade; they are approved and can be regulated by WTO rules. It is likely that regional multilateral agreements between the leading players will contribute not only «mitigate conflicts», but also to progress negotiations on agriculture in the WTO and the growth trade of agricultural products.

Keywords: tariffs, tariff quotas, non-tariff barriers, regional trade agreements of the EU, agricultural products.

References

1. Key Statistics and Trends in Trade Policy. (2013). *UNCTAD – United Nations Conference on Trade And Development*. New York and Geneva: United Nations. Available: http://unctad.org/en/PublicationsLibrary/ditctab20132_en.pdf
2. *World Trade Report 2014 – Trade and development: recent trends and the role of the WTO*. (2014). World Trade Organization, 240. Available: https://www.wto.org/english/res_e/booksp_e/world_trade_report14_e.pdf
3. Krasnikova, N. O. (2013). Osoblyvosti suchasnoho kryzovoho protektsionizmu. *Visnyk Dnipropetrovskoho universytetu. Seriya Svitove hospodarstvo i mizhnarodni ekonomichni vidnosyny*, 5, 55–61.
4. Fulponi, L., Shearer, M., Almeida, J. (2011, March 31). Regional Trade Agreements – Treatment of Agriculture. *OECD Food, Agriculture and Fisheries Papers*, 44. Organisation for Economic Co-Operation and Development (OECD), 10. doi:10.1787/5kgg53fmjxv-en
5. Crawford, J.-A. (2012, October 1). Market Access Provisions on Trade in Goods in Regional Trade Agreements. *SSRN Electronic Journal*. Available: <http://doi.org/10.2139/ssrn.2174330>
6. Tangermann, S. (2013, December). *E15: Agriculture, Trade and Food Security Challenges. Expert Group: A Post-Bali Food Security Agenda*. Bali. Available: <http://www.ictsd.org/themes/global-economic-governance/research/e15-agriculture-trade-and-food-security-challenges-expert>
7. Sheffield, S. (1998). Agriculture, GATT, and Regional Trade Agreements. *Economic Research Service/USDA. Regional Trade Agreements and U. S. Agriculture*, AER-771, 87–96. Available: http://www.ers.usda.gov/media/927931/aer771_002.pdf
8. Pilling, D., Donnan, S. (2013, September 22). Trans-Pacific Partnership: Ocean's Twelve. *Financial Times*. Available: <http://www.ft.com/cms/s/0/8c253c5c-2056-11e3-b8c6-00144feab7de.html#axzz40VhzRIbe>
9. EU agriculture – Statistical and economic information. (2013). *European Commission*. Available: http://ec.europa.eu/agriculture/statistics/agricultural/2013/pdf/c7-1-37_en.pdf
10. Konsolidovana versiiia Dohovoru pro funktsionuvannia Yevropeiskoho Soiuzu. *LIHA:ZAKON*. Available: http://search.ligazakon.ua/l_doc2.nsf/link1/MU10267.html
11. Soglasheniia VTO. *Tsentri ekspertizy po voprosam VTO*. Available: <http://www.wto.ru/documents.asp?f=sogl&t=13>
12. European Union. (2013, November 28). *Trade policy review. Report by the secretariat. WT/TPR/S/284/Rev.2*. World Trade Organization, 252. Available: <http://docsonline.wto.org/dol2fe/Pages/FE.../q/WT/TPR/S284R2.pdf>
13. *World Tariff Profiles 2013*. (2013). World Trade Organization, 202. Available: https://www.wto.org/english/res_e/booksp_e/tariff_profiles13_e.pdf

14. Council decision of 16 September 2010 on the signing, on behalf of the European Union, and provisional application of the Free Trade Agreement between the European Union and its Member States, of the one part, and the Republic of Korea, of the other part (2011/265/EU). (14.05.2011). *Official Journal of the European Union*, L 127/1, 1–1426. Available: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2011.127.01.0001.01.ENG
15. Uhoda pro asotsiatsiiu mizh Ukrainoiu, z odnogo boku, ta Yevropeiskym Soiuzom, Yevropeiskym spivtovarystvom z atomnoi enerhii i yikhnimy derzhavamy-chlenamy, z inshoho boku. (27.06.2014). *LIHA:ZAKON*. Available: http://search.ligazakon.ua/1_doc2.nsf/link1/MU14097.html
3. Ivanov, Yu. B., Berezna, Yu. V. (2010). Podatkova bezpeka: sutnist ta umovy zabezpechennia. *Ekonomika rozvytku*, 2(54), 9–11.
4. Polonska, Yu. M. (2011). Orhanizatsiine zabezpechennia systemy pidtrymky pryiniattia upravlinskykh rishen u podatkovomu planuvanni za kryteriiem podatkovoi bezpeky. *Komunalne hospodarstvo mist*, 100, 277–284.
5. Krivtsov, A. I. (2012). Kontseptual'nyi podhod k obespecheniu nalogovoi bezopasnosti organizatsii. *Proceedings of the II International Scientific-Practical Conference «Actual problems of science, economics and education of XXI century»*, Samara, 5 March – 26 September, 2012. Part 2. Samara: Samara Institute RSTEU, 180–185.
6. Frolova, M. M. (2015). Ekonomicheskaia bezopasnost' predpriatii: nalogovyi aspekt. *Proceedings of the III International Scientific-Practical Conference «The economic security of Russia: problems and prospects»*, Nizhny Novgorod, 26–28 May 2015. Nizhny Novgorod, 424–428.
7. Drozhzhina, I. A. (2009). Prognozirovanie naloga na dohody fizicheskikh lits i edinogo sotsial'nogo naloga na mikrourovne. *Ekonomicheskie i gumanitarnye nauki*, 6(212), 72–78.
8. Lomeiko, A. V. (2011). Postroenie systemy nalogovoi bezopasnosti predpriatii. *Aktual'nye voprosy ekonomicheskikh nauk*, 20, 267–271.
9. Arefiev, S. O. (2014). Podatkove administruvannia pidpriemstva yak sposib podatkovoi bezpeky. *Visnyk Skhidnoukrainskoho natsionalnoho universytetu imeni Volodymyra Dalia*, 1(208), 10–12.
10. Kuzmin, O. E., Melnyk, O. G., Grom'yak, O. B. (2014) Conceptual Framework for Express Diagnostic Analysis of Industrial Enterprises. *Actual Problems of Economics*, 1(151), 193–202.
11. Cox, N. S. (n. d.). Tax and Regulatory Avoidance Through Non-traditional Alternatives to Tax Havens. *SSRN Electronic Journal*. Available: <http://doi.org/10.2139/ssrn.420660>
12. Phillips, J., Pincus, M., Rego, S. O. (2003, April). Earnings Management: New Evidence Based on Deferred Tax Expense. *The Accounting Review*, Vol. 78, № 2, 491–521. doi:10.2308/accr.2003.78.2.491
13. Comprix, J., Graham, R. C., Moore, J. A. (2011, March). Empirical Evidence on the Impact of Book-Tax Differences on Divergence of Opinion among Investors. *The Journal of the American Taxation Association*, Vol. 33, № 1, 51–78. doi:10.2308/jata.2011.33.1.51
14. Yaresko, N. (07.11.2015). Osnovnaia problema nalogov v Ukraine – administrirovanie. *Liga.Finansy*. Available: <http://finance.liga.net/economics/2015/11/7/news/45676.htm>
15. U Svitovomu banku vydylyly problemy podatkovoi systemy Ukrainy. (12.11.2015). *Finance.ua*. Available: <http://news.finance.ua/ua/news/-/362880/u-svitovomu-banku-vydylyly-problemy-podatkovoyi-systemy-ukrayiny>

ANALYSIS OF TAX ALTERNATIVES OF ENTERPRISES IN THE CONTEXT OF A MULTI-VECTOR DEVELOPMENT

page 14–18

In the article the tax alternatives of the enterprises in the context of their multi-vector development are considered. Based on the research it is concluded that the alternative tax accompany the activity on each stage of its life cycle, from business registration to the cessation of business activities.

An overview of recent tax changes in the external environment in Ukraine is done. It is established that the tax alternatives associated with various vectors of business entity (the formation of a reserve for doubtful debts, the application of special tax regimes, operations with securities, amortization policy management, foreign trade management, payment of excise duty, etc.). It is revealed that alternative tax in every case affect the determination of the tax base, method of calculating the tax, object of taxation, determination of the tax period, timing and manner of payment of tax, etc.

As a result of recent changes of tax environment in Ukraine it is concluded its further dynamic development, which will give every other tax alternatives that should be addressed. It is proved that it will create the opportunity to minimize tax risks by different managers and owners and thus ensure the multi-vector business development.

Keywords: enterprise, tax alternative, tax system, tax process, multi-vector development.

References

1. *Podatkovi zminy: neobkhidni kroky dlia ekonomichnogo zrostantia*. Ofitsiine vydannia Derzhavnoi fiskalnoi sluzhby Ukrainy. Available: <http://sfs.gov.ua/data/files/39507.pdf>
2. Vykliuk, M. I., Hresyk, V. V. (2013). Podatkova bezpeka: dualistychnist ekonomichnoi pryrody traktuvannia zmistu osnovnykh kharakterystyk. *Innovatsiina ekonomika*, 5, 242–246.

DEVELOPMENT OF PRODUCTIVE FORCES AND REGIONAL ECONOMY

METHOD OF ASSESSMENT AND ANALYSIS OF INFRASTRUCTURE SUPPORT LEVEL OF AGRICULTURAL SECTOR IN UKRAINE

page 19–24

The article is devoted to methodological aspect of the assessment of infrastructure support level of agricultural sector in Ukraine.

Aim of the article is developing a methodology assessment of infrastructure support level of agricultural sector in Ukraine and its analysis by the developed technique that will reveal the degree of development of agricultural sector in the regions of Ukraine.

In the article the author's interpretation of the term «infrastructure support of agricultural sector» is proposed.

The method of assessing the level of infrastructure support of agricultural sector consists of five stages that consist in defining the place and role of infrastructure support of agricultural sector

in Ukraine and its particular areas, quantitative assessment of the infrastructure of the agricultural sector, location assessment of infrastructure of the agricultural sector and their balance to determine their availability for agricultural products, quality assessment of the quality of services provided by facilities of infrastructure support of agricultural sector, and synthesis of assessment results obtained in previous stages and overall assessment of infrastructure support of agricultural sector in the regions of Ukraine.

Conducted analysis by this method made it possible to rank the regions of Ukraine for the high, middle and low level of development. It is determined that the main factors influencing the level of infrastructure support level of agricultural sector of Ukraine is the work of trade and intermediary institutions, financial and credit intermediaries, social and economic development of the regions, availability of educational and scientific institutions, agroecology, climatic conditions.

Keywords: infrastructure, infrastructure support, agricultural sector, objects, methods, evaluation, region.

References

1. Pinstrup-Andersen, P., Satoru, S.; In: Bourguignon, F., Pleskovic, B. (2007). Rural Infrastructure and Agricultural Development. Rethinking Infrastructure for Development. *Annual World Bank Conference on Development Economics*. Washington, DC: World Bank, 175–203. doi:10.1596/978-0-8213-6841-1
 2. Llanto, G. M. (2012). The Impact of Infrastructure on Agricultural Productivity. *Discussion Paper Series, 12*. Philippine Institute for Development Studies, 1–54.
 3. Warner, M., Kahal, D., Lehel, S. (2008). Market-oriented agricultural infrastructure: appraisal of public-private partnerships. *Agricultural Management, Marketing and Finance Occasional, Paper 23*. Rome: Food and Agriculture Organization of the United Nations, 1–43.
 4. Zongzhang, L., Xiaomin, L. (2009). The effects of rural infrastructure development on agricultural production technical efficiency: evidence from the data of Second National Agricultural Census of China. *International Association Agricultural Economists Conference, Beijing, China, August 16–22, 2009, Paper 506*, 1–19.
 5. Dowgert, M. F. (2010). The impact of irrigated agriculture on a stable food supply. *Proceedings of the 22nd Annual Central Plains Irrigation Conference, Kearney, NE., February 24–25, 2010*. Available: <https://www.ksre.k-state.edu/irrigate/oow/p10/Dowgert10.pdf>
 6. Fakayode, B. S., Omotesho, O. A., Tsoho, A. B., Ajayi, P. D. (2008). An economic survey of rural infrastructures and agricultural productivity profiles in Nigeria. *European Journal of Social Sciences, Vol. 7, № 2*, 158–171.
 7. Korchinsky, I. (2014). Infrastructure architectonics of agrarian sector of Ukraine. *Agrarian Economics, Vol. 7, № 1–2*, 96–100.
 8. Gerasimenko, N., Pihanova, S. (2003). Integrated assessment of the goods market trade infrastructure for production purposes in Khabarovsk region. *Practice Marketing, 7*, 20–28.
 9. Nikolaeva, T. (2000). System evaluation the effectiveness of trade enterprises commercial activity. *Marketing in Russia and Abroad, 4*. Available: <http://www.cfin.ru/press/marketing/2000-4/11.shtml>
 10. Tretyakov, M., Veliev, E. (2007). Assessment of infrastructure development level in the region. *Bulletin of the Khabarovsk State University of Economics and Law, 3(24)*, 30–34.
 11. Tarasenko, A. (2014). Infrastructure provision as a part of the integrated development of the agricultural sector in the region. *Science and Education in Australia, America and Eurasia: Fundamental and Applied Science, Melbourne, Australia, June 25, 2014, Vol. I*. Melbourne: Melbourne IADCES Press, 289–294.
- Attained results allow to define the main principles of inter-budget relations regulation as a security of social and economic development of regions of Ukraine from a perspective of the contribution of their financial support.
- Keywords:** social and economic development of regions, inter-budget relations, regulatory support, tax reforming, budget reforming.
- #### References
1. Tiebout, C. M. (1956, October). A Pure Theory of Local Expenditures. *Journal of Political Economy, Vol. 64, № 5*, 416–424. doi:10.1086/257839
 2. Tiebout, C. M. (1961). An Economic Theory of Fiscal Decentralization. *Public Finances: Sources, and Utilization*. New Jersey: Princeton, 79–96.
 3. Musgrave, R. A. (1959). *The Theory of Public Finance*. McGraw-Hill Book Company, Inc., 628.
 4. Oates, W. E. (1972). *Fiscal Federalism*. New York: Harcourt Brace Jovanovich, 256.
 5. Wright, D. S. (1974, January 1). Intergovernmental Relations: an Analytical Overview. *The ANNALS of the American Academy of Political and Social Science, Vol. 416, № 1*, 1–16. doi:10.1177/000271627441600102
 6. Volokhova, I. S. (2010). *Mizhbiudzhetni vidnosyny v Ukraini: suchasnyi stan ta perspektyvy rozvytku*. Odesa: Atlant, 233.
 7. Lunina, I. O. (2010). Formuvannya mistsevykh biudzhetyv na osnovi pryntsyphu ekvivalentnosti: shliakh do efektyvnoi biudzhetnoi systemy. *Finansy Ukrainy, 9*, 3–12.
 8. Mazur, Yu. O. (2015). Podatkove stymulivannya innovatsii v Ukraini v umovakh implementatsii Uhody pro asotsiatsiiu z YeS. *Materialy Kruhloho stolu «Problemy rozvytku nauky hospodarskoho prava i vdoshkonalennia hospodarskoho zakonodavstva», m. Kyiv, 4 hrudnia 2015 r.* Kyiv: Lira-K, 132–136.
 9. Tyshchenko, O. M., Holiakova, K. V. (2012). Teoretyko-metodychnyi analiz aspektiv rehulivannya mizhbiudzhetnykh vidnosyn. *Problemy ekonomiky, 1*, 24–29.
 10. Vasylyk, O. D., Pavliuk, K. V. (2004). *Derzhavni finansy Ukrainy*. Kyiv: Tsentr navchalnoi literatury, 608.
 11. In: Miklovda, V. P., Slava-Prodan, S. S., Sember, S. V., Hoblyk, V. V. (2009). *Zhyttiezdatnyi ekonomichni rozvytok rehionu*. Uzhhorod: Lira, 432.
 12. Verkhovna Rada of Ukraine. *Budget Code of Ukraine from 08.07.2010 № 2456-VI*. Available: <http://zakon2.rada.gov.ua/laws/show/2456-17/page>
 13. Pro mistseve samovriaduvannya v Ukraini. *Law of Ukraine from 21.05.1997 № 280/97-BP*. Available: <http://zakon5.rada.gov.ua/laws/show/280/97-bp/page>
 14. *Analitichna dopovid do Shchorichnoho Poslannia Prezydenta Ukrainy do Verkhovnoi Rady Ukrainy «Pro vnutrishnie ta zovnishnie stanovyshe Ukrainy v 2015 rotsi»*. (2015). Kyiv: NISD, 684.
 15. Local budgets. *Ministry of Finance of Ukraine*. Available: <http://www.minfin.gov.ua/news/bjudzhet/local-budg?page=1>
 16. Medynska, T. V. (2014). Yedynyi podatok u formuvanni dokhodiv mistsevykh biudzhetyv ta podatkovyi kontrol za yoho splatoui. *Stalyi rozvytok ekonomiky, 2(24)*, 218–224.
 17. Budget of Ukraine. *The Price of the State*. Available: <http://cost.ua/en/budget/>
 18. Roberts, S. R., Fisun, O. (2014, September 03). *Local Governance and Decentralization Assessment: Implications of Proposed Reforms in Ukraine*. International Development or the United States Government. Available: <https://www.usaid.gov/sites/default/files/documents/1863/LOCAL%20GOVERNANCE%20ASSESSMENT%20FINAL.pdf>
 19. *Deitsentralizatsiia. Zdobutky reformy mizhbiudzhetnykh vidnosyn*. Available: http://auc.org.ua/sites/default/files/present_zdobutki.pdf

REGULATION OF INTERGOVERNMENTAL RELATIONS IN THE SOCIO-ECONOMIC DEVELOPMENT OF REGIONS OF UKRAINE

page 24–29

The features of the regulatory support of the budget regulation of the social and economic development of regions of Ukraine have been considered in the article. The necessity of such justification has been caused by current changes in tax and budget legislation of Ukraine in the context of European integration. It was determined that the features of the tax and budget legislation of Ukraine which have been caused by the necessity of problem solution of the organization of inter-budget relations from a perspective of financial support of regions are the legislation improvement within the frame of decentralization, the significant extension of community power, the extension of filling sources of resource base of the local budget. The main strategic directions of social and economic development of Ukraine, among which the implementation of effective tools of budget regulation of such development is important, have been determined.

ECONOMIC CYBERNETICS

BUDGET OPTIMIZATION FOR ADVERTISERS AS CONTEXTUAL ADVERTISING MARKET PARTICIPANTS

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The problem of budget optimizing for advertisers in the market of modern Internet advertising was investigated depending on the choice of strategy of contextual advertising when using the RTB technology and found that the long-term strategy that uses the methodology of statistical arbitrage has good prospects. The importance of this issue is caused by the energetic innovative changes in Internet advertising and by the rapid growth of contextual advertising both in the world and in Ukraine. The conducted testing of the EM-algorithm model in the computer instruction paradigm established a substantial increase in efficiency of an advertiser's budget use. The conducted numerical modeling using special software has shown that the statistical arbitrage model has some differences, depending on the rate selection parameters, but in all cases it gives better results when statistical arbitrage is not applied.

The research results are useful for advertisers because they make it possible to optimize the advertising budget and are important for the Internet advertising market, because they increase its effectiveness in general.

Keywords: market web advertising, contextual search, budget optimization, statistical arbitrage, expectation-maximization algorithm.

References

- Advertising Expenditure Forecasts September 2015. *ZenithOptimedia*. Available: http://www.zenithoptimedia.com/wp-content/uploads/2015/09/Adspend-forecasts-September-2015-executive-summary1.pdf?mc_cid=85cd21944b&mc_eid=86d41fa20c
- Obiem reklamnogo rynku Ukrainy 2015 i prognoz obiemov rynku 2016. Ekspertnaia otsenka Vseukrainskoi reklamnoi koalitsii. *Vseukrainskaia Reklamnaia Koalitsiia*. Available: <http://www.adcoalition.org.ua/adv/statistics>
- Yan, J., Liu, N., Wang, G., Zhang, W., Jiang, Y., Chen, Z. (2009). How much can behavioral targeting help online advertising? *Proceedings of the 18th international conference on World wide web – WWW'09*. Association for Computing Machinery (ACM), 261–270. doi:10.1145/1526709.1526745
- Glushchenko, T. S., Dobryanska, V. V. (2015). Trends and Prospects of Development of the Advertising-Communication Market of Ukraine. *Business Inform*, 4, 327–332.
- Halchinskiy, L. Yu., Stashkevych, D. S. (2015). Model assessing the effectiveness for intermediary companies in the market of contextual advertising. *Scientific Bulletin of International Humanitarian University. Series: Economics and Management*, 13, 242–246.
- Pavlov, D. H. (2011). Teoretyko-ihrovi modeli povedinky uchasnykiv kontekstnoi reklamnoi kampanii. *Naukovi pratsi [Chornomorsko ho derzha noho univ ersy tetu imeni Petra Mohyly]. Ser.: Kompiuterni tekhnolohii*, Vol. 160, № 148, 47–51.
- Lee, K., Orten, B., Dasdan, A., Li, W. (2012). Estimating conversion rate in display advertising from past performance data. *Proceedings of the 18th ACM SIGKDD international conference on Knowledge discovery and data mining – KDD '12*. Association for Computing Machinery (ACM), 768–776. doi:10.1145/2339530.2339651
- Hogan, S., Jarrow, R., Teo, M., Warachka, M. (2004, September). Testing market efficiency using statistical arbitrage with applications to momentum and value strategies. *Journal of Financial Economics*, Vol. 73, № 3, 525–565. doi:10.1016/j.jfineco.2003.10.004
- Yuan, S., Wang, J., Zhao, X. (2013). Real-time bidding for online advertising. *Proceedings of the Seventh International Workshop on Data Mining for Online Advertising – ADKDD '13. Article № 3*. Association for Computing Machinery (ACM). Available: <http://doi.org/10.1145/2501040.2501980>
- Chen, B., Yuan, S., Wang, J. (2014). A Dynamic Pricing Model for Unifying Programmatic Guarantee and Real-Time Bidding in Display Advertising. *Proceedings of 20th ACM SIGKDD Conference on Knowledge Discovery and Data Mining – ADKDD'14*. Association for Computing Machinery (ACM), 1–9. doi:10.1145/2648584.2648585
- Zhang, W., Wang, J. (2015). Statistical Arbitrage Mining for Display Advertising. *Proceedings of the 21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining – KDD '15*. Association for Computing Machinery (ACM), 1465–1474. doi:10.1145/2783258.2783269
- Perlich, C., Dalessandro, B., Hook, R., Stitelman, O., Raeder, T., Provost, F. (2012). Bid optimizing and inventory scoring in targeted online advertising. *Proceedings of the 18th ACM SIGKDD international conference on Knowledge discovery and data mining – KDD '12*. Association for Computing Machinery (ACM), 804–812. doi:10.1145/2339530.2339655
- Cavallo, R., McAfee, R. P., Vassilvitskii, S. (2015, June 23). Display Advertising Auctions with Arbitrage. *ACM Transactions on Economics and Computation*, Vol. 3, № 3, 1–23. doi:10.1145/2668033
- Liao, H., Peng, L., Liu, Z., Shen, X. (2014). iPinYou Global RTB Bidding Algorithm Competition Dataset. *Proceedings of 20th ACM SIGKDD Conference on Knowledge Discovery and Data Mining – ADKDD'14*. Association for Computing Machinery (ACM), 1–6. doi:10.1145/2648584.2648590
- Bharadwaj, V., Ma, W., Schwarz, M., Shanmugasundaram, J., Vee, E., Xie, J., Yang, J. (2010). Pricing guaranteed contracts in online display advertising. *Proceedings of the 19th ACM international conference on Information and knowledge management – CIKM '10*. Association for Computing Machinery (ACM), 399–408. doi:10.1145/1871437.1871491
- Lee, K.-C., Jalali, A., Dasdan, A. (2013). Real time bid optimization with smooth budget delivery in online advertising. *Proceedings of the Seventh International Workshop on Data Mining for Online Advertising – ADKDD '13. Article № 1*. Association for Computing Machinery (ACM). Available: <http://doi.org/10.1145/2501040.2501979>
- Zhang, W., Zhang, Y., Gao, B., Yu, Y., Yuan, X., Liu, T.-Y. (2012). Joint optimization of bid and budget allocation in sponsored search. *Proceedings of the 18th ACM SIGKDD international conference on Knowledge discovery and data mining – KDD '12*. Association for Computing Machinery (ACM), 1177–1185. doi:10.1145/2339530.2339716
- Gatev, E., Goetzmann, W. N., Rouwenhorst, K. G. (2006). Pairs Trading: Performance of a Relative-Value Arbitrage Rule. *Review of Financial Studies*, Vol. 19, № 3, 797–827. doi:10.1093/rfs/hhj020
- Flach, P. (2012). *Machine Learning: The Art and Science of Algorithms that Make Sense of Data*. Cambridge University Press, 396. doi:10.1017/cb09780511973000
- iPinYou Real-Time Bidding Dataset for Computational Advertising Research. Available: <http://data.computational-advertising.org/>
- Statistical Arbitrage Mining for Display Advertising. Available: <https://github.com/wnzhang/rtbarbitrage>

TECHNOLOGY TRANSFER IN THE ECONOMICS

RESEARCH OF ESSENCE OF NETWORK TRANSPORT ASSOCIATIONS AS AN ECONOMIC CATEGORY

page 37–40

Research space in relation to the creation of integrated network transport associations is in the process of forming in the economic

literature and needs improvement and expansion of existing categorical and conceptual framework.

An analysis of the literature was found a significant number of definitions of networks and network structures, which leads to the terminological ambiguity of concepts and lack of practical recommendations regarding the establishment and operation of the

network transport associations. Based on this in the article it is developed the categorical and conceptual-terminological framework of creation and development of network transport associations.

As a historical category, network transport associations connected with historical periods of transport and network processes that began with the formation of a network of automotive, marine, rail and air routes. These new formations are considered as a philosophical category in the transport sector, which laid the basis for cooperation based on understanding its genesis, philosophical methods and interpretation. As a legal category, network transport associations operate in the existing legislative and regulatory field, which needs substantial revision and improvement. As an economic category, associations transport network are a set of property relations in the creation, exchange, distribution and consumption of a variety of properties, resources, experience and knowledge.

Presented results of research of the essence of network transport associations as historical, philosophical, legal and economic categories allow understanding the complexity of the relationships that arise in the process of their creation and development and forming the basis of the theory of network interaction of the companies of different modes of transport.

Keywords: network transport associations, interaction, networks, network structures, integration, consolidation.

References

- Dikan, V. L. (2006). Combined transport system the urgency of improving in the international transport network. *Bulletin of Economics and Transport Industry*, 13, 13–20.
- Kutah, A. P. (2004). *Modelling of transport systems*. Kyiv: University of Economics and Transport Technology, 195
- Reser, S. M. (1992). *The interaction of transport systems*. Moscow: Nauka, 320
- Sych, E. M., Parubets, O. M. (2012). *Organizational and economic problems of interaction between transport networks of neighboring countries*. Kyiv: Logos, 218
- Tsvetov, Y. M., Lysenkov, V. A., Smelyanskiy, Y. M. (1985). *Organization of the joint work of the various modes of transport*. Kyiv: Technology, 191
- Gritsenko, S. I. (2011). *The development strategy of transport and logistics clusters in Ukraine*. St. Petersburg: Saint Petersburg State University of Economics and Finance, 41.
- Osipov, V. M. (2009). International experience of creation and functioning of marine cluster. *Journal of Social and Economic Research*, 36, 305–311.
- Kozyr, B. Yu. (2011). Clustered systems in development projects commercial seaports of Ukraine. *Management of Development of Complex Systems*, 6, 99–103.
- Lifar, V. V. (2014). Transport cluster in the region the organizational aspects. *Marketing and Management Innovation*, 2, 188–196.
- Smirnov, I. G. (2012). Processes transport and logistics cluster in the European Union. *Foreign Trade, Economics, Finance, Law*, 6, 15–21.
- Bode, A., l'Arme, T. B. T., Alig, S. (2010). Research note: clusters vs. networks – a literature-based approach towards an integrated concept. *International Journal of Globalisation and Small Business*, Vol. 4, № 1, 92–110. doi:10.1504/ijgsb.2010.035333
- Huggins, R. (2000, April). The success and failure of policy-implemented inter-firm network initiatives: motivations, processes and structure. *Entrepreneurship & Regional Development*, Vol. 12, № 2, 111–135. doi:10.1080/089856200283036
- Webster, J. (1995, March). Networks of collaboration or conflict? Electronic data interchange and power in the supply chain. *The Journal of Strategic Information Systems*, Vol. 4, № 1, 31–42. doi:10.1016/0963-8687(95)80013-g
- Podryeza, S. M., Novak, V. A., Hurin, G. S. (2010) Aviation alliance as a result of economic globalization in the global aviation. *Problems of a systemic approach to the economy enterprises*, 28. Available: <http://jrn1.nau.edu.ua/index.php/PPEI/article/download/210/200>
- Goltz, G. A. (2005). About Transport philosophy. *Proceedings of the XI International (14th Ekaterinburg) Scientific-practical conference «Problems of economics, organization and management of the restructuring and development of enterprises of industry, services and public utilities», 14–15 June 2005*. Available: <http://www.waksman.ru/Russian/Systems/g2005.htm>
- Verkhovna Rada of Ukraine. (2003). *The Economic Code of Ukraine from 16.01.2003 № 436-IV*. Available: <http://zakon3.rada.gov.ua/laws/show/436-15>
- Pro obiednannia derzhavnykh pidpriemstv transportu i dorozhnoho hospodarstva. *Decree of the Cabinet of Ministers of Ukraine from 17.03.1993 № 20–93*. Available: <http://zakon5.rada.gov.ua/laws/show/20-93>
- Parubets, O. M. (2015). *Methodological foundations of the network of associations of transport enterprises*. Nizhin: Publishing Aspect-Polygraph Ltd., 364
- Parubets, O. M. (2014). Relationship category «network» and «network structure» as integration unions of transport enterprises. *Efficient economy*, 3. Available: <http://www.economy.nayka.com.ua/?op=1&z=2870>
- Bolychev, O., Mikhailov, A. (2014). Network transformations in economy. *Baltiyskij region*, 3(21), 41–55. doi:10.5922/2074-9848-2014-3-3
- Sushchenko, E. A., Buzdakov, L. N. (2011). Development of business structures' network interaction forms management. *Project management and development of production*, 3(39), 52–56.

ECONOMICS AND MANAGEMENT OF ENTERPRISE

RESEARCH AND ANALYSIS OF THE COMMERCIALIZATION PROCESS OF IDEAS AND RESULTS OF THE INNOVATIVE ACTIVITIES IN UKRAINE: LEGAL AND ECONOMIC ASPECTS

page 41–45

It is investigated a legal aspect of commercialization in the light of the basic laws of Ukraine and agreements, which entered Ukraine to integrate into the global economic system: the Paris Convention, Madrid Agreement, Agreement «On Patent Cooperation» agreement «On Trade-Related Aspects of Intellectual Property Rights» Laws of Ukraine «On innovative activity», «On scientific and scientific-technical information», «On Protection of Rights to Industrial Designs», «On protection of inventions and industrial models» and others. The article states that the shortcomings of the Ukrainian legislation limited time duration of patent protection and features protection of intellectual property. The aim of research of the legal framework in terms of protection of intellectual property is the formation of a legal corridor for the implementation of the commercialization of ideas

and technology transfer, as the author of the idea for the concept of the protection of his rights to object ownership is crucial for its implementation marketing.

The economic aspect describes the contemporary realities of patent effectiveness of Ukraine, as the defining characteristics of commercialization and its primary stage. Along with the display of patent activity, the article noted the trend of innovative activity of enterprises, which states that the number of innovative active enterprises for the period from 2012 to 2014 is increased, but the implementation of innovative products and innovative costs are decreased. Analysis of the statistical data allows determining basically positive trend that character will drop down if negative changes in the national economy will continue.

Keywords: international agreements, laws of Ukraine, patenting, commercialization, innovative activity of enterprises.

References

- Druker, P. (2013). *Effektivnyi rukovoditel'*. Moscow: Mann, Ivanov i Feber, 240.

2. An'shin, V. M., Dagaev, A. A., Kolokolov, V. A. (2006). *Innovatsionnyi menedzhment. Kontseptsii, mnogourovnevnye strategii, mehanizmy innovatsionnogo razvitiia*. Moscow: DELO, 244.
3. Prodius, O. I. (2010). Innovatsiyni rozvytok promyslovosti: realii ta perspektyvy. *Visnyk Khmelnytskoho natsionalnoho universytetu*, 1, 106–110.
4. William, E. (1982). Paris Convention for the Protection of Industrial Property — A View of the Proposed Revisions. *NCJ Int'l L. & Com. Reg.*, 8, 155.
5. Sandison, H. (1986). The Berne Convention and the Universal Copyright Convention: The American Experience. *Colum.-VLAJL & Arts*, 11, 89.
6. Schmidt-Szalewski, J. (1998). The International Protection of Trademarks after the Trips Agreement. *Duke J. Comp. & Int'l L.*, 9, 189.
7. Treaty Patent Cooperation. (2012, Nov 13). *Notification of Transmittal of the International Search Report and the Written Opinion of the International Searching Authority, or the Declaration*. Issued for PCT/US2012/052759, 17.
8. Agreement on Trade-Related Aspects of Intellectual Property Rights. (1999, January 1). *Business Guide to the World Trading System*. Commonwealth Secretariat, 234–255. doi:10.14217/9781848597044-23-en
9. Otten, A., Wager, H. (1996). Compliance with TRIPS: the Emerging World View. *Vanderbilt Journal of Transnational Law*, 29, 391.
10. *The Civil Code of Ukraine from 16.01.2003 № 435-IV*. Available: <http://zakon4.rada.gov.ua/laws/show/435-15>
11. Pro innovatsiynu diialnist. *Law of Ukraine from 04.07.2002 № 40-IV*. Available: <http://zakon3.rada.gov.ua/laws/show/40-15>
12. Pro avtorske pravo i sumizhni prava. *Law of Ukraine from 23.12.1993 № 3792-XII*. Available: <http://zakon2.rada.gov.ua/laws/show/3792-12>
13. Pro Osnovni zasady rozvytku informatsiynoho suspilstva v Ukraini na 2007–2015 roky. *Law of Ukraine from 09.01.2007 № 537-V*. Available: <http://zakon0.rada.gov.ua/laws/show/537-16>
14. Pro naukovu-tekhnichnu informatsiiu. *Law of Ukraine from 25.06.1993 № 3322-XII*. Available: <http://zakon3.rada.gov.ua/laws/ano/3322-12>
15. Pro okhoronu prav na vynakhody i korysni modeli. *Law of Ukraine from 15.12.1993 № 3687-XII*. Available: <http://zakon3.rada.gov.ua/laws/show/3687-12>
16. Pro okhoronu prav na znaky dlia tovariv i posluh. *Law of Ukraine from 15.12.1993 № 3689-XII*. Available: <http://zakon4.rada.gov.ua/laws/show/3689-12>
17. Pro okhoronu prav na promyslovi zrazky. *Law of Ukraine from 15.12.1993 № 3688-XII, Current Edition from 05.12.2012, Warranty 5460-17*. Available: <http://zakon2.rada.gov.ua/laws/show/3688-12>
18. Pro okhoronu prav na oznachennia pokhodzhennia tovariv. *Law of Ukraine from 16.06.1999 № 752-XIV, Current Edition from 05.12.2012, Warranty 5460-17*. Available: <http://zakon5.rada.gov.ua/laws/show/752-14>
19. Pro okhoronu prav na topohrafii intehrallykh mikroskhem. *Law of Ukraine from 05.11.1997 № 621/97-BP, Current Edition from 05.12.2012, Warranty 5460-17*. Available: <http://zakon0.rada.gov.ua/laws/show/621/97-bp>
20. Pro derzhavnyi kontrakt na silskohospodarsku produktsiiu na 1995 rik. *Decree of the President of Ukraine from 16.01.1995 № 51/95*. Available: <http://zakon4.rada.gov.ua/laws/show/51/95>
21. Pro rozpovsiudzhennia pryimirnykh audiovizualnykh tvoriv, fonohram, videohram, kompiuternykh prohram, baz danykh. *Law of Ukraine from 23.03.2000 № 1587-III*. Available: <http://zakon2.rada.gov.ua/laws/show/1587-14>
22. Pro profesiynykh tvorchykh pratsivnykiv ta tvorchi spilky. *Law of Ukraine from 07.10.1997 № 554/97-BP, Current Edition from 01.01.2016, Warranty 835-19*. Available: <http://zakon3.rada.gov.ua/laws/show/554/97-bp>
23. *State Statistics Service of Ukraine*. Available: <http://www.ukrstat.gov.ua/>
24. Ukrainian Institute of Scientific, Technical and Economic Information. (2015). *Stan rozvytku nauky i tekhniky, rezultaty naukovoi, naukovu-tekhnichnoi, innovatsiyni diialnosti, transferu tekhnologii za 2014 rik*. Kyiv, 208.
25. Melnyk, T. M., Zubko, O. V. (2012). Zovnishnia torhivlia vysokotekhnolohichnykh tovaramy: instytutsionalnyi vymir. *Marketynh i menedzhment innovatsii*, 2, 181–190.

FORMATION OF OPTIMAL PRODUCTION SCALE OF BUILDING MATERIALS

page 45–49

This article deals with the theoretical background of stages and scale of production of building materials. The problems that arise when planning the production of building materials are summarized. A necessary condition for an integrated approach to achieving a balanced system of the building sector is the development of organizational and methodological foundations.

The main aim of research is to improve the efficiency of the enterprise for production of building materials for the implementation of the strategic development plan.

Using the simplex method at the planning stage of production scale in the enterprise allows to determine the optimal production. This means maximum utilization of equipment employed in the production process.

The paper presents the option of calculating the optimal scale of production under the given constraints. This method is suitable for the development and justification of actions aimed at ensuring the stable functioning of economic entities in the building industry.

The results can be used in enterprises producing building materials, as well as allow raising the level of methodical, information and software.

The proposed author's approach allows justifying the quantitative indicators of production of building materials in the implementation of the strategic plan of the enterprise.

Keywords: building materials, industry, building complex, optimal production.

References

1. Zalunina, O. M. (2014). Role of Target Indicators in Determination of Prognostic Estimates for the Construction Industry. *Business Inform*, 3, 160–165.
2. Zalunina, O. M. (2014). Construction of aggregates of features of the building complex of the territory for conceptual grouping scheme. *Eastern-European Journal Of Enterprise Technologies*, 4(3(70)), 29–33. doi:10.15587/1729-4061.2014.26278
3. Hakansson, H., Ingemansson, M. (2011). Construction Companies and How They Acquire Knowledge through Business Interaction. *The IMP Journal*, Vol. 5, № 2, 67–78.
4. Bygballe, L., Ingemansson, M. (2011). Public Policy and Industry Views on Innovation in Construction. *The IMP Journal*, Vol. 5, № 3, 157–171.
5. Bygballe, L. E., Ingemansson, M. (2014, April). The logic of innovation in construction. *Industrial Marketing Management*, Vol. 43, № 3, 512–524. doi:10.1016/j.indmarman.2013.12.019
6. Harris, F., McCaffer, R., Edum-Fotwe, F. (2013). *Modern Construction Management*. Ed. 7. Wiley-Blackwell, 572.
7. Zalunina, O. M. (2015). The economic dimension of management decisions in the building industry. *ScienceRise*, 9(1(14)), 42–46. doi:10.15587/2313-8416.2015.50512
8. Samuseva, R. F. (1979). *Perspektivnoe planirovanie razvitiia regional'nogo stroitel'nogo kompleksa*. Moscow: Stroiizdat, 160.
9. Tersh, G. V. (1985). *Regional'noe razvitie stroitel'nogo kompleksa*. Moscow: Stroiizdat, 45.
10. Zalunina, O. M. (2014). Postroenie kontseptual'noi shemy grupirovki oblastei Ukrainy po makroekonomicheskim parametram v stroitel'nom sektore. *Problemy ekonomiki*, 4, 91–96.
11. Brunsson, K. (2015). Sustainability in a Society of Organisations. *Journal of Organisational Transformation and Social Change*, Vol. 12, № 1, 5–21. doi:10.1179/1477963314Z
12. Abrahamsson, S., Hansson, J., Isaksson, R. (2011). Integrated Management Systems — testing a model for integration. *14th Toulon-Verona Conference «Organizational Excellence in Services», September 1–3, 2011*. University of Alicante, University of Oviedo (Spain), 15–28.
13. Druzhynyna, V. V., Zalunina, O. M. (2012). Vyznachennia osoblyvostei rynku pratsi v budivnytstvi. *Visnyk Khmelnytskoho natsionalnoho universytetu*, 2(5), 58–53.
14. Doing Business 2014: Understanding Regulations for Small and Medium-Size Enterprises. (2013, October 25). *Doing Business*. The World Bank, 278. doi:10.1596/978-0-8213-9984-2

15. Ben-David, I., Graham, J. R., Harvey, C. R. (2013, August 13). Managerial Miscalibration. *The Quarterly Journal of Economics*, Vol. 128, № 4, 1547–1584. doi:10.1093/qje/qjt023
16. Zalunina, O. M. (2014). Metodologija opredeleniia kluchevykh faktorov vliianiia funkcionirovaniia stroitel'nogo predpriatiia. *Visnyk Odeskoho natsionalnogo universytetu. Seriya: ekonomichni nauky*, 6, 44–51.
17. Zalunina, O. M. (2014). Metodologicheskie instrumentarii strukturirovaniia stroitel'nogo sektora oblasti Ukrainy. *Naukovyi visnyk Khersonskoho derzhavnogo universytetu. Seriya ekonomichni nauky*, 6, 52–60.
18. Zalunina, O. M. (2015). Determine the relationship of industries related to regional development. *Technology Audit And Production Reserves*, 1(7(21)), 8–12. doi:10.15587/2312-8372.2015.38434

CHARACTERISTICS OF DEVELOPMENT MODELS OF SERVICES OF FILLING STATIONS NETWORK

page 49–53

The literature focused on the analysis of the market of filling stations, as components of the market infrastructure, but little attention is paid to the development of filling stations network as an organization that operates on the basis of public utility. This utility is formed by the formation of different models and methods of services at filling stations network.

In the article it is considered the range of services provided by filling stations, which are located in areas with varying capacity of the market. Also it is analyzed the number of filling stations (complexes) in recent years of market stations.

The author has formed three classification criteria under which categorized types of services at the filling stations and conducted a detailed analysis of all offered types of services at filling stations networks. It is characterized totalitarian and democratic character of development management of filling stations network.

It is shown a graphical representation of the three levels of the hierarchy of filling station: low, medium and high. It is analyzed the priority of criteria by which consumers choose filling station.

Keywords: services, filling station, classification of the services, classification features, development of the services, network.

References

1. Karpiy, O. P. (2015). Analizuvannya suchasnoho stanu rozdrubnogo avtozapravnoho rynku. *Visnyk Khmelnytskoho natsionalnogo universytetu. Ekonomichni nauky*, 6(230), 10–13
2. *Samar Instytut Badan Rynku Motoryzacyjnego*. (01.02.2009). Available: <http://www.samar.pl/>
3. Malekh, P. I. (2005). *Rozvytok pidpriemstv infrastruktury avtomobilnogo transportu*. Kyiv: National Transport University, 19.
4. Dehtiarova, O. O. (2002). *Udoskonalennia metodiv vyrobnycho-hospodarskoi diialnosti pidpriemstv na osnovi kontrolinhu (na prykladi naftererobnykh pidpriemstv)*. Odessa: Odessa National Economic University, 19.
5. Dorozhkina, M. S. (2008). *Rozvytok mizhnarodnoi korporatynoi in-tehratsii v naftererobnomu biznesi*. Kyiv: Kyiv National Economic University named after Vadym Hetman, 20.
6. Kniaz, S., Holyavka, L. (2014). The peculiarities of an enterprise intellectual potential bearer's interaction and the identification of their goals. *Econtechmod*, Vol. 3, № 2, 21–27.
7. Koska, D. (2004). Wplyw rozporzadzen Komisji Europejskiej na sektor samochodowy w Unii Europejskiej. *Studia Europejskie*, 4, 29–47.
8. Bruhn, M.; In: Bruhn, M., Wehrle, F. (1989). Europa 1992 – Herausforderungen an das Marketing im Europaischen Binnenmarkt. *Europa 1992 – Chancen und Risiken für das Marketing*. Munster, 19–32.
9. Meissner, H. G.; Tietz, B., Koehler, R., Zentes, J. (1995). Euromarketing. *Handwörterbuch des Marketing*. Verlag Schaeffer-Poeschel, Stuttgart, 634.
10. Koroli benzokolonok. Komu prinadlezhat 10 krupneishih v Ukraine setei AZS. *Fokus*. Available: <http://focus.ua/money/332626/>
11. V Ukraine stalo men'she AZS. *SEGODNIA.ua*. Available: <http://www.segodnya.ua/economics/avto/v-ukraine-stalo-menshe-azs-549970.html>
12. Kostiuik, O., Krikawski, J.; In: Barcika, R., Biesoka, G. (2009). Zarzadzanie logistyczne w przemysle przetwarzania drewna. *Teoria i prak-*

tyka rozwoju lokalnego i regionalnego. Bielsko-Biala: Wyd-wo Akad. Techn.-Humanistycznej, 329–337.

13. Chto vliiaet na vybor AZS i chto razdrzhaet klientov. *4Service Holdings GmbH*. Available: <https://4service-group.com/ru/news/292/>

RISK MANAGEMENT IN THE CONTEXT OF INNOVATION PROJECTS IMPLEMENTATION AT MACHINE-BUILDING ENTERPRISES

page 54–57

Methodology to reduce the risks of innovative projects implementation at machine-building enterprises is proposed.

Currently analysis methods of the innovation risks are not generalized completely.

Methods of negative factors effect on the efficiency of innovative projects should be improved.

The uncertainty in the development of innovative projects results in possible losses which quantitative measure is risk.

Uncertainty of an event occurrence and its undesirability are required risk components. That is shown in associated expenditures reflecting either direct damage or indirect one.

This methodology is based on the rejection of risky innovation project in favour of less risky one or on the risk minimization.

The necessity to substantiate at the planning stage the quantitative values of economic indicators when further implementation of the project is not expedient is proved.

The research is of practical value for machine-building enterprises as it proposes to develop the concept of an innovation project before its implementation; to analyze and systematize the risks of innovative projects according to certain parameters determined in the research as they are typical for machine-building enterprises. Moreover, five-stage assessment of total innovation risk according to the results of the analysis and systematization is proposed.

Keywords: innovations, risks, projects, investment, management, diversification, hedging, insurance, limitation, methods.

References

1. Herstatt, C., Verworn, B., Nagahira, A. (2004). Reducing project related uncertainty in the «fuzzy front end» of innovation: a comparison of German and Japanese product innovation projects. *International Journal of Product Development*, Vol. 1, № 1, 43–65. doi:10.1504/IJPD.2004.004890
2. Halman, J. I. M., Keizer, J. A. (1994). Diagnosing risks in product-innovation projects. *International Journal of Project Management*, Vol. 12, № 2, 75–80. doi:10.1016/0263-7863(94)90013-2
3. Assink, M. (2006). Inhibitors of disruptive innovation capability: a conceptual model. *European Journal of Innovation Management*, Vol. 9, № 2, 215–233. doi:10.1108/14601060610663587
4. Ramgopal, M. (2003). Project uncertainty management. *Cost Engineering*, Vol. 45, № 12, 21–24.
5. Mu, J., Peng, G., MacLachlan, D. L. (2009). Effect of risk management strategy on NPd performance. *Technovation*, Vol. 29, № 3, 170–180. doi:10.1016/j.technovation.2008.07.006
6. Goffin, K., Mitchell, R. (2010). *Innovation Management: Strategy and Implementation using the Pentathlon Framework*. Ed. 2. Basingstoke: Palgrave Macmillan, 416.
7. Brochner, J., Olofsson, T. (2011). Construction Productivity Measures for Innovation Projects. *Journal of Construction Engineering and Management*, Vol. 138, № 5, 670–677. doi:10.1061/(ASCE)CO.1943-7862.0000481
8. Bazel, R., Koks, D., Braun, R.; In: Efimova, M. R. (1993). *Informatsiia i risk o marketinge*. Translation from English. Moscow: Finstat-inform, 93.
9. Balabanov, I. T., Goncharuk, O. V., Savinskaia, N. A. et al.; In: Balabanov, I. T. (2000). *Banki i bankovskoe delo*. St. Petersburg: Piter, 253.
10. Valdaitsev, S. V. (2001). *Upravlenie innovatsionnym biznesom*. Moscow: YuNITI, 343.
11. Filina, G. I., Kravchenko, M. N. (2007). Problemy innovatsiionnoho rozvytku ekonomiky Ukrainy. *Finansovye rynki i tsennye bumagi*, 11, 4–9.
12. Bovin, A. A., Cherednikova, L. E. (2001). *Intellektual'naia sobstvennost': ekonomicheskii aspekt*. Moscow: INFRA-M; Novosibirsk: NSAEIU, 216.

13. Churikanova, E. (2015). Cognitive approach application for the typological classification of regions by level of industrial development. *Technology Audit And Production Reserves*, 1(7(21)), 28–31. doi:10.15587/2312-8372.2015.38681
14. Illiashenko, S. M. (2010). Stratehichne upravlinnia innovatsiinou diialnistiu pidpriemstva na zasadakh marketynhu innovatsii. *Aktualni problemy ekonomiky*, 12, 111–119.
15. Stadnyk, V. V., Nepohodina, N. I. (2008). Teoretyko-metodolohichni osnovy investuvannya rozvytku pidpriemstva. *Aktualni problemy ekonomiky*, 1, 60–69.
16. Mazur, E. P., Smirnova, G. A., Titova, M. N. (2011). Innovatsionnye riski v deiatel'nosti predpriatiia. *Innovatsii*, 4–5 (41–42), 68–70.
17. Sydora, T. Yu. (2012). Kontseptsiiia modeliuвання diialnosti pidpriemstva v umovakh tsyklichnykh zmin zovnishnoho seredovyscha. *Derzhava ta rehiony: Ekonomika ta pidpriemnytstvo*, 4, 82–85.
18. Parshyna, O. A. (2010). Stratehichne upravlinnia finansovymy resursamy pidpriemstva. *Ekonomika promyslovosti*, 3, 188–193.
19. Granaturov, V. M. (2002). *Ekonomicheskii risk: sushchnost', metody izmereniia, puti snizheniia*. Ed. 2. Moscow: Delo i servis, 160.

MACHINE-BUILDING ENTERPRISES' INNOVATIONS FOR DEVELOPMENT MECHANISM DEVELOPMENT

page 57–62

Article analyzes the main features of machine-building enterprises' innovations for development management. Due to the high level of innovations' uncertainty and low economic situation predictability, it is necessary to build innovations for development management mechanism, which takes into account both the available statistical information and management experience. The conceptual model of enterprise innovative development is described. This model allows providing the coordinated work of all company functional units, getting competitive advantages due to complete meeting the demand and reducing the level of risk immanent to innovations. The paper presents a mathematical model of innovations for development evaluation, which reflects the relationship among sets of innovations for development factors in the context of its parts: innovative capacity and innovation process. Also decision-making expert system for management option choice: maintaining option, dynamic option, static option, and balanced development option based on input values is proposed. The author proposed innovations for development mechanism, which helps to maximize machine-building enterprises' profit by identifying and practical usage of available reserves of innovations for development degree increase.

Keywords: innovations for development degree, expert system, innovations for development management.

References

1. Balabanov, I. T. (2001). *Innovatsionnyi menedzhment*. St. Petersburg: Piter, 304.
2. In: Illiashenko, S. M. (2006). *Marketynh i menedzhment innovatsiinoho rozvytku*. Sumy: VTD «Universytetska knyha», 728.
3. Rohoza, M. Ye., Verhal, K. Yu. (2007). Rol ta sutnist stratehii innovatsiinoho rozvytku v systemi zahalnoi stratehii upravlinnia diialnistiu pidpriemstva. *Ekonomika: problemy teorii ta praktyky*, Vol. 228, № 4, 968–972.
4. Maksymova, T. S., Filimonova, O. V., Lyshtvan, K. V. (2010). Formuvannya innovatsiinou polityky na pidpriemstvi. *Ekonomichnyi visnyk Donbasu*, 2, 181–183.
5. Moroz, O. S. (2012). Innovatsiinyi rozvytok pidpriemstva: sutnist ta problema vyznachennia skladovykh chastyn. *Naukovi zapysky Natsionalnoho universytetu «Ostrozka akademiiia»*. Serii «Ekonomika», 20, 148–151.
6. Belousenko, M. V. (2006). *Obshchaia teoriia ekonomicheskoi organizatsii: organizatsionnaia evoliutsiia industrial'noi ekonomiki*. Donetsk: DonNTU, 432.
7. Semenchenko, N., Moroz, O. (2013). Degree of enterprises innovations for development evaluation using fuzzy logic tools. *Journal LAssociation 1901 «SEPIKE»*, 3, 228–232.
8. Yudin, E. G. (1978). *Sistemnyi podhod i printsip deiatel'nosti*. Moscow: Nauka, 391.

9. Zhang, W.-B. (1991). *Synergetic Economics — Time and Change in Nonlinear Economics*. Springer-Verlag Berlin Heidelberg, 246. doi:10.1007/978-3-642-75909-3
10. Moroz, O. S. (2012). Formuvannya systemy pokaznykiv dlia otsiniuvannya rivnia innovatsiinoho rozvytku pidpriemstva. *Ekonomika Krymu*, 3(40), 263–266.
11. Shtovba, S. D. (2007). *Proektirovanie nechetkih sistem sredstvami MATLAB*. Moscow: Goriachaia liniia — Telekom, 288.

THE STUDY OF THE INVESTMENT POLICY FORMATION OF THE ENTERPRISES AS AN IMPORTANT FACTOR OF THEIR STRATEGIC DEVELOPMENT

page 63–68

Types, peculiarities of investments in the context of transition to an innovative model of economic growth of the country for the short term are specified. The state of the investment climate in Ukraine is studied, the ways of its improvement are defined, the effect of an investment policy on the formation of a corporate development plan is justified. The analysis of an investment activity in Ukraine revealed that macroeconomic indicators are still on the periphery of global investment flows. It was found that the main reasons of decrease in investment activity in Ukraine are: an unfavorable investment climate; inadequate legal framework; poor-quality arrangement of investment projects and programs, as well as their ineffectiveness; imperfection of investment instruments and investment market. Some suggestions concerning the formation of innovative and investment potential using the equity capital of companies are recommended. The principles of the investment policy of enterprises under the conditions of modern management paradigm are stated: the matching principle, the principle of interest and communication skills, the principle of flexibility and alternative, innovative principle, the principle of minimizing of the investment risk. The suggested in the research principles of investment policy make the investment policy of enterprises the tool for enhancement of efficiency of its functioning as a whole for the long term. This study contributes to the definition of the main directions of investment policies of enterprises of Ukraine.

Keywords: investments, investment policy, economics, management, financing, innovation, principles, strategic development.

References

1. Masse, P.; In: Zhdanko, A. V. (1971). *Kriterii i metody optimal'nogo opredeleniia kapitalovlozhenii*. Translation from French. Moscow: Statistika, 50.
2. Blank, I. A. (2002). *Upravlenie ispol'zovaniem kapitala*. Kyiv: Elga, 656.
3. Horbatiuk, L. M. (2010). Investytsii: ekonomichna sutnist i klasyfikatsiia. *Bulletin of Poltava State Agrarian Academy*, 2, 201–204.
4. Kovalev, V. V. (2007). *Upravlenie denezhnymi potokami, pribyl'iu i rentabel'nost'iu*. Moscow: TK Velbi, Prospekt, 336.
5. Pro innovatsiinu diialnist. Law of Ukraine from 04.07.2002 № 40-IV. *Bulletin of Verkhovna Rada Ukraine (BVR)*, 36, article 266. Available: <http://zakon4.rada.gov.ua/laws/show/40-15>
6. Schumpeter, J. A. (2007). Business Cycles: a Theoretical, Historical, and Statistical Analysis of the Capitalist Process. *Classiques des sciences sociales*. J.-M. Tremblay. Available: <http://doi.org/10.1522/030021081>
7. Lukianyk, M. M. (2003). Sutnist investytsii yak ekonomichnoi katehorii. *Bulletin of Sumy State Agrarian University. Series: Finance and Credit*, 2, 107–110.
8. Grinko, A. P. (2015). *Metodolohiia ta orhanizatsiia bukhhalterskoho obliku vidtvorennia osnovnoho kapitalu*. Kharkiv, 40.
9. Horoshko, K. O. (n. d.). Stan investytsiinou diialnosti v Ukraini. *Electronic Research Archive Scientific and Technical Library of National University «Lviv Polytechnic»*. Available: <http://ena.lp.edu.ua>
10. Grinko, A. (2015). Classification of capital assets as a information tool of accounting. *Technology Audit And Production Reserves*, 2(6(22)), 72–76. doi:10.15587/2312-8372.2015.41736

USE OF FUNCTIONAL APPROACH FOR EFFECTIVE MANAGEMENT AND EXPENSE TRACKING ON RESTAURANT BUSINESS ENTERPRISES

page 69–75

The condition of the restaurant business in Ukraine has been studied, and this study showed that at present, many enterprises of the restaurant business cannot stand competition and close down in the context of crisis, high level of inflation, drop of income level of the population. However, the restaurant business is one of the most widespread types of small businesses both in Ukraine and in the world, so the basic directions of its improvement are specified in the article. It is proved that in spite of the large number of scientific papers and publications, the problematic issues of cost accounting at the enterprises of restaurant economy remain unsolved to the full extent. We investigated the role and place of distribution costs and production costs in the circulation of capital and defined their substantive content. It is proved that the activities and internal characteristics of any enterprise better reveal in the functions performed in it that requires a certain amount of time and resource expenses. Therefore, there is a direct link between the cost values for the realization of its common functions, size of the enterprise, features of its activity, sectoral affiliation, that answers the question about the sources of expenses. We suggested a functional and cost-based structure of restaurant business enterprises, recommended classification of expenditure of catering business enterprises, depending on the types of economic activity and enterprise management objectives, which is the basis for the introduction of functional reporting of expenses enterprises restaurant business and calculation of production costs at restaurant business enterprises, and which is also necessary for organization of managerial accounting.

Keywords: restaurant business, strategy, management, functional approach, classification, expenses, accounting, structure.

References

- Worlds-50-best restaurants-revealed. *Restaurant Magazine*. Available: <http://www.restaurantmagazine.com/2014>
- Tsagolov, N. A., Anikin, A. V., Polianskii, F. Ya. et al.; In: Tsagolov, N. A. (1979). *Adam Smit i sovremennaia politicheskaia ekonomia*. Moscow: MSU, 214.
- Rikardo, D. (1993). Nachala politicheskoi ekonomii i nalogovogo oblozheniia. *Antologiya ekonomicheskoi klassiki. Vol. II*. Moscow: Ekono, 396.
- Laikko-Roto, T., Nevas, M. (2014, September). Restaurant business operators' knowledge of food hygiene and their attitudes toward official food control affect the hygiene in their restaurants. *Food Control, Vol. 43*, 65–73. doi:10.1016/j.foodcont.2014.02.043
- Sanchez-Canizares, S. M. (2014). Restaurant. *Encyclopedia of Tourism*. Springer International Publishing, 1–2. doi:10.1007/978-3-319-01669-6_162-1
- Piatnytska, H. T. (2003). Inozemni investytsii v Ukrainu ta rozrobka naukovykh pidkhodiv do otsiniuvannia investytsiinoi pryvablyvosti restorannoho hospodarstva u rehionalnomu rozrizi. *Derzhava ta rehiony*, 4, 173–180.
- In: Zhuk, I. M. (2015). *Statystychnyi shchorichnyk Ukrainy za 2014 r.* Kyiv: Konsultatn, 586.
- Nasonova, O. (03.08.2015). Restoranni biznes-2015: vyzhivaet mudreishii. *VideoArhiv transliatsii «Pervogo Delovogo»*. Available: <http://fbc.net.ua/video/12450>.
- Sotsialno-ekonomichne stanovyshche Ukrainy za 2014 rik. (2014). *Ukrstat.org – State Statistics Service of Ukraine documents publishing*. Available: http://ukrstat.org/druk/soc_ek/2014/arh_2014_u.htm
- In: Hlukhova, O. A. (2015). *Sotsialno-ekonomichne stanovyshche Kharkivskoi oblasti za 2014 rik*. Kharkiv: Holovne upravlinnia statystyky u Kharkivskii oblasti, 13.
- Tablytsia indeksiv inflatsii za 2015 r. *Bukhhalterskyi oblik pidpriemstv, bukhhalterskyi outsorsynh, obsluhovuvannia*. Available: <http://oblik-today.com.ua/ua/info/109-tablytsia-indeksiv-inflyatsii-za-2015r>
- Setrov, M. I. (1992). *Osnovy funktsional'noi teorii organizatsii*. Moscow: Nauka, 156.
- Statsenko, V. V. (2009). Glavnaia tehnologii uspeha. *Karavan Plus*, 11(94), 82–84.
- Pro vnesennia zmin do Metodychnykh rekomendatsii z formuvannia skladu vytrat ta poriadok yikh planuvannia u torhovelnii diialnosti. *Order of the Ministry of Economy of Ukraine from 02.03.2010 № 226*. Available: http://meold.kmu.gov.ua/minec/control/uk/publish/printable_article?art_id=145488

INNOVATIZATION AND INTELLECTUALIZATION OF PRODUCTION ENVIRONMENT AT THE ENGINEERING ENTERPRISE

page 76–80

Research is devoted to development of organizational aspects of innovatization and intellectualization of production environment at the engineering enterprise as direction of their self-development and increase of the intellectual capital, including client.

The essence and content of innovatization and intellectualization of production environment at the engineering enterprise are revealed. The expediency of application of these processes at the mechanical engineering enterprises is proved as mutually complementary. The key areas of production environment at the enterprise are defined for innovatization and intellectualization technology: staff, machinery, equipment, resources and products. Two-way direction of these processes for enterprises and self-transformation into a commercially designed proposal are discovered. Attention is paid to content intellectualization of functions of production departments, the role of the staff; professional and functional cooperation of the work in the context of its organization through the creation of engineering and consulting department for the concentration of associated and providing technologies and proposals that in the complex by the low level of spending could significantly improve the environmental condition of the production system and can be commercialized by the decision of the company. A range of services for industrial and technological purposes for increasing the client capital of the engineering enterprises is proposed.

Functional areas of innovatization and intellectualization of the engineering companies are revealed. They are lying in transforming enterprise development functions that traditional to the innovative to intelligent products that can be used both by the enterprise and be commercialized in the form of knowledge transfer.

Keywords: innovatization, intellectualization, production environment, engineering enterprises.

References

- Postalyuk, M. P. (2014). Innovatization of industrial enterprises and its assessment as a ground for innovative design management of their activities. *Vestnik ekonomiki i prava i sotsuologii*, 4, 78–82.
- Postalyuk, M., Vafin, A. (2014). The innovatization of management of an industrial estate in local economic systems. *Vestnik TISBI, Vol. 4*. Available: <http://www.tisbi.ru/assets/Site/Science/v4/3.pdf>
- Galiuk, I. B. (2012). Theoretical aspects of innovatization as the objective process of economic systems. *Economic Bulletin of the National Mining University*, 3, 12–17.
- Novitskiy, V. Ye. (2009). Challenges of institutional innovation management in the context of challenges of national development at the present stage of globalization present stage of globalization. *Naukovi visti NTUU «KPI»*, 5, 5–10.
- Butnik-Siverskiy, A. (2003). Transformatsiia intelektualnoi vlasnosti v innovatsiyni produkt. *Intelektualnyi kapital*, 5, 3–12.
- Jigerov, Z., Dubovik, M. (2013). Multiplier of knowledge and intellectualization of economic growth. *Messenger of the International Nobel Economic Forum*, 1(6), 115–123.
- Derii, V. (2015). Accounting and cost analysis on a intellectualization, computerization and information. *The Journal of Zhytomyr State Technological University. Series: Economics*, 3(69), 50–56.
- Missikoff, M., Canducci, M., Maiden, N. (2015). *Enterprise Innovation – From Creativity to Engineering*. John Wiley & Sons, 322. doi:10.1002/9781119145622
- Yakovlev, A., Kostikov, K., Kozyreva, I., Martyushev, N. (2015, January). From High Technologies to the Technological Superiority. *Procedia – Social and Behavioral Sciences, Vol. 166*, 232–234. doi:10.1016/j.sbspro.2014.12.516

10. Winkelbach, A., Walter, A. (2015, May). Complex technological knowledge and value creation in science-to-industry technology transfer projects: The moderating effect of absorptive capacity. *Industrial Marketing Management*, Vol. 47, 98–108. doi:10.1016/j.indmarman.2015.02.035

CLASSIFICATION OF INFORMATION FOR FORECASTING INDUSTRIAL ENTERPRISES ACTIVITIES

page 80–83

The current rhythm of economic life of Ukraine requires from attention from enterprises in the forecasting consequences of the trends that emerged. Forecasts at the macro-, meso- and micro- levels in areas such as construction and production of building materials are the keys to their survival.

Building industry is always the first responding to both positive and negative trends in the economy, industry and construction materials directly related to the development of the building industry.

The article discusses the types of information that comes in subsystem for forecasting marketing information system for manufacturers of concrete and concrete products. Classification of information is given by: usage ready, presence of dynamics, trends in the dynamic ranks, sources, starting point. Depending on the type of information it is proved classification of the forecasts, which can be obtained (by the term of prediction, by the economy level, by the type of assessments).

Keywords: marketing information, information classification, forecasting subsystem, types of forecasts.

References

- Kotler, P. T.; In: Penkova, E. M. (1990). *Principles of Marketing*. Translation from English. Moscow: Progress, 736.
- Box, G. E. P., Jenkins, G. M., Reinsel, G. C. (2008). *Time Series Analysis: Forecasting and Control. Ed. 4*. Wiley, 784.
- Afanasev, V. N., Yuzbashev, M. M. (2001). *Analiz vremennykh riadov i prognozirovaniye*. Moscow: Finansy i statistika, 228.
- Yerina, A. M., Yerin, D. L. (2014). *Statystichnye modelirovaniya ta prognozuvannya*. Kyiv: KNEU, 348.
- Kendall, M., Stuart, A. (1973). *The Advanced Theory of Statistics. Vol. 2*. Translation from English. Moscow: Nauka, Fizmatlit, 899.
- Hrabovetskyi, B. Ye. (2010). *Metody ekspertnykh otsinok: teoriya, metodolohiia, napriamy vykorystannia*. Vinnytsia: VNTU, 171.
- Potgieter, M., de Jager, J. W., van Heerden, N. H. (2013, November). An Innovative Marketing Information System: A Management Tool for South African Tour Operators. *Procedia – Social and Behavioral Sciences*, Vol. 99, 733–741. doi:10.1016/j.sbspro.2013.10.545
- Andreopoulou, Z., Tsekouropoulos, G., Theodoridis, A., Samathrakis, V., Batzios, C. (2014). Consulting for Sustainable Development, Information Technologies Adoption, Marketing and Entrepreneurship Issues in Livestock Farms. *Procedia Economics and Finance*, Vol. 9, 302–309. doi:10.1016/s2212-5671(14)00031-8
- Novikova, E. N. (2015, February 1). Design of a Marketing Information System. *Mediterranean Journal Of Social Sciences*, 6(1 S3), 141–145. doi:10.5901/mjss.2015.v6n1s3p141
- Pedko, I. A. (2015). Conceptual Bases of Formation of Marketing Information Systems in Business. *Economic Bulletin of the National Mining University*, 3(51), 110–117.

METHODOLOGICAL BASIS OF THE SYSTEM ANALYSIS OF INDUSTRIAL ENTERPRISES' ECONOMIC STABILITY

page 84–89

Feasibility of applied system analysis for the research of the enterprises from the standpoint of system-structural paradigm for solving the problem of ensuring their economic sustainability is proved in the article. This is due to the relevance and unsolving of the problem of providing enterprises' economic stability during a recession, on the one hand, and the lack and the need of methodological support for the formation of a new paradigm on the other hand. Critical analysis of the main provisions of system-structural paradigm allows

assimilating the methodological principles of the new approach to the methodology of general systems theory, which was carried out in the article. As a result of the research procedures have been adapted for applied system analysis, and adjusted its typical sequence taking into account the lack of empirical data, creating rules for its application within the new system-structural paradigm. This allowed to carry out the identification of the enterprise as tetrad consisting of four types of subsystems that differing by the nature of space-time restrictions and the matrix structure of his inner circle, and to determine the mechanism of formation of economic stability. As a result, it was determined eight groups of parameters that are useful for econometric modeling, and made the selection of statistical indicators for their evaluation according to domestic machine-building enterprises. Results of the study can be used by economists, the scope of scientific interest of which includes issues of ensuring economic stability, and the followers of the new system-structural paradigm for the empirical study of its provisions.

Keywords: enterprises' economic stability, system analysis, system-structural paradigm.

References

- Pechchei, A.; In: Gvishiani, D. M. (1985). *Chelovecheskie kachestva*. Moscow: Progress, 312.
- Kornai, J. (1998). *The System Paradigm*. Working Paper № 278. Collegium Budapest. Available: <http://deepblue.lib.umich.edu/bitstream/handle/2027.42/39662/wp278.pdf?sequence=3>
- Kleiner, G. B. (2011). Novaia teoriia ekonomicheskikh sistem i ee prilozheniia. *Vestnik Rossiiskoi akademii nauk*, Vol. 81, № 9, 794–808.
- Kleiner, G. B. (2015). Gosudarstvo – region – otrasl' – predpriatiie: karkas sistemnoi ustoichivosti ekonomiki Rossii. Chast' 1. *Ekonomika regiona*, 2, 50–58.
- Kleiner, G. B. (2015). Ustoichivost' rossiiskoi ekonomiki v zerkale sistemnoi ekonomicheskoi teorii. *Voprosy ekonomiki*, 12, 107–123.
- Engel's, F., Marks, K. (1961). *Anti-Duhring. Ed. 2. Vol. 20*. Moscow: Izdatel'stvo politicheskoi literatury, 858.
- Livshits, V. N. (2013). *Osnovy sistemnogo myshleniia i sistemnogo analiza*. Moscow: Institute of Economics, Russian Academy of Sciences, 54.
- Rybachuk, M. A. (2015). Sbalansirovannost' sistemnoi struktury kak neobhodimoe uslovie dlia strategicheskoi ustoichivosti predpriatiia. *Vestnik Voronezhskogo gosudarstvennogo universiteta. Seriya: ekonomika i upravlenie*, 1, 140–146.
- Kravchenko, M. (2015). Formalization of the concept of the enterprise economic sustainability from the system-structural theory positions. *Ekonomika ta derzhava*, 12, 31–34.
- Zgurovskii, M. Z., Pankratova, N. D. (2011). *Sistemnyi analiz. Problemy, metodologiya, prilozheniia*. Kyiv: Naukova dumka, 726.
- Zgurovskii, M. Z., Demchenko, A. M., Novikov, A. N., Kovalenko, I. I. (1993). *Sistemnyi analiz v issledovanii slozhnykh fizicheskikh protsessov i polei*. Kyiv: Glushkov Institute of Cybernetics, 37.

DEVELOPMENT OF METHODS OF ASSESSING THE QUALITY OF FIXED ASSETS OF HOTEL ENTERPRISES

page 89–92

The paper investigates the views of scientists on the assessing the quality of services provided by the hospitality industry. The author considers the principles of organization of internal space in the hotel enterprises and the influence of functional, environmental and aesthetic criteria to the quality of fixed assets in the hotel room.

Conducted research is necessary to determine the directions of reproduction of fixed assets in the hospitality industry with the aim of increasing their competitiveness on the European market of hotel services.

As a result of scientific research it is developed a quality map of the primary means of the hotel rooms, suggested factors of quality items and practice materials determined by the target values of the multiplicative coefficients that allow calculating the ratio of the integrated perception of quality items of fixed assets of the hotel rooms.

The proposed method allows taking into account the opinions of the clients, to determine enjoy the quality of fixed assets of the hotel

rooms which is a key parameter for quality services. The obtained information gives the possibility to manage the reproduction and modernization of material and technical base of the hotel.

Keywords: fixed assets, hotel enterprises, service quality, environmental criteria.

References

1. Pravyła oboviazkovoї sertyfikatsii posluh z tymchasovoho rozmyshchennia (prozhyvannia). *Order of State Committee for Standardization, Metrology and Certification from 27.01.1999 № 37*. Available: <http://zakon5.rada.gov.ua/laws/show/z0236-99>
2. Koutsenko, O. V. (2010). Analytical instruments determining the quality of hotel services. *Scientific Bulletin of UNFU*, 20.15, 292–296.
3. Barchukov, I. S. (2008). *Metody nauchnyh issledovaniy v turizme*. Moscow: Publishing Center «Academy», 224.
4. Kabushkin, N. I., Bondarenko, G. A. (2001). *Menedzhment gostynits i restoranov*. Ed. 2. Minsk: Novoe znanie, 216.
5. Abukhalifeh, A. N., Mat Som, A. P. (2012, July 13). Service Quality Management in Hotel Industry: A Conceptual Framework for Food and Beverage Departments. *International Journal of Business and Management*, Vol. 7, № 14, 135–141. doi:10.5539/ijbm.v7n14p135
6. Hersh, A. M. (2010). Evaluate the impact of Tourism Services Quality on customer's satisfaction. *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 2, № 6, 207–234.
7. Su, A. Y.-L. (2004, November). Customer satisfaction measurement practice in Taiwan hotels. *International Journal of Hospitality Management*, Vol. 23, № 4, 397–408. doi:10.1016/j.ijhm.2004.02.002
8. Soutar, G. N., Kandampully, J., Mok, C., Sparks, B. (2001). Chapter 6: Service Quality, Customer Satisfaction, and Value: An Examination of Their Relationships. *Service Quality Management in Hospitality, Tourism, and Leisure*. New York: The Haworth Hospitality Press, 97–110. doi:10.4324/9780203047965
9. Ahafonova, L. H., Ahafonova, O. Ye. (2002). *Turyzm, hotelnyi ta restoranynyi biznes: Tsinoutvorennia, konkurentsia, derzhavne rehuliuвання*. Kyiv: Znannia Ukrainy, 358.
10. Boyko, N. G. (2002). Scientific basis for the substantiation of business strategy in the hospitality industry of Ukraine. *Bulletin of KNTEU*, 3, 45–50.

NECESSITY RESEARCH OF USING PROGRAM-TARGET METHODS OF PLANNING IN MANAGEMENT OF DEVELOPMENT OF INDUSTRIAL PRODUCTION

page 93–96

The basic theoretical aspects of program-target method of planning were considered as an element of management in the article. As a primary there was fulfilled the analysis of existing theoretical positions respectively on program of planning as reflected in the works of national and foreign authors.

The research of theoretical foundations found that today there was not a single point of view about efficiency of methods of program-oriented planning and its clear definition.

The author evaluated the nature, objectives and main tasks of program planning, determined and summarized logical scheme of the program and target planning. It is determined that such a scheme «goals — ways — tools» is based on the objectives established ways how to achieve them, and they bind ways and consistent with the necessary means costs of economic resources, including time. Join of goals, ways and means of achieving is embodied in a program of action in accordance with the intended goals. The presence of such a program indicates the way, terms and resource's cost of achieving these goals. This is the main feature of the program of target planning. Hence, the feature of this method of planning is not just a predict of future of system's states and drawing up specific programs to achieve of the desired results.

In practice of national experts there are many examples of the program development at the macro level but the data of applications and most important data of effectiveness in industrial production are missed.

According to the research it is established that the use of program-target method of planning is necessary to implement to the system of management of development of industrial enterprises.

The use of program planning will prevent many mistakes in planning and reduce the risk of production's losses in a crisis.

Keywords: planning, program, program-target method, program-target planning, management, manufacturing.

References

1. Pashuta, M. T. (2005). *Prohnozuvannia ta prohramuvannia ekonomichnoho ta sotsialnoho rozvytku*. Kyiv: Tsentr navchalnoi literatury, 408.
2. Borisevich, V. I., Kandaurova, G. A., Kandaurova, N. N. et al.; In: Borisevich, V. I., Kandaurova, G. A. (2001). *Prognozirovanie i planirovanie ekonomiki*. Minsk: Interpressservis; Ekoperspektiva, 380.
3. Shvaika, L. A. (2006). *Planuvannia diialnosti pidpriemstva*. Lviv: Novyi svit-2000, 268.
4. Ackoff, R. L. (2002). *Creating the Corporate Future: Plan or be Planned For*. Translation from English. Moscow: Syryn, 256. ISBN 5-86567-0454
5. Zaharchenko, V. I., Ivanova, T. G., Korsikova, N. N. et al.; In: Zaharchenko, V. I. (2003). *Razrobotka tselevykh programm na predpriiatiiakh promyshlennosti (metodicheskie polozenia)*. Odessa: Odessa Law Institute of the National University of Internal Affairs, 85.
6. Leibking, A. R., Rudneva, E. V., Rudnik, B. L. (1983). *Problemy metodologii i organizatsii razrobotki kompleksnykh programm*. Moscow: Nauka, 111.
7. Milner, B. Z. (2008). *Teoriia organizatsii*. Moscow: Infra-M, 864. ISBN 978-5-16-003319-8.
8. Morrissey, G. (1979). *Management by Objectives and Results*. Translation from English. Moscow: Sovetskoe Radio, 144.
9. Raisberg, B. A., Lobko, A. G. (2002). *Programmo-tselevoe planirovanie i upravlenie*. Moscow: INFRA-M, 428. ISBN 5-16-001313-X.
10. Stechenko, D. M. (2007). Prohramno-tsilova oriantatsiia v upravlinni sotsialno-ekonomichnym rozvytkom rehionu. *Universytetski naukovi zapysky*, 3(23), 167–171.
11. Verkhovna Rada of Ukraine. (2014). Constitution of Ukraine. Law of Ukraine from 28.06.1996 № 254к/96-BP; as amended according to the Law of Ukraine from 21.02.2014 № 742-VII. *Bulletin of Verkhovna Rada of Ukraine (BVR)*, № 11, Article 143. Available: <http://zakon2.rada.gov.ua/laws/show/254k/96-bp>
12. Eckart, K., Ehrke, S., Krahe, H., Eckart-Muller, I. (2003). *Social, Economic and Cultural Aspects in the Dynamic Changing Process of Old Industrial Regions: Ruhr District (Germany), Upper Silesia (Poland), Ostrava Region (Czech Republic)*. Berlin; Hamburg: Munster: LIT Verlag, 400.
13. Carney, J., Hudson, R., Lewis, J. (1980). *Regions in Crisis: New Perspectives in European Regional Theory*. London: Taylor & Francis, 179.
14. Steiner, G. A., Steiner, J. F. (2001). *Business, Government and Society*. N-Y: McGraw-Hall, 311.
15. Zhukovskii, A. I., Vasiliev, S. V., Shtreis, D. S.; In: Fabrichnii, S. Yu. (2006). *Razrobotka, realizatsiia i otsenka regional'nykh tselevykh programm (na osnove Kanadskogo opyta)*. Ottawa — Moscow — Novgorod, 175.
16. Farnham, D., Pimlott, J. (1999). *Understanding Industrial Relations*. Ed. 5. Cassell, 449.
17. Akuliushina, M. A. (2010). Obosnovanie formirovaniia investitsionnoi strategii promyshlennogo kompleksa Ukrainy. *Rynkova ekonomika: suchasna teoriia i praktyka upravlinnia*, Vol. 13, № 29, 11–17.
18. Rothaermel, F. (2012). *Strategic Management: Concepts and Cases*. McGraw-Hill Education, 960.
19. Mankiw, N. G. (2005). *Macroeconomics*. Ed. 5. Worth Publ., 548.

MODIFICATION OF THE BOSTON CONSULTING GROUP MATRIX IN THE STRATEGIC MANAGEMENT OF AN ENTERPRISE

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The article deals with the topical issues of how the domestic enterprises use the system of analysis and assessment of external and internal environments, detect their products position at the market compared to the competitive products and select the strategy of their further development taking into account the peculiarities of the innovative activity of domestic enterprises. For this purpose it is suggested to use the portfolio analysis methods. Based on the results of

the analysis of the well-known portfolio matrices the conclusion has been drawn that with the view of the evaluation and formation of the strategic directions of an enterprise as well as detection of its innovative activity it is required to modify the Boston Consulting Group matrix. The use of the modified Boston Consulting Group matrix will help to shape an effective strategy of the further development of an enterprise after having analyzed the enterprise activity in dynamics and having balanced the life cycles of separate products in the corresponding business directions of the «enterprise portfolio». The implementation of the modified Boston Consulting Group matrix into the activity of «Ozon» LLC has allowed revealing the problems in the matrix use which has defined the prospects of further investigations.

Keywords: portfolio, analysis, matrix, strategy, position, innovations, products – «dreams».

References

1. *Metody i instrumenty portfel'nogo analiza*. Available: <http://gigabaza.ru/doc/68031-pall.html>. Last accessed: 12.01.2016.
2. Tarnavska, N., Napora, O. (2008). *Stratehichnyi menedzhment: praktykum*. Kyiv: Kondor, 287.
3. Dovhan, L. Ye., Karakai, Yu. V., Artemenko, L. P. (2009). *Stratehichne upravlinnia*. Kyiv: Tsentri uchbovoi literatury, 440.
4. Petryshyn, N. Ya. (2008). Instrumentarii stratehichnoho planuvannya diialnosti mashynobudivnykh pidpryemstv. *Bulletin of the National University «Lviv Polytechnic». Series: Management and Entrepreneurship in Ukraine: stages of formation and development problems*, 624, 70–76.
5. Saienko, M. H. (2007). *Stratehiia pidpryemstva*. Ternopil: Ekonomichna dumka, 352.
6. Osel, R. R., Wright, R. V. L. (1980). Allocating resources: How to Do It in Multi-Industry Corporations. *Handbook of Business Problem Solving*. New York: McGraw-Hill, 322.
7. Morrison, A., Wensley, R. (1991, January). Boxing up or Boxed in?: A Short History of the Boston Consulting Group Share/Growth Matrix. *Journal of Marketing Management*, Vol. 7, № 2, 105–129. doi:10.1080/0267257x.1991.9964145
8. Serrano Gallardo, M. del P., Arroyo Gordo, M. P., Gimenez Maroto, A. M. (2005, November). La Matriz BCG (Boston Consulting Group) para la Gestion de Publicaciones Periadicadas. *Index de Enfermeria*, Vol. 14, № 50, 53–56. doi:10.4321/s1132-12962005000200011
9. Robinson, C. G. (1985, Jun). The Boston Consulting Group's strategic menagerie. *South African Journal of Business Management*, Vol. 16, № 2, 76–86.
10. Green, M. T., Odom, L., Jacquelyn, A., Hudspeth, E., Hudspeth, G. (2003). Using the Boston Consulting Group Matrix To Analyze College Programs: Should that New Major Be Approved? *Education Leadership Review*, Vol. 4, № 2, 14–16.
11. Solovii, Kh. Ya. (2012). *Formuvannia ta vykorystannia zbalansovanykh system pokaznykiv innovatsiinoi diialnosti pidpryemstv*. Lviv, 195.
12. Podolchak, N. Yu. (2012). *Stratehichnyi menedzhment*. Lviv: Lviv Polytechnic Publishing House, 400.