



ECONOMICS AND MANAGEMENT OF ENTERPRISE

DOI: 10.15587/2312-8372.2018.123334

THE IMPACT OF AUDITOR'S ETHICS ON THE QUALITY OF AUDITING THE COMPANY'S CASH FLOWS

page 4–8

Khovrak Inna, PhD, Associate Professor, Department of Accounting and Finance, Kremenchuk Mykhailo Ostrohradskiy National University, Ukraine, e-mail: inna.khovrak@gmail.com, ORCID: <http://orcid.org/0000-0002-0352-4374>

Kozyarchuk Tetyana, Department of Accounting and Finance, Kremenchuk Mykhailo Ostrohradskiy National University, Ukraine, ORCID: <https://orcid.org/0000-0003-1418-7884>

The cash flow of the company is a sophisticated complex system, which enhances the quality requirements of the audit. Various factors influence the process of conducting an audit, such as: level of financial market development, regulatory support, trust for audit services, quality of financial information, interest differentiation of parties, qualifications of the auditor, etc. Special attention is required to study ethical aspects of the audit. Therefore, the aim of research is substantiation of the importance of the auditor's ethics and the quality of auditing the company's cash flows to form socially responsible market leaders in the context of asymmetric information.

The system approach towards the realization of the research goal allowed to systematize theoretical and methodological principles of the audit of cash flows and develop a conceptual scheme for conducting a cash flow audit of the enterprise taking into consideration the influence of the external environment and the company's development strategy. Based on the comparative analysis of professional auditors' ethics codes, developed by experts from various countries and international organizations, criteria for the quality of the cash flow audit has been identified as follows: integrity, objectivity, professional competence, confidentiality, professional behavior, etc. It has been also identified that the audit quality depends, to a large extent, on the reliability of information and the possibility of its use by various users. Therefore, the interests of the core users of audit information have been systemized by authors.

The mechanism of an ethical audit of the company's cash flow was developed, including policies and procedures, which are inherent in different levels: auditor, enterprise and the environment. The advantages of forming socially responsible leader companies in the asymmetry of information conditions were determined. It is an opportunity for the company to attract investors, skilled personnel and loyal customers and partners. At the same time, the presence of socially responsible auditors and companies can stimulate overall integrity, ethical behavior and sustainable development of society.

Keywords: cash flow audit, audit quality, auditor ethics.

References

1. Official site of the State Statistics Service of Ukraine. Available at: <http://www.ukrstat.gov.ua/>. Last accessed: 11.01.2018.
2. Ffoulkes, P. InsideBIGDATA Guide to Use of Big Data on an Industrial Scale. *InsideBIGDATA*. Available at: <https://insidebigdata.com/white-paper/guide-big-data-industrial-scale/>. Last accessed: 11.01.2018.
3. Wolkowitz, E., Parker, S. Big Data, Big Potential: Harnessing Data Technology for the Underserved Market. *Morganstanley*. Available at: http://www.morganstanley.com/sustainableinvesting/pdf/Big_Data_Big_Potential.pdf. Last accessed: 11.01.2018.
4. Official site of Deloitte. Available at: <https://www2.deloitte.com/ua/uk.html>. Last accessed: 11.01.2018.
5. Official site of PricewaterhouseCoopers. Available at: <https://www.pwc.com/>. Last accessed: 11.01.2018.
6. Official site of Ernst & Young. Available at: <http://www.ey.com/>. Last accessed: 11.01.2018.
7. Official site of KPMG. Available at: <https://home.kpmg.com/xx/en/home.html>. Last accessed: 11.01.2018.
8. Revenue of the Big Four accounting/audit firms worldwide in 2017 (in billion U.S. dollars). Available at: <https://www.statista.com/statistics/250479/big-four-accounting-firms-global-revenue/>. Last accessed: 11.01.2018.
9. Big 4 Accounting Firms Salary Breakdown. Available at: <https://crushthecpaexam.com/salary-breakdown-of-the-big-4-accounting-firms/>. Last accessed: 11.01.2018.
10. Register of Audit Companies and Auditors of the Audit Chamber of Ukraine. Available at: <http://www.apu.com.ua/reestr-auditor-skikh-firm-ta-auditoriv>. Last accessed: 11.01.2018.
11. Iankovyi, O., Koshelek, H., Iankovyi, V. (2017). Realization of the complex forecast of an enterprise's cash flows. *Technology audit and production reserves*, 2 (4 (34)), 52–56. doi:10.15587/2312-8372.2017.99137
12. Grechan, A. (2016). The role of the cash flow in evaluation of the real investment project. *Technology audit and production reserves*, 2 (6 (28)), 25–27. doi:10.15587/2312-8372.2016.66191
13. Korinko, M. (2014). Audytorskyi kontrol hroshovykh koshtiv. *Intelekt XXI*, 6, 80–85.
14. Bukit, R. B., Iskandar, T. M. (2009). Surplus free cash flow, earnings management and audit committee. *International Journal of Economics and Management*, 3 (1), 204–233.
15. Pravdiuk, N., Plakhtii, T. (2017). Development of the basic theoretical basis of accounting information quality. *Technology audit and production reserves*, 3 (4 (35)), 4–9. doi:10.15587/2312-8372.2017.100912
16. Derun, I. (2017). Improvement of the essence of professional judgment in accounting of Ukraine. *Technology audit and production reserves*, 2 (4 (34)), 25–29. doi:10.15587/2312-8372.2017.98277
17. Gunny, K. A., Zhang, T. C. (2013). PCAOB inspection reports and audit quality. *Journal of Accounting and Public Policy*, 32 (2), 136–160. doi:10.1016/j.jacccpol.2012.11.002
18. DeFond, M. L., Lennox, C. S. (2011). The effect of SOX on small auditor exits and audit quality. *Journal of Accounting and Economics*, 52 (1), 21–40. doi:10.1016/j.jacceco.2011.03.002
19. Van Tendeloo, B., Vanstraelen, A. (2008). Earnings Management and Audit Quality in Europe: Evidence from the Private Client Segment Market. *European Accounting Review*, 17 (3), 447–469. doi:10.1080/09638180802016684
20. Kaveh, M., Khalili, M., Ghorbani, A., Soroush, M. (2014). Professional Ethics in Accounting and Auditing. *World Essays Journal*, 1 (2), 85–93.
21. Nand, A. *Five Ethical Dilemmas facing Internal Auditors – Find out how you can help?* Available at: <https://www.iiafiji.org/resources/66eff172-2496-4c51-8025-c2d53d2c3956.pdf>. Last accessed: 11.01.2018.
22. Shkulipa, L. (2017). Research of the main advantages in social oriented accounting. *Technology audit and production reserves*, 3 (4 (35)), 14–19. doi:10.15587/2312-8372.2017.101925
23. Official site of The American Accounting Association. Available at: <http://aaahq.org/>. Last accessed: 11.01.2018.
24. APES 110 Code of Ethics for Professional Accountants. (2010). Accounting Professional & Ethical Standards Board Limited, 133.
25. The Code of Ethics. Belize. Available at: http://www.belizelaw.org/web/CJEI/Belize/doc/pdf/4c_code_of_judicial_conduct_and_etiquette.pdf. Last accessed: 11.01.2018.
26. Central Coordinating Agency for Internal Audit Service, Ministry of Finance. (2014, November). *Code of Ethics for Internal Auditors, Royal Government of Bhutan*. Available at: <http://www.mof.gov.bt/wp-content/uploads/2014/07/CODEOFEHICS01012015.pdf>. Last accessed: 11.01.2018.

27. Kiernander, G. *Professional Ethics in Auditing (Relevant to Paper III – PBE Auditing and information systems)*. Available at: http://www.hkiaat.org/images/uploads/articles/PBE_PaperIII_Oct09.pdf. Last accessed: 11.01.2018.
28. Handbook of the Code of Ethics for Professional Accountants. (2015). *The International Federation of Accountants*. Available at: <https://www.ifac.org/publications-resources/2015-handbook-code-ethics-professional-accountants>. Last accessed: 11.01.2018.
29. Khovrak, I. (2017). Odpowiedzialność społeczna jako strategia przewodztwa przedsiębiorstwa na rynku. *Zarządzanie Publiczne*, 3 (39), 391–401.

DOI: 10.15587/2312-8372.2018.124396

FORMATION OF DIAGNOSTICS INDICATOR BASE OF THE UNIVERSITY SCIENTIFIC ACTIVITY SYSTEM

page 9–15

Kuzmin Oleh, Doctor of Economic Sciences, Professor, Director of the Institute of Economics and Management, Lviv Polytechnic National University, Ukraine, e-mail: oleh.y.kuzmin@lpnu.ua, ORCID: <https://orcid.org/0000-0002-6014-6437>

Melnik Olha, Doctor of Economic Sciences, Professor, Head of the Department of Foreign Trade and Customs, Institute of Economics and Management, Lviv Polytechnic National University, Ukraine, e-mail: olga.g.melnik@lpnu.ua, ORCID: <https://orcid.org/0000-0001-8819-1910>

Zhuk Liliya, PhD, Associate Professor, Head of Scientific Research Department, Lviv Polytechnic National University, Ukraine, e-mail: lilia.v.zhuk@lpnu.ua, ORCID: <https://orcid.org/0000-0001-7299-2705>

The object of research is the indicators for the diagnosis of the state of the system of scientific activity of higher educational institutions (HEIs), including universities. Diagnostics of scientific activity today takes on special significance for the HEIs that are in a highly competitive environment in the market of educational and scientific services.

During the research methods of expert evaluation, analysis and synthesis, logical generalization were used.

A set of representative indicators reflecting the resource support of scientific activity, its effectiveness, and also characterize the stability, adaptability and reliability of the system are obtained. All indicators are grouped by the following subsystems: conducting research; training of highly qualified scientific personnel; maintenance of creative activity of participants of educational process; use of scientific results obtained in the educational process. The proposed set of indicators forms the basis for further interpretation of the state of the system of scientific activity of the university, obtaining a holistic view of the problems, shortcomings and threats to the implementation of scientific activity, and making informed management decisions. Proposals have been formulated to complement the forms of «Indicators of Scientific and Technical and Technological Activities of HEIs» with additional indicators, in particular on the level of qualifications of the SSPW and the HEI scientific infrastructure, which provide more reliable data for diagnosing the HEI scientific activity.

Interpretation of monitoring results and assessment of the state of the scientific activity system on the proposed indicators will allow to form an information array of data on existing problems, potential threats and risks in the field of scientific activity. And also in the future – to develop proposals to eliminate these problems, to prevent threats and risks.

Keywords: state diagnosis of the scientific activity system of the university, indicators for diagnosis, higher educational institutions.

References

1. Grechan, A. P., Radionova, N. Yo. (2011). Diagnosis of the efficiency of enterprises. *Bulletin of the Volodymyr Dahl East Ukrainian National University*, 10 (1), 13–17.
2. Melnyk, O. G. (2010). *Systems of diagnostics of activity of machine-building enterprises: polycrystalline concept and toolkit*. Lviv: Publishing House of Lviv Polytechnic National University, 344.
3. Zhuk, L. (2017). Basic Principles of Scientific Research in Higher Education Institutions: Management and Financing. *Economics, Entrepreneurship, Management*, 4 (1), 1–14. doi:10.23939/eem2017.01.001
4. Kuzmin, O., Yastrybskyy, M. (2017). *Implementation of the higher education prospective development concept: Ukrainian reality and experience of the countries of East Asia*. Goslar: LAP Lambert Academic Publishing, 50.
5. Markusova, V. A. (2002). Who and how measures science? *Alma mater*, 12, 42–46.
6. Pisliakov, V. V. (2007). Methods of academic degree evaluation by citation index. *Sociological journal*, 1, 128–140.
7. Vagin, V. N., Oskin, P. V. (2006). Heuristic and stochastic methods of reading effective values in diagnostic systems. *Bulletin of the Russian Academy of Sciences. Theory and systems of management*, 4, 78–93.
8. Vyborova, Ye. N. (2007). *Economic diagnostics in the system of business entity management*. Novosibirsk: Sib. UPK, 2007. 251.
9. Rousseau, R. (2002). Journal evaluation: technical and practical issues. *Library Trends*, 50 (3), 418–439.
10. Feshchur, R. V., Samulyak, V. Yu. (2010). Groups of indicators for assessing the level of enterprise's development. *Bulletin of the Lviv Polytechnic National University. Series: Management and Entrepreneurship in Ukraine: Stages of Development and Development Issues*, 691, 231–239.
11. Melnyk, O. G. (2009). *Diagnostics of the activity of the machine-building enterprise on the basis of the system of economic indicators*. Lviv: Ukrpol, 188.
12. Kaplan, R. S., Norton, D. P. (2003). *Balanced Scorecard. From strategy to action*. Moscow: Olympus Business, 304.
13. Kaplan, R. S., Norton, D. P. (2006). *Strategic unity: creating synergy with the help of balanced indicator system*. Moscow: Williams ID, 384.
14. Anuapu, F. F. (Ed.). (1972). *Diagnostics of the production systems*. Irkutsk: ITSNTI, 39.
15. Mitsenko, N. G., Kulay, S. M. (2010). Diagnosis of the state of economic activity of the enterprise. *Scientific bulletin of Ukrainian National Forestry University*, 20.5, 223–227.
16. Ananyshnev, V. M., Tkachenko, A. V., Fursov, V. V. (2016). The international criteria and indicators for assessing university activities. *System Psychology and Sociology*, 19, 86–92. Available at: http://systempsychology.ru/journal/2016_19/354-v-m-ananishnev-a-v-tkachenko-v-v-fursov-mezhdunarodnye-kriterii-i-pokazateli-ocenki-deyatelnosti-vuzov.html. Last accessed: 26.01.2018.
17. On Approval of the Procedure and Criteria for Granting a National Status to an Institution of Higher Education, confirmation or deprivation of this status. *Resolution of the Cabinet of Ministers of Ukraine No. 912 from November 22, 2017. Legislation of Ukraine*. Available at: <http://zakon3.rada.gov.ua/laws/show/912-2017-%D0%BF>. Last accessed: 26.01.2018.
18. Public discussion of the project of Decree of the Cabinet of Ministers of Ukraine «On Approval of the Procedure for Conducting State Certification of Institutions of Higher Educational in Relation to Their Scientific (Scientific and Technical) Activity». (2017, June 23). *Ministry of Education and Science of Ukraine*. Available at: <https://mon.gov.ua/ua/news/gromadske-obgovorennya-proektu-postanovi-kabinetu-ministriv-ukrayini-pro-zatverdzhennya-poryadku-provedennya-derzhavnoyi-atestaciyi-vishih-navchalnih-zakladiv-u-chastini-provadzhennya-niminaukovoyi-naukovo-tehnichnoyi-diyalnosti>. Last accessed: 26.01.2018.
19. Ananyshnev, V. M. (2008). *Management Sociology*. Moscow: Engineer, 267.

20. On approval of the form of state statistical observation No. 3-science (annual) «Report on the implementation of scientific research and development». (2016). *State Service of Statistics of Ukraine. No. 104.* Available at: http://ukrstat.gov.ua/norm_doc/2016/104/104_2016.htm. Last accessed: 26.01.2018.
21. On approval of the form of state statistical observation No. 1-nk (annual) «Report on the work of post-graduate and doctoral studies». (2017). *State Service of Statistics of Ukraine. No. 191.* Available at: http://www.ukrstat.gov.ua/norm_doc/2017/191/191_2017.htm. Last accessed: 26.01.2018.
22. On approval of the forms of state statistical observation No. 1-PV (monthly) and No. 1-PV (quarterly) «Labor report». (2016). *State Service of Statistics of Ukraine. No. 90.* Available at: http://ukrstat.gov.ua/norm_doc/2016/90/90_2016.htm. Last accessed: 26.01.2018.
23. On the results of scientific and technical activities. (2017). *Ministry of Education and Science of Ukraine. No. 1609.* Available at: https://mon.rit.org.ua/info/nakaz_2017-12-13_1609.pdf. Last accessed: 26.01.2018.
24. Suganya, M. V. (2012). Structural-logical model of calculation of the integral index of anti-crisis stability of the system bank. *Effective economy*, 7. Available at: http://nbuv.gov.ua/UJRN/efek_2012_7_6. Last accessed: 26.01.2018.
25. Cabinet of Ministers of Ukraine. (2014). Law of Ukraine on Higher Education No. 1556-VII from July 1, 2014. *News from the Verkhovna Rada. No. 37–38. P. 2004.* Available at: <http://zakon0.rada.gov.ua/laws/show/1556-18>. Last accessed: 26.01.2018.
26. On Approval of Licensing Conditions for Educational Activities of Educational Institutions. *Resolution of the Cabinet of Ministers of Ukraine No. 1187 from December 30, 2015. Legislation of Ukraine.* Available at: <http://zakon3.rada.gov.ua/laws/show/1187-2015-%D0%BF>. Last accessed: 26.01.2018.
27. On Approval of the Procedure for Preparing Graduates of Higher Education in the Degree of Doctor of Philosophy and Doctor of Science in the Institutions of Higher Educational (Scientific Institutions). *Resolution of the Cabinet of Ministers of Ukraine No. 261 from March 23, 2016. Legislation of Ukraine.* Available at: <http://zakon3.rada.gov.ua/laws/show/261-2016-%D0%BF>. Last accessed: 26.01.2018.
28. On Approval of the List of Fields of Knowledge and Specialties under which Graduates of Higher Education are Prepared. *Resolution of the Cabinet of Ministers of Ukraine No. 266 from April 29, 2015. Legislation of Ukraine.* Available at: <http://zakon2.rada.gov.ua/laws/show/266-2015-%D0%BF>. Last accessed: 26.01.2018.
29. Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). (2015, May 14–15). *Ministerial Conference in Yerevan*, 32. Available at: http://www.britishcouncil.org.ua/sites/default/files/standards-and-guidelines_for_qa_in_the_ehea_2015.pdf. Last accessed: 26.01.2018.

DOI: 10.15587/2312-8372.2018.124414

SELECTION OF THE OPTIMAL SET OF REVENUE MANAGEMENT TOOLS IN HOTELS

page 16–21

Korzh Natalia, Doctor of Economic Science, Professor, Department of Management and Administration, Vinnytsia Institute of Trade and Economics of the Kyiv National University of Trade and Economics, Ukraine, e-mail: norischuk067@gmail.com, ORCID: <https://orcid.org/0000-0002-4901-3078>

Onyshchuk Natalia, PhD, Senior Lecturer, Department of Tourism and Hotel and Restaurant Business, Vinnytsia Institute of Trade and Economics of the Kyiv National University of Trade and Economics, Ukraine, e-mail: onivin@ukr.net, ORCID: <https://orcid.org/0000-0002-2513-2259>

The object of research is the scientific category «revenue management» and its tools, which, with the growth of the num-

ber of on-line sales channels of hotel services, become decisive in the struggle for survival. The existence of a large number of profit management tools associated with the online booking regime work as a SmallDat and gives quite scattered information about the state of the market. One of the most problematic areas is the formation of perspective analytics using existing tools.

In the course of the research methods of analysis, generalization and comparison of existing analytical software on the market were used, influencing the decision on the tactical actions of the hotel in the markets.

The author's interpretation of the scientific category «revenue management» is obtained as an auxiliary method of maximizing profits from a fixed perishable resource based on understanding, forecasting and strategic influence on consumer behavior. The proposed definition has a number of features, in particular, the emphasis is not on revenue growth, but on profits that can be obtained as a result of the implementation of specific strategic actions.

The advantages and disadvantages of the analytical tools common in the country are analyzed: Rate Shopper; OTA; BI and RMS. It is proved that no tool provides perspective analysis and therefore it is necessary to use several tools. Since this is an economic issue, the hotel must have an optimal set of such tools for the development of strategic decisions.

A model is proposed for making managerial decisions to optimize a set of analytical tools, which demonstrates the progress of the decision-making process for working with the instrument. According to the model, each hotel can choose at its discretion a set of analytical tools and check their relevance in the operational cycle of the hotel and informative for development of strategic decisions.

Keywords: revenue management, revenue optimization, analytical tools, income from the guest, income from the number, sales channels.

References

1. Kozlov, D. A. (2014). *Yield management in hotels*. Createspace, 234.
2. Josephi, S. H. G., Stierand, M. B., Van Mourik, A. (2016). Hotel revenue management: Then, now and tomorrow. *Journal of Revenue and Pricing Management*, 15 (3–4), 252–257.
3. Talluri, K., van Ryzin, G. (2005). *The Theory and Practice of Revenue Management*. Boston: Springer, 731. doi:10.1007/b139000
4. Wang, X. L., Yoonjoung Heo, C., Schwartz, Z., Legohrel, P., Specklin, F. (2015). Revenue Management: Progress, Challenges, and Research Prospects. *Journal of Travel & Tourism Marketing*, 32 (7), 797–811. doi:10.1080/10548408.2015.1063798
5. Phillips, R. (2005). *Pricing and Revenue Optimization*. Stanford University Press, 364.
6. Kimes, S. E. (2000). Revenue management on the links: Applying yield management to the golf industry. *Cornell Hotel and Restaurant Administration Quarterly*, 41 (1), 120–127. doi:10.1177/001088040004100129
7. Jauncey, S., Mitchell, I., Slamet, P. (1995). The meaning and management of yield in hotels. *International Journal of Contemporary Hospitality Management*, 7 (4), 23–26. doi:10.1108/09596119510083229
8. Jones, P. (1999). Yield management in UK hotels: a systems analysis. *Journal of the Operational Research Society*, 50 (11), 1111–1119. doi:10.1057/palgrave.jors.2600739
9. Cross, R. G. (1997). Launching the revenue rocket: How revenue management can work for your business. *Cornell Hotel and Restaurant Administration Quarterly*, 38 (2), 32–43. doi:10.1177/001088049703800222
10. Ferguson, M., Smith, S. (2014). The changing landscape of hotel revenue management and the role of the hotel revenue manager. *Journal of Revenue and Pricing Management*, 13 (3), 224–232. doi:10.1057/rpm.2014.11
11. Korzh, N. V. (2017). Theoretical basis and praxeology revenue management. *Scientific letters of international academic society of Michal Baludansky*, 1, 131–136.

12. Skugge, G. (2004). Growing effective revenue managers. *Journal of Revenue and Pricing Management*, 3 (1), 49–61. doi:10.1057/palgrave.rpm.5170093

DOI: 10.15587/2312-8372.2018.124416

INVESTIGATION OF THE EXISTING METHODOLOGY OF VALUE ESTIMATION AND METHODS OF DISCOUNT RATE ESTIMATION

page 21–26

Plikus Iryna, PhD, Associate Professor, Department of Finance and Credit, Sumy State University, Ukraine, e-mail: plikusirina@gmail.com, ORCID: <http://orcid.org/0000-0002-0657-7260>

The subject of research is the current practice of determining the fair value of assets and liabilities at the present (discounted) cost. One of the most problematic places is the determination of the discount rate, which belongs to the jurisdiction of a professional accountant judgment.

The methods of formalization, hypothetical assumption, system approach and scientific abstraction in substantiating the formation of accounting policy with respect to the choice of the discount rate are used in the research.

The results of the study have shown that fair value measurement using discounting can reduce the quality of financial reporting for subjectivity when choosing methods for its valuation and the discount rate. An algorithm is proposed in the choice of methods for fair value estimation, which allows to more reliably determine the real value of accounting objects and elements of financial reporting. Thanks to this, it is possible to simulate the process of calculating the cost of objects, by sequentially identifying an adjustment to the aggregation of value values. Proceeding from the desire to minimize the influence of professional judgments on the financial reporting indicators, the feasibility of determining the future cash flow with the terms of the contract is justified. For the purposes of the following estimates of this asset or liability, it is necessary to calculate the discount rate. Based on the mathematical dependence of the present value of the future cash flow with its nominal value and the discount rate, a formula for calculating the discount rate is proposed. In comparison with similar studies, such discount rate is the actual rate agreed by the parties to the contract, agreeing on the terms and amount of payments. This provides an opportunity to minimize the impact of professional accounting judgments on the reliability level of financial reporting.

Keywords: algorithm for choosing methods for fair value estimation, estimation of discount rate, calculation of discount rate.

References

- Official website of IFRS Foundation. Available at: <http://www.ifrs.org>. Last accessed: 16.01.2018.
- Lustosa, P. R. B. (2011). The Fairness of Fair Value: SFAS 157, Irving Fisher and GECON. *SSRN Electronic Journal*. doi:10.2139/ssrn.1814176
- Christensen, H. B., Nikolaev, V. V. (2012). Does Fair Value Accounting for Non-Financial Assets Pass the Market Test? *SSRN Electronic Journal*. doi:10.2139/ssrn.1269515
- Herrmann, D., Thomas, W. B., Saudagar, S. M. (2005). The Quality of Fair Value Measures for Property, Plant, and Equipment Accounting Forum. *SSRN Electronic Journal*. doi:10.2139/ssrn.312150
- Landsman, W. R. (2006). Fair Value Accounting for Financial Instruments: Some Implications for Bank Regulation. *BIS Working Paper*, 209. doi:10.2139/ssrn.947569
- Da Silva, J. M., Rezende, A. J., Braunbeck, G. O. (2016). Judgment of the Relevance of Fair Value in Biological Assets: A Experimental Analysis on the Market Perception Versus the Academic Perception. *SSRN Electronic Journal*. doi:10.2139/ssrn.2803418
- Bradshaw, J. H., Khanna, B. S., Roush, M., van Zijl, T. (2005). Analysis of Change in Present Value Measurements. *SSRN Electronic Journal*. doi:10.2139/ssrn.1286942
- Ji, K. (2010). Some Rates are Better than Others. *Journal of Applied Research in Accounting and Finance*, 5 (2), 14–25. doi:10.2139/ssrn.1535678
- Swinkels, L. A. P. (2011). The Case for Local Fair Value Discount Rates Under IFRS. *SSRN Electronic Journal*. doi:10.2139/ssrn.1762291
- Anantharaman, D., Henderson, D. (2016). Understanding Pension Liabilities: A Closer Examination of Discount Rates. *SSRN Electronic Journal*. doi:10.2139/ssrn.2864447
- Tereshchenko, O. (2006). The discount rate: the problems of calculation and the ways of their solution. *The world of finance*, 4 (9), 144–150.
- International Valuation Standards. (2016, December). Available at: <https://www.ivsc.org/files/file/view/id/812>. Last accessed: 16.01.2018.
- Mizhnarodny standart finansovoyi zvitnosti 13 (MSFZ 13). Otsinka spravedlyvosti vartosti. (2013). *Zakonodavstvo Ukrayny*. Available at: http://zakon0.rada.gov.ua/laws/show/929_068. Last accessed: 16.01.2018.
- RICS Rating Standards. (2011). Moscow: Alpina Publishers, 188.
- Kontseptualna osnova finansovoi zvitnosti. (2010). *Zakonodavstvo Ukrayny*. Available at: http://zakon3.rada.gov.ua/laws/show/929_009. Last accessed: 16.01.2018.
- Derun, I. (2012). Vykorystannya spravedlyvosti v bukhhalterskomu obliku neoborotnykh aktyiviv. *Bukhhalterskyy oblik i audyt*, 12, 20–27.
- Kharlamova, E. (2015). *Spravedlivaya stoimost v MSFO*. Available at: <https://www.buh24.com.ua/spravedlivaya-stoimost-v-msfo/>. Last accessed: 16.01.2018.
- Mizhnarodni standarty finansovoyi zvitnosti. (2011). *Zakonodavstvo Ukrayny*. Available at: http://zakon2.rada.gov.ua/laws/show/929_010. Last accessed: 16.01.2018.
- Rohova, N. V. (2014). Bukhhalterskyi oblik dyskontuvannia zboviazan: problemy realizatsii v umovakh MSFZ. *Naukovyi visnyk Poltavskoho universytetu ekonomiki i torhizli*, 4 (66), 193–197.
- Dvorakova, D. (2011). Developments in Fair Value Measurement: Some IFRS 13 View. *Recent Researches in Applied Economics*, 151–156. Available at: <http://www.wseas.us/e-library/conferences/2011/Iasi/AEBD/AEBD-25.pdf>. Last accessed: 16.01.2018.
- Ralko, A. S. (2015). Metody opredeleniya stavky dyskontyrovannya. *Naukovyy visnyk Mizhnarodnoho humanitarnoho universytetu*, 150.
- Lesnova, Yu. V. (2014). Diskontirovanie kak sposob opredeleniya spravedlivoy stoimosti dlya tseley MSFO. Korporativnaya finansovaya otchetnost'. *Mezhdunarodnye standarty*, 10. Available at: <https://finacademy.net/materials/article/diskontirovaniye-sposob-opredeleniya-stoimosti>. Last accessed: 16.01.2018.
- Liliuk, K. V. (2015). Vyznachennia stavky dyskontuvannia. *Visnyk NTU «KhPI»*, 53 (1162), 33–36.

DOI: 10.15587/2312-8372.2018.124436

FORMATION OF A SCIENTIFIC APPROACH TO FUNCTIONING AS A PROCESS OF DEVELOPMENT OF INNOVATION-ORIENTED ENTERPRISES

page 26–33

Boiarynova Kateryna, PhD, Associate Professor, Department of Management, National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute», Ukraine, ORCID: <https://orcid.org/0000-0001-5879-2213>, e-mail: boyarinova@ukr.net

The object of research is considering the functioning of the development process of innovation-oriented enterprises in changing, turbulent economic conditions. The lack of available scientific approaches to the implementation of operational

measures to develop innovative enterprises in the process of functioning has made it necessary to consider the functioning not as a process of life activity, but as a process of their operational development in the conditions of economic instability.

The theoretical bases of functioning of innovation-oriented enterprises as a development process are scientifically grounded. It is revealed that in its implementation it is necessary to lay the scientific and methodological foundations of innovation-oriented development. The functioning of an innovation-oriented enterprise is defined as a process of operative, systematic implementation of functions aimed at changing the economic state of an enterprise in order to achieve the target development targets. It is justified to operate with the development of innovative enterprises and key concepts.

The formed scientific approach allows to develop the organizational and economic bases for operating development in the process of functioning on the basis of fulfilling their economic functions as economic entities and in the system of economic relations.

Keywords: economic functions, functionality of innovation-oriented enterprises, development operating.

References

1. Karpukhina, N. I., Shibanova-Roenko, E. A. (2012). Protivorechiya mezhdu funktsionirovaniem i razvitiem sotsial'no-ekonomiceskoy sistemy kak geneticheskaya osnova krizisov. *Studencheskiy nauchnyi forum*. Available at: <http://www.rae.ru/forum2012/187/276>
2. Lepeiko, T. I., Mazorenko, O. V. (2007). Rozkryttia sutnosti funktsionuvannia ta rozvytku pidpriyiemstva. *Ekonomika: problemy teorii ta praktyky*, 5 (232), 1226–1231.
3. Mazorenko, O. V. (2014). Vzaiemozviazok etapiv zhyttievoho tsylku funktsionuvannia i rozvytku pidpriyiemstva. *Sotsialno-ekonomicznyi rozvycyot rehioniv v konteksti mizhnarodnoi integratsii*, 2 (15 (4)), 100–102.
4. Kiselev, Yu. M. (2006). Zakon organizatsii «samosokhranenie» i ustoychivost' proizvodstvenno-ekonomiceskoy sistemy predpriyatiya. *Interespo Geo-Sibir*, 2 (1). URL: <http://cyberleninka.ru/article/n/zakon-organizatsii-samosokhranenie-i-ustoychivost-proizvodstvenno-ekonomiceskoy-sistemy-predpriyatiya>
5. Hultman, M., Bonnedahl, K. J., O'Neill, K. J. (2016). Unsustainable societies – sustainable businesses? Introduction to special issue of small enterprise research on transitional Ecopreneurs. *Small Enterprise Research*, 23 (1), 1–9. doi:10.1080/13215906.2016.1188719
6. Belz, F. M., Binder, J. K. (2015). Sustainable Entrepreneurship: A Convergent Process Model. *Business Strategy and the Environment*, 26 (1), 1–17. doi:10.1002/bse.1887
7. Pogrebova, O. A., Konnikov, E. A., Kurbanbaeva, D. F. (2017). Model assessing the sustainability of industrial enterprise development based on real option dynamic management model of innovations generations. *2017 XX IEEE International Conference on Soft Computing and Measurements (SCM)*. doi:10.1109/scm.2017.7970749
8. Carayannis, E. G., Grigoroudis, E., Sindakis, S., Walter, C. (2014). Business Model Innovation as Antecedent of Sustainable Enterprise Excellence and Resilience. *Journal of the Knowledge Economy*, 5 (3), 440–463. doi:10.1007/s13132-014-0206-7
9. Aniskin, Yu. P. (2009). *Upravlinnia korporatyvnymy zminamy po kryteriui stiikosti*. Moscow: Omeha-l, 404.
10. Kuzmin, O. Ye., Didyk, A. M. (2014). Tools of providing the multiple-vector development of enterprises. *Technology Audit and Production Reserves*, 6 (2 (20)), 21–24. doi:10.15587/2312-8372.2014.31396
11. Solow, R. M. (1957). Technical Change and the Aggregate Production Function. *The Review of Economics and Statistics*, 39 (3), 312–320. doi:10.2307/1926047
12. Richardson, H. W. (1993). *Regional growth theory*. London, 405.
13. Feser, E. J. (1999). *Understanding local economic development*. New Brunswick: Center for Urban Policy Research, Rutgers University, 506.
14. Glazl, E., Livekhud, B. (2000). *Dinamichnoe razvitiye predpriyatiya. Kak predpriyatiya – pionery i byurokratiya mogut stat' effektivnymi*. Kaluga: Dukhovnoe poznanie, 264.
15. Gloor, P. A. (2006). *Swarm Creativity: Competitive Advantage through Collaborative Innovation Networks*. New York: Oxford University Press, 207. doi:10.1093/acprof:oso/9780195304121.001.0001
16. Khvan, V., Khorovit, G.; Uvarov, A. F. (Ed.). (2012). *Tropicheskiy les. Sekret sozdaniya sleduyushhey Silikonovoy doliny*. Tomsk: Izdatel'stvo Tomskogo gosudarstvennogo universiteta sistem upravleniya i radioelektroniki, 331.
17. L'vov, D. S., Glaz'ev, S. Yu. (1986). Teoreticheskie i prikladnye aspekty upravleniya NTP. *Ekonomika i matematicheskie metody*, 5, 793–804.
18. Berle, A. A., Means, G. C. (1991). *The Modern Corporation and Private Property*. New Brunswick: Transaction Publishers, 396.
19. Jensen, M. C., Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3 (4), 305–360. doi:10.1016/0304-405X(76)90026-x
20. Senge, P. M. (1990). *The Fifth Discipline: The Art and practice of the learning organization*. New York, 464.
21. Penrose, E. (1995). *The theory of the growth of the firm*. Oxford: Oxford University Press, 76–80. doi:10.1093/0198289774.001.0001
22. Richardson, G. B. (1972). The Organisation of Industry. *The Economic Journal*, 82 (327), 883–896. doi:10.2307/2230256
23. Casson, M. C.; Foss, N., Mahnke, V. (Eds.). (2000). *An Entrepreneurial Theory of the Firm. Competence, Governance and Entrepreneurship: Advances in Economic Strategy Research*. Oxford: Oxford University Press, 116–145.
24. Langlois, R. N. (2007). The Entrepreneurial Theory of the Firm and the Theory of the Entrepreneurial Firm. *Journal of Management Studies*, 44 (7), 1107–1124. doi:10.1111/j.1467-6486.2007.00728.x
25. Marintsev, D. A. (2010). Sistemno-funktsional'naya teoriya firmy kak osnova sovershenstvovaniya menedzhmenta. *Vestnik Ivanovskogo gosudarstvennogo universiteta. Seriya «Estestvennye, obshchestvennye nauki»*, 2, 92–95.
26. Marintsev, D. A. (2010). Sotsial'no ekonomiceskaya sushhnost' firmy. *Lichnost'. Kul'tura. Obshhestvo*, 12 (3 (57–58)), 248–252.
27. Novyy slovar inostrannykh slov. EdwART. (2009). Available at: https://dic.academic.ru/dic.nsf/dic_fwords/12888
28. Noveyshiy filosofskiy slovar'. (1998). Minsk: Izd. V. M. Skakun, 896.
29. Pesikov, S. G. (2005). Razvitie funktsiy upravleniya predpriyatiem usloviyakh globalizatsii i informatizatsii rynochnoy ekonomiki. *Rossiyskoe predprinimatel'stvo*, 6, 8–13.
30. Vasylkivskyi, D. M. (2012). Analiz mozhlyvosti realizatsii mekhanizmu pidvyshchennia ekonomicznoho potentsialu pidpriyiemstva. *Visnyk Khmelnytskoho natsionalnogo universytetu*, 3 (3), 103–105.
31. Kleyner, G. (2002). Predpriyatiye – upushchennoe zveno v tsepi institutsional'nykh preobrazovaniy v Rossii. *Problemy teorii i praktiki upravleniya*, 2, 22–26.
32. Sytnyk, H. V. (2013). Tsilova funktsii pidpriyiemstva: evoliutsiya kontseptsii ta suchasni pohliady. *Problemy ekonomiky*, 1, 243–254.
33. Kleyner, G. B. (2005). Sistemno-integratsionnaya teoriya predpriyatiya i evolyutsionnyy pokhod. VI Mezhdunarodnyy Simpozium po evolyutsionnoy ekonomike. Pushhino, 15. Available at: <http://www.twirpx.com/file/62919>
34. Zhrebilo, T. V. (2010). *Slovar' lingvisticheskikh terminov*. Nazran: OOO «Pilgrim», 486.
35. Voynikanis, E. A., Yakushev, M. V. (2004). *Informatsiya. Sobstvenost'. Internet: Traditsiya i novelly v sovremennom prave*. Moscow: Volters Kluwer, 176.
36. Asmolova (Plakhova), L. M. (2015). Funktsii obrazovatel'noy organizatsii: ot tseley k ikh vypolneniyu. *Portaly i sayty obrazovatel'nykh organizatsiy na platforme kompanii «Sinergiya-infо»*. Available at: https://eduface.ru/consultation/management/funkci_obraзовательной организаци_от_целей_к_их_выполнению
37. Drozdov, I. N. (2012). *Upravlenie razvitiem organizatsii*. Vladivostok: Dal'nevostochnyy gosudarstvennyy tekhnicheskiy

- universitet. Tsentr gumanitarnykh tekhnologiy. URL: <http://gtmarket.ru/laboratory/basis/4498>
38. Misharin, Yu. V. (2013). Strategirovanie v innovatsionnoy deyatel'nosti. *Fundamental'nye issledovaniya*, 11–5, 1007–1011
 39. Osypov, V. M., Vorozheikin, O. O. (2012). Osoblyvosti stratehuvannia ekonomichnogo rozvytku ahlomeratsii v Ukrainsi. *Stratehichni priorityty*, 3 (24), 82–86.
 40. Kulikova, E. I. (2015). Kontseptual'nye osnovy formirovaniya i razvitiya printispov regional'nogo strategirovaniya. *Evrasiyskiy sozuz uchenikh*, 6–1 (15), 77–80.
 41. Kukharskaya, N. A. (2014). Strategirovanie sotsial'no-ekonomicheskogo razvitiya regiona kak novyy podkhod k razrabotke i realizatsii strategiy regional'nogo razvitiya. *Sotsial'no-ekonomicchi problemi suchasnogo periodu Ukrainsi*, 3 (107), 22–28.

DOI: 10.15587/2312-8372.2018.124455

DEVELOPMENT OF GAS TRANSPORTATION COMPANIES' ECONOMIC SECURITY LEVEL EVALUATION METHOD BY TAXONOMETRIC METHOD

page 34–40

Prokopiv Mykhailo, Postgraduate Student, Department of Finance, Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine, e-mail: mikelprokopiv@gmail.com, ORCID: <https://orcid.org/0000-0002-4601-6329>

The object of research is the process of assessing the state of ensuring economic security of gas transport enterprises. One of the biggest problems faced by scientists in determining the level of economic security is the problem of the extent to which the indicator affects the overall state of the enterprise. In the course of the study, a method of variation is used to solve this problem, which allows to avoid subjective judgments by the method of «expert assessments», and also allows to adjust the values of indicators taking into account their weight. The key difference between the methods is that in the calculation, the so-called standardization is done—bringing the absolute and relative values of the indicators to a dimensionless value. This allows to increase the range of indicators to determine the level of economic security. As a result, an integral indicator of the level of economic security of a gas transportation enterprise is obtained, not only solves the weaknesses of other methods, but also takes into account the peculiarities of the gas transportation industry. Due to this, it is possible to obtain as accurate as possible data on the state of economic security, as well as on the indices of significance of the components of the activities of the gas transportation enterprise. In comparison with similar methods, the proposed method allows to develop an effective model of enterprise management, which ensures stable development and avoids adverse factors or threats. The efficiency of the model lies in the overall activity of the enterprise, taking into account the shortcomings of other methods and features of the gas transportation industry.

Keywords: method of variations, economic security of gas transport enterprises, level of development, evaluation algorithm.

References

1. Vasyltsiv, T. H., Voloshyn, V. I., Humeniuk, A. M. (2009). *Priorytety ta zasoby zmitsneniya ekonomichnoi bezpeky maloho ta serednego pidprijemnytstva*. Lviv: Vydavnytstvo LKA, 248.
2. Dovbnia, S. B., Hichova, N. Yu. (2008). Diahnostyka rivnia ekonomichnoi bezpeky pidprijemstva. *Finansy Ukrainsi*, 4, 88–97.
3. Zubok, M. I. Zubok, P. M. (2004). *Bezpeka pidprijemnytskoi diialnosti: normatyvno-pravovi dokumenty komertsiihnoho pidprijemstva, banku*. Kyiv, 144.
4. Kozaichenko, H. V., Ponomarov, V. P., Liashenko, O. M. (2003). *Ekonomichna bezpeka pidprijemstva: sutnist ta mekhanizm zabezpechennia*. Kyiv: Libra, 280.

5. Mak-Mak, V. P. (2003). *Sluzhba bezopasnosti predpriyatiya*. Moscow: Shkola okhrany «Bayard», 208.
6. Baller, S., Dutta, S., Lanvin, B. (Eds.). (2016). *The Global Information Technology Report 2016: Innovating in the Digital Economy*. Geneva: World Economic Forum, 307.
7. Edvinsson, L., Malone, M. (1997). *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Roots*. New York: Harper Collins Publishers, Inc., 225.
8. Andriesson, D. (2005). Implementing the KPMG Value Explorer. *Journal of Intellectual Capital*, 6 (4), 474–488. doi:10.1108/14691930510628771
9. Brookings, A., Board, P., Jones, S. (1998). The predictive potential of intellectual capital. *International Journal of Technology Management*, 16 (1/2/3), 115. doi:10.1504/ijtm.1998.002646
10. Kaplan, R. S., Norton, D. P. (1996). Using the Balanced Scorecard as a Strategic Management System. *Harvard Business Review*, 74 (1), 75–85.

DOI: 10.15587/2312-8372.2018.124506

FORMATION OF SYSTEM FRAMEWORKS OF ENERGY CONTROLLING

page 40–43

Kovalev Anatoliy, Doctor of Economic Sciences, Professor, Vice-Rector for Science, Odessa National Economic University, Ukraine, e-mail: kovalev@oneu.edu.ua, ORCID: <https://orcid.org/0000-0002-6128-7012>

Degtiareva Olga, PhD, Associate Professor, Department of Economics of Enterprise, Odessa National Economic University, Ukraine, e-mail: degtiareva@gmail.com, ORCID: <https://orcid.org/0000-0003-1276-334X>

The object of research is the controlling concept and its application in the energy sector of the enterprise. Controlling concept opens wide perspectives and provides economic instruments to raise effectiveness and to reach goals of enterprise. The main challenge by implementation of controlling concept in energy sphere is lack of understanding of all opportunities that controlling concept gives as well as needs of its integration on all levels of decisions making. As far as the controlling is illustrious by its system approach, the system frameworks of energy controlling cover multifunctional areas and managerial systems of enterprise.

The operational cycle of energy controlling is described. This cycle includes the main stages of management of energy consumption in the enterprise.

The system frameworks of energy controlling are formed. Being a part of the general controlling mechanism, energy controlling integrates into the control and analytical work of the enterprise for achievement of energy goals. By its conceptual basement, it provides:

- transparency of processes and results in energy sector;
- timely information and analytical support for both operational and strategic decisions related to energy activity and development;
- optimization of allocation of companies internal resources for enhancement of energy efficiency and energy saving;
- coordination of energy goals and objectives at all levels of management, as well as a systematic, integrated solution of energy problems.

Keywords: energy controlling, energy management, energy efficiency, system frameworks.

References

1. Kallakuri, C., Vaidyanathan, S., Kelly, M., Cluett, R. (2016). *The 2016 International Energy Efficiency Scorecard*. Available at: <https://aceee.org/research-report/e1602>. Last accessed: 20.02.2018.

2. Matzen, F. J., Tesch, R. (Eds.). (2017). *Industrielle Energiestrategie: Praxishandbuch für Entscheider des produzierenden Gewerbes*. Wiesbaden: Springer Fachmedien, 823. doi:10.1007/978-3-658-07606-1
3. Müller, E., Engelmann, J., Löffler, T., Strauch, J. (2009). *Energieeffiziente Fabriken planen und betreiben*. Berlin-Heidelberg: Springer-Verlag, 340. doi: 10.1007/978-3-540-89644-9
4. Pehnt, M. (2010). *Energieeffizienz: Ein Lehr- und Handbuch*. Berlin: Springer, 356. doi:10.1007/978-3-642-14251-2
5. Gleich, R. M. (2014). Schulze. Energiecontrolling: Konzeption und Umsetzung in der Praxis. *Controller Magazin*, 39 (4), 71–75.
6. Rackow, T., Schrader, P., Franke, J. (2015). Effizientes Energie-Controlling. *Controlling & Management Review*, 59 (4), 60–68. doi:10.1007/s12176-015-0589-8
7. Gallien, C., Posch, W. (2013). Betriebliches Energiemanagement – Analysen, Methoden und Bewertungsmodelle zur Effizienzsteigerung. *BHM Berg- Und Hüttenmännische Monatshefte*, 158 (7), 286–289. doi:10.1007/s00501-013-0156-6
8. Nemirovskyi, Y. A. (2010). Power management is basis of efficiency of economy of Ukraine. *Energy saving. Power engineering. Energy audit*, 2 (72), 15–22.
9. Antunes, P., Carreira, P., Mira da Silva, M. (2014). Towards an energy management maturity model. *Energy Policy*, 73, 803–814. doi:10.1016/j.enpol.2014.06.011
10. Pudycheva, G. A. (2014). Development of energy controlling conceptual statements. *Technology Audit and Production Reserves*, 5 (2 (19)), 39–43. doi:10.15587/2312-8372.2014.28110
11. Energiecontrolling. (2009). *Amstein+Walthert*, 48. Available at: http://www.amstein-walthert.ch/fileadmin/user_upload/Dokumente/zB_Broschueren/zB_Nr48_Nachdruck_web.pdf. Last accessed: 20.02.2018.
12. Degtareva, O. O. (2017). Conceptual explanation of definition and content of energy controlling: proceedings. *Economics of Enterprise: modern challenges of theory and praxis*. Odessa: Atlant, 264–266.

DOI: 10.15587/2312-8372.2018.124508

IMPROVEMENT OF ORGANIZATIONAL AND DOCUMENTARY SECURITY OF VACATION

page 44–51

Dubinina Maryna, Doctor of Economic Sciences, Associate Professor, Department of Accounting and Taxation, Mykolayiv National Agrarian University, Ukraine, e-mail: dubinina@mnau.edu.ua, ORCID: <https://orcid.org/0000-0002-3993-0622>

Cheban Yuliia, PhD, Associate Professor, Department of Accounting and Taxation, Mykolayiv National Agrarian University, Ukraine, e-mail: gorbachso@mnau.edu.ua, ORCID: <https://orcid.org/0000-0002-8231-2918>

Horbach Svitlana, Department of Accounting and Taxation, Mykolayiv National Agrarian University, Ukraine, e-mail: gorbachso@mnau.edu.ua, ORCID: <https://orcid.org/0000-0002-0615-8146>

Dubinin Viktor, PhD, Associate Professor, Department of Technogenic and Civil Safety, Admiral Makarov National University of Shipbuilding, Mykolayiv, Ukraine, e-mail: Viktor.dubinin@nuos.edu.ua, ORCID: <https://orcid.org/0000-0001-9458-5887>

The object of research is a system of organizational and documentary support for the design and provision of vacations in agricultural enterprises. One of the most problematic places is that ... information about the specifics of granting and documenting vacation, as well as their main types at enterprises and the amount of supply is not subject to official sources of the State Statistics Committee. Such information is not displayed in the reporting forms of enterprises, which requires the use of additional methods and sources of information collection.

An experience of foreign countries to use vacation as one of the methods of motivating employees is used in the research. The introduction of an internal document into the activities of enterprises, which can have a form that is independent of other documents, and be part of the internal social report of the enterprise.

The following generalized elements are defined as «vacation»: dismissal of the employee from performance of labor duties, preservation of the employee in the period of vacation of employment (position), payment. It is established that the term «vacation» is identified with the concept of «time». The main features of the majority of vacations are formulated.

The main directions of improving the organizational and documentary provision of vacation and its use in the context of social activities of enterprises are outlined, namely:

- use of vacation as one of the types of employee motivation;
- use of the classification of vacations to improve its planning, analysis and control;
- recording information on vacations in collective agreements of enterprises;
- use of an internal document to display information on the volume of species, sources of coverage for vacation expenses.

Keywords: regulation of granting vacation, regulatory support, internal document, collective agreement, financial reporting.

References

1. *Otpusk v raznykh stranakh mira*. Available at: http://www.denga.com.ua/index.php?id=3718&option=com_content&task=view
2. Mikhaylova, M. V *chem otlichya trudovogo zakonodatel'stva raznykh stran*. Available at: <http://www.reccona.com.ua/novosti/123>
3. Vacation Leave. *United States DEPARTMENT OF LABOR*. Available at: https://www.dol.gov/general/topic/workhours/vacation_leave
4. Harashchenko, L. P. (2012). Problemy realizatsii prava na vidpustku v Ukrayini. *Visnyk Akademii pratsi i sotsialnykh vidnosyn Federatsii prospilok Ukrayiny*, 1, 30–33.
5. Hutsu, S. F. (2015). Navchalni ta tvorchi vidpustky za zakonodavstvom Ukrayiny. *Zbirnyk naukovykh prats KhNADU. Seria Pravo*, 5, 82–87.
6. Dmytrieva, K. I. (2013). Pravove rehuluvannia chasu vidpochynku za zakonodavstvom kraiin iz rozvynutoiu ekonomikoiu. *Chasopys Kyivskoho universytetu prava*, 1, 193–199.
7. Sytnyska, O. A. (2010). *Yurydychni harantii prava na pratsiu ta prava na vidpochynok za trudovym zakonodavstvom Ukrayiny*. Khmelnytskyi: Vydavnytstvo Khmelnytskoho universytetu upravlinnia ta prava, 168.
8. Frenkel, E. B. (2012). *Trudovoe i sotsial'noe pravo zarubezhnykh stran*. Moscow: Yurist, 674.
9. Suk, L. P., Suk, P. O. (2009). Orhanizatsiia obliku pratsi ta yii oplaty. *Bukhhalteriia v silskomu hospodarstvi*, 21, 28–44.
10. Plakhtii, T. F., Kalashnyk, V. V. (2013). Udoskonalennia modeli analitychnoho obliku rozrakhunkiv za vyplatamy. *Zbirnyk naukovykh prats Tavriiskoho derzhavnoho ahroteknolohichnoho universytetu (ekonomicni nauky)*, 1 (2), 239–247
11. Tarca, A. (2007). Book review: Applying international accounting standards. *The International Journal of Accounting*, 42 (1), 113–116. doi:10.1016/j.intacc.2006.12.006
12. Dubinina, M. V., Kalashnyk, O. M. (2015). Normatyvno-pravove rehuluvannia ta zabezpechennia obliku rozrakhunkiv z oplaty pratsi na silskohospodarskykh pidprijemstvakh. *Naukovyi visnyk Khersonskoho derzhavnoho universytetu*, 15 (1), 149–152.
13. Tkachenko, N. A. (2012). Oblikove zabezpechennia skladannia zvitnosti z oplaty pratsi. *Ekonomika APK*, 7, 89–94.
14. Koriahin, M. V., Popkova, O. O. (2011). Aspekty zakonodavcho-normatyvnoho rehuluvannia oplaty pratsi ta yii bukhhalterskoho obliku v krainakh SND. *Mizhnarodnyi zbirnyk naukovykh prats*, 3 (21), 204–210.
15. Potryvaieva, N. V., Babenko, M. D. (2008). Perspektivnyy udoskonalennia obliku oplaty pratsi v suchasnykh umovakh hopodariuvannia. *Visnyk ahrarnoi nauky Prychornomoria*, 3, 31.

16. Syrtseva, S. V. (2011). Problemy obliku rozrakhunkiv za vyplatamy pratsivnykam v suchasnykh umovakh. *Visnyk Prychornomorskoi rehionalnoi naukovo-praktychnoi konferentsii profesorskoy klyadatshkoho skladu*. Mykolaiv, 133.
17. Frantsiyan, V. F. (1973). *Problemy zakonodatel'stva ob otpuskakh rabochikh slushashchikh*. Moscow, 22.
18. Ostrovskiy, L. Ya. (1978). *Otpuska rabochim sluzhashhim*. Minsk: Belarus, 78.
19. Prokopenko, V. I. (1981). *Chas vidpochynku*. Kyiv: Polityvdatyv Ukrayiny, 78.
20. Harashchenko, L. P. (2003). *Pravove rehuliuvannia vidpustok za zakonodavstvom Ukrayiny*. Kyiv: Red. haz. «Imenem Zakonu», Pavlim, 172.
21. Cheban, Y. Y., Dvornitska, T. P., Endres, V. S. (2017). Vidpustka: teoretychni aspekty. *Modern Economics*, 6, 221–228.
22. Gintsburg, L. Ya. (1961). *Otpuska robochikh i sluzashchikh*. Moscow: Izd-vo Akademii nauk SSSR, 162.
23. Pro vidpustky. *Law of Ukraine No. 504/96-VR from November 15, 1996. Baza danykh «Zakonodavstvo Ukrayiny»*. URL: <http://zakon0.rada.gov.ua/laws/show/504/96-%D0%B2%D1%80>

DOI: 10.15587/2312-8372.2018.124532

IMPLEMENTATION OF THE SYSTEM OF ECONOMIC SECURITY IN THE ENTERPRISE AND ITS IMPACT ON THE RESULTS OF THE ECONOMIC ACTIVITY OF THE ENTERPRISE

page 51–55

Melikhova Tetiana, PhD, Associate Professor, Department of Accounting, Analysis, Taxation and Audit, Zaporizhzhia State Engineering Academy, Ukraine, e-mail: tanya_zp_zgia@ukr.net, ORCID: <http://orcid.org/0000-0002-9934-8722>

The object of research is implementation process of the economic security system in the enterprise and its impact on the results of the economic activity of the enterprise. One of the most problematic places is the absence in Ukraine of its own methodological recommendations for determining the economic efficiency of implementing the system of economic security at the enterprise and assessing its impact on the economic activities of the enterprise. To solve the problems, the methods of analysis and synthesis, methods of logical generalization and analogies, comparative comparison, and also monographic and graphoanalytical methods were used.

It is offered to use indicators of economic efficiency of economic safety of the enterprise. These indicators are built on the basis of increased revenues from sales of products, an increase in the gross output of the company's cash flow and an increase in the accumulated gross output of cash flow. This will help to justify the feasibility of the system of economic security in the enterprise and assess its impact on the results of economic activities. Methods for calculating the indicators of the overall and comparative effectiveness of economic security with the use of approaches to determining the effectiveness of the economic activity of the enterprise are proposed.

These methods take into account, as a result, an increase in the proceeds from the sale of products, an increase in the annual and accumulated gross output of the company's cash flow, an increase in the level of economic security of the enterprise, and a reduction in losses through improving the reliability of economic security. As costs, take into account: the annual accounting and economic costs associated with the implementation of economic security, gross and net conventional cash flow, gross and net cumulative conditional cash flow associated with the economic security implementation. Comparative economic efficiency is based on exceeding the index of economic results over the index of costs for the implementation of economic security, takes into account its level, reliability and impact on increased sales of products and cash flow products. Using the above methods will

justify the feasibility of implementation of the economic security system and its improvement.

Keywords: economic security of the enterprise, net and gross conditional cash flow, general and comparative economic efficiency.

References

1. Fayol, A., Emerson, G., Taylor, F., Ford, G. (1992). *Upravlenie – eto nauka i iskusstvo*. Moscow: Respublika, 349.
2. Ursul, A. D. (Ed.). (1985). *Problema effektivnosti v sovremennoy naуke*. Kishinev, 256.
3. Rikardo, D. (1929). *Nachala politicheskoy ekonomiki i podatnogo oblozheniya*. Moscow: Gosizdat, 368.
4. Metodika opredeleniya godovogo ekonomiceskogo effekta, poluchennogo v rezul'tate vnedreniya novoy tekhniki. *GKNTSM*. (1961). Moscow: Ekonomika, 47.
5. Metodika (osnovnye polozheniya) opredeleniya ekonomiceskoy effektivnosti ispol'zovaniya v narodnom khozyaystvye novoy tekhniki, izobreteniy i ratsionalizatorskikh predlozheniy. (1977). *Ekonomiceskaya gazeta*, 10, 11–15.
6. Tipovaya metodika (osnovnye polozheniya) opredeleniya ekonomiceskoy effektivnosti ispol'zovaniya v narodnom khozyaystvye novoy tekhniki, izobreteniy i ratsionalizatorskikh predlozheniy. (1977). *Effektivnost' kapital'nykh vlozheniy*. Moscow: Ekonomika, 102.
7. Metodicheskie ukazaniya po kompleksnoy otsenke effektivnosti meropriyatiy, napravlenyykh na uskorenie nauchno-tehnicheskogo progressa. (1989). Moscow: Ekonomika, 120.
8. Metodicheskie rekomendatsii po opredeleniyu ekonomiceskoy effektivnosti meropriyatiy nauchno-tehnicheskogo progressa na zhelezodorozhnom transporte. (1990). Moscow: Ekonomika, 92.
9. Tipovaya metodika opredeleniya ekonomiceskoy effektivnosti kapital'nykh vlozheniy i novoy tekhniki v narodnoe khozyaystvo SRSR. (1960). *Effektivnost' kapital'nykh vlozheniy*. Moscow: Ekonomika, 108.
10. Tipovaya metodika opredeleniya ekonomiceskoy effektivnosti kapital'nykh vlozheniy (obnovlenny variant). (1969). *Effektivnost' kapital'nykh vlozheniy*. Moscow: Ekonomika, 98.
11. Metodika opredeleniya effektivnosti kapital'nykh vlozheniy. (1990). Moscow: Ekonomika, 87.
12. Tipovaya metodika opredeleniya ekonomiceskoy effektivnosti. (1981). *Ekonomiceskaya gazeta*, 2–3, 11–14.
13. Kompleksnaya otsenka effektivnosti meropriyatiy, napravlenyykh na uskorenie nauchno-tehnicheskogo progressa. (1989). Moscow: Informelektro, 118.
14. Krylov, E. I., Vlasova, V. M., Zhuravkova, I. V. (2003). *Analiz effektivnosti investitsionnoy i innovatsionnoy deyatelnosti predpriyatiya*. Moscow: Finansy i statistika, 608.
15. Pelikhov, E. F. (2005). *Ekonomiceskaya effektivnost' innovatsiy*. Kharkiv: Izd-vo NUA, 168.
16. Savitska, H. V. (2007). *Ekonomichnyi analiz diialnosti pidprijemstv*. Kyiv: Znannia, 648.
17. Savchuk, V. P., Primko, S. I., Velichko, E. G. (1999). *Analiz i razrabotka investitsionnykh proektor*. Kyiv: Absolyut-V: El'ga, 304.
18. Salyha, K. S. (2010). *Ekonomiche obgruntuvannya innovatsionnykh proektor*. Zaporizhzhia: KPU, 404.
19. Baibakova, T. V., Suvorova, L. A., Epinina, V. S., Azmina, Y. M. (2017). Methodical Aspects of Economic Evaluation of Functioning Efficiency for Vertically-integrated Associations of Enterprises. *Advances in Economics, Business and Management Research*, 38, 34–39. doi:10.2991/ttess-17.2017.6
20. Shashlo, N. V. (2017). Determinants of ensuring of the agro-industrial enterprises' economic security. *Russian Journal of Agricultural and Socio-Economic Sciences*, 72 (12), 115–118. doi:10.18551/rjoas.2017-12.14
21. Zaimova, D. (2011). Measuring the Economic Efficiency of Italian Agricultural Enterprises. *Euricse Working Papers*, 018/11, 23. doi:10.2139/ssrn.1858666
22. Drozdov, N. A., Tagiltseva, J. A., Vasilenko, M. A., Kuzina, E. L. (2017). The railway enterprises activity environmental and economic results planning. *Quality Management, Transport and*

- Information Security, Information Technologies.* Saint Petersburg, 1321–1325. doi:10.1109/itmuis.2017.8085926
23. Vlasenko, M. N., Shedko, Y. N. (2017). Economic security and its environmental component in modern market sustainable development of enterprises. *Business Strategies*, 2, 21–24. doi:10.17747/2311-7184-2017-2-21-24
24. Arkhipova, T. V., Afonasova, M. A., Beskrovnaia, L. V. (2017). Economic sustainability of state-owned enterprises as basis of sustainable economic development. *Future Academy*, 7, 27–34. doi:10.15405/epsbs.2017.07.02.4
25. Nguyen, X. (2015). On the efficiency of private and state-owned enterprises in mixed markets. *Economic Modelling*, 50, 130–137. doi:10.1016/j.econmod.2015.06.011
26. Junevicius, A., Daugeliene, R., Jurkeviciene, J., Orzekauskas-Nussbaum, P. (2017). Application of Management Audit for increasing Economic Efficiency of State-owned Enterprises Activities. *Engineering Economics*, 28 (4), 421–431. doi:10.5755/j01.ee.28.4.17924
27. Al-Rawasdeh, H. M., Kuzubov, A. A. (2017). Analysis of organizational and economic mechanism in the management system of agricultural enterprises. *Russian Journal of Agricultural and Socio-Economic Sciences*, 70 (10), 75–80. doi:10.18551/rjoas.2017-10.12
28. Shashlo, N. V. (2017). Model of integral assessment of an economic security as a reflection of the agro-industrial enterprises' effectiveness. *Russian Journal of Agricultural and Socio-Economic Sciences*, 64 (4), 58–64. doi:10.18551/rjoas.2017-04.08
29. Guotai, C., Zhichong, Z., Abedin, M. Z. (2017). Credit Risk Rating System of Small Enterprises Based on the Index Importance. *International Journal of Security and Its Applications*, 11 (6), 35–52. doi:10.14257/jjsia.2017.11.6.04

DOI: 10.15587/2312-8372.2018.124536

FORMALIZATION OF THE PROCESS OF THE STRATEGIC ADAPTATION OF THE MANUFACTURING COMPANY TO INTEGRATION OF COMPLEX-TECHNICAL SYSTEMS IN THE SUPPLY CHAIN

page 56–64

Krykavskyi Yevhen, Doctor of Economic Sciences, Professor, Head of the Department of Marketing and Logistics, Lviv Polytechnic National University, Ukraine, e-mail: ywkyrk@ukr.net, ORCID: <https://orcid.org/0000-0002-1847-586X>

Savchenko Yuliia, Postgraduate Student, Department of Marketing and Logistics, Lviv Polytechnic National University, Ukraine, e-mail: savchenkojulika@gmail.com, ORCID: <https://orcid.org/0000-0003-0650-9249>

The experience of functioning supply chains both in Ukraine and abroad convincingly proves the importance of a high level of synchronization of actions of all its participants. The formation of a successful model for managing these integrated structures underscores, at the same time, the exceptional importance of strategic harmonization of the goals of the chain and its participants. Despite the existence of a huge heritage of works devoted to the strategic aspects of the operation of such structures, research aimed at strategic adaptation of an individual participant to integration into the supply chain is clearly not enough. A consequence of the lack of a methodology for adapting an enterprise's strategy to integration into the supply chain is not only a lack of understanding by Ukrainian entrepreneurs of the potential benefits and threats of such integration, but also hostile to it.

Thanks to the use of known strategic analysis tools such as SCOC and SWOT analysis, a scheme for identifying the motives for integrating a manufacturing enterprise into the supply chain of complex technical systems is proposed, which allows the enterprise to decide on the timeliness or, conversely, the relevance of such initiative.

Taking into account the prioritization of the application of the project approach to the formation of the integration strategy of the supply chain, this allows to identify the impact of this strategy on the business strategy. In particular, for a manufacturing enterprise, this is considered within the framework of such strategic benchmarks as «efficiency» and «elasticity». In combination with the formation of corresponding sets of characteristic landmarks for each type of functional strategies, the formalization of the process of strategic adaptation of a separate manufacturing enterprise of complex technical systems to integration into the supply chain becomes possible in the context of the strategic goal set by the project. The practical value of such formalization lies in simplifying the decision-making process associated with the need to harmonize them with decisions of a higher level. And also with the choice of alternative options for filtering out those that contradict the main goal of the supply chain.

Keywords: supply chain of complex technical systems, integration strategy, SCOC analysis, project approach.

References

1. Christopher, M. (2000). *Logistyka i zarzadzanie lancuchem dostaw*. Warszawa: Polskie Centrum Doradztwa Logistycznego, 266.
2. Bozarth, C. B., Handfield, R. B. (2007). *Wprowadzenie do zarzdzania operacjami i Lancuchem dostaw*. Gliwice: Helion, 728.
3. Szymonik, A. (2010). *Logistyka i zarzadzanie lancuchem dostaw*. Part 1. Warszawa: Difin, 214.
4. Hugo, M. (2010). *Five Traits of an Agile Enterprise*. Available at: <http://www.cio.com/article/2372922/it-organization/five-traitsof-an-agile-enterprise---150--parts-4---5.html>. Last accessed: 02.02.2018
5. Krykavskyi, Ye. V., Chornopyska, N. V. (2012). *Lohistychni sistemy*. Lviv: Vydavnytstvo Lvivskoi politekhniki, 312.
6. Krykavskyi, Ye., Pokhylchenko, O., Fertch, M. (2017). *Lohistyka ta upravlinnia lantsiuhamy postavok*. Lviv: Vydavnytstvo Lvivskoi politekhniki, 844.
7. Chukhray, N. I., Hirna, O. B. (2007). *Formuvannia lantsiuha postavok: pytannia teorii ta praktyky*. Lviv: Intelekt-Zakhid, 237.
8. Kolodizieva, T. O. (2016). *Upravlinnia lantsiuhamy postavok*. Kharkiv: KhNEU im. S. Kuznetsia, 164.
9. Tankov, K. M., Bakhurets, O. V. (2011). Stratehichni pidkhody do formuvannia vzaiemovidnosyn u lantsiuhamy postavok. *Problemy ekonomiki*, 2, 58–63.
10. Posylkina, O. V., Khromykh, A. H. (2012). Metodychni pidkhody ta instrumenty pobudovy intehrovanykh lohistychnykh sistem u farmatsii. *Farmatsetychnyi chasopys*, 4 (24), 99–107.
11. Krykavskyi, Ye. V., Pokhylchenko, O. A., Chornopyska, N. V., Kosatiuk, O. S., Savina, N. B., Nikshych, S. M., Yakymyshyn, L. Ya. (2014). *Ekonomika lohistyky*. Lviv, 640.
12. Vich-na-vich z noviou realnistiu: zahostrennia problem bezpeky y okhorony na tli obmezhenykh resursiv. (2017). *Spetsialnyi zvit Komertsinoi sluzby Posolstva SShA v Ukraini*. Available at: http://2016.export.gov/ukraine/build/groups/public/@eg_ua/documents/webcontent/eg_ua_108976.pdf
13. Bezpeka-2017: noviti rozrobky u Kyiv pryezly 130 kompanij. *Multymediina platforma inomovlennia Ukrayny*. Available at: <https://www.ukrinform.ua/rubric-technology/2326174-bezpeka2017-noviti-rozrobki-u-kiiv-pryezli-130-kompanij.html>
14. Zhurnal «Sety y byznes». Available at: <http://www.sib.com.ua>
15. Horobchuk, I. S. (2015). Analiz pidkhodiv do vyznachennia poniatia «Intehratiina stratehiiia pidpriemstva». *Molodyi vchenyi*, 10 (25), 110–114. Available at: <http://molodyvcheny.in.ua/files/journal/2015/10/24.pdf>
16. Mazaraki, A. (2013). Integration strategies as a permanent component of business development. *Strategy of enterprises in the waiting period of the crisis: economic, social and legal aspects*, 11, 197–205.
17. Yurchak, O. V. (2010). *Suchasnyi stan rozrobky stratehii v Ukrayni: stratehiiia yak proekt*. Available at: <http://www.management.com.ua/strategy/str197.html>

DOI: 10.15587/2312-8372.2018.124538

RESEARCH OF THE ASPECTS OF MODELING OF THE PROJECT MANAGEMENT OF RISK OF IMPLEMENTATION SYSTEM INFORMATION SUPPORT

page 64–69

Babenko Vitalina, Doctor of Economic Sciences, Professor, Department of International Business and Economic Theory, V. N. Karazin Kharkiv National University, Ukraine, ORCID: <http://orcid.org/0000-0002-4816-4579>, e-mail: vitalinababenko@karazin.ua

Nakisko Oleksandr, PhD, Department of Accounting and Audit, Kharkiv Petro Vasylchenko National Technical University of Agriculture, Ukraine, ORCID: <http://orcid.org/0000-0003-3789-2455>, e-mail: nakisko307@gmail.com

Mykolenko Inna, PhD, Department of Enterprise Economics, Poltava State Agrarian Academy, Ukraine, ORCID: <http://orcid.org/0000-0003-3800-6136>, e-mail: MykolenkoInna@ukr.net

The object of research is the risk management of the information support system of enterprise management. One of the most problematic places is the identification of anticipated risks and their minimization. The process of risk management is associated with the complexity and duration of the implementation of the information management system of the enterprise and its relatively high cost.

In the course of the study, the modeling approaches of the project risk management process were used. Stages of modeling the process of risk management of the project of implementing the information support system are determined. They include the identification and assessment of project risks, an analysis of key risks and opportunities, the definition of strategies and methods for responding to risks. As well as the development and implementation of action plans to minimize risks, measure, monitor and report on risk management activities with an analysis of the results of management decisions. For their implementation, a standard BPwin program procedure is proposed with the possibility of ABC estimation of the cost of performing each stage.

Thanks to this, it is possible to control the production costs at every stage of the information support system. In comparison with similar known methods, approaches are suggested that minimize the loss of the management of enterprise management information systems as a result of the impact of risks through predictability and minimizing the risks to which the project is exposed.

Keywords: modeling of risk management, information technology projects, implementation of the information support system.

References

- Baronov, V. V. et al. (2000). *Avtomatizatsiya upravleniya predpriyatiem*. Moscow: INFRA-M, 239.
- Maklakov, S. V. (2002). *Modelirovaniye biznes-protsessov s BPwin 4.0*. Moscow: Dialog-mifi, 224.
- Malyarets, L., Draskovic, M., Babenko, V., Kochuyeva, Z. et al. (2017). Theory and practice of controlling at enterprises in international business. *Economic Annals-XXI*, 165 (5–6), 90–96. doi:10.21003/ea.v165-19
- Turner, R., Ledwith, A., Kelly, J. (2012). Project management in small to medium-sized enterprises. *Management Decision*, 50 (5), 942–957. doi:10.1108/00251741211227627
- Larson, E., Larson, R. (2009). *Managing Small Projects. The Critical Steps*. Watermark Learning, 12.
- Pollack, J., Adler, D. (2014). Does Project Management Affect Business Productivity? Evidence From Australian Small to Medium Enterprises. *Project Management Journal*, 45 (6), 17–24. doi:10.1002/pmj.21459
- Pollack, J., Adler, D. (2015). The relationship between project management and small to medium enterprise profitability. *Global Conference on Business and Finance Proceedings*, 10 (1), 344–355.
- Perez-Ezcurdia, A., Marcelino-Sdeba, S. (2012). The small project paradox in SMEs. *Prime Journal of Business Administration and Management*, 2 (9), 687–692.
- Babenko, V. O. (2016). Informatsiine zabezpechennia optymizatsii upravlinnia innovatsiinoiu diialnistiu pidpryiemstv Ukrayiny. *Enerhosberezhnye. Enerhetyka. Enerhoaudyt*, 11 (154), 40–52.
- Barykin, A. N., Ikryannikov, V. O. (2013). Vozmozhnye puti primeneniya biznes-modelirovaniya v upravlenii proektami razvitiya malykh mnogoprofil'nykh kompaniy. *Menedzhment innovatsiy*, 3 (23), 226–239.
- Babenko, V. A. (2016). Dynamical models of the minimax program management of innovation processes in enterprises with risks. *Doslidzhennia ta optymizatsiya ekonomichnykh protsesiv «Optymum-2016»*. Kharkiv: NTU «KhPI», 71–73.
- Dosyukov, S. (2013, November). *Distributed Information Systems. From A to Z Embarcadero Developer Network*. Available at: <http://dn.codegear.com/article/30025>
- Gayfullin, B., Obukhov, I. (2001). Sovremennye sistemy upravleniya predpriyatiem. Part 1. *Sredstva i sistemy kompyuternoy avtomatizatsii*. Available at: <http://www.asutp.ru/?p=600254>
- Murphy, A., Ledwith, A. (2007). Project management tools and techniques in high-technology SMEs. *Management Research News*, 30 (2), 153–166. doi:10.1108/01409170710722973
- Vitlinskiy, V. V., Babenko, V. A. (2012). Obzor metodov kolichestvennoy otseki vliyanija riskov v agropromyshlennom proizvodstve. *Rinkova transformatsiya ekonomiki*, 14, 78–87.
- Babenko, V. A. (2012). Pokazately ekonomicheskoi effektivnosti vnedreniya ynformatsyonnoi sistemi upravleniya ynnovatsyonnym protsessam predpriyatiya. *Naukovi pratsi Poltavskoi derzhavnoi ahrarnoi akademii. Seria «Ekonomichni nauky»*, 2 (2 (5)), 7–11.
- Luo, W., Strong, D. (2004). A Framework for Evaluating ERP Implementation Choices. *IEEE Transactions on Engineering Management*, 51 (3), 322–333. doi:10.1109/tem.2004.830862
- ISO 31000: Principles and Guidelines on Implementation. International Organization for Standardization, 20.

DOI: 10.15587/2312-8372.2018.124542

DEVELOPMENT OF ECONOMIC APPROACHES TO THE FORMATION AND EVALUATION OF THE STRATEGY OF CONSTRUCTION ENTERPRISES

page 70–75

Tsyfra Tetiana, Associate Professor, Corresponding Member of the Academy of Construction of Ukraine, Department of Construction Economics, Kyiv National University of Construction and Architecture, Ukraine, ORCID: <https://orcid.org/0000-0001-7891-0467>, e-mail: tatena.c@ukr.net

Zapechnaya Yuliya, PhD, Associate Professor, Department of Construction Economics, Kyiv National University of Construction and Architecture, Ukraine, ORCID: <https://orcid.org/0000-0003-3333-9900>, e-mail: knubaadmission@knuba.edu.ua

Gritcenko Olexandr, PhD, Associate Professor, Department of Construction Economics, Kyiv National University of Construction and Architecture, Ukraine, ORCID: <https://orcid.org/0000-0001-7740-7536>, e-mail: knubaadmission@knuba.edu.ua

The object of research is the processes of formation and evaluation of the strategy of developers in the housing construction market, taking into account the housing affordability. One of the most problematic places is the sequence of these goals on the

priority scale, which for each consumer can be different, depending on which one he prefers. Considering:

- various requirements of customers and investors to build;
- different functional purpose of objects;
- readiness to invest in improving the quality characteristics of these facilities;
- financial possibilities of the investor;
- the willingness of a particular designer and contractor to perform this kind of work.

In comparison with similar well-known economic approaches to the formation and evaluation of the market strategy of construction enterprises, the concept is based on ensuring «housing affordability». The main criteria for evaluation and housing are identified objectively reflect its future affordability for different segments of the population. According to the proposed approach, the weight factors of these factors for different types of housing affordability are determined, divided into five types.

Formalization of evaluation criteria for residential premises will allow management personnel of construction companies-developers:

- reduce the time spent on making decisions on choosing the type of apartments that will have a stable, long-term demand in the strategic perspective;
- optimize the technical and economic indicators of projects;
- optimize the cost parameters of objects.

Keywords: housing affordability, building construction affordability, market affordability strategy, affordable housing.

References

1. Tytok, V. V. (2012). Suchasnyi stan protsedury otrymannia zamovnykom budivnytstva dozvilykh dokumentiv. *Shliakhy pidvyshchennia efektyvnosti budivnytstva v umovakh formuvannia rynkowych vidnosyn*, 28, 142–150.
2. Economy Rankings. (2017). *The official site of Doing Business – the World Bank Group*. Available at: <http://russian.doingbusiness.org/rankings>. Last accessed: 04.11.2017.
3. Nepomniashchy, O. M., Isaenko, D. V. (2016). Rehuliuvannia dozvilno-pohodzhuvalnykh protsедur u budivnytstvi vidpovidno do svitovykh standartiv. *Publiche ureduvannia*, 1 (2), 49–60. Available at: <http://cyberleninka.ru/article/n/regulyuvannya-dozvilno-pogodzhuvalnih-protsedur-u-budivnitstvi-vidpovidno-do-svitovih-standartiv>. Last accessed: 04.11.2017.
4. Lancaster, K. J. (1966). A New Approach to Consumer Theory. *Journal of Political Economy*, 74 (2), 132–157. doi:10.1086/259131
5. King, A. T. (1976). The Demand for Housing: A Lancasterian Approach. *Southern Economic Journal*, 43 (2), 1077–1087. doi:10.2307/1057332
6. Levy, D., Murphy, L., Lee, C. K. C. (2008). Influences and Emotions: Exploring Family Decision-making Processes when Buying a House. *Housing Studies*, 23 (2), 271–289. doi:10.1080/02673030801893164
7. Borsch-supan, A., Pitkin, J. (1988). On discrete choice models of housing demand. *Journal of Urban Economics*, 24 (2), 153–172. doi:10.1016/0094-1190(88)90036-8
8. Johnson, M. D. (1989). The Differential Processing of Product Category and Noncomparable Choice Alternatives. *Journal of Consumer Research*, 16 (3), 300–309. doi:10.1086/209216
9. Bielenkova, O. Yu., Shaoqing, G. (2016). System for managing the efficiency of housing stock reconstruction on the basis of economic development. *Standardisation of engineering construction*, 1, 356–357.
10. Bielenkova, O. Yu. (2014). Tendentsii rozvytku budivelnoi haluzi yak chynnyky formuvannia stratehichnoi konkurentospromozhnosti budivelnykh pidpriyemstv. *Budivelne vyrobnytstvo*, 57, 24–30.
11. Stetsenko, S. P. (2013). Stratehichne upravlinnia systemoiu ekonomicnoi bezpeky rehionu. *Ahrosvit*, 24, 47–50.
12. Hoiko, A. F., Sorokina, L. V., Rehida, O. V. (2014). Doslidzhennia efektyvnosti investuvannia zhytlovoho budivnytstva: rehionalnyi aspekt. *Budivelne vyrobnytstvo*, 57, 56–63.
13. Hoiko, A. F., Sorokina, L. V. (2016). Analytichna kharakterystyka rozvytku rynku zhytla m. Kyieva. *Shliakhy pidvyshchennia efektyvnosti budivnytstva v umovakh formuvannia rynkowych vidnosyn*, 34, 83–97.
14. Bielenkova, O. Yu., Shaotsin, H. (2015). Otsinka profiliu developerskoi kompanii (na prykladi rekonstruktsii zhytlovoho fondu KNR). *Naukovyi visnyk Bukovynskoho derzhavnoho finansovo-ekonomichnogo universytetu. Ekonomichni nauky*, 28 (4), 51–54.
15. Izmailova, K. V., Abashkina, K. O. (2017). Obhruntuvannia ekonomicchnoi dotsilnosti vstanovlennia soniachnykh batarei na zamiskykh zhytlovych budynkakh. *Budivelne vyrobnytstvo*, 64, 23–29.
16. Rubtsova, O. S. (2015). Peredumovy vykorystannia CRM – sistemy dlja optymizatsii stratehii realizatsii produktii ta polipshennia biznes-protsesiv v pidriadnykh budivelnykh orhanizatsiakh. *Budivelne vyrobnytstvo*, 59, 37–40.
17. Krykun, K. V., Oliferuk, S. L., Zapiechna, Yu. O., Serdiuchenko, N. B. (2017). Vdoskonalennia upravlinnia vytratamy vyrobnych resursiv na zabezpechennia yakosti u budivnytstvi. *Shliakhy pidvyshchennia efektyvnosti budivnytstva v umovakh formuvannia rynkowych vidnosyn*, 35.
18. Kishchenko, T. Ye., Husarova, L. V. (2015). Pidvyshchennia efektyvnosti investytsiino-budivelnoho protsesu za rakhunok vykorystannia kontseptsiї ta posluh developerskykh kompanii. *Budivelne vyrobnytstvo*, 59, 52–54.
19. Ushatskyi, S. A., Serdiuk, A. V. (2011). *Orhanizatsiino-ekonomicchi osnovy formuvannia ta rozvytoku rynku dostupnoho zhytla*. Vinnytsia: VNTU, 176.
20. Interim Report of the Green Growth Strategy: Implementing our commitment for a sustainable future. (2010, May 27–28). Paris, 90. Available at: www.oecd.org/greengrowth
21. Housing Affordability Index Methodology. *The National assotion of realtors*. Available at: <https://www.nar.realtor/Research.nsf/Pages/HAmeth>. Last accessed: 04.11.2017.
22. BIM (Building Information Modeling or Building Information Model). Available at: <https://ru.wikipedia.org/wiki/BIM>

DOI: 10.15587/2312-8372.2018.124543

THE USE OF A BALANCED SYSTEM OF INDICATORS FOR THE MANAGEMENT OF CONSTRUCTION ENTERPRISES

page 76–82

Sotnikova Irina, Lecturer, Department of Economics and Management, Institute of Innovation Education of the Kyiv National University of Construction and Architecture, Ukraine, e-mail: innolanovykova@gmail.com, ORCID: <https://orcid.org/0000-0002-1327-6933>

The object of research is a balanced system of indicators (BSI), which is evaluated from the standpoint of its ability to use in the management of construction enterprises, taking into account the current conditions of their functioning in the market. During the research, it is determined that the model of the balanced system of indicators functions only within the limits of the indicated indicators, the choice of which is limited and does not take into account possible changes in the competitive environment. That is why the enterprise, when using the mechanism, should additionally carry out an assessment of possible changes and take into account the subjectivity of a part of the indicators. But for Ukrainian construction companies there is a possibility to take on the experience of foreign countries in introducing BSI and assessing the effectiveness of its use in the practical activities of foreign enterprises. BSI creates the necessary information basis for decision-making for virtually all functions of enterprise management: forecasting, planning, analysis, control and motivation. The implementation of most of the listed functions requires the availability of appropriate information support.

The existing approaches to the definition of models of estimation of the efficiency of activity of construction enterprises

are analyzed and the main advantages and disadvantages of existing models are substantiated. For construction companies it is suggested to use in practical terms the concept of the strategy of enterprise development on the basis of a balanced system of indicators by determining the main goals, objectives and principles. Within the framework of this work, the evaluation of the activities of Ukrainian construction companies is based on the assumption that the most problematic are, as a rule, the following business processes: preparation of production; marketing; strategic planning; finances; HR (Human Resources). The expediency of using the methodological approach to the assessment of the effectiveness of management of construction enterprises, in which the matrix of business process distribution is based on the definition of the value of the II (index of importance) and the index of problem (IP), is grounded.

The mechanism of stimulation of the company's employees in forming the development strategy based on a balanced system of indicators contributes to the involvement of employees in making decisions in the company's activities, the setting of clear objectives and fair remuneration standards.

Keywords: development management, strategic goals, intangible assets of a construction company, strategic card.

References

1. Kaplan, R. S., Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston: Harvard Business School Press, 322.
2. Kaplan, R. S., Norton, D. P. (2004). *Organizatsiya, orientirovannaya na strategiyu. Kak v novoy biznes-srede preuspevayut organizatsii, primenyaushchie sbalansirovannuyu sistemу pokazateley*. Moscow: Olimp-Biznes, 416.
3. Gershun, A., Gorskiy, M. (2006). *Tekhnologii sbalansirovannogo upravleniya*. Moscow: Olimp-Biznes, 416.
4. Oleksiv, I. B. (2006). Pobudova sistemy zbalansovanykh pokaznykiv pidprijemstva na osnovi modeli odnochasnnykh rivnian. *Visnyk Natsionalnoho universytetu «Lvivska politekhnika»*, 12, 132–138.
5. Rampersand, Kh. (2006). *Universal'naya sistema pokazateley: Kak dostigat' rezul'tatov, sokhranyaya tselostnost'*. Moscow: Al'pina Biznes Buks, 352.
6. Vnedrenie sbalansirovannoy sistemy pokazateley. (2015). Moscow: Al'pina Biznes Buks, 478.
7. Blanshar, K., Karlos, D. P., Rendolf, A. (2014). *3 klyuchya k sozdaniyu novoy strukturny upravleniya*. Minsk: OOO Popuri, 304.
8. Pitere, T., Uoterman, R.; Ivenko, L. I. (Ed.). (2013). *V poiskakh effektivnogo upravleniya (opyt luchshikh kompaniy)*. Moscow: Progress, 224.
9. Niven, P. R.; Horskoho, M. (Ed.). (2006). *Diahnostiqa zbalansovanoj sistemy pokaznykiv: Pidtrymuichy maksymalnu efektyvnist*. Dnipropetrovsk: Balans Biznes Buks, 256.
10. Dinesh, D., Palmer, E. (1998). Management by objectives and the Balanced Scorecard: will Rome fall again? *Management Decision*, 36 (6), 363–369. doi:10.1108/00251749810223529
11. Pearce, J. A., Robinson, R. B. (2015). *Strategic Management*. Homewood: Richard D. Irwin, 384.
12. Horvat, P. (2000). Sbalansirovannaya sistema pokazateley kak sredstvo upravleniya predprijatiem. *Problemy teorii i praktiki upravleniya*, 4, 108–113.
13. Karloff, B. (1993). *Delovaya strategiya. Kontseptsija, soderzhanie, simvolы*. Ufa: Akademiya menedzhmenta; Moscow: Ekonomika, 287.
14. Nedosekin, A. (2016). Balanced Scorecard: plusy, minusy, problemy vnedreniya. *Antikrizisnyy menedzhment*, 12, 19–25.
15. Pan, L. (2003). Zbalansovana sistema pokaznykiv yak instrument efektyvnoho upravlinnia stratehiieiu. *Naukovi zapysky. Seriya: Ekonomichni nauky*, 21, 56–63.
16. Braun, M. G. (2005). *Sbalansirovannaya sistema pokazateley: na marshrute vnedreniya*. Moscow: Al'pina Biznes Buks, 226.
17. Adams, C., Neely, A. (2000). The performance prism to boost M&A success. *Measuring Business Excellence*, 4 (3), 19–23. doi:10.1108/13683040010377818
18. Ofitsiynyi sait «Balanced Scorecard v Ukraini». Available at: <http://bsc.org.ua/>
19. Nifaeva, O. V. (2005). Primenie sistemy sbalansirovannykh pokazateley v marketinge. *Marketing v Rossii i za rubezhom*, 5, 31–36.
20. Olve, N.-G., Roy, J., Wetter, M. (2001). *Performance Drivers: A Practical Guide to Using the Balanced Scorecard*. Wiley, 364.
21. Mitskevich, A. (2004). Struktura sbalansirovannoy sistemy pokazateley firmy. *Ekonomicheskie strategii*, 5–6, 132–137.
22. Gershuna, A. M., Nefedovoy, Yu. S. (2005). *Razrabotka sbalansirovannoy sistemy pokazateley*. Moscow: Olimp-Biznes, 128.
23. Ampuero, M., Goranson, J., Scott, J. (1998). Solving the Measurement Puzzle: How EVA and the Balanced Scorecard Fit Together. *The Cap Gemini Ernst & Young Center for Business Innovation. Measuring Business Performance*, 2, 45–52.