ZESZYTY NAUKOWE

MAŁOPOLSKIEJ WYŻSZEJ SZKOŁY EKONOMICZNEJ W TARNOWIE

numer 3

Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie, t. 43 Kwartalnik, nr 3, wrzesień 2019

Rada Programowa prof. dr Alina Bădulescu (Rumunia), dr Elsa Barbosa

(Portugalia), dr inż. Radka Johnová (Czechy), prof. dr Memet Karakuş (Turcja), prof. dr Androniki Kavoura (Grecja), prof. dr Stathis Kefallonitis (USA), prof. dr hab. Leszek Kozioł (Polska), prof. dr Ivars Muzis (Łotwa), mgr Eisa Patricia Orozco Quijano (Kanada), prof. dr Saša Petar (Chorwacja), prof. dr Jarmila Radová (Czechy), prof. dr Elisabete Rodrigues (Portugalia), prof. dr hab. Wasilij Rudnicki – przewodniczący (Ukraina), prof. dr hab. Jan Siekierski (Polska), prof. dr Paloma Taltavull de la Paz (Hiszpania), dr Sotirios Varelas (Cypr), doc. dr Dagmar Weberová (Czechy), mgr Lidia Matuszewska –

sekretarz (Polska)

Redaktor naczelny prof. dr hab. Leszek Kozioł

Redaktorzy tematyczni dr Michał Kozioł

dr Janusz Zabek

Redaktor statystyczny dr hab. Michał Woźniak, prof. MWSE

Opracowanie redakcyjne Anastazja Oleśkiewicz

Adres redakcji Małopolska Wyższa Szkoła Ekonomiczna

Redakcja Zeszytów Naukowych

ul. Waryńskiego 14, 33-100 Tarnów, Polska

tel.: +48 14 65 65 553 faks: +48 14 65 65 561 http://zn.mwse.edu.pl

e-mail: redakcja@mwse.edu.pl

Redakcja informuje, że wersją pierwotną (referencyjną) czasopisma jest wydanie elektroniczne.

Wszystkie artykuły zamieszczone w czasopiśmie są recenzowane.

Pełne teksty artykułów są zamieszczane na stronie internetowej czasopisma: http://zn.mwse.edu.pl.

Zgodnie z wykazem Ministerstwa Nauki i Szkolnictwa Wyższego publikacjom naukowym zamieszczonym w czasopiśmie przyznawane jest 20 punktów.

Indeksowane w: BazEkon, CEJSH, Index Copernicus (ICV 2018: 89.62), POL-Index

© Copyright by Małopolska Wyższa Szkoła Ekonomiczna w Tarnowie Tarnów 2019

Druk i oprawa: Poligrafia Wydawnictwa BIBLOS

Wydawnictwo Diecezji Tarnowskiej

Biblos

plac Katedralny 6, 33-100 Tarnów

tel.: 14-621-27-77 faks: 14-622-40-40 e-mail: biblos@biblos.pl http://www.biblos.pl

THE MAŁOPOLSKA SCHOOL OF ECONOMICS IN TARNÓW RESEARCH PAPERS COLLECTION

issue 3

The Małopolska School of Economics in Tarnów Research Papers Collection, vol. 43 Quarterly, issue 3, September 2019

Programme Council Prof. dr Alina Bădulescu, PhD (Romania), Elsa Barbosa,

PhD (Portugal), Ing. Radka Johnová, PhD (Czech Republic),

(Poland), Prof. Memet Karakus, PhD (Turkey), Prof.

Androniki Kavoura, PhD (Greece), Prof. Stathis Kefallonitis, PhD (USA), Prof. Leszek Kozioł, PhD (Poland), Prof. Ivars Muzis, PhD (Latvia), Eisa Patricia Orozco Quijano, MA (Canada), Prof. Saša Petar, PhD (Croatia), Prof. Jarmila Radová, PhD (Czech Republic), Prof. Elisabete Rodrigues, PhD (Portugal), Prof. Vasiliy Rudnitskiy, PhD-President (Ukraine), Prof. Jan Siekierski, PhD (Poland), Prof. Paloma Taltavull de la Paz, PhD (Spain), Sotirios Varelas, PhD (Cyprus), Doc. Dagmar Weberová, PhD (Czech Republic),

Lidia Matuszewska, MA-Secretary (Poland)

Chief Editor Prof. Leszek Kozioł, PhD

Subject Editors Michał Kozioł, PhD

Janusz Zabek, PhD

Statistical Editor Prof. Michał Woźniak, PhD

Editor Anastazja Oleśkiewicz

Editorial Office Małopolska School of Economics

Editorial Office

ul. Waryńskiego 14, 33-100 Tarnów, Poland

tel.: +48 14 65 65 553 fax: +48 14 65 65 561 http://zn.mwse.edu.pl

e-mail: redakcja@mwse.edu.pl

The Editorial Board informs that the reference version of this magazine is its electronic edition.

All articles published in the journal are subject to reviews.

Full-text articles are posted on the website of the journal: http://zn.mwse.edu.pl.

According to the regulations of the Ministry of Science and Higher Education scientific publication in the journal is awarded 20 points.

Indexed in: BazEkon, CEJSH, Index Copernicus (ICV 2018: 89.62), POL-Index

© Copyright by Małopolska School of Economics in Tarnów Tarnów 2019

Printed and bounded at the Poligrafia Wydawnictwa BIBLOS

Wydawnictwo Diecezji Tarnowskiej

Biblas

plac Katedralny 6, 33-100 Tarnów

tel.: 14-621-27-77 fax: 14-622-40-40 e-mail: biblos@biblos.pl http://www.biblos.pl

Table of Contents

Foreword	9
ECONOMICS AND FINANCES	
TERESA MARTYNIUK, KATERYNA ROMANCHUK: Corporate social responsibility reporting—Polish and Ukrainian experience	13
WOJCIECH WYRZYKOWSKI, PIOTR KASPRZAK: Sealing tax collection in Poland and the EU in the years 2008–2018	31
Wasilij Rudnicki, Oksana Sarakhman, Ruslana Shurpenkova: Strategic audit as a means of implementation of the state financial control in Ukraine	47
Robert Sterniński: Economic migrations to Poland in 2008–2018	59
ADAM METELSKI: Factors influencing the financial expectations of students of economics	73
MANAGEMENT AND QUALITY	
KATARZYNA BARTUSIK, JOLANTA WALAS-TRĘBACZ: Project value determinants in organizations	87
BARRY A. FRIEDMAN: Hospitality, tourism, and events industry competency model: Human resource management implications	101
Janusz Ząbek: The role of the organization's leadership in risk management according to norm ISO 31000:2018	117
MARCIN BUTLEWSKI, WIKTORIA CZERNECKA, AGATA SZCZEPANIAK, MARTA POJASEK, MARCIN BARAN: Practical implications on ergonomic assessments resulting from EN16710-2—ergonomics methods. A methodology for work analysis	107
to support design	127

Spis treści

Wprowadzenie	9
EKONOMIA I FINANSE	
TERESA MARTYNIUK, KATERYNA ROMANCHUK: Raportowanie społecznej	
odpowiedzialności biznesu. Doświadczenia Polski i Ukrainy	13
WOJCIECH WYRZYKOWSKI, PIOTR KASPRZAK: Uszczelnienie poboru podatków w Polsce i UE w latach 2008–2018	31
Wasilij Rudnicki, Oksana Sarakhman, Ruslana Shurpenkova:	
Audyt strategiczny jako narzędzie kontroli wydatkowania środków	
publicznych na Ukrainie	47
Robert Sterniński: Migracje ekonomiczne do Polski w latach 2008–2018	59
ADAM METELSKI: Czynniki kształtujące oczekiwania finansowe studentów	
kierunków ekonomicznych	73
ZARZĄDZANIE I JAKOŚĆ	
KATARZYNA BARTUSIK, JOLANTA WALAS-TRĘBACZ: Determinanty tworzenia	
wartości projektu w organizacjach	87
BARRY A. FRIEDMAN: Model kompetencyjny w sektorze usług	
turystycznych – implikacje dla zarządzania zasobami ludzkimi	101
Janusz Ząbek: Rola kierownictwa organizacji w zarządzaniu ryzykiem	
zgodnie z normą ISO 31000:2018	117
MARCIN BUTLEWSKI, WIKTORIA CZERNECKA, AGATA SZCZEPANIAK,	
Marta Ројаѕек, Marcin Baran: Praktyczne implikacje	
dla analiz ergonomicznych w zarządzaniu projektami wynikające	
z normy EN 16710-2 Metody ergonomiczne. Metodyka analizy	
pracy wspierająca projektowanie	127
Małgorzata Hankiewicz, Krzysztof Hankiewicz: E-learning w działalności	
polskich bibliotek publicznych	143

Foreword

The Malopolska School of Ecomomics in Tarnów Research Papers Collection has been published for 20 years. During this period, over 600 scientific articles and didactic publications have been released. These works are a source of knowledge, they present directives, indicate solutions to problems of enterprises and institutions, and contain proposals to increase the learning outcomes of students at various levels of study. The topics of the works focus mainly on the discipline of management and quality science as well as economics—paying particular attention to finance and accounting—but also tourism and recreation, ergonomics and labour protection, the use of IT in practice and scientific research. It is also worth emphasizing the significant and ever-growing share of the papers published in the bulletin of scientific articles prepared by foreign authors.

This issue is also made up of the work of academic and teaching staff of universities and research centres in the country and abroad. So we have research by employees of Sopot University of Applied Sciences, Gdańsk University of Technology, Cracow University of Economics, Poznań University of Economics, Poznań University in Poznań, the Małopolska School of Economics in Tarnów, the Banking University in Lviv, the State University of New York at Oswego. In the content of the publication, several themes and topics of research can be distinguished, namely: measurement and reporting of corporate social responsibility, tax collection in Poland and the European Union countries, economic migrations to Poland; research on the impact of legal regulations and auditing on the effectiveness of public spending, analysis of factors influencing students' financial expectations, research on the impact of e-learning on the functioning of public libraries, a theoretical approach to the competency model of tourism, hotel and event industry employees, project value determinants in organizations, and the use of the method of ergonomic analysis in project management, resulting from the EN 16710-2 standard.

The articles are the result of scientific work carried out as part of pure and applied research, they contain a lot of interesting cognitive and application-oriented information. For this reason, *The Malopolska School of Ecomomics in Tarnów Research Papers Collection* can be an interesting and useful publication for both theoreticians and students, as well as employees of enterprises.

I would like to thank everyone who co-produced this issue of the journal, especially the Editors who took the trouble to give opinions on submitted articles, the Reviewers for their substantive and valuable comments, as well as the entire Editorial Team and all of the contributors.

Leszek Kozioł Editor-in-Chief



Corporate social responsibility reporting—Polish and Ukrainian experience

Teresa Martyniuk¹ Kateryna Romanchuk²

Sopot University of Applied Sciences, Poland Faculty of Economic and Social Research

ORCID: 1 0000-0001-8556-200X 2 0000-0002-4928-867X Abstract: An increasing interest in corporate social responsibility (CSR) can be observed on the part of companies in Poland. The legislative changes contained in Directive 2014/95/EU of the European Parliament and of the Council, as well as in the Polish Accounting Act of 15 December 2016, regarding non-financial reporting and with respect to diversity, have increased the awareness and purposefulness of social responsibility among companies. The purpose of the article is to demonstrate the method of presenting financial and non-financial corporate social responsibility data in annual reports of Polish and Ukrainian companies. The research carried out shows that financial statements are the primary source of information on CSR activities in Polish companies. Integrated reports have a small share in the creation of CSR information. A trend exists, however, indicating departure from CSR reporting in dedicated reports, in favour of integrated reports. In contrast, most Ukrainian companies present information on CSR activities in dedicated reports. After the amendment to the Ukrainian Act on Accounting in 2018, increasingly more enterprises have begun to present CSR information in financial statements, in the report-on-operations part.

Key words: corporate social responsibility, legal regulations for CSR reporting, integrated reporting

1. Introduction

The main source of information on a company's results and achievements should be the company's annual financial report, covering primarily its financial statement and management report, while the information obtained through it should build trust between the organization and its stakeholders. An environmentally-oriented enterprise should not be limited to a mere presentation of facts and figures in its financial statement but should elaborate on this data and explain it in a broad sense, inter alia, in terms of relations with natural environment, social environment, and employees. A financial statement should not only serve the assurance function, consisting

Correspondence to: Teresa Martyniuk Sopocka Szkoła Wyższa ul. Rzemieślnicza 5 81-855 Sopot, Poland Tel.: +48 58 555 83 69 E-mail: tmartyniuk@ssw.sopot.pl in the registration and presentation of economic information to the owners by the management board, but also the information function—mainly addressed to external recipients of information. It should serve both the settlement of enterprise's accounts with the environment as well as the making of economic decisions (Martyniuk, 2016). Various addressees evaluate the same state of things and the same position in an annual report differently. Financial statements generally correspond to the facts, but the addressees should be aware that the information presented is also aimed at agitation, while the manner in which it is prepared may and, as intended by the preparer, is meant to influence the assessments and the decisions made. Economic development causes the information regarding operations and results, presented in financial statements, to be expanded to include additional areas of interest, e.g. the natural environment, the social and labour policies, the respect for human rights, and the prevention of corruption, as to avoid information gaps. This is probably connected with the growing economic risk, which means that recipients of reporting information need retrospective and prospective information on the company, both the financial and the non-financial data.

The financial statements currently prepared, however, do not include all the necessary elements, as they mainly illustrate the financial effects of past events, often not incorporating non-financial information (Świderska, 2010). Financial statements focus on the companies' financial results, often not informing about important elements that contributed to the achievement of these results, inter alia, the scope of the financial outlays incurred and the benefits resulting from implementation of the idea of corporate social responsibility (CSR). The insufficient scope of the information contained in financial statements is also indicated by the conceptual assumptions of the IFRS, which indicate that they do not provide all the information that users may need to make economic decisions, because they reflect the effects of past events and do not always provide non-financial information (MSSF, 2011, p. 30).

Stakeholders of an organization expect comprehensive information on its activities and impact on the development of the environment. For this reason, new forms of presenting both the financial and the non-financial achievements of organizations have been sought. In Poland, the so-called integrated reports have gained popularity.

The purpose of the article is to demonstrate the method of presenting financial and non-financial CSR data in the annual reports submitted by the Polish companies listed on the main market of the Warsaw Stock Exchange Main Market, as part of the WIG30 index, for the "Social Reports in 2014–2018" competition as well as to indicate the CSR reporting experience of Ukrainian enterprises.

To write the article, descriptive and comparative methods were used for analysis of bibliographic materials and legal acts. Additionally, analysis of financial statements of selected companies listed on the Warsaw Stock Exchange, included in the Respect Index, was carried out. To present a multi-faceted approach to the issues under study, companies differing in their scope of activity were selected for the analysis. The basis for assessment of Ukrainian companies was the Transparency and CSR Index of 100 largest companies.

2. The legal regulations for CRS reporting in Poland

In recent years, many changes have been made to the structure of financial statements in Poland, and thus the scope of the information disclosed has been expanded. This is related to changes in the environment of enterprises, the scientific and technological progress, the organizational culture as well as the increased demand for information (Nesterowicz, 2014; Bek-Gaik and Rymkiewicz, 2014). As Andrzej Niemiec emphasizes, recipients of reporting information expect not only financial information, but also information on the vision and the development strategy of a given company.

According to the Advisory Committee on Improvements to Financial Reporting in Washington, the reporting of non-financial measures is valuable to investors, because such data contains information about various significant aspects of company operations, which cannot be clearly reflected in financial statements. The Committee defines such non-financial measures as the Key Performance Indicators (KPIs). In turn, the British Companies Act 2006, § 196, describes the key performance measures as factors that can be used to effectively measure the development, the performance or the (competitive) position of an enterprise (Niemiec, 2017, p. 16).

Alternately, Janusz Samelak cites those areas of company's operation that can be reported as non-financial factors, i.e. economic risk, the impact of activities on natural environment, and the intellectual capital (Samelak, 2013). According to Monika Marcinkowska, enterprises should disclose various characteristics of their business, including, in particular, the description of company's main products, suppliers, its opportunities for and threats to development, as non-financial information (Marcinkowska, 2004).

The non-financial information that companies should disclose ought to pertain to the formal structure of a given capital group, the relationships between individual entities of the group, the course of the decision-making processes, the entity's assumed strategy (Krasodomska, 2014). Information about employees is also important, mainly concerning: the number of employees, the employment rotation, the age structure, the functions performed, gender, accidents at work, the cost of training. Information on the research and development work planned, the shareholding structure and the rating assigned to the company is also important for stakeholders. Wanda Skoczylas, in turn, states that long-term functioning of an organization is determined by social activities, including fair distribution of the value generated and ecological activities. These elements form the strategic basis for competitive advantage and are crucial for assurance of a long-term existence of every organization (Skoczylas, 2016, p. 17).

This short overview of the literature on financial reporting and of the changes in the economic environment which Polish enterprises currently operate in shows that the stakeholders' needs, in terms of the information prepared by the financial and accounting services of enterprises, have been changing, which is reflected in the Act of December 15, 2016 amending the Accounting Act (Journal of Laws 2017, item 61). This amendment introduced an obligation for large enterprises to disclose non-financial information. The main purpose of the amendments to the Accounting Act entailed implementation of Directive 2014/95/EU amending Di-

rective 2013/34/EU, with regard to disclosure of non-financial information and information on diversity, on the part of some large companies and capital groups (EU Journal of Laws of 2014, L 330).

This directive obliges inclusion of the following information financial reporting:

- the minimum of non-financial information related to the so-called corporate social responsibility (CSR);
- information on the diversity policy, in terms of the composition of entity's administrative, management and supervisory bodies, in relation to such aspects as e.g. age, sex, education and professional experience, as well as information on the objectives of the diversity policy, the manner of its implementation and the effects in a given reporting period. The new European regulations impose CSR reporting only on large entities. This obligation applies to public interest entities and their capital groups, in which:
 - the average annual full-time employment is over 500 persons,
 - the balance-sheet total exceeds EUR 20 million,
 - the net revenues are higher than EUR 40 million.

The requirements for disclosure of the diversity policy, in turn, apply to companies with the average annual employment of over 250 persons and the balance-sheet total of more than EUR 20 million, or the net revenues of more than EUR 40 million.

Pursuant to the Directive, the entities covered by it, when performing their reporting obligations, may rely on national framework principles, the EU framework principles, e.g. the Eco-Management and Audit Scheme (EMAS), or international framework principles, such as: the UN Global Compact initiative, the UN Guiding Principles on Business and Human Rights implementing the UN "protection, respect and repair" framework, the OECD Guidelines for Multinational Enterprises, the ISO 26000 standard issued by the International Organization for Standardization, the Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy published by the International Labour Office, the Global Reporting Initiative (GRI) or other recognized international frameworks (Niemiec, 2017). In Poland, the manner in which entities should prepare reports on their activities is currently regulated by three legal acts:

- The Accounting Act of 29 September 1994 (i.e. Journal of Laws 2019, item 351);
- The Ordinance of the Minister of Finance of 19 February 2009 on current and periodic information published by issuers of securities and on conditions for recognizing the information required by the law of a non-member state as equivalent information (i.e. Journal of Laws 2018, item 757);
- The National Accounting Standard no. 9 "Activity Reports" (Official Journal of the Ministry of Finance of 9 January 2018, item 4).

The Accounting Act, Article 49, paragraph 1 stipulates that the heads of limited companies, limited joint-stock partnerships, mutual insurance companies, cooperatives and a state-owned enterprises, as well as the heads of those general partnerships and limited partnerships all unlimited-liability partners of which are capital companies, limited companies, limited joint-stock companies or companies from other countries, with a legal form similar to these companies, prepare reports on the entities' activities along with annual financial statements.

The Accounting Act specifies how companies should prepare the reports on their activities. Article 49, item 2 indicates that a report on activity should include relevant information on the property and financial standing, including assessment of the effects achieved, description of the risk factors and potential threats. The Act lacks regulations that would directly indicate where in the annual report non-financial information regarding CSR is to be included.

Pursuant to the Act, a report on the company's operations should include significant information about the property and financial standing, including assessment of the effects achieved as well as indication of the risk factors and description of threats. Detailed scope of the information contained in the activity report is presented in Table 1.

Type of report	The scope of information disclosure
Report on business activity	 the anticipated development of the entity major research and development achievements the current and the projected financial condition acquisition of own shares (stocks), particularly the purpose of the purchase, with indication of what part of the share capital they represent, as well as the purchase price and the selling price of these shares (stocks) in the event of a sale the branches (plants) owned by the entity the financial instruments, with regard to: the risk, i.e. changes in prices, credit risk, significant disruptions to cash flows and loss of financial liquidity, which the entity is exposed to the objectives and the methods of financial risk management adopted by the entity, including the methods of securing significant types of planned transactions for which hedge accounting is used financial indicators non-financial indicators information on environmental issues employment information

Table 1. The scope of the information contained in the report on an entity's operations

S o u r c e: Authors' own elaboration based on the Accounting Act, Article 49.

The purpose of the National Accounting Standard No. 9 is to aid economic entities in the preparation of reports on their activities in accordance with the provisions of the Accounting Act, as to meet the users' expectations and promote the good practices in this respect. The standard specifies:

- the purpose, the nature and the quality characteristics of the activity report,
- the rules for preparation and presentation of activity reports,
- the content of activity reports,
- the statement on the application of corporate governance,
- the statement on non-financial information.

The International Financial Reporting Standards (IFRS) do not regulate in detail the content of the management's report on entity's business operations. The IAS 1 recommends that financial statements, in addition to the mandatory financial data and cash flows, include the management board's assessment of the company's business activity for the past year and its financial position as of the balance-sheet date, primarily with respect to those areas that do

not directly result from the financial data or that may be difficult to comprehend for the readers of financial statements. The IAS 1 emphasizes that many entities, in addition to financial statements, prepare reports and statements, such as, for example, reports on a given entity's impact on the environment and reports on the added value generated. These reports and statements, presented outside the financial statements, are excluded from the IFRS regulations. It follows that the IAS 1, like the Accounting Act, does not clearly indicate the purpose of a report on business operations. The large freedom with regard to the information presented in a report on the operations of an enterprise contributes to the limitation of the usefulness of financial statements and to obstruction of faithful presentation of enterprise image in these statements. This has significant impact on the presentation of CSR information in financial statements. A well-prepared report should be credible and reliable as well as indicate the competitive advantage of the enterprise, in social and economic terms (Pierścionek and Jurek-Stępień, 2006).

In addition to the applicable Polish legislation, there are many initiatives that support disclosure of CSR information, as shown in Table 2.

Type of initiative	Form of support
Evaluation of Good CSR Practices	The project analyzes and assesses social responsibility, indicating the direction in which companies should not move forward and what mistakes they should not make.
The "Good Contract" Certificate	It provides consumers with confidence that the company they use applies honest practices, with regard to their clients, not infringing their rights.
A guide for entrepreneurs	Published by the Ministry of Economy since 2013.
The Respect Index	Introduced to the Warsaw Stock Exchange in 2009 as the first index of socially responsible companies in Central and Eastern Europe. It is used by companies to improve their image and to contact stakeholders.
The Social Reports competition	The competition is organized by the Responsible Business Forum, Deloitte Poland and by SGS Polska, formerly CSR Consulting. The initiative is aimed at promotion and dissemination of the idea of responsible business, sustainable development, environmental protection and social involvement.

Table 2. Polish initiatives supporting the disclosure of CSR information

Source: Authors' own elaboration based on Sroka, Grzymisławski and Kustra, 2013; Wiśniewski, 2012.

In Poland, CSR reports are mainly prepared by the companies listed on the Warsaw Stock Exchange (WSE), included in the Respect Index. These companies may publish separate CSR reports, provided that these reports contain the minimum non-financial information specified in the Accounting Act. Enterprises that are interested in separate CSR reporting may disclose all the information required in the report on operations, as a separate part thereof: *Statement on non-financial information*.

It is estimated that the number of companies that currently publish social reports world-wide is about 10 000, while among the largest global corporations in the G250 group, about 79% publish such reports (KPMG, 2008).

In Poland, social reporting was initiated by international companies, while the first environmental report of a Polish company was published in 2003 by PKN Orlen. Since then, dynamic development of reporting can be observed, especially in the energy, the finance and the industrial sectors. The reports published are becoming increasingly precise. This is confirmed by the data on the reports submitted to the Social Reports competition organized by the Responsible Business Forum, Deloitte and SGS, as summarized in Table 3.

Table 3. Reports submitted for the Social Reports competition in 2014–2018

Competition edition	2014	2015	2016	2017	2018	Total			
Number of reports submitted	31	37	31	44	49	192			
including e.g.									
Construction and real estate	1	1	3	5	4	14			
Energetics	6	9	5	5	7	32			
Pharmaceutics	1	1	1	1	1	5			
Finance	5	5	6	8	9	33			
Trade	_	3	_	4	2	9			
Chemical industry	1	3	_	1	3	8			
Heavy industry	2	2	2	3	3	12			
Wood, paper and furniture industry	_	_	_	_	1	1			
Food industry	5	4	1	5	2	17			
Tobacco industry	_	_	_	_	_	_			
Raw materials and fuels	3	2	2	2	2	11			
Telecommunication	1	1	_	1	1	4			
Transport and logistics	1	2	1	1	2	7			
Services	3	1	2	2	2	10			

S o u r c e: Authors' own elaboration based on Forum Odpowiedzialnego Biznesu, 2019.

3. The legal regulations for CRS reporting in Ukraine

Ukraine, by moving towards integration with the European Union, has been implementing measures aimed at harmonization of the Ukrainian national law with European Union legislation. This also applies to the harmonization of Ukrainian legislation, in terms of accounting and financial reporting. Chapter 13, Article 387 of the Association Agreement (between the European Union and its Member States, on the one hand, and Ukraine, on the other, OJ EU 2014, L161/3) provides for "introduction of relevant international standards at national level and gradual approximation to EU law in the field of accounting and auditing, as listed in Annex XXXV to this Agreement" (Article 387, item 1b). The government's efforts to harmonize the Ukrainian law, in terms of accounting, with the EU legislation and with international standards, however, has been raising sharp polemics among accountants and academics.

Particular attention, in this context, should be paid to the changes occurring in the reporting of CSR. In Ukraine, the concept of socially responsible business is still at an early stage and is being implemented in large enterprises only. The practice of CSR reporting by Ukrainian enterprises does not yet have a history. The Amendment to the Law on Accounting and Financial Reporting in Ukraine of October 5, 2017 (hereinafter: LAFR; see: Verkhovna Rada Ukrayiny, 2017) introduced a new reporting element: an *Activity Report*—a document containing both financial and non-financial information, presenting the condition and the development prospects of an enterprise and disclosing the main risks and uncertainties associated with its activities (Article 1 LAFR). The procedure and the deadlines for preparing activity reports are the same as for financial statements (Verkhovna Rada Ukrayiny, 2018).

Micro and small entities have been exempted from the obligation to prepare activity reports, while medium-sized enterprises may reduce the scope of the information contained therein, without disclosure of non-financial data. At the same time, the Cabinet of Ministers of Ukraine was obliged to prepare final and transitional provisions that would define the scope and the form of the report on activity. On July 31, 2018 (despite the fact that the form of the activity report was to be established by July 1, 2018) the Ukrainian Ministry of Finance, for the first time, presented an activity report template for public discussion. The structure of the activity report presented for discussion, along with the content of its elements, has been causing a lot of controversy, because it refers to the out-of-date EU Directive no. 2013/34/EU. It is worth noting that the provisions of the above-mentioned Directive have been significantly supplemented by the Directive 2014/95/EU, which, unfortunately, is not referred to in the draft implementing the provisions to the Law.

The structure of the activity report submitted for discussion by the Ukrainian Ministry of Finance is presented in Table 4.

Table 4. The draft activity report proposed by the Ministry of Finance of Ukraine

	The Ministry of Finance of Ukraine proposals
Activity report element	Content
Organizational structure and description of the com- pany's activity	Brief description of the company's organizational structure: - strategy and goals - the scope of activity, by geographical location and industry - information on basic finished goods produced by the entity or the services it provides - information on the entity's share in various market segments, in which the entity conducts business
Activity results	Analysis of the enterprise's business performance, including explanation of the development dynamics in the reporting period. Disclosure of information may take into account: - the price increase/ decrease - the increase/ decrease in the volume of the goods and services provided - introduction of new products and/ or services - refrainment from production of separate products and/ or services - any other significant factor causing changes in all trade in goods and in profit
Liquidity and obligations	Information on the main sources of liquidity: - the amounts of the inflows expected from each source (including internal and external inflows) - the expected trends or fluctuations in the company's liquidity, taking into account the existing commitments and various factors affecting the liquidity - analysis of the company's obligations at the end of the reporting period, the types of those obligations and dates of their settlement
Natural environment	Information on environmental impact and the actions taken to reduce such impact. Indicators of ecological impact may appear in this part, concerning: - rational water consumption - waste management - greenhouse gases - energy consumption, etc.
HR policy	Description of the personnel policy, including employment, development and training of personnel. It is mandatory to disclose information about: - the total number of employees, the share of females in managerial positions - employee motivation - protection and safety at work - staff training and education - equal employment opportunities, etc.
Risk	Information on the company's policy regarding operational and financial risk management (market risk, credit risk, liquidity risk). Impact of risk on business operations and the approaches or the instruments used to reduce the impact of such risks ought to be disclosed.
Research and innovation	Information on research and innovation activities and the studies carried out by the entity, the level of the costs of such activities, and their impact on the company's operations.

Financial investments	Information on the entity's shares in securities of other enterprises. Financial investments in associated enterprises. Investments in daughter companies, etc.
Development perspectives	Information on the likely prospects for the company's future development, taking into account the risks and challenges affecting the company's operations, ought to be disclosed.
Corporate management	The information in this part is presented only by the companies the securities of which have been admitted to public trading. The following key indicators are disclosed: - the management bodies, their composition and powers, the corporate management strategy - description of the functioning of shareholders' meetings - the shareholder structure and the share capital - the owners of securities with special control rights and description of those rights - the company's activities associated with its own shares - the main features of internal control systems - the dividend policy - the perspectives for development and improvement of corporate management, etc.

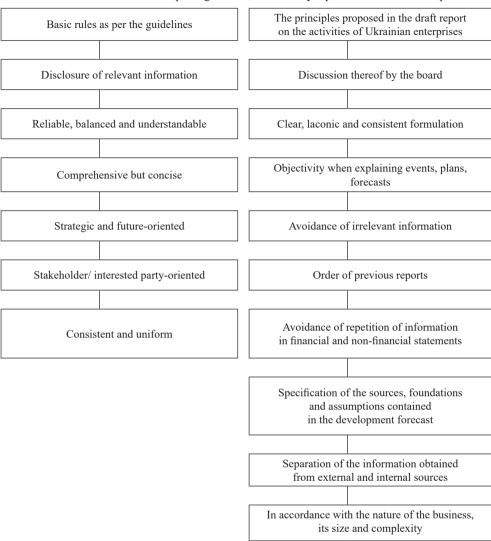
Note: The parts that are in agreement with the parts of the activity report specified by Directive 2014/95/EU are highlighted in gray. It should be noted that the parts of the activity reports provided for in the provisions of this Directive, i.e. observance of human rights, the fight against corruption and bribery and others (including the provisions regarding supply chains) have not been discussed at all in the activity report propounded by the Ukrainian Ministry of Finance.

S our ce: Authors' own elaboration based on the materials from the Round Table meeting (Dixi Group, 2018).

Based on the analysis of the structure and the content of the activity report submitted for discussion, a rather formal approach to the development of methodical recommendations and a formal nature of this undertaking can be noted. This is due to the fact that a large proportion of the indicators proposed for disclosure in the report on activity coincide with those disclosed in the notes/supplementary information part. There are no differences between the information disclosed in the notes and the one included in the report on activity. The liability of enterprises for incorrect preparation of activity reports, for lack of such reports or for failure to recognize the obligation to prepare such reports has not been specified.

In addition to the structure of the activity report, the Cabinet of Ministers of Ukraine, based on global experience in this field, propounded the principles and rules for preparation of activity reports. Comparison of the principles set out in the guidelines for reporting of non-financial information and the principles proposed in the draft activity report for Ukrainian enterprises is presented in Table 5.

Table 5. Reporting principles in the field of non-financial information, as per the guidelines on non-financial information reporting and the draft activity report for Ukrainian enterprises



Source: Authors' own elaboration.

4. CSR in an integrated enterprise report—the Polish experience

Due to the existence of many different approaches to presenting non-financial information, a new concept in non-financial reporting, i.e. integrated reporting, has developed in Poland. The concept of integrated reporting was created to organize and reconcile the notions of reporting financial and non-financial data (Walińska and Gad, 2015). Integrated reporting, apart from expanding the scope of the information disclosed in annual reports, entails, above all, a modern approach to business, which helps prevent formation of information gaps in organizations. An integrated report, in its essence, allows provision of the information indispensable for its recipients, regarding the methods used in entity management, the company's mission, vision and strategy, the results associated with its past activities, as well as its future plans—all in one document. It also takes into account the social and economic environment which the entity operates in. It focuses on the building of entity's value and social responsibility, both in the short and long term. Its biggest advantage is the transmission, in a systematic and verified manner, of the information relevant to the recipients, which previously used to be published in separate documents, i.e. in financial reports, activity reports and sustainable development reports.

The nowadays widespread idea of integrated reporting has been gaining an increasing number of supporters, because this form of reporting allows presentation of the fact that an organization has a sustainable development strategy based on real commitment to social responsibility and that it takes into account the needs of all stakeholders (see: Badura-Mojza, 2017).

In order to examine the manner in which Polish companies report CSR issues, financial statements for the years 2014–2017, issued by the companies listed on the Warsaw Stock Exchange, included in the Respect Index (WIG30)¹, were reviewed.

While analyzing the composition of the Respect Index, from its 1st to 10th edition, it should be noted that:

- 41 companies took part in all ten editions;
- 9 companies have been on the index list continuously since its very beginning (Bank Handlowy w Warszawie S.A., Elektrobudowa S.A., Grupa LOTOS S.A., ING Bank Śląski S.A., KGHM Polska Miedź S.A., Polski Koncern Naftowy ORLEN S.A., PGNiG S.A., Pelion S.A., Zakłady Azotowe w Tarnowie-Mościcach S.A.).

These companies are the market leaders, which, by consistently improving their activities in the field of responsible business, can be an inspiration to others.

¹ The Respect Index is the first index of responsible companies in Central and Eastern Europe. The index includes companies operating in accordance with the best management standards in the field of corporate governance, information governance and investor relations, taking into account ecological, social and employee factors (Krzysztofek, 2013, pp. 481–494). On December 14, 2016 the Warsaw Stock Exchange announced its tenth Respect Index. The Respect Index project currently has its 10th edition—so far 41 different companies have participated in it, each of which has been successively, from year to year, showing a high level of social responsibility. When analyzing the composition of the Respect Index from its 1st to 10th edition, it should be noted that: 41 companies took part in all ten editions; since the very beginning of the index's existence, 9 companies have been continuously included in it.

			2014		2015		2016			2017			
No.	Sector	Fin. rep.	CSR rep.	Intgr. rep.	Fin. rep.	CSR rep.	Intgr. rep.	Fin. rep.	CSR rep.	Intgr. rep.	Fin. rep.	CSR rep.	Intgr. rep.
1.	Production	4	2	5	5	1	5	5	2	5	4	1	6
2.	Services	7	4	0	8	2	1	11	5	1	9	6	3
3.	Finance	8	3	0	8	3	0	4	6	1	2	8	1
Total		19	9	5	21	6	6	20	13	7	15	15	10

Table 6. CSR reporting by Polish companies in 2014–2017

Source: Authors' own elaboration based on the reports issued by WIG30 companies.

The data in Table 6 shows that financial statements are the primary source of information on the CSR activities undertaken in Polish companies. Integrated reporting still has a small share in the creation of CSR information. There has been a trend, however, indicating a departure from reporting CSR activity in dedicated reports, in favour of integrated reports. This is especially noticeable in the reports from 2017, when new regulations came into force, as a consequence of the amendment to the Accounting Act of December 15, 2016. Important changes are noticeable in the "Services" enterprises, in which disclosure of CSR information has changed—by moving from financial statements to dedicated CSR reports or integrated reports. In turn, companies from the financial industry began to draw up an increasing number of reports dedicated to CSR.

A list of the companies presenting CSR information as part of integrated reports is presented in Table 7. One-third of the companies included in the Respect Index prepare integrated reports. Lotos S.A. has been preparing integrated reports since the beginning of the Respect Index, i.e. since 2009—7 reports. The next position is Zakłady Azotowe w Tarnowie-Mościcach S.A., which has prepared 4 reports since 2012. Since 2015, integrated reports have been prepared by three companies: Budimex S.A., Tauron Polska Energia S.A., Polska Grupa Energetyczna S.A.—the last of the companies prepared its report in an online form only. It is important that the number of companies preparing such reports has been increasing from year to year.

No.	Company	Report name	Form; number of pages	Integrated report since the year	Number of integrated reports
1.	Budimex S.A.	Zintegrowany Raport Roczny Budimex 2016 (za 2015 rok)	PDF; 122 pages	2015	1
2.	KGHM Polska Miedź S.A.	Raport Zintegrowany KGHM 2015	PDF; 88 pages	2013	3
3.	LOTOS S.A.	Zintegrowany Raport Roczny LOTOS 2015	PDF; 272 pages	2009	7

Table 7. The Respect Index companies preparing integrated reports

4.	Lubelski Węgiel Bogdanka S.A.	Raport Zintegrowany GK Lubelski Węgiel Bogdanka 2015	PDF; 141 pages	2014	2
5.	Pelion S.A.	Zintegrowany Raport Roczny Pelion 2015	PDF+ online; 30 pages	2013	3
6.	Polska Grupa Energetyczna S.A.	Raport Zintegrowany PGE 2015	on-line	2015	1
7.	PKN ORLEN S.A.	Raport Zintegrowany Grupy ORLEN 2015	PDF + online; 351 pages	2014	2
8.	Tauron Polska Energia S.A.	Raport Zintegrowany Tauron 2015	PDF + online; 164 pages	2015	1
9.	Zakłady Azotowe w Tarnowie- -Mościcach S.A.	Raport Zintegrowany Grupy Azoty za rok 2015	PDF; 142 pages	2012	4

Source: Krzysztofek, 2018, p. 145.

The research carried out shows that, in terms of CSR reporting, Polish companies have free choice. The lack of uniform CSR reporting rules is probably a significant problem for the stakeholders who use this information. The information contained in business activity reports should be useful for decision making, timely, presented in a comprehensible and transparent form, and forward-looking. It should allow creations of a view on the value of a given enterprise and the factors creating it, both the financial and the non-financial ones.

5. CSR reporting—Ukrainian experience

Reporting on corporate social responsibility in Ukraine is at its early stage of development. The Transparency and CSR Index of the largest companies in Ukraine is the only ranking that characterizes the state of CSR reporting (Tsentr Rozvytok KSV, 2016). Since 2011, monitoring of the CSR activities in a 100 of the largest Ukrainian companies has been conducted annually, as part of this ranking. This helps to reveal the strengths and weaknesses of CSR implementation in Ukraine and indicates the areas which attention should be paid to. The CSR information most commonly disclosed on the websites of Ukrainian enterprises is related to employment, human resources development, health and safety, volunteering, support for women, prevention of harassment, development of entrepreneurship, education, and environmental protection.

It should be emphasized, however, that with regard to the companies presented in the Transparency Ranking, the information disclosed is general, concerning only the practices that the companies plan to implement. There is no specific information on the results of CSR implementations, namely:

- 68 out of 89 enterprises provided information on CSR practices, but only 12 of them disclosed information on the results of this implementation;
- out of the 44 enterprises that reported their environmental policies, only 13 disclosed information on the results of policy implementation;

- 46 enterprises presented information on development policies and social support, however only 11 companies disclosed the results of implementation (Tsentr Rozvytok KSV, 2016);
- in 2016, only 11 companies, out of 100, posted CSR reports on their websites, whereby a downward trend can be observed in the publication of CSR reports.

Vast majority of the enterprises prepared reports in accordance with the GRI 4.0, some of which, however, clearly limited the amount of the information disclosed to a few indicators only.

The share of the Ukrainian enterprises that presented information on CSR programmes on their websites in 2016 was only 11% out of all companies. This probably results from a lack of motivation on the part of Ukrainian enterprises to implement corporate social responsibility as well as from a lack of knowledge about the benefits and effects of the CSR activities undertaken.

6. Conclusion

Under the conditions of market economy, confirmation of the reliability of the information contained in financial statements becomes a very important element of the market's functioning. Assessment of annual financial statements, of their correctness, reliability and clarity should become the rule for social responsibility, not an exclusive obligation for a limited group of enterprises that meet two out of the three conditions listed in Article 64 of the Accounting Act. Objectivity and a faithful representation of reality are considered the necessary attributes of a reliable, socially responsible accounting system that discloses information about the company's property, financial and income situation via annual reports. The research carried out shows that Polish companies primarily include CSR information in financial statements. Integrated reports are prepared by few companies only, although increased interest, for example, of the industrial-sector companies, can be observed. In Poland, integrated reports are mainly prepared by large enterprises, which increasingly often begin to notice that integrated reporting offers an opportunity to strengthen their market position.

Integrated reporting in Poland is at the initial stage of its development, although the discussion on this topic has been broadening. A widespread view prevails, that an integrated report should provide information which is of key importance from the perspective of the business value creation process, both within the entity and in terms of its environment. To create an integrated report, a financial report, with the management board's commentary, as well as other reports related to social responsibility should be used (Walińska, 2015, p. 161; Bek-Gaik and Rymkiewicz, 2016). All the currently-presented views are characterized by the fact that there is no certainty as to whether they will be valid in a few or several years. It cannot be stated today whether entities will be more willing to prepare integrated reports or, perhaps, financial statements and the accompanying business reports that will include Management Commentaries and other environmental reports. Currently, the focus can be directed on comparison of the solutions, with respect to which better fulfills the role of bridging the information gap that arises between an enterprise and its stakeholders (Walińska, 2015, p. 161).

In contrast, the Ukrainian enterprises examined mainly present the information regarding CSR activities on their websites. Only a small group of large and medium-sized enterprises disclose information on CSR in the newly binding activity reports. The changes introduced to the Ukrainian contraction of the changes introduced to the Ukrainian contraction.

nian balance-sheet law, however, have caused much debate, because they do not take into account the regulations contained in Directive 2014/95/EU. Nevertheless, interest in CSR on the part of Ukrainian enterprises is low. This probably results from insufficient knowledge about the benefits of CSR activities, primarily among company management and the persons responsible for disclosure of such information. Presentation of the good practices in the application of CSR would probably increase the management efficiency of Ukrainian enterprises.

References

- Badura-Mojza, A. (2017). Zmiany w raportowaniu CSR w Polsce studium przypadku. Zarządzanie Finansami i Rachunkowość, 5 (3), 5–17.
- Bek-Gaik, B., Rymkiewicz, B. (2014). Społeczna odpowiedzialność przedsiębiorstw a finansowe miary dokonań. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia, 67, 137–151.
- Bek-Gaik, B., Rymkiewicz, B. (2016). Tendencje rozwoju sprawozdawczości zintegrowanej w praktyce polskich spółek giełdowych. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia, 79 (1), 767–783.
- Dixi Group. (2018). Матеріали круглого столу: нові вимоги до формування фінансової та нефінансової звітності компаній [online, accessed: 2019-01-09]. Київ: Аналітичний центр DiXi Group. Retrieved from: https://drive.google.com/file/d/12WVP1plHH2ljFYch4pO9NlziTdGLWW4M/view.
- Forum Odpowiedzialnego Biznesu. (2019). Konkurs Raporty Społeczne. Biblioteka Raportów [online, accessed: 2019-01-08]. Warszawa: Forum Odpowiedzialnego Biznesu. Retrieved from: http://raportyspołeczne.pl/.
- Komunikat Ministra Rozwoju i Finansów z dnia 4 stycznia 2018 w sprawie ogłoszenia uchwały Komitetu Standardów Rachunkowości w sprawie przyjęcia aktualizacji Krajowego Standardu Rachunkowości Nr 9 Sprawozdanie z działalności. Dz.Urz. MRiF z dnia 9 stycznia 2018, poz. 4.
- KPMG (2008). KPMG International Survey of Corporate Responsibility Reporting 2008. Amstelveen: KMPG International.
- Krasodomska, J. (2014). *Informacje niefinansowe w sprawozdawczości spólek*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie. ISBN 9788372526717.
- Krzysztofek, A. (2013). Respect Index inicjatywa Giełdy Papierów Wartościowych w procesie wdrażania zasad społecznej odpowiedzialności na polskim rynku kapitałowym. Zeszyty Naukowe Wyższej Szkoły Bankowej w Poznaniu, 49 (4), 481–494.
- Krzysztofek, A. (2018). Zintegrowane raportowanie na przykładzie spółek Respect Index. Zarządzanie i Finanse, 16 (2), 133–154.
- Marcinkowska, M. (2004). Raport roczny z działań i wyników przedsiębiorstw: nowe tendencje w sprawozdawczości finansowej. Kraków: Oficyna Ekonomiczna. ISBN 8389355418.
- Martyniuk, T. (2016). Funkcja informacyjna rachunkowości w outsourcingu usług finansowo-księgowych. *Finanse, Rynki Finansowe, Ubezpieczenia, 80* (2), 151–157. DOI: 10.18276/frfu.2016.2.80/2-16.
- MSSF. (2011). Międzynarodowe Standardy Sprawozdawczości Finansowej (MSSF) obejmujące Międzynarodowe Standardy Sprawozdawczości Finansowej (MSSF) oraz Interpretacje według stanu na dzień 1 stycznia 2011 r. Cz. A. Warszawa: Stowarzyszenie Księgowych w Polsce. ISBN 9788372282842.
- Nesterowicz, R. (2014). Sprawozdawczość finansowa i jej rola w ocenie wyników działalności przedsiębiorstw. *Nierówności Społeczne a Wzrost Gospodarczy*, 39 (3), 320–329.
- Niemiec, A. (2017). Jak dobrać dane niefinansowe, aby prezentowały istotne cechy działalności. *Rachunkowość*, 3, 15–23.
- Pierścionek, Z., Jurek-Stępień, S. (eds.). (2006). Czynniki sukcesu polskich przedsiębiorstw na rynkach Unii Europejskiej. Warszawa: Szkoła Główna Handlowa. ISBN 9788373782617.
- Samelak, J. (2013). Zintegrowane sprawozdanie przedsiębiorstwa społecznie odpowiedzialnego. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego. ISBN 9788374177559.
- Skoczylas, W. (2016). Zarządzanie dokonaniami przedsiębiorstw. In: A. Niemiec (ed.). *System pomiaru dokonań w przedsiębiorstwach* (pp. 15–28). Warszawa: CeDeWu.pl. ISBN 9788375567939.
- Sroka, R., Grzymisławski, A., Kustra, A. (2013). Raportowanie danych pozafinansowych: przewodnik dla przedsiębiorców. Ekspertyza przygotowana dla Ministerstwa Gospodarki przez Crido Business Consulting oraz Akademię Górniczo-Hutniczą. Warszawa: Ministerstwo Gospodarki.

- Świderska, M. (2010). Sprawozdawczość finansowa jako źródło informacji dla oceny efektów działalności gospodarczej. Zeszyty Teoretyczne Rachunkowości, 29 (85), 101–121.
- Tsentr Rozvytok KSV = Центр Розвиток КСВ. (2016). Шостий індекс прозорості і ксв українських компаній [online, accessed: 2019-01-12]. Retrieved from: http://csr-ua.info/csr-ukraine/wp-content/up-loads/2017/05/Transparency-Index-2016 final.doc.
- Układ o stowarzyszeniu między Unią Europejską i jej państwami członkowskimi, z jednej strony, a Ukrainą, z drugiej strony [online, accessed: 2019-01-13]. Dz.Urz. UE z 2014 r., L161/3. Retrieved from: https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:22014A0529(01)&from=PL.
- Verkhovna Rada Ukrayiny = Верховна рада України. (2017). Закон України. Про внесення змін до Закону України «Про бухгалтерський облік та фінансову звітність в Україні» щодо удосконалення деяких положень [online, accessed: 2019-01-08]. Відомості Верховної Ради (ВВР), 2017, по. 44, ст. 397. Retrieved from: http://zakon2.rada.gov.ua/laws/show/2164-19.
- Verkhovna Rada Ukrayiny = Верховна рада України. (2018). Закон України. Про бухгалтерський облік та фінансову звітність в Україні [online, accessed: 2019-01-08]. Відомості Верховної Ради (ВВР), 1999, no. 40, ст. 365. Retrieved from: http://zakon2.rada.gov.ua/laws/show/996-14/print1509545497138212.
- Walińska, E. (2015). Zintegrowany raport początek końca sprawozdania finansowego? Zeszyty Teoretyczne Rachunkowości, 82 (138), 151–165.
- Walińska, E., Gad, J. (2015). Sprawozdanie finansowe jako fundament sprawozdawczości przedsiębiorstwa. In: E. Walińska, B. Bek-Gaik, J. Gad, B. Rymkiewicz. Sprawozdawczość przedsiębiorstwa jako narzędzie komunikacji z otoczeniem. Wymiar finansowy i niefinansowy (pp. 33–62). Łódź: Wydawnictwo Uniwersytetu Łódzkiego. ISBN 9788379696208.
- Wiśniewski, T. K. (2012). Respect Index spółki odpowiedziane społecznie na giełdzie. In: L. Anam, E. Szul-Skjoeldkrona, E. Zamościńska. *Jak zyskać na odpowiedzialności? CSR w strategiach spółek gieldowych: przewodnik dla CEO i executives* (pp. 15–16). Warszawa: CSRinfo. ISBN 9788363187040.

Raportowanie społecznej odpowiedzialności biznesu. Doświadczenia Polski i Ukrainy

Abstrakt: W Polsce zaobserwować można coraz większe zainteresowanie spółek społeczną odpowiedzialnością przedsiębiorstwa. Zmiany prawne w Dyrektywie Parlamentu Europejskiego i Rady 2014/95/UE oraz w polskiej ustawie o rachunkowości z 15 grudnia 2016 roku, dotyczące raportowania informacji niefinansowych oraz w zakresie różnorodności, zwiększyły świadomość i celowość odpowiedzialności społecznej wśród spółek. Celem artykułu jest przedstawienie sposobu prezentacji danych finansowych i niefinansowych z zakresu społecznej odpowiedzialności przedsiębiorstw (ang. corporate social responsibility – CSR) w raporcie rocznym przez spółki polskie i ukraińskie. Z przeprowadzonych badań wynika, że podstawowym

źródłem informacji o działaniach CSR w polskich spółkach jest sprawozdanie finansowe. Niewielki udział w tworzeniu informacji o CSR mają raporty zintegrowane. Zarysowuje się jednak trend wskazujący na odchodzenie od raportowania działań o CSR w raportach dedykowanych na rzecz raportów zintegrowanych. Natomiast w spółkach ukraińskich większość firm informacje o działaniach CSR prezentuje w sprawozdaniach dedykowanych. Po nowelizacji ustawy o rachunkowości na Ukrainie w 2018 roku coraz więcej przedsiębiorstw zaczyna prezentować informacje o CSR w sprawozdaniu finansowym, w części dotyczącej sprawozdania z działalności.

Słowa kluczowe: społeczna odpowiedzialność przedsiębiorstwa, regulacje prawne raportowania CSR, raportowanie zintegrowane

Sealing tax collection in Poland and the EU in the years 2008–2018

Wojciech Wyrzykowski¹ Piotr Kasprzak²

Gdańsk University of Technology, Poland Faculty of Management and Economics

ORCID: 1 0000-0003-3775-0190 ORCID: 2 0000-0002-5570-4000

Abstract: The purpose of this study is to present issues related to sealing tax collection system in Poland and European Union countries as well as OECD members in 2008–2018. The article is divided into four parts, which include: introduction, origin of the problem, implemented solutions and conclusions. It presents the results of the conducted analysis including studies of the literature and empirical data (mainly from OECD, GUS—Polish Central Statistical Office and Eurostat sources, as well as professional industry reports) as well as the structure of the tax systems in Europe. The following result is a presentation of the origin of the problem, i.e. the occurrence of revenue decrease in tax collection after 2008, and actions that were undertaken to reduce the effects of this negative phenomenon. The authors also present a preliminary assessment of the actions conducted by particular countries along with their level of effectiveness in achieving the goals, which was to reduce the level of tax frauds.

Key words: tax system, sealing tax collection, tax gap

1. Introduction

The financial security of the state is based on the predictability and efficiency of its revenues, in which taxes play the most important role (Raczkowski, 2012). In recent years, the growing scale of illegal reduction of tax burdens directly affects the economy as well as behaviour of individual taxpayers. Over the past decade, as a result of the financial crisis of 2008, a number of changes have been made to the tax systems of the EU countries. First of all, special attention was paid to the phenomena of tax crimes and extortion, resulting in the extension of the already existing tax gap, which is destructive to each state's budget. Counteracting this phenomenon, individual countries (usually under the aegis of the EU and OECD) have prepared solutions aimed at sealing the mechanism of tax collection. The most important at the international level include: the introduction of directives on the so-called MDR mechanism and exit tax schemes, increasing the level

Correspondence to:
Piotr Kasprzak
Politechnika Gdańska
Wydział Zarządzania i Ekonomii
Katedra Analizy Ekonomicznej
i Finansów
ul. Gabriela Narutowicza 11/12
80-233 Gdańsk, Poland
Tel.: +48 58 347 11 06
E-mail: pkasprzak@zie.pg.gda.pl

of computerization, and thus exchange of information, attempts to strengthen cooperation on the basis of the tax administration, which in turn is expected to reduce the number of cases as well as those attempted on dealing with transfer pricing mechanism (EU programmes Fiscalis 2020 and Hercules III). For example, in Poland, the reform of the administration was initiated. This resulted in creating the new administrative entity of the National Tax Administration, together with revolutionary fully on-line reporting of the Unified Control File (also known as Standard Audit File for Tax) and the mechanism of the reverse charge and joint and several liability.

The following article is the review of the literature, including professional industry reports and selected statistical data. The purpose of this work is to present issues related to sealing tax collection in Poland and European Union countries as well as OECD member countries in 2008–2018. The analysis consists also of the scale and size of actions taken to seal the tax collection system in individual European Union countries. The authors focused mainly on activities undertaken in Poland. The adopted research hypothesis assumes that the described actions taken by the EU and OECD countries are the result of the financial crisis and depict a response to the growing scale of fraud and extortion in direct and indirect taxes.

2. Origin of the problem

A properly organized tax system, as part of the macroeconomic mechanism, provides security in the stable functioning of each country (Gomułowicz and Małecki, 2002). The financial crisis of 2008 forced many changes in the tax policy of individual European Union countries (Kasprzak, 2018). The first in the twenty-first century global financial crisis also proved numerous weaknesses of individual tax systems, as for the first time on such a large scale EU institutions began the discussion about tax crimes. For example, undue VAT refunds, fictitious issued invoices, so-called straw person transactions, acceptance of decreased revenues or increased tax costs. The above actions are only selected examples that cause tax depletion both in Poland and other European Union countries. This consequently reduces the so-called effectiveness of the tax system, which depends on a number of factors (Malesa, 2015).

The tax systems of the European Union countries play a special and important role in shaping the structure and level of GDP (Figure 1). For several dozen years (especially in the last decade of the twentieth century) the share of taxes in the GDP of the European Union countries increased (Wyrzykowski, 2008). Ultimately, at the beginning of this century, this figure decreased, however, public spending increased, usually much faster than GDP growth, which resulted in budget deficits and a significant increase in overall public debt¹, especially at the end of the first decade of the twenty-first century. The increase in both the level of budget deficit and public debt could be visibly noted after 2008, i.e. following the outbreak of the global financial crisis. The amount of the first indicator has been significantly reduced in recent years (Figure 2), however, the level of overall EU debt, that clearly increased after 2008, remains practically unchanged and exceeds 80% of average GDP for all EU countries (Figures 3 and 4).

¹ The EU countries in the early 1990s began to reduce excessive public finance deficits in individual countries as part of the Maastricht Treaty. It was decided that the budget deficit cannot be higher than 3% of GDP, and public debt measured in relation to GDP should not exceed 60%. For example, in 2015, 17 out of 28 EU countries recorded a public debt-to-GDP ratio of over 60%.

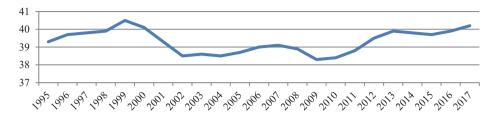


Figure 1. Tax and other compulsory social security contributions in relation to the GDP of all European Union countries (in%)

S o u r c e: Authors' own elaboration based on Eurostat, 2018.

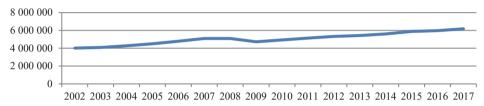


Figure 2. Tax and other compulsory social security contributions in relation to the GDP of all European Union countries (in million Euros)

S o u r c e: Authors' own elaboration based on Eurostat, 2018.

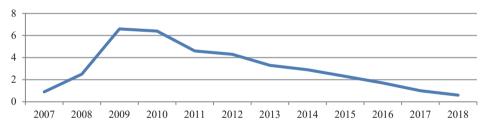


Figure 3. The level of budget deficit in relation to the GDP of all European Union countries (in %)

Source: Authors' own elaboration based on Eurostat, 2018.

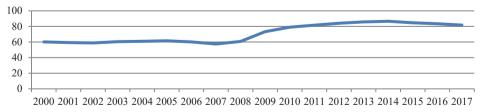


Figure 4. The level of public debt in relation to the GDP of all European Union countries (in%)

S o u r c e: Authors' own elaboration based on Eurostat, 2018.

The tax systems of the European Union countries are very similar in their general concept and structure. In all EU countries, taxes and public levies are collected primarily for the purpose of: financing public expenditure, implementing the state's redistributive policy, conducting consumption-shaping policies, and for implementing counter-cyclical and anti-inflationary policies (Wyrzykowski, 2008). The tax systems of the EU countries are very similar to the solutions applied all over the world, including in other OECD countries. Individual Member States, through their tax systems, not only implement similar assumptions, but also use similar solutions and mechanisms, which, in principle, are subject in the European Union to the so-called processes of harmonization. However, harmonizing taxes within the EU is not easy and is one of the most difficult areas in the implementation of integration processes established at the threshold of forming the Union (Kosikowski, 1998). Indirect taxes are unified to the greatest extent. Under the Treaty of Rome, VAT, excise tax and other indirect taxes that could contribute to preventing the free movement of goods and services between Member States are harmonized.

As mentioned, harmonization is much more difficult than initially assumed. When introducing the harmonization, differences in the structure and level of VAT rates in individual countries were measured, while in the case of excise duty individual groups of goods that were subject to taxation in the EU countries proved to be difficult to be defined and unified (for example, Poland belongs to a small group of countries that collect excise from vehicles). What is more, this process was conducted and continued when new countries joined the Union, which resulted, *inter alia*, in the emergence of transition periods for new member states, various and numerous exceptions to the already existing rules and the need to change the already made arrangements (Wach, 2005).

So far, direct taxes, mainly PIT and CIT have been harmonized to the least extent. When unifying income taxes, special attention to the principles of corporate tax was paid. This was connected with an attempt to create a situation in which the conditions of competition between entrepreneurs in individual countries will be similar (Wyrzykowski, 2008). The result of the actions was, among others, adoption of directives related to the common tax system for mergers, divisions, transfer of assets, sale and purchase of shares and elimination of double taxation.

As mentioned, the imperfection of the tax system affects its level of efficiency. One of the elements, apart from the obvious ones, such as: the cost of handling tax collection, the level of social acceptance of imposed rates or the number of tax-related administrative duties, along with the preparation of declarations, analysis of regulations and payment of the tax due (Wyrzykowski and Kasprzak, 2017), which can be taken into account when defining the effectiveness of the system, is called tax gap. The tax gap phenomenon is not clearly defined, mainly due to the specificity of tax collection in each country. For example, the American equivalent of the Polish Tax Administration, i.e. the Internal Revenue Service, described the tax gap as "the amount of tax liabilities that were not settled on time." According to the European Commission, the tax gap should be understood similarly, i.e. as "the difference between the amount of taxes that should be paid and the amount that actually goes to the state budget." An extensive definition of the concept was presented, for instance by the Ministry of Finance of Slovakia, which defined the tax gap as "the difference between the tax actually paid and the tax that should have been paid if all natural and legal persons declared their activities and transactions in a proper manner in accordance with the actual transaction and law including the intention of

the legislator." The tax gap is calculated after taking into account the costs of tax control by the tax administration (Sarnowski and Selera, 2018). At this point, it should be noted that the Polish Ministry of Finance postulates even broader concept of the tax gap. It presupposes taking into account the notion of policy gap, which, apart from obvious crimes and attempts to reduce or avoid taxation, includes the use of possible reliefs, exemptions or preferences in a given tax. This approach assumes that the gap could be treated not only as a difference between the resulting liability and unpaid tax, but also as a difference between actual tax revenues received and potential inflows, which were not realized due to departures from general, generally applicable rules (e.g. the existence of reduced VAT rates for selected categories of services or goods, the possibility of joint settlement of spouses in the case of PIT, and finally giving preferences to specific social groups or types of enterprises could be included in that). Yet another concept is compliance gap, which is defined as the difference between realized tax revenues and achievable revenues, assuming that taxpayers meet their tax obligations under applicable tax law.

The tax gap is a phenomenon that adversely affects the functioning of the state, it also has a negative impact on the perception of the tax system by entrepreneurs and individuals—some of these people may not accept a situation in which the state is idle towards non-paying taxpayers (Adamczyk, 2015). What is more, insufficient tax revenues mean that the state budget has less financial resources, which results in the decreased limit of the supply of individual public goods and investments in infrastructure or other sectors of the national economy, for example defence, education or health care. The tax gap is a widespread phenomenon, i.e. it has always occurred and will always be present. When its level is low, it does not cause anxiety, it begins to worry the government only when its increase is noted or it stays at a higher level for a long period of time (Baran, 2018).

The problems of defining the tax gap are accompanied by difficulties in its accurate calculation. The most common subject of estimates is the VAT gap. In Poland, its size began to increase significantly since 2008 (Sarnowski and Selera, 2018). According to the calculations of the European Commission, in the years of 2006–2011 the VAT gap increased from 0.4% of GDP to 1.5% of GDP, while GDP itself increased. There are opinions that the occurrence of this phenomenon is conducive to Intra-Community supply of goods. The system of settling transactions within the Union, based on the fact of the reverse charge mechanism, i.e. on the independent determination of the amount of taxation by both parties, while limiting effective control methods, in conjunction with the "traditional" solution consisting in tax refund, caused the emergence of the so-called tax carousels (Michalik, 2017). It should be emphasized, however, that the tax gap has both criminal foundations (tax fraud that is directly aimed at extorting undue input tax) and those of a natural nature (errors in making declarations, bankruptcy of contractors, etc.), as well as reasons arising from companies in the so-called the grey economy (PWC, 2015). An important challenge is also to eliminate the so-called empty or blank invoices, i.e. those that do not reflect actual business events (Baran, 2018).

3. Mechanisms conducted for sealing tax collection

Among the methods used by individual countries, the introduction of the following solutions should be particularly emphasized i.e. Standard Audit File for Tax, the use of the so-called exit tax, implementation of the tax avoidance clause and reporting MDR schemes.

3.1. Standard Audit File for Tax (SAF-T)

OECD has introduced a model of agreed (comparable) logical structure in which taxpayers, at the request of tax authorities, will provide their own tax books, both in full and in selected areas, and the required source of evidence. Such standardized format for the exchange of information, prepared in XML format, was proposed as the Standard Audit File for Tax (SAF-T) in 2005² and then in 2010. The Guidance Note³, SAF-T file was proposed as part of the plan to increase effectiveness of tax audits.⁴

Portugal was the first to use this format in 2008. The models for introducing the Standard Audit File for Tax (JPK) in Poland were derived not only from the SAF-T structure itself, but also from the experience of the countries that introduced similar solutions earlier.

Table 1. Introduction of SAF-T in selected European countries together with applicable national names			
	The data the format		

Country	The date the format was entered/ planned to enter	The local format name
Portugal	December 2016	SAF-T (PT)
Luxembourg	March 2013	FAIA
France	January 2014	FEC
Austria	January 2009	SAF-T (AT)
Poland	July 2016	JPK
Lithuania	July 2015	SAF-T
Norway	January 2020	SAF-T
Spain	July 2017	SII
Hungary	July 2018	B2B
The United Kingdom	April 2019	API

S o u r c e: Authors' own elaboration based on materials of the ministries of finance of individual countries—synthetically presented at https://en.wikipedia.org/wiki/SAF-T.

² In May 2005, the OECD Committee on Taxation (CFA) published the first version of the SAF-T guidelines. Version 1.0 was based on entries found in the general ledger's chart of accounts, together with main file data for customers and suppliers, and details of invoices, orders, payments and corrections. The revised version (2.0) extended the standard with information on inventory and fixed assets.

³ Guidance Note: Guidance for Developers of Business and Accounting Software Concerning Tax Audit Requirements.

⁴ This file includes detailed information about the entity that submits it, general ledger accounts, tax codes, details of customers, suppliers, products, warehouses with their stocks and assets. In addition, it includes, in particular, all postings in the general ledger that occurred during the period for which the taxpayer submits SAF-T, as well as information on sales invoices, purchases, payments, shipments of goods within warehouses and transactions on fixed assets.

The Polish solution of the file (JPK), although created in reference to the SAF-T idea, in practice significantly deviates from the OECD standard. This applies not only to the number of files submitted by Polish taxpayers (it varies in individual countries), but also to the scope of reported information. Implementing JPK in Poland was not easy, however, it was necessary to solve emerging problems and imperfections in the design of the project (Samborska and Rodak, 2016). The JPK project was introduced to the Polish legal order in September 2015 (Act of 10 September 2015 amending the Tax Ordinance Act and some other acts, Journal of Laws of 2015, item 1649). The VAT register was subjected to the first change regulations. This tax is the largest source of budget revenues in Poland and is also the most susceptible to fraud due to a system leak. In connection with the above, planning revenues from it and implementing plans presents great difficulties (Tratkiewicz, 2014).

The introduction of JPK constituted a very important step in the process of digitizing the Polish tax system, and above all it contributed to significantly reduce the tax gap. Only in the first four months of the obligation to submit JPK, PLN 184 million of VAT refund was questioned, in the same period checking 383 million purchase invoices and questioning over 121,000 of them (Lis, 2018; Podatki.biz). It would be impossible to do such work using previous methods (prior to introduction of JPK). In 2017, revenues from VAT amounted to PLN 157 billion and were higher by 23% compared to 2016. Plans for 2017 assumed an increase in revenues to PLN 167 billion, and in fact they reached PLN 175 billion. For 2019, the assumptions reached another increase in revenues to PLN 180 billion (MF, 2019a). Therefore, the implementation of the JPK system in the field of VAT should be assessed unambiguously positively. The benefits arising from this apply to both tax administration and entrepreneurs that are presented below.

Table 2. Basic benefits of JPK implementation in Poland

Benefits for tax administration

- sealing the tax system
- accelerating tax enforcement
- elimination of random checks
- reduction of inspection time
- reduction of control costs
- limiting the negative effects of controls
- limitation of unfair competition
- identifying taxable persons unknown from the place of establishment
- eliminating empty invoices and those issued by non-existent entities
- deleting inactive entities from the VAT taxable persons register

Benefits for entrepreneurs

- facilitating the process of submitting documents
- increasing tax credibility
- a chance to be excluded from the so-called VAT carousel
- reducing the number of errors in company documentation
- reduction of working time
- faster tax refund deadline

Other economic benefits

- the ability to determine sales value in geographical areas
- identification and location of recipients and suppliers of goods and services
- analysis of purchases made at specific time intervals
- assessment of suppliers according to tax risk
- assessment of fraud by location of entities

Source: Authors' own elaboration.

In the nearest future the abovementioned benefits will be increased by eliminating the obligation to submit VAT returns.⁵ Additional effects from the computerization of the tax system using JPK formats are associated with the implementation of other information catalogues and the planned extension of these systems.⁶

New control tools are constantly emerging and they will contribute to reduce the scale of tax fraud. An example of this is the Transaction Analysis Network (TNA).⁷ The new guidelines are to lead and expand the scope of information on VAT transactions beyond individual countries and to cover the system of all EU countries. VAT is a growing source of income and is rated as one of the most GDP growth-friendly forms of taxation. In 2015, income in the EU countries amounted to over EUR 1 trillion and corresponded to 7% of EU GDP (EC, 2019).

In May 2019, the President of the Republic of Poland signed an amendment to the Act on tax on goods and services (Act of 12 April 2019 amending the Act on tax on goods and services and certain other acts, Journal of Laws of 2019, item 1018). Its goal is to create a single taxpayer base in Poland, and thus to allow entrepreneurs to verify contractors, which is to further tighten the tax system and minimize unconscious participation in VAT carousels. It should be emphasized that the reduction of the grey economy and the VAT gap as well as increased income from CIT and PIT are the other expected advantages.

⁵ The VAT declarations are to be replaced by JPK VDEK in 2019.

⁶ The uniform control file, next to JPK VAT, is extended by further files: PK_KR—with data from accounting books, JPK_WB—with data from bank statements, JPK_MAG—with data from warehouses, JPK_VAT—with data from VAT purchase and sale records, JPK_FA—with data on VAT invoices, JPK_PK-PIR—with data from the tax revenue and expense ledger, JPK_EWP—with data from the revenue record, JPK_SF—containing electronic financial statements.

⁷The order in this regard in Poland is contained in the Act of 1 March 2018 on counteracting money laundering and terrorist financing (i.e. Journal of Laws of 2019, item 1115). As part of the application of financial security measures, the Ministry of Finance is required to conduct ongoing monitoring of economic relations. The following include examination of transactions carried out between related entities to ensure that the conducted transactions are consistent with the knowledge of the obligated institution about the client, business profile and risk, and as far as possible, examining the sources of funds as well as related documentation.

⁸ The Act enters into force on September 1, 2019 while on January 1, 2020 amendments to the Tax Ordinance Act as well as to PIT and CIT Acts adjusting to the described change in the VAT Act will come into force.

⁹ In the first four months of 2019, CIT revenues were 19.4% higher compared to the same period of 2018 (revenues amounted to PLN 23.3 billion). Information from the Ministry of Finance at www.mf.gov.pl.

3.2. Exit tax

The idea of a new tax, supported by the Polish government, has its source in the EU Council Directive on Anti-Tax Avoidance Directive (ATAD). ¹⁰ It contains five legally binding anti-fraud measures that all Member States should apply for common anti-aggressive tax planning actions from January 1, 2019. The subject of the directive are taxes on unrealized capital gains, and its purpose is to ensure that if a taxpayer transfers assets or tax residence outside the tax jurisdiction of a given country, it can impose tax on the economic value of any capital gains made on its territory, although these gains have not yet been implemented at the time of the change of tax jurisdiction. The European Commission has noticed that entrepreneurs are fleeing to tax havens; however in fact they do not create new enterprises there, but transfer their existing activities. The new tax burden is to discourage them from doing so. At the same time, the European Commission recommended that the scope of this Directive should be extended to entities that are not subjected to corporation tax, i.e. natural persons, while it was stated that the application of exit tax to natural persons should be considered as a sovereign decision of a given state, not having elements from ATAD directive.

Exit tax raises a lot of controversy not only in Poland. It is already subject to the case law of the EU Court of Justice. In the issued judgments, the main are: the fear of violation of the EU's fundamental freedom, which is the freedom of movement, and hence fear of having to pay tax on the transfer of property, will resign from such a movement. However, over time, the Court of Justice changed its position, liberalizing the law in the context of the right to tax unrealized gains, probably under pressure from the European Commission, which unfortunately solves in a selective manner the consequences of problems resulting from the lack of harmonization of income taxes. 12

In Poland, although the EU regulations require a new tax by the end of 2019, the Ministry of Finance has introduced it since the beginning of 2019.¹³ There were immediate doubts as far as the compliance of the introduced solution with the Directive is concerned. The main allegations are as follows:

¹⁰ Council Directive (EU) 2016/1164 of 12 July 2016 establishing provisions to counteract tax avoidance practices that have a direct impact on the functioning of the internal market (EU Official Journal 2016, L193/1). Its tax avoidance package is part of the Commission's programme for fairer, simpler and more effective corporate taxation in the EU. The package contains specific measures to prevent aggressive tax planning, increased tax transparency and to create a common business environment in the EU.

¹¹ Already in 2004, this issue was raised in the context of the French taxpayer. The Court then stated that "the taxation of persons whose place of residence is in a given country for tax purposes on the basis of realized profits, and persons who transfer their place of residence abroad—on the basis of unrealized profits, constitutes unequal treatment which violates freedom of movement."

¹² In 2011, the Court changed its position by issuing a controversial judgment in which it held that "a Member State should have the right to tax profits arising under its competence before transferring capital to another country." This ruling has become an expression of the direction that the European Union has taken in terms of sealing national tax systems.

¹³ Art. 30da–30di of the Act of 26 July 1991 on personal income tax (i.e. Journal of Laws of 2018, item 1509) and Art. 24f of the Act of 15 February 1992 on corporate income tax (i.e. Journal of Laws of 2019, item 865).

- taxation of natural persons may be considered as a violation of the EU principle of the free movement of persons and capital, and thus the intervention of the bodies of the European Union and the Court of Justice of the EU in Polish law may be needed;
- the case law of the CJEU states that Member States may impose tax on unrealized gains when leaving/ changing the country of residence (exit tax), whereas immediate taxation (as disproportionate and violating certain freedoms) is not allowed in the Polish law, i.e. 7 days for payment;
- the Act adopts hypothetical profits as the tax base.¹⁴ This may lead to the payment of tax on profits which ultimately the taxpayer will never gain. Other EU countries apply the principle of taxing only realized and not undue profits and not hypothetical, so a significant proportion of taxpayers will not have enough money to settle taxes;
- the tax will have a significant and negative impact on the functioning of the Polish economy within the EU, which may also violate the freedom of business;
- the Polish Act incorrectly treats the change of tax residence as caused solely by the desire to avoid taxes, and the formula will lead to double taxation of income. Attention is also paid to other changes which do not correspond to the essence and spirit of the Directive.¹⁵

At present, due to the short period of application of the amendments to the Act, it is difficult to assess the effects of the new taxation, but they have already resulted in appropriate responses. The Polish National Chamber of Tax Advisers accused the legislator that its reservations were not taken into account in the legislative process, and thus they addressed a complaint to the European Commission, in which the Chamber indicated particular provisions of Community law. In its opinion, they were infringed by the Polish implementing act. The complaint includes allegations of the following infringements:

- extending exit tax also to natural persons—according to the Polish National Chamber of Tax Advisers, the regulations contained the directive set only in a general, minimum level of protection against aggressive tax planning and do not mean consent to the introduction of provisions in relation to these persons;
- making it difficult for citizens to move to other Member States;
- impeding taxpayers from starting a business in other Member States.

If the Commission formally deals with the complaint, it is possible for the EC to refer the complaint to the Court of Justice of the European Union. In this respect, there are already judgments creating a significant probability of repealing Polish provisions.¹⁶

¹⁴ Taxes will apply to events that will not generate any revenue for the taxpayer.

¹⁵ The Directive indicates that one of the conditions for applying the exit tax is the loss by a Member State of the right to tax the transferred assets. Meanwhile, the Act provides that the transfer of assets abroad will be subject to the exit tax also in the event of partial loss of Poland's right to tax income from the sale of transferred assets.

¹⁶ On February 26, 2019 the Court of Justice of the European Union (CJEU) issued a ruling in case C-581/17 regarding German provisions on exit tax. The Court, assessing the obligation to pay the tax immediately, issued a ruling confirming the non-compliance of German exit tax regulations with the principle of free movement of persons set out in an international agreement concluded between the EU and Switzerland.

4. Tax avoidance clause

Tax avoidance clause occurs in more than 25 legal orders, both in countries characterized by a low level of grey economy, e.g. Germany, Sweden or Switzerland, but also in countries where its share is high, e.g. China, Brazil or Italy. Solutions in some countries are formulated in detail, in others they are very economical (not legal) in its content. In Poland, the anti-tax avoidance clause has been in force for three years (it was introduced on July 15, 2016),¹⁷ but the history of its attempts to place it in tax legislation back dates to a much earlier period. For the first time in 2003, universally binding tax law standards were introduced.¹⁸ The provision was not evaluated at the stage of its creation and only after two months it was referred to the Constitutional Tribunal.¹⁹ On May 21, 2004 the Tribunal declared it unconstitutional, accusing the dissolution of:

- breach of the principles of correct legislation, by failing to comply with the principles of legal certainty and security as well as the protection of trust in the state and the law;
- no grounds for introducing a legal regulation binding negative effects on the taxpayer with its actions, provided they are lawful;
- violation of the principle of predictability of legal decisions as a result of adopting the solution and interpretation based on subjective elements, such as: impressions and opinions, failure to fill out defocused terms, content guaranteeing a uniform jurisprudence and de facto granting rights to unauthorized law introducing process. In the Court's opinion, the principles of: rule of law, legal certainty, trust in the state and law and its organs, specificity of regulations and legalism were violated.

It is worth recalling the justification mentioned above, as currently, after re-introducing the clause, these allegations may still be valid. The clause undoubtedly finds its legal and economic justification in attempts to limit the processes of aggressive or illegal tax avoidance in the world. This is due to many reasons and, above all, to the different approaches to the issue of economic freedom, the essence of tax optimization activities and the assessment of the harmfulness of such a phenomenon (see: Wyrzykowski, 2016). Proposals for solutions and appropriate actions were taken both by international organizations and within European Union institutions.²⁰ Finally, in 2016, the Anti-Tax Avoidance Directive (ATAD) was issued,

¹⁷ Act of 13 May 2016 amending the Tax Ordinance Act and some other acts (Journal of Laws of 2016, item 846). Amended in the next period by the Act of November 29, 2016 amending the act on personal income tax, the act on corporate income tax and the act amending the act Tax Ordinance and some other acts.

¹⁸ Contemporary Art. 24 of the Polish Tax Code.

¹⁹ The application to the Constitutional Tribunal was directed on 17 February 2003 by the Polish Ombudsman and the President of the Supreme Administrative Court.

²⁰ The basic rules have already been included in the OECD Model Convention on taxes on income and wealth. In 2013, the OECD also proposed the Base Erosion and Profit Shifting Action Plan defining 15 key tax areas (it was also supported by the G20 group). It resulted in reports published in October 2015 containing relevant recommendations. Recommendations on combating tax evasion were formulated, among others in the conclusions of the European Council meeting held on March 1 and 2, 2012. They were identified in the form of a recommendation on aggressive tax planning (document reference—C [2012] 8806). The Commission's position is also supported by the European Parliament, including in its February 2012 resolution (included in the Annual Tax Report, reference number 2011/2271 [INI]). Conclusions the Parliament repeated in its resolution of April the same year (Call Number 2012/2599 [RSP]).

which is a call to take action in all EU countries.²¹ The Polish legislator did not return to the issue of the tax avoidance clause for 12 years, but there were the signals and recommendations of the European Council, the European Commission and the European Parliament that caused the necessity to begin the process by the Polish government.

From 2019, the general tax avoidance clause has expanded. It was also supplemented with regulations enabling the imposition of additional financial sanctions on the taxpayer. It immediately aroused emotions and controversy, mainly through extremely vague terms used in constructing its principles, high restrictiveness and lack of predictability of the effects of its use. It is alleged that the legislator has introduced too wide changes, because the ATAD Directive does not specify exactly what the national provisions regarding the clause should include. The version from 2019, although in unity with the general intention of the Directive, in detailed however solutions went far beyond it. An argument for the above considerations is also the fact that by the end of September 2018 the head of the Polish National Tax Administration (KAS) had completed only one clause procedure. Both parties (the legislator and entrepreneurs) believe that the change should have a positive impact on market competitiveness and ensure equal treatment of taxpayers conducting business activity, counteracting unfair competition of those who earn from tax avoidance mechanism.²² Unfortunately, after analyzing the newly introduced regulations, this is largely justified by the question whether administration will use this solution in a sufficiently professional manner, whether they will be quite prudent in its application, or whether they will prove excessively the will to reach for this tool. Discussion increased primarily as a result of the liquidation of the amount of PLN 100,000 applicable limit in 2016. The limit determines the achievement of a tax benefit and the introduction of a new criminal sanction from the Tax Penal Code.²³ It is intensified by the current opinion about the search for additional funds to secure government social programmes.²⁴ An example of the fulfilment of fears are the numerous refusals to issue tax rulings that have been commonly issued until now. The authorities informed that the tax rulings applications subject meets the conditions for applying the clause itself by the fact that elements of the presented fact or future event constitute of tax avoidance. According to KAS data, in 2017 the tax authorities refused the tax ruling by 650 times.²⁵ The tax office's position is confirmed by some court rulings, ²⁶ although there are more and more frequent judgments

²¹ Council Directive (EU) 2016/1164 of 12 July 2016 establishing provisions to counteract tax avoidance practices that have a direct impact on the functioning of the internal market (EU Official Journal 2016, L193/1).

²² As a result, the taxpayer corrected settlements and paid over PLN 600,000 to the budget.

²³ The amount of PLN 100,000 of tax benefit for many smaller entrepreneurs constituted a sufficient boundary separating the consequences of accidental errors, thus providing a certain guarantee of security.

²⁴ The Ministry of Finance cautiously estimates that the clause will reduce the tax gap (from PLN 1 to 5 billion in the first year of the new regulations being in force).

²⁵ See answer of Paweł Cybulski, Undersecretary of State in the Ministry of Finance, to the interpellation No. 11902 of MP Izabela Leszczyna. It should be emphasized that the subject of refusal to issue interpretations were most often transformations, contributions, employee incentive programmes, trademark transfers and even family donations.

²⁶ In a judgment of 30 May 2017 (reference number I SA / Po 493/17), the Provincial Administrative Court in Poznań agreed with the tax authorities, stating that "A taxpayer intending to take actions that are suspected of being taken primarily to the achievement of a tax advantage, contrary to the subject and purpose of the provision of the Tax Act, cannot [...] require an individual interpretation to be issued to safeguard these activities against the effects of any verification by tax authorities."

ordering justification of such position in a non-superficial way.²⁷ Tax authorities, by refusing to issue an interpretation, may give a reason for a tax avoidance clause only if they have duly analyzed the economic objectives and demonstrate that the reservations are indeed relevant. It should be noted that the tax benefits achieved by taxpayers would be contrary to the subject of the Act, above all by attempting to achieve an economic advantage as dominating over the remaining, in this case, not significant business and economic goals.²⁸ During the first two years of the tax evasion clause, 16 entities requested security opinions, two of them received opinions stating that the clause was not threatened, three received refusal to issue an opinion due to the probability of using the clause.²⁹ At this stage, it is difficult to assess the effects, both favourable and unfavourable of the introduction of the clause. One should wait for the practical effects of its application and consequences arising from possible sanctions. However, the clause can be judged in a general way. Polish tax law does not require the taxpayer to pay the highest taxes in any place, they have the right to use civil law transactions to reduce taxation.³⁰ The essence of business activity is to maximize the obtained profit as a result of conducting business by an entrepreneur with the right to use all legal constructions, which creates the applicable legal order. Already until the introduction of the clause in a revised, more sanctioned version, tax law was equipped with tools giving authorities the opportunity to combat the phenomenon of tax evasion and forms of tax avoidance, including international taxation (double taxation avoidance agreements). Proper hierarchy of law means that conflicts may arise between the provisions of the Tax Code and the provisions of international agreements. It is hard to resist the impression that the only reason for introducing changes in 2019 was the creation of sanction mechanisms, increasing the revenue of the tax authorities, and not creating solutions reducing the scale of fraud. In addition, such action is primarily contrary to the postulate of simplifying the tax system. The introduction of a tax evasion clause in practice may not bring the assumed results, leading at the same time to long-lasting disputes, which may end in the defeat of the taxpayer or tax authorities, and the effects will be borne by the budget, i.e. all taxpayers.

5. MDR diagrams

National provisions on reporting of MDR schemes entered into force at the beginning of 2019 and constitute the implementation of EU Council Directive (2018/822 of 25 May 2018 amending Directive 2011/16/EU) in the field of mandatory automatic exchange of informa-

²⁷ See: Judgment of the Provincial Administrative Court in Gliwice of 28 September 2017 (reference number I SA/GL 497/17). The court emphasized that the authorities, if they refuse to issue an interpretation of tax law due to a justified supposition of the application of the anti-tax avoidance clause, must base on information resulting from the facts (future event) presented in the application for the interpretation, and not only on guesses and intuition that such a clause will apply. Therefore, if the taxpayer's application for interpretation does not clearly show whether there is a justified suspicion in the given case of the application of the anti-tax avoidance clause, then—according to the court—the authority is obliged to request the taxpayer to supplement such an application and to examine the possible risk of such conditions at the stage of interpretive proceedings.

²⁸ Judgment of the Supreme Administrative Court of January 31, 2019 (reference number II FSK 3242/18).

²⁹ Data from the National Tax Administration. https://www.podatki.gov.pl/.

³⁰ Such a conclusion resulted from the statement that civil law transactions cannot be used to reduce taxation and that the clause will protect it.

tion in the field of taxation with respect to notifiable cross-border arrangements (EU Official Journal of 2018, L139/1). It should therefore be noted that this solution is an EU mechanism which purpose is to provide the tax administration with information that "will be used by tax authorities to improve the quality of the tax system." As noted by the Polish Ministry of Finance, the regulation is to allow quick access to information about potentially "aggressive planning or fraud related to tax planning, as well as information about promoters and those using tax schemes." However, that it is primarily about discouraging taxpayers from implementing the so-called arrangements that may lead to an understatement or even avoidance of business taxation. In the justification for introducing the obligation the Ministry of Finance also adds that "the tax scheme within the meaning of the MDRs does not mean that the agreement is covered by the scope of application of the general clause against tax avoidance, specific anti-tax avoidance regulations or other relevant regulations." At the same time, it should be noted that within the meaning of the legislator, MDR provisions have a wider scope of application than regulations on combating tax avoidance.

The obligation to provide information on the tax scheme is a reporting obligation. Therefore, it may also apply to situations where the reconciliation does not constitute a form of tax avoidance. For example, the reporting obligation may arise in connection with the use of concessions and preferences consistent with the legislator's purpose. However, this does not mean that a taxpayer using such a tax scheme should expect tax control or other negative consequences only because of submitting information about the tax scheme. Although the primary purpose of MDR is to obtain information on arrangements that have an increased risk of aggressive tax optimization or violation of other tax regulations, it is also an instrument that can provide valuable information to analyze the functioning of certain discounts or preferences in terms of their ex-post occurrence.

There is no restriction on the types of taxes covered by MDR. Therefore, tax schemes regarding direct taxes, indirect taxes (VAT, excise tax) and local taxes, e.g. real estate tax, and other arrangements regulated in the tax law will be applicable.

The tax advantage should be understood as (Article 3 point 18 of the Tax Code):

- no tax liability, deferment or reduction of its amount;
- tax loss arising or being overstated;
- an overpayment or refund right or an overpayment or refund amount;
- no obligation to pay tax by the payer.

The information obligation under MDR provisions will not arise when the criterion of the qualified beneficiary is not met, i.e. the entity's income/ costs/ assets do not exceed the equivalent of EUR 10 million in PLN and the value of the subject of the agreement does not exceed EUR 2.5 million, while at the same time the cross-border criterion is not met.

Due to the fact that the obligation to report schemas is a new solution, there is currently no statistics regarding this mechanism. However, it should be noted that in many cases the need for reporting will mean additional work for particular companies.

6. Conclusion

The above study is a presentation of the mechanisms used after 2008, which were aimed at sealing the tax systems of the European Union countries. It should be noted that most solutions were adopted at the EU level or within the OECD. However, individual countries have some freedom in implementing regulations. For example, Poland has implemented the provisions regarding exit tax to a greater extent than required. The application of the presented solutions seems necessary due to a clear deterioration of macroeconomic indicators (amount of tax receipts, size of debt and budget deficits). Therefore, in the authors' opinion, the efforts made will improve the efficiency of the tax system, which is already being observed today. It should be noted, however, that there is no ideal system and the actions of state authorities should be adapted to the changing socio-economic environment.

References

- Adamczyk, A. (2015). Zjawisko luki podatkowej w kształtowaniu warunków funkcjonowania przedsiębiorstw. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług, 116, 601–611.
- Baran, B. (2018). Domykanie luki podatkowej jako odpowiedź na potrzeby budżetowe w UE. Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, 347, 34–43.
- Eurostat. (2018). Statistical data available from Eurostat website [online, accessed: 2019-06-15]. Luxembourg: Eurostat Statistical Office of the European Union. Retrieved from: https://ec.europa.eu/eurostat/tgm/download.do;jsessionid=OsFgRXxbPxJIUSGfyiciyXX-3OSeo1Nd81uyn5lA2zVHsTKSJLWk!-1294713385?tab=table&plugin=1&language=en&pcode=tec00127.
- Gomułowicz, A., Małecki, J. (2002). Podatki i prawo podatkowe. Warszawa: Wydawnictwo Prawnicze LexisNexis. ISBN 8373341234.
- Kasprzak, P. (2018). Elementy polityki podatkowej państw Unii Europejskiej po kryzysie finansowym w 2008 r. Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, 347, 44–56.
- KE. (2019). VAT: będzie analiza transakcji [online, accessed: 2019-06-15]. Warszawa: Komisja Europejska. Przedstawicielstwo w Polsce. Retrieved from: https://ec.europa.eu/poland/news/190519_vat_pl.
- Kosikowski, C. (1998). Harmonizacja prawa polskiego z prawem wspólnotowym w zakresie akcyz. In: B. Brzeziński, J. Głuchowski, C. Kosikowski. Harmonizacja prawa podatkowego Unii Europejskiej i Polski (pp. 147–185). Warszawa: Polskie Wydawnictwo Ekonomiczne. ISBN 8320811244.
- Lis, M. (2018). JPK w praktyce: po pierwszych wpadkach system przyspiesza [online, accessed: 2019-06-15]. Website: Money.pl. Warszawa: Wirtualna Polska Media SA. Retrieved from: https://www.money.pl/gospodarka/wiadomosci/artykul/jpk-vat-podatki-wyludzenia,178,0,2409906.html.
- Malesa, M. (2015). Efektywność polskiego system VAT w świetle wzrostu skali oszustw podatkowych. Zeszyty Naukowe PWZS w Płocku. Nauki Ekonomiczne, 22 (2), 259–270.
- Mazur, T., Bach, D., Juźwik, A., Czechowicz, I., Bieńkowska, J. (2019). Raport na temat wielkości luki podatkowej w podatku VAT w Polsce w latach 2004–2017 [online, accessed: 2019-06-15]. Warszawa: Ministerstwo Finansów. Retrieved from: https://www.gov.pl/documents/1079560/1080340/No_3-2019_TMazur.pdf/437aa4f4-d590-4109-55ff-8ff1fd9ccba0.
- MF. (2019a). *Budżet na 2019* [online, accessed: 2019-06-15]. Warszawa: Ministerstwo Finansów. Retrieved from: https://www.gov.pl/web/finanse/budzet-na-2019.
- MF. (2019b). Objaśnienia podatkowe z dnia 31 stycznia 2019 r. Informacje o schematach podatkowych (MDR) [online, accessed: 2019-06-15]. Warszawa: Ministerstwo Finansów. Retrieved from: https://www.podatki.gov.pl/media/4417/obja%C5%9Bnienia-podatkowe-mdr-z-dnia-31-01-2019.pdf.
- Michalik, T. (2017). How the European Commission and European countries fight VAT fraud = Jak Komisja Europejska i kraje europejskie walczą z oszustwami VAT. Warszawa: CASE Centrum Analiz Społeczno-Ekonomicznych Fundacja Naukowa. ISBN 9788371786525.
- OECD. 2005. Guidance Note Guidance for Developers of Business and Accounting Software Concerning Tax Audit Requirements [online, accessed: 2019-06-15]. OECD. Retrieved from: https://www.oecd.org/

- tax/administration/guidance note-guidance for developers of business and accounting software concerning-tax auditrequirements. htm.
- Podatki.biz. (2019). Podatki 2020: JPK VAT zamiast deklaracji VAT od kwietnia 2020 r. [online, accessed: 2019-08-15]. Website: Podatki biz. Informacje dla podatników malych i dużych. Tychy: TaxNet. Retrieved from: https://www.podatki.biz/sn_autoryzacja/logowanie.php5/artykuly/podatki-2020-jpkvat-zamiast-deklaracji-vat-od-kwietnia-2020-r 16 41780.htm?idDzialu=16&idArtykulu=41780.
- PWC. 2015. Wyłudzenia VAT luka podatkowa w 2014 roku i prognoza na 2015 [online, accessed: 2019-06-15]. PWC. Retrieved from: https://www.pwc.pl/pl/pdf/luka-vat-pwc-wrzesien-2015.pdf.
- Raczkowski, K. (2012). Percepcja bezpieczeństwa ekonomicznego i wyzwania dla zarzadzania nim w XXI wieku. In: K. Raczkowski (ed.). Bezpieczeństwo ekonomiczne. Wyzwania dla zarządzania państwem (pp. 69–148). Warszawa: Oficyna a Wolters Kluwer business. ISBN 9788326416873.
- Samborska, M., Rodak, M. (2016). 10 najczęstszych problemów związanych z JPK: doświadczenie dużych przedsiębiorców wsparciem dla małych i średnich firm [online, accessed: 2019-01-20]. Purpurowy Informator GT. Poznań: Grant Thornton. Retrieved from: https://grantthornton.pl/wp-content/up-loads/2016/10/PurpurowyInformator 05 10.pdf.
- Sarnowski, J., Selera, P. (2018). Zmniejszenie luki VAT w Polsce w latach 2016–2017: przyczyny, środki, dalsze perspektywy [online, accessed: 2019-06-15]. Warszawa: Polski Instytut Ekonomiczny. ISBN 9788361284680. Retrieved from: http://pie.net.pl/wp-content/uploads/2018/10/Raport-LUKA--VAT-www-08-11-A.pdf.
- Tratkiewicz, T. (2014). Podatek od towarów i usług jako narzędzie polityki fiskalnej w latach 2004–2013. Studia Ekonomiczne, 198, 307–322.
- Wach, K. (2005). Systemy podatkowe krajów Unii Europejskiej. Kraków: Oficyna Ekonomiczna. ISBN 8389355809.
- Wyrzykowski, W. (2008). Podatki w Polsce. Zarys wykładu. Gdańsk: Bookmarket. ISBN 9788375990157.
- Wyrzykowski, W. (2016). Klauzula obejścia prawa podatkowego a zasada in dubio pro tributario: zależności i kontrowersje. *Przedsiębiorczość Międzynarodowa*, 2 (1), 121–138.
- Wyrzykowski, W., Kasprzak, P. (2017). Ocena efektywności działalności administracji podatkowej w Polsce na tle wybranych państw. *Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie*, 33 (1), 83–95.

Uszczelnienie poboru podatków w Polsce i UE w latach 2008–2018

Abstrakt: Celem niniejszego opracowania jest prezentacja problematyki związanej z uszczelnianiem poboru podatków w Polsce i w krajach Unii Europejskiej oraz w państwach członkowskich OECD w latach 2008–2018. Artykuł podzielony został na cztery części: wstęp, genezę problemu, wdrożone rozwiązania oraz uwagi końcowe. W artykule zaprezentowano wyniki przeprowadzonej analizy, w ramach której przedstawiono literaturę przedmiotu oraz wnioskowanie na podstawie wybranych danych empirycznych (głównie ze źródeł OECD, GUS i Eurostatu oraz profesjonalnych

raportów branżowych), przybliżono także budowę systemów podatkowych krajów europejskich. Rezultatem jest prezentacja genezy problemu, tj. powstania uszczupleń w poborze podatków po roku 2008 oraz działań, które podejmowano w celu zmniejszenia skutków tego negatywnego zjawiska. Autorzy przedstawiają także wstępną ocenę podjętych przez poszczególne kraje działań wraz z poziomem ich skuteczności w zakresie osiągnięcia planowych celów, którym było zmniejszenie poziomu wyłudzeń podatkowych.

Slowa kluczowe: system podatkowy, uszczelnienie poboru podatków, luka podatkowa

Strategic audit as a means of implementation of the state financial control in Ukraine

Wasilij Rudnicki¹

Małopolska School of Economics in Tarnów, Poland Department of Finance and Accounting

Oksana Sarakhman² Ruslana Shurpenkova³

State Higher Educational Institution "Banking University", Ukraine Lyiv Educational Institute

ORCID: 1 0000-0003-1601-5381 2 0000-0002-8793-592X 3 0000-0002-8825-2389 Abstract: In the modern world, the main place among financial management systems belongs to the state financial control, because it provides law and effective use of state resources. In a market economy, state financial control requires the introduction of a strategic audit in order to find ways to increase the productivity and effectiveness of the state in all spheres of its activity. The formation of a strategic audit in Ukraine shows an increase in its role in the development of the national economy and in raising the status of social and political life. The article explores the legal nature of strategic audit in Ukraine, defines the concept of "strategic audit", examines the main elements of the strategic state audit, formulates the main objectives of the strategic audit and raises the importance and necessity of strategic audit implementation for effective state financial control. On the basis of the analysis of foreign experience in the sphere of financial control, the directions of development of strategic audit in the domestic economy are proposed.

Key words: state financial control, strategic audit, stages of evolution of strategic audit, elements of a strategic state audit, tasks of the strategic state audit, auditor, Accounting Chamber (Ukraine)

1. Introduction

In the sphere of functioning of a market economy, the task of controlling the receipt and purposeful use of state funds for its effective functioning at the present stage of development and in the future is of paramount importance.

Thus, government financial control is a kind of financial control carried out by the relevant government authorities, which consists in establishing the actual state of affairs in respect of compliance with the requirements of the current legislative framework on the controlled object aimed at ensuring legality, financial discipline and rationality in the process of formation, distribution, possession, use and disposal of assets owned by the state (Polishchuk, 2014).

Correspondence to:
Wasilij Rudnicki
Małopolska Wyższa Szkoła
Ekonomiczna w Tarnowie
Katedra Finansów i Rachunkowości
ul. Waryńskiego 14
33-100 Tarnów, Poland
Tel.: +48 14 65 65 547
E-mail: wasilij.rudnicki@mwse.edu.pl

Government financial control exists for the implementation of government financial policy and for making financial stability in the country. First of all, those are development, review, approval and execution of budgets of all levels and extra budgetary funds, and also financial activities of budgetary institutions control.

The main objective of the government financial control is to provide adherence to the principles of legality, expediency and efficiency of regulatory and executive actions on the management of public financial resources, tangible and intangible assets, their preservation and increase to perform government functions.

Today in Ukraine measures are being taken for the gradual transition of public administration to the level of European standards. But nevertheless, the system of state financial control which operates today in Ukraine does not fully meet the requirements of the present, because the main disadvantage is imperfect legislation.

It consists of:

- availability of a large number of legal acts regulating the activity of certain bodies of state financial control:
- lack of a basic law on financial control that clearly articulated the concept, essence, forms, types and methods of financial control, as well as the division of powers between the subjects of control activity, etc. (Polishchuk, 2014).

It becomes obvious that new approaches to organizing a country's budget process that are aimed at medium and long-term budget planning require the use of new modern types and methods of public financial control, such as a strategic audit of public finances.

The purpose of the article is to investigate the role of strategic audit in Ukraine, to define the concept of strategic audit, the main elements of strategic state audit, the main tasks of strategic audit, to substantiate the importance of introducing strategic audit in the financial sector.

2. Regulation of strategic audit

A comparatively new but rather effective element of the mechanism of state financial control is a strategic (forward) audit that decides on the development strategy of the government enterprises and institutions, organizations (at the micro level) and the whole country as a whole (at the macro level).

Strategic audit began in the 1950s, when the most Americans corporations and enterprises, and later—Europe, needed strategic planning of business processes. International Audit Standards (IAS) have been put into form in 1997 and from that time strategic audit became not only a tool for monitoring law, but also an economic and legal tool of a preventive nature. And already in 1998, the IAS used 34 countries as national standards, and in 35 countries they were used without significant changes.

With the adoption of the Law of Ukraine "On Auditing Activities" (new version of the law "On Audit of Financial Reporting and Audit Activity", dated October 1, 2018), the Legal Institute of Auditing in Ukraine began to emerge in 1993. Therefore, the Audit Chamber of Ukraine (APU) adopted the decision of April 18, 2003 on the adoption of the Standards

of Audit and Ethics of the International Federation of Accountants as National Auditing Standards from 1 January 2004.

Along with the introduction and development of financial reporting in Ukraine, the demand for strategic audit has increased in recent years.

In contemporary economic literature, based on the importance of strategic audit, much attention is focused on the direction of its development and efficiency. But nevertheless, the unity of opinions in a wide range of scientists and practitioners does not define the essence of this concept (The Institute of Internal Auditors, 2019).

In the Ukrainian legislation that regulates the scope of the audit, the definition of "strategic audit" is not provided. In turn, foreign scientific opinion on strategic analysis and audit views strategic audit as a process of gathering information used to develop specific business goals and strategies.

After analyzing different approaches to defining the concept of "strategic audit" for both domestic and foreign scholars, we can talk about two basic approaches:

- 1st approach—defines a strategic audit as a subsystem of managerial audit which evaluates the prospects of the organization's development or the efficiency of the investment resources (Guseva Y. V., Markova V. D., Piskunova S. I., Piskunov O. O., Liubesnov L. M.);
- 2nd approach—considers strategic audit as an area of audit and consulting activity, which produces a comprehensive assessment of internal and external conditions of activity (Zhuravlev P. V., Alekseeva I. V., Thompson A. A., Odegov Yu. G., Striklend A. J.).

The first and following experience with the application of the audit legislation in Ukraine detected some gaps, contradictions and weaknesses in legislation. Inadequate regulation of the audit market in Ukraine has led to problems with the confirmation of the quality and reliability of financial statements of enterprises and banks. This raises the risk of bankruptcy of such entities, which reduces their trust in potential investors and the population, and also creates barriers to attracting investment in the national economy as a whole. All this led to the need for an in-depth look at the problem of legal regulation of the audit institution in general in Ukraine in order to improve it.

In the development of domestic audit, an important event took place—the transition of the national audit to international standards 2003. By that time, Ukrainian auditors were guided by their work with 32 national standards and the Code of Ethics of Auditors. But time is not in place, therefore investors who came to the Ukrainian market became more demanding. Of course, they wanted to assess the financial statements of the activities of the company, the organization was carried out according to the usual canons customary for them. Therefore, the decision of the Audit Chamber of Ukraine from April 18, 2003 adopted International Standards on Auditing and Ethics as National Standards from January 1, 2004.

Until recently, one of the contradictions in the Ukrainian legislation was that the existing system of regulation of audit activity contravened European legislation, taking into account the European integration course of our state (The European Confederation of Institutes of Internal Auditing, 2019). An Indicator of the implementation of the European Parliament and Council Directive of May 17, 2006 on the statutory audit of annual reports and consolidated accounts was the adoption of the new wording of the Law of Ukraine "On Audit of Financial".

Reporting and Auditing" dated January 10, 2018, which is currently determining the legal basis for the audit of financial statements, audit activity in Ukraine, and regulates the relations which arise in its conduct.

It should be taken into account that harmonization of legislation in the field of audit with European standards is one of the guiding principles of Ukraine within the framework of the "Ukraine 2020" strategy and a direct obligation within the framework of the Association Agreement.

Implementation of audit reforms in Ukraine will contribute to a positive investment climate, and secure:

- increase of investor confidence in the financial statements of domestic enterprises;
- raising confidence in the activities of national auditors;
- minimization of poor quality audit services;
- transparency and reliability of financial statements of issuers of securities, banks, insurance companies, other public companies, including state-owned enterprises;
- access of Ukrainian auditors to European markets.

Thus, the creation of perfect legislation that would clearly outline the main aspects of regulating the scope of audit in Ukraine is the first and very important step towards building an effective audit regulatory system aimed at improving the quality of audit of financial statements in the interests of the state and all of society.

3. Domestic practice of conducting strategic audit in the field of state financial control taking into account world experience

Developing Ukraine's integration processes and modern state of the economy request new approaches to financial control from the state.

First of all, the bodies of the external (Accounts Chamber) and the internal (State Financial Inspection) of state financial control in many cases overlap each other's functions. Of course, this significantly reduces the efficiency of their work. At the present stage it is not enough simply to control the issues of financial discipline, use of funds for the intended purpose and in the established volumes, and also it is necessary to determine the effectiveness of the invested resources in various indicators.

Second, with the transition to the programme-target method of budgeting in Ukraine, the issues of development and implementation of strategic audit in the system of external financial control bodies are very important.

Strategic audit is a modern method and an actual tool for improving the efficiency of management in the long run, a fundamental restructuring of production and organizational processes. Strategic audit is a tool for the correct, rational, economic construction of internal and external business processes and the implementation of economic operations.

At present, the methodology and technique of strategic audit in Ukraine is at the stage of formation and development. After analyzing world experience, one can distinguish four main stages of the evolution of the strategic audit (Figure 1).

With the help of the state strategic audit, a number of tasks are solved in world practice, in particular: assessment of the quality of the strategies of the state and its subjects; analysis of

the interconnection of strategic and territorial planning systems; assessment of the dynamics and level of achievement of key indicators; target indicators of strategic programmes; use of public funds in accordance with the approved strategic goals of the state and its subjects for the medium and long term, the assessment of strategic coherence, intermediate and tactical goals of the state.

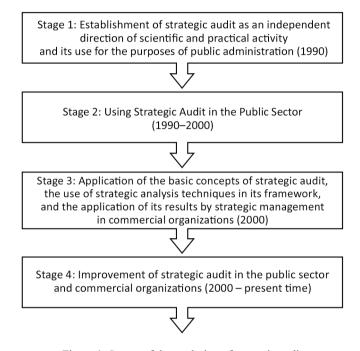


Figure 1. Stages of the evolution of strategic audit

Source: Arsanukaev, 2015.

The sequence of conducting a strategic state audit is similar to the method of conducting an independent audit, but it also has some differences. Thus, the process of strategic audit can be divided into three stages: the assessment of the validity of strategic plans and programmes, the feasibility of their implementation, an assessment of the effectiveness of the formation and use of state resources from the perspective of the possibility of being implemented in the established terms of strategic goals and priorities of state policy; obtaining evidence of the level of achievement of key indicators, target indicators and preparation of comprehensive conclusions based on them.

As world experience shows, strategic audit is perceived as a highly developed management tool and consists of certain key elements (Table 1).

Item name	Characteristics of an element
1. Object	National security, the strategic direction of state policy, the results of major state programmes and system reforms, the activities of the departments responsible for their implementation.
2. Item	The strategic position of the recipient of budget funds and the environment of its functioning, options for achieving strategic goals and their financial support.
3. Purpose	Comprehensive evaluation: a) the system of state strategic planning of socio-economic development; b) the possibility of achieving (realization) in the established time frame of the strategic goals and priorities of the state policy, taking into account the assessment of the resource capabilities, as well as the existing risks and expected consequences.
4. Methods of audit	 Examination of the promising and resources of the planned projects. Strategic analysis (SWOT-analysis) of socio-economic development of the state and its subjects. Scenario method for forecasting the trajectories of achievement of strategic goals. Programming, budgeting.
5. Contents of the report	Assessment of the degree and dynamics of achievement of the strategic goals of the state programme.
6. The nature of the conclusions and recommendations	Adjustment of state programmes and strategic goals in order to increase the efficiency of the use of resources in the context of national strategic priorities.

Table 1. Elements of the system of state financial strategic audit

Source: Anhelyna, 2013.

Elements of the system of state financial strategic audit in the country cannot function effectively separately. Only their full-fledged interconnection will enable the state to ensure the qualitative functioning of the strategic audit and the reliable final result of its activity. In particular, the effectiveness of financial strategic audit depends on the entities that perform it.

The subjects of strategic audit in Ukraine are: independent auditors, financial inspectors, accounting Chamber employees. According to the Law of Ukraine "On Audit of Financial Reporting and Audit Activities", an auditor is an individual who has confirmed qualification for carrying out the audit activity, has relevant practical experience and is included in the Register of Auditors (Verkhovna Rada Ukrayiny, 2018).

Auditors in different countries are called differently. For example, in the USA, an accountant-auditor is called a public or certified accountant, in France, accountants-experts or accountants, in Germany, the controller of the holding or the controller of books, in the UK—the auditor or juryman.

In Ukraine, auditors can work individually (only as an individual entrepreneur) or as a part of a business entity (legal entity), with certification. In Ukraine, a national audit system similar to that of market-economy countries audits has been formed. The basic components of the national audit system are, on the one hand, auditors and audit firms, and on the other hand, a professional non-governmental organization (Auditors' Union) and the Audit Chamber of Ukraine. According to the statistics of the Register of Auditors (as of November 8, 2018), in Ukraine there are (Verkhovna Rada Ukrayiny, 2019):

- auditors (individuals-entrepreneurs)—2709 persons;
- audit entities (legal entities)—864 firms.

In accordance with the Constitution of Ukraine and the Law of Ukraine "On the Accounting Chamber", the functions of financial control over the activities of budgetary institutions are exercised by the Accounting Chamber of Ukraine. On behalf of the Verkhovna Rada Ukrayiny, it is authorized not only to exercise control over the use of funds from the state budget, but also to control their proceeds.

The activities of the Accounting Chamber are based on the principles of: legality, independence, objectivity, transparency and impartiality. The Accounting Chamber applies in its activities the main principles of the activities of the International Organization of Supreme Audit Institutions (INTOSAI), the European Organization of Supreme Audit Institutions (EUROSAI) and the International Standards of Supreme Audit Institutions (ISSAI) in part that does not contradict the Constitution and laws of Ukraine (The European Confederation of Institutes of Internal Auditing, 2019).

The Accounting Chamber of Ukraine carries out analytical, control and expert activity, which ensures a unified control system for the implementation of the state budget. Although the Accounting Chamber of Ukraine and the main directions of activity are determined, the further adaptation of this supervisory body to international standards is ongoing (Figure 2).



Figure 2. Main directions of control activity of the Accounting Chamber of Ukraine

Source: Bazyuk and Lahdan, 2018.

Auditors of the Accounting Chamber apply a systematic approach to organizing inspections and analyzing their results. In the daily work of the Accounting Chamber experts, much attention is paid to analytical activity, assessment of the effectiveness of the control of objects of verification.

Consequently, the Accounting Chamber acts as a body that provides the public and authorities with reliable real information on the state of the funds management with the State Budget of Ukraine.

If we consider the system of financial control abroad, then it is quite the same type and consists mainly of 5 elements (Figure 3). In Western countries, one of the main places in the field of financial control is the Office of the Chief Auditor—Auditor, that is, the Accounting Chamber. The main purpose of its creation and existence is the implementation of general control over the use of funds from the state budget of the country. Typically, such an organization is subordinate to the president or parliament of the state.

In turn, the tax office is already subordinated to the president, the ministry of finance and government. The main objective of this institution is to control revenue in the context of tax revenues to the budget.

Non-state control services are institutions that carry out audits on the reliability of financial statements and the legality of financial transactions on a commercial basis.

Internal control services are structural divisions of enterprises, the main task of which is to increase profits, to achieve the goal of reducing costs, optimizing financial flows.

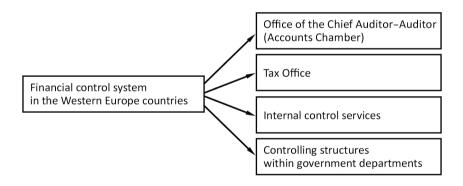


Figure 3. The system of financial control in the countries of Western Europe

Source: Bazyuk and Lahdan, 2018.

The system of financial control in foreign countries is carried out according to the following principles: institutional independence; financial independence; personal independence of auditors-controllers; own responsibility for the programme of inspections; sufficiency of information authority; the right to take measures.

Based on world experience, Ukraine is moving from retrospective forms of state control, such as audit and inspections, to its new form, the state financial audit. This is due to the

need to improve the effectiveness of public financial control in general, to improve the performance of executive bodies and various organizations that use state resources, as well as the need to introduce a new, less fiscal but more operational and partner control form in the budget sphere.

That is why, based on foreign experience, we propose the following recommendations for improving the strategic audit as a means of carrying out the public financial audit in Ukraine:

- preparation of national standards and methodological base for international and European standards, taking into account the European integration course of Ukraine;
- development of a unified information base and normative and legal support for the functioning of internal and external audit bodies;
- to ensure, at the legislative and practical level, the established cooperation of the Accounting Chamber with law enforcement and judicial bodies, which will allow the maximum compensation to offenders caused by the state losses and the return of state funds that were used in an unintended way;
- analysis of the experience of introducing strategic audit in the system of state financial control of foreign countries, its methodological and legal support, which will facilitate the development of the foundation for improvement and further development of the existing system in Ukraine;
- training of the personnel of the appropriate qualification, stimulating the prestige of the profession, creating public places in higher educational institutions of Ukraine.

4. Conclusions

Analyzing the foregoing, we can say that due to the action of objective economic factors in the development of society, it is already not enough traditional financial audit. At the present stage of development, humanity needs new audit technologies that allow obtaining not only relevant but also strategic financial information about the activities of commercial, non-commercial organizations and the state as a whole. This information is also required for investors to be able to analyze the development strategy, strategic reporting and prospects of investing resources in one or another project. That is why strategic audit becomes very relevant in modern conditions.

Strategic audit plays an important role not only in modern business conduct, but also in the implementation of public financial control. Firstly, with the help of a strategic audit, the prospects for the development of the whole country as a whole, as well as the results of large state programmes and system reforms are assessed, and the strategic direction of state policy is determined. Secondly, its conduct makes it possible to compare several projects of state development and to choose the most advantageous strategy for the state. Thirdly, strategic audit allows to minimize risks in one or another sphere.

Creating a clear legislative framework is the first and very important step towards building an effective audit engagement system that should improve the quality of the audit of financial reporting in the public interest.

Harmonization of legislation in the field of audit with European standards is one of the guiding principles of Ukraine within the framework of the "Ukraine 2020" strategy and the duty under the Association Agreement between Ukraine and the European Union.

Consequently, the criterion for the further development of audit in Ukraine is the orientation towards the international requirements adopted by the international community for auditing and related services.

References

- Alekseeva, Y. V., Bohataya, Y. N. = Алексеева, И. В., Богатая, И. Н. (2012). Стратегический аудит в системе аудиторско-консалтинговых услуг. Вестник Ростовского государственного экономического университета «РИНХ», 1 (37), 51–61.
- Anhelyna, Y. A. = Ангелина, И. А. (2013). Стратегический аудит в системе государственного финансового контроля. *Теория и практика общественного развития*, 3, 5.
- Arsanukaev, A. Kh. = Арсанукаев, A. X. (2015). Исследование эволюции стратегического аудита. Учёт и станистика, 2 (38), 38–45.
- Audit Chamber of Ukraine official website = Офіційний сайт Аудиторської палати України. (2019). [online, accessed: 2019-09-15]. Retrieved from: www.apu.com.ua.
- Bazyuk, V. R, Lahdan, A. V. = Базюк, В. Р., Лагдан, А. В. (2018). Вітчизняний та зарубіжний досвід здійснення державного фінансового аудиту. Актуальні проблеми сьогодення, 5, 24–30.
- The European Confederation of Institutes of Internal Auditing. (2019). [online, accessed: 2019-09-15]. Retrieved from: http://www.eciia.eu/what-we-do/.
- The Institute of Internal Auditors. (2019). [online, accessed: 2019-09-15]. Retrieved from: https://global.theiia.org/.
- Metodychni rekomendatsiyi z provedennya Rakhunkovoyu palatoyu finansovoho audytu = Методичні рекомендації з проведення Рахунковою палатою фінансового аудиту. (2015). No. 5-5 [online, accessed: 2018-10-01]. Рахункова палата України. Retrieved from: http://www.ac-rada.gov.ua/doccatalog/document/16746274/Metod rek fin audit.pdf.
- Микоуіd, І. L., Shevchuk, О. D. = Мукоїд, І. Л., Шевчук, О. Д. (2012). Особливості проведення державного аудиту в Україні. *Збірник наукових праць Вінницького національного аграрного університету*. Серія: *Економічні науки*, 4 (70), vol. 2, 230–234.
- Polishchuk, V. V. = Поліщук, В. В. (2014). Напрямки вдосконалення системи державного фінансового контролю: впровадження стратегічного аудиту. *Публічне управління: теорія та практика*, 145–149.
- Synytsyna, D. H., Nalbandyan, N. A. = Синицина, Д. Г., Налбандян, Н. А. (2017). Анализ аудиторской деятельности в зарубежных странах. *Молодой ученый*, 50, 180–183.
- Verkhovna Rada Ukrayiny = Верховна рада України. (2018). Закон України «Про аудит фінансової звітності та аудиторську діяльність» [online, accessed: 2018-10-01]. *Відомості Верховної Ради (ВВР*), 2018, no. 9, ст. 50. Retrieved from: https://zakon.rada.gov.ua/laws/show/2258-19.
- Verkhovna Rada Ukrayiny = Верховна рада України. (2019). Electornic database of legislative acts of Ukraine = Електронна база законодавчих актів України: офіційне інтернет-представництво [online, accessed: 2019-09-15]. Retrieved from: www.zakon.rada.gov.ua.

Audyt strategiczny jako narzędzie kontroli wydatkowania środków publicznych na Ukrainie

Abstrakt: Prowadzona przez instytucje państwowe kontrola wydatkowania środków publicznych odgrywa we współczesnych systemach zarządzania finansami ogromną rolę, zapewniając zgodne z obowiązującymi przepisami prawa i efektywne wykorzystanie środków budżetowych. W gospodarce rynkowej kontrola środków publicznych stwarza potrzebę przeprowadzenia audytu strategicznego, w celu znalezienia sposobów na zwiększenie wydajności i skuteczności państwa we wszystkich obszarach jego działalności. Utworzenie instytucji audytu strategicznego finansów publicznych na Ukrainie pokazuje wzrost roli tego narzędzia w rozwoju

gospodarki narodowej, a także podnoszenie poziomu życia społecznego i politycznego w tym kraju.

W artykule zaprezentowano prawne uwarunkowania audytu strategicznego na Ukrainie, zdefiniowano pojęcie audytu strategicznego, poddano analizie główne elementy strategicznego audytu środków publicznych, sformułowano jego cele i znaczenie dla skutecznej kontroli wydatkowania środków publicznych. Na podstawie analizy przyjętych w innych krajach rozwiązań w zakresie kontroli finansowej zaproponowano kierunki rozwoju audytu strategicznego na Ukrainie.

Słowa kluczowe: środki publiczne, kontrola finansowa, audyt strategiczny, zadania audytu strategicznego, audyt, audytor. Izba Ksiegowa (Ukraina)

Economic migrations to Poland in 2008–2018

Robert Sterniński

Gdańsk University of Technology, Poland Faculty of Management and Economics

ORCID: 0000-0001-8647-0174

Abstract: The aim of the article is to present the stream and structure of economic migrants to Poland between 2008–2018. The first part presents economic migrations in their theoretical aspects, explaining the concept and presenting definitions. Then, the institutional and legal conditions of economic migration to Poland with particular emphasis on documents required by Polish labour market were presented, i.e. work permits, seasonal work permits and declarations of entrusting work to a foreigner. The next part presents data on the number of issued statements and work permits, indicating the potential number of economic migrants. Data from the Social Insurance Institution regarding foreigners registered for retirement and disability insurance were also presented. Moreover, data analysis and evaluation were performed. The article ends with a summary.

Key words: migrations, economic migrant, work permit, labour market

1. Introduction

Poland is defined as a country of emigration, which can be justified taking into consideration the level of mobility of Poles in recent decades. Poland's accession to the European Union in 2004 significantly influenced the further increase in the flow of migration of Poles who massively joined the European labour market. In relation to these population flows, until recently migrations to Poland were not a massive phenomenon. In the post-war period, Poland was closed to the influx of people from outside, except for the few arrivals from the countries of the former Eastern Bloc. Poland was not considered as an attractive destination for migrants, which resulted from the level of economic development, low wages or the level of social benefits. The system transformation led to gradual changes in this respect, and the subsequent economic growth with the support of the European Union allowed gradual reduction of income differences in Poland in

Correspondence to: Robert Sterniński E-mail: robert.sterninski@gmail.com 60 Robert Sterniński

relation to Western European countries. Until recently, the inflow of immigrants to Poland in comparison to the inflow to Western European countries was relatively small, but the situation changed significantly after 2014, i.e. since the outbreak of the conflict in Ukraine. What is more the increase is also the effect of the entry of the new *Act on foreigners*, introducing simplifications in the legalization of stay in Poland. The purpose of this article is to answer the question: how did the stream of economic migrants flow to Poland in 2008–2018 and how was it structured?

2. Economic migration in the theoretical approach

The term *migration* is derived from the word *migratio* (Latin 'resettlement') and means "territorial displacement associated with a relatively permanent change of residence" (Okólski, 2003, p. 407).

Considering migrations according to the criterion of space, Eisenstadt described them as "the physical transition of an individual or group from one society to another. This transition usually requires abandoning a certain social environment and entering into a different, different character" (Eisenstadt, 1953, p. 169). In this context, migration is considered in the separation category. The migrant chooses or is forced to part with family, friends, representatives of the ethnic group, nation, which results in a change in social relations. In turn, a change in the economic environment should be understood as a displacement between areas with different patterns of economic behaviour (e.g. from the countryside to the city, from a developing country to a developed one). Against this background, migration is considered, among others, in the category of changes in the economic status of the migrant (Górny and Kaczmarczyk, 2003).

Bogue (1959) stated that the term *migrant* should be used to refer to people permanently changing their place of residence. So he began the idea of considering migration according to the criterion of residence or stay. This view was supported by Lee (1966), according to which migration should be defined as a change of residence of a permanent or semi-permanent nature, with no significant displacement distance. It is also irrelevant whether this phenomenon is forced or voluntary, internal or external. Displacements without a permanent change of residence, which is a special manifestation of human mobility, are commonly referred to as circulation (Skeldon, 2012).

"Recognizing the need to improve international migration statistics [...] the United Nations Department of Statistics (UNSD) and the European Statistical Office (Eurostat) have carried out a number of activities that have resulted in proposing draft recommendations for international migration statistics" (UN, 1998, p. III). The recommendations concerned, inter alia, ways of defining international migrations and other concepts related to this phenomenon. An international migrant was defined as a person who changed their habitual residence. With this definition, the home country is where the person lives, "that is, the country in which they normally spend their rest time during the day. Temporary travel abroad for recreational, holiday, visiting friends and family, business, therapeutic or religious purposes do not change a person's whereabouts" (UN, 1998, p. 10). The United Nations has also proposed ways of defining long-term and short-term migrants. A long-term migrant is considered to be a person

who "moves to a state other than their country of permanent residence for a period of at least one year (12 months) with the effect that the country of destination has actually become their permanent residence. From the country of departure point of view the person will be a long-term emigrant, and in the receiving country a long-term immigrant" (UN, 1998, p. 10). In turn, a short-term migrant was considered to be a person who "moves to a country other than his country of permanent residence, for a period of at least 3 months, but shorter than a year (12 months), except for cases where the transfer to a given country takes place for recreation, vacation, visiting friends and family, business, therapeutic or related to religious worship" (UN, 1998, p. 10).

There is no functional definition of migration in the Polish legal system. The term *foreigner* is used in relation to people coming to Poland and staying on its territory, in accordance with the Act currently in force on December 12, 2013 on foreigners. A foreigner is defined as "anyone who does not have Polish citizenship" (Journal of Laws of 2013, item 1650, pp. 2/279). In addition, the Act uses the term *mobility*, which is understood as "the right of a foreigner to enter and stay on the territory of the Member States of the European Union in order to work in the host State unit based in a given Member State of the European Union" (Journal of Laws 2013 item 1650, pp. 4/279).

Sjaastad (1962), representing the economic approach to the phenomenon, described migration as the migrants' desire to increase the rate of return on their human capital reduced by migration costs. Wheras Borjas (1989) described it as an attempt to achieve individual benefits by people, both in terms of income and in terms of personal satisfaction. The economic approach to migration theory is also based on Hicks's formulation: "the differentiation of net economic benefits, mainly the difference in net salary is the main reason for migration" (1932, p. 76).

To correctly understand the essence of migration processes, it seems crucial to identify the factors responsible for taking by migrants activities leading to change. According to the main objective criterion, migration is divided into economic and non-economic (Halfacree, 2004).

The decisive motive for economic migration, also known as economic migration, is to improve the economic situation of the migrant and his family. Their most important goal is employment generating greater (wage and non-wage) economic benefits than obtained in the country of origin. The desire to receive higher income may not be the only reason for migration, but it should be decisive. With this method of definition, persons who would not migrate in a situation where higher salary could not be achieved should not be considered as economic migrants (Jończy, 2010).

3. Institutional and legal conditions of labour migrations to Poland

The status and situation of the migrant on the labour market in the host country as well as the legality of their stay is important (Kondoh, 2000). The legality of a migrant's stay in the territory of the host country does not necessarily mean that they have been granted the right to work. At this level, a distinction can be made between following situations (Kawczyńska-Butrym, 2009):

62 Robert Sterniński

 Both the migrant's entry into the country, their stay and start of work, for example on the basis of an employee visa, are legal.

- The entry and stay of a migrant is legal, but the migrant entered the host country, for example on a tourist visa, and then started employment without having the permission to do so.
- The migrant's stay is illegal and he cannot legally start employment.

There are the following documents admitting to the Polish labour market:

- 1) Work permit.
- 2) Seasonal work permit.
- 3) Declaration on entrusting work to a foreigner.

Work permits are issued by the voivode at the employer's request. A foreigner must apply for a residence permit independently, so that they can legally perform work in Poland on the basis of a work permit (up to 3 months it is possible to work under visa-free travel, if such a solution has been introduced for a given country). The work permit specifies the employer, job position or type of work performed by the foreigner, the lowest salary that a foreigner may receive in a given position, working time and the period of validity of the permit. There are several types of work permits (type A—when a foreigner is employed in an entity in Poland; B—when a foreigner performs a function in the management board, acts as a general partner or a proxy, C—in the case of delegating a foreigner to Poland). Authorization procedures and criteria differ depending on the type of authorization. Posted workers must have employment conditions not worse than those specified in Polish labour legislation in areas such as working time, overtime, minimum wage, health and safety, parental rights, etc. The employer may sign both an employment contract and a civil law contract with the foreigner (e.g. contract of mandate, contract for specific work). The contract should be signed in writing (MRPiPS, 2019).

A seasonal work permit (type S) is issued by the staroste (the lower administrative level) at the employer's request. This is a new instrument introduced on January 1, 2018. The employer may apply for a seasonal work permit for a foreigner who is already in Poland and has a residence permit enabling work (e.g. visa—with the exception of visas issued for tourist purposes, use of temporary protection or arrival for humanitarian reasons) as well as for a foreigner who will just apply for entry to Poland. A seasonal work permit is issued for a period not exceeding 9 months in a year. The following are applications in sectors such as agriculture, gardening, tourism, as part of activities considered seasonal as defined in the Regulation of the Minister of Family, Labour and Social Policy of 8 December 2017 on subclasses of activities according to the Polish Classification of Activities (MRPiPS, 2019).

Based on the *Declaration of entrusting the performance of work to a foreigner*, only citizens of Armenia, Belarus, Georgia, Moldova, Russia and Ukraine can be employed. This is called simplified procedure and it applies to works that are not considered as seasonal. The condition for performing work under the simplified procedure is the entry by the poviat labour office of a statement on entrusting the performance of work to a foreigner in the register of declarations at the employer's request, and the possession by the foreigner of a document confirming the title to stay in Poland, which entitles to work. The declaration of entrusting the performance of work to a foreigner entitles to be employed for a period of up to 6 months

within the next 12 months. While working on the declaration, the foreigner may change the employer. However, the new employer must obtain a new document admitting to the labour market for the foreigner. A foreigner may only work for the employer indicated in the declaration (MRPiPS, 2019).

4. Economic migrations to Poland in 2008–2018

4.1. Work permits issued

The scale of the influx of economic migrants to Poland can be proved by data referring to documents enabling legal work, including work permits. In 2018, the most frequently applied for work permit the citizens of eight countries presented in Table 1. The table contains data on the number of permits issued in the years 2008–2018.

Year Country of origin	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ukraine	5400	9504	12,894	17352	19,375	20,416	24,945	48,010	103,208	192,547	238,334
Nepal	181	838	2110	1200	471	524	392	596	1211	7075	19,912
Belarus	1325	1669	1937	1350	1723	1723	1591	1893	4577	10,518	19,233
India	733	1164	1189	787	811	1300	763	993	1345	3938	8362
Bangladesh	54	213	676	646	233	314	282	314	718	2412	8341
Moldova	1218	601	675	977	609	699	897	1322	2560	3792	6035
Georgia	109	143	94	154	171	203	225	88	141	398	2752
Uzbekistan	356	295	434	617	957	948	1040	1396	826	1409	2634
Others	8646	14,913	16,613	17,725	14,794	12,951	13,528	11,174	12,808	13,537	23,165
Total	18,022	29,340	36,622	40,808	39,144	39,078	43,663	65,786	127,394	235,626	328,768

Table 1. Number of work permits issued in 2008–2018 by migrant's country of origin

Source: Author's own elaboration based on data from the Ministry of Labour Market Department of the Ministry of Labour and Social Policy.

The number of work permits issued increased from 18,000 in 2008 to nearly 329 thousand in 2018, i.e. by 18 times. The largest increases in nominal terms occurred in 2015–2018, noting a change from 66 thousand in 2015, up to 127 thousand in 2016, 236 thousand in 2017 and 329 thousand in 2018. The number of permits issued (in thousands) and the dynamics of changes are presented in Figure 1.

64 Robert Sterniński

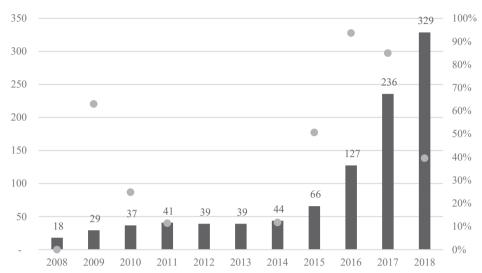


Figure 1. The number of work permits issued (in thousands) and the dynamics of changes (%, year on year) in 2008–2018

Source: Author's own elaboration based on data from the Ministry of Labour Market Department of the Ministry of Labour and Social Policy.

So far the most work permits were received by Ukrainian citizens. In 2018, they received 12 times more permits than Nepalese and Belarusians, who took respectively 2nd and 3rd place in the ranking. The share of work permits issued to citizens of Ukraine, Nepal, Belarus and other countries in total permits issued by Polish institutions is shown in Figure 2.

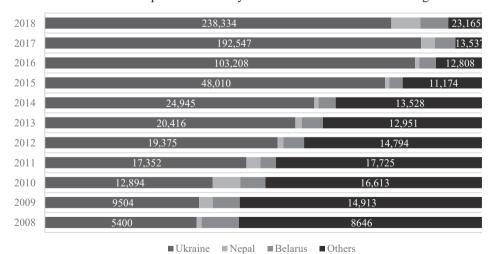


Figure 2. Proportion of work permits issued to citizens of Ukraine, Nepal and Belarus in total permits issued in 2008–2018

Source: Author's own elaboration based on data from the Ministry of Labour Market Department of the Ministry of Labour and Social Policy.

The share of work permits issued to Ukrainian citizens in total permits increased steadily from 2008 to 2017. In 2018, there was a decline in this share, but this is due to the new instrument introduced on January 1, 2018—seasonal work permit (type S), which is used by Ukrainian citizens

4.2. Issued declarations of intention to entrust and entrusting performance of work

The declaration of the intention to entrust work (applicable in the years 2007–2017) and the declaration of entrustment of work (applicable since 2018) are instruments for legalizing the work of foreigners in Poland, which by the ease of meeting the procedural requirements are by far the most popular among economic migrants and their employers. Table 2 presents data on the statements issued in 2008–2018, divided by migrant's country of origin.

Table 2. Number of statements issued regarding the intention to entrust the performance of work in 2008–2018, broken down by country of origin of migrants

Year Country of origin	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018*
Ukraine	142,960	180,133	169,490	239,646	223,671	217,571	372,946	762,700	1,262,845	1,714,891	1,446,304
Belarus	12,606	4860	3623	4370	7636	5194	4017	5599	23,400	58,046	62,805
Russia	1147	674	595	963	1624	1260	1227	1939	3937	6150	6718
Moldova	_	2747	5912	13,024	9421	9248	6331	9575	20,650	31,465	36,742
Georgia	_	_	453	1774	1384	2343	2103	1366	1698	11,126	28,008
Armenia	_	_	_	_	_	_	774	1043	1597	2786	1648
Total	156,713	188,414	180,073	259,777	243,736	235,616	387,398	782,222	1,314,127	1,824,464	1,582,225

^{*} The data relates to declarations of entrustment of work performance.

Source: Author's own elaboration based on data from the Ministry of Labour Market Department of the Ministry of Labour and Social Policy.

Originally the so-called simplified procedure was available to citizens of Ukraine, Belarus and Russia. From 2009, the procedure was also available to citizens of Moldova, from 2010 Georgia, and from 2014 also Armenia. By far the most statements in the entire analyzed period were issued to Ukrainian citizens. In record 2017, a total of 1.82 million statements were issued, of which Ukrainians received 1.71 million (94%).

66 Robert Sterniński

When analyzing data on declarations of intention to entrust work to a foreigner, whose registration was completed at the end of 2017, with data on declarations on entrusting work to a foreigner, effective from 1 January 2018, it should be noted that since 2018 the scope of data regarding statements has changed. Currently they apply only to works that are not considered as seasonal. Hence, the decrease in the number of statements issued in 2018 compared to 2017. The number of statements issued in 2008–2018 and the dynamics of changes are presented in Figure 3.

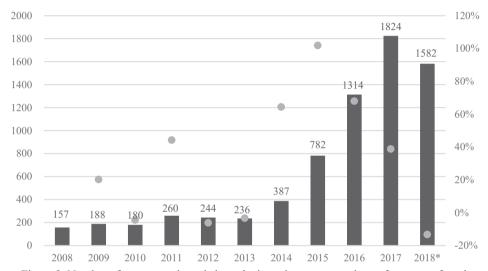


Figure 3. Number of statements issued about the intention to entrust the performance of work and the dynamics of change (%, year on year) in 2008–2018

Source: Author's own elaboration based on data from the Ministry of Labour Market Department of the Ministry of Labour and Social Policy.

The large number of statements issued does not mean that eventually so many foreigners came to Poland as some of them eventually resign from leaving. It does not also mean that a certain number of foreigners in Poland work permanently. Half of the employees from Ukraine come to Poland for a period of 1 to 3 months, and every fourth from 3 to 6 months. This means that the majority of Ukrainian citizens treat their stay in Poland as an opportunity for short-term earnings and use a simplified employment procedure that allows them to work for 6 months within 12 months (Personnel Service, 2018).

In 2018, a total of 121,436 seasonal work permits were issued, the vast majority of which were granted to Ukrainian citizens. Table 3 shows the countries to which citizens have been issued the most permits.

^{*} The data relates to declarations of entrustment of work performance.

Country of origin	Seasonal work permits issued
Bangladesh	16
Belarus	607
Philippines	15
Georgia	199
India	38
Moldova	359
Nepal	192
Russia	45
Ukraine	119,926
Other countries	39
Total	121,436

Table 3. Number of seasonal work permits issued in 2018

Source: Author's own elaboration based on data from the Ministry of Labour Market Department of the Ministry of Labour and Social Policy.

4.3. Applications for old-age and disability pension insurance

All persons who have the status of an employee, contractor or person conducting non-agricultural business activity are subject to compulsory retirement and disability pension insurance, in accordance with the provisions on the social security system. Foreigners who work in Poland are also subject to these insurances (except in special cases).

The data from the Central Register of Insureds indicate that the number of individuals who were subject to retirement and disability insurance and who had citizenship other than Polish increased from 65,000 in December 2008 to nearly 570 thousand in December 2018 (Table 4 and Figure 4). This means a nearly 9-time increase, while the number of foreigners from the EU countries increased by 2-time, and from the non-EU foreigners increased by almost 11--time. As at December 31, 2018, the number of foreigners from the EU countries was 36,000 people, while the number of foreigners from outside the EU—nearly 534 thousand, including 421 thousand people with Ukrainian citizenship (78.8%). Next in terms of numbers were also for migrants from outside the EU, followed by citizens of Belarus (34.1 thousand), Vietnam (8.1 thousand), Moldova (7.6 thousand) and Russia (7.5 thousand). At the end of 2008, foreigners constituted less than 1% of the total insured, while as at December 31, 2018 their share was already 3.6%. The increase in the number of foreigners registered for retirement and disability insurance was characterized by the highest dynamics in the case of non-EU migrants, in particular Ukrainian citizens (26-time increase in the period 2008–2018; impressive nominal growth from 16.2 to 420.7 thousand economic migrants) and Georgia (a 37--time increase). Also noteworthy are data on citizens of countries not yet considered important from the point of view of immigration to Poland: India (6-time increase to 5.9 thousand),

68 Robert Sterniński

Nepal (15-time increase to 2.7 thousand) and Bangladesh (19-time increase to 1.3 thousand) (Adamowicz and Nasiński, 2019).

Table 4. Number of foreigners registered for pension and disability insurance
by citizenship—at the end of the year

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018*
Total	65,041	69,813	69,813	78,608	93,012	101,083	124,349	184,188	293,188	440,255	569,724
EU citizens	16,350	17,138	17,138	19,048	22,242	24,656	27,349	29,421	31,694	24,116	35,960
Non-EU citizens, including:	48,691	52,675	52,675	59,560	70,770	76,427	97,000	154,767	261,494	406,139	533,764
Ukrainians	16,237	18,602	18,602	21,777	29,713	32,989	49,150	101,150	194,418	316,474	420,723
Belarusians	4184	4320	4320	4927	6035	6387	7094	8903	14,351	24,013	34,143
Vietnamese	3004	3481	3481	3951	4655	5267	6041	6146	6528	7592	8138
Moldovans	789	643	643	817	994	12,317	1767	2628	5024	6510	7656
Russians	3018	3201	3201	3448	3661	3832	4178	4692	5691	6654	7569

Source: Adamowicz and Nasiński, 2019.

32,454 34,073 34,073 37,783 41,057 43,438 47,850 49,150 21,377 29,713 32,989 24,656 27,349 29,421 31,694 34,116 35,960 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Figure 4. Comparison of the number of foreigners registered for retirement and disability pension insurance—at the end of the year

Source: Adamowicz and Nasiński, 2019.

In the analyzed period, the structure of foreigners registered for insurance, divided by citizenship, changed dynamically (Table 5 and Figure 5). The share of foreigners from the EU regularly decreases (from 25.1% in December 2008 to 6.3% in December 2018), while the

share of foreigners from outside the EU is steadily growing (from 74.9% in December 2008 to 93.7% in December 2018). The largest changes are observed in the increase in the share of Ukrainian citizens (from 25.0% in December 2008 to 73.8% in September 2018).

Table 5. Structure of foreigners registered for retirement and disability pension insurance by citizenship (in %)—at the end of the year

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EU citizens	25.1	24.5	24.5	24.2	23.0	24.4	22.0	16.0	10.8	7.7	6.3
Non-EU citizens, including:	74.9	75.5	75.5	75.8	76.1	75.6	78.0	84.0	89.2	92.3	93.7
Ukrainians	25.0	26.6	26.6	27.7	31.0	32.6	39.5	54.9	66.3	71.9	73.8
Belarusians	6.4	6.2	6.2	6.3	6.5	6.3	5.7	4.8	4.9	5.5	6.0
Vietnamese	4.6	5.0	5.0	5.0	5.0	5.2	4.9	3.3	2.2	1.7	1.4
Moldovans	1.2	0.9	0.9	1.0	1.1	12.2	1.4	1.4	1.7	1.5	1.3
Russians	4.6	4.6	4.6	4.4	3.9	3.8	3.4	2.5	1.9	1.5	1.3

Source: Adamowicz and Nasiński, 2019.

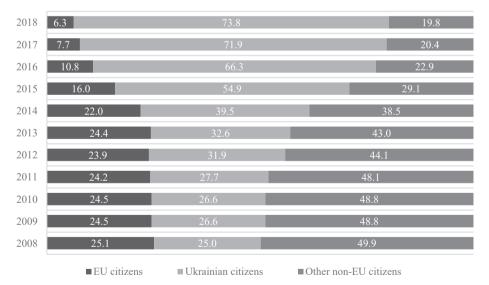


Figure 5. Changes in the structure of foreigners registered for retirement and disability pension insurance by citizenship (in %)—as at the end of the year

Source: Adamowicz and Nasiński, 2019.

70 Robert Sterniński

The data presented in this part of the study do not include foreigners working in Poland without a formal agreement between them and the employer. The actual number of economic migrants working illegally in Poland is difficult to estimate.

In addition, some labour migrants work on the basis of a contract for specific work, from which social security contributions are not paid. The analysis of employment of foreigners carried out by the National Labour Inspectorate showed that on the basis of a contract for specific work in 2014, 15% of foreigners subjected to control were employed (as much as 65% in the agricultural sector). It is worth emphasizing that employing foreigners on the basis of specific work contracts is not justified in the vast majority of cases due to the form and conditions of work, and only serves to circumvent the provisions governing the obligation to register an employee for social insurance, which allows the employer to reduce labour costs (PIP, 2016).

5. Summary

In recent years, Poland has unexpectedly become one of the leaders of the European Union in terms of the influx of economic migrants. Statements about the intention to entrust work to a foreigner, i.e. the so-called simplified procedure, were mostly issued for Ukrainian citizens. In 2008–2018, the share of statements for Ukrainian employees in the total number of statements issued ranged from 91% to 97%. At the end of 2018, as many as 570 thousand foreigners were subject to retirement and disability insurance, which is almost 9 times more than at the end of 2008. The mass influx of economic migrants to Poland, especially after 2014, has become a fact, which is confirmed by data on work permits issued and declarations of intention to entrust work and social insurance applications.

Assessing the stage of the process of transforming Poland into an immigration country is extremely difficult, both by the nature of migration processes (large fluctuations, short-term migrations) or the imperfection of official data sources. Considering the ever-growing employment gap in Poland, which may amount to up to 1.5 million people by 2025 (PWC, 2019) and the growing real wage, further pressure from employers on creating easier access to the Polish labour market for economic migrants should be expected, which will result in maintaining the trend of increasing their population in Poland.

References

- Adamowicz, R., Nasiński, P. (2019). *Cudzoziemcy w polskim systemie ubezpieczeń społecznych*. Warszawa: Zakład Ubezpieczeń Społecznych, Departament Statystyki i Prognoz Aktuarialnych.
- Bogue, D. J. (1959). Internal Migration. In: Ph. M. Hauser, O. D. Duncan (eds.). *The Study of Population* (pp. 486–509). Chicago: University of Chicago Press.
- Borjas, G. J. (1989). Economic theory and international migration. *International Migration Review*, 23 (3), 457–485.
- Eisenstadt, S. N. (1953). Analysis of patterns of immigration and absorption of immigrants. *Population Studies*, 7 (2), 167–180.
- Górny, A., Kaczmarczyk, P. (2003). Uwarunkowania i mechanizmy migracji zarobkowych w świetle wybranych koncepcji teoretycznych. Warszawa: ISS UW.
- Górny, A., Kaczmarczyk, P., Szulecka, M., Bitner, M., Okólski, M., Siedlecka, U., Stefańczyk, A. (2018). *Imigranci w Polsce w kontekście uproszczonej procedury zatrudniania cudzoziemców.* Warszawa: Wise-Europa; Uniwersytet Warszawski. Ośrodek Badań nad Migracjami.

- Halfacree, K. (2004). A utopian imagination in migration's terra incognita? Acknowledging the non-economic worlds of migration decision-making. *Population, Space and Place*, 10 (3), 239–253.
- Hicks, J. (1963). The theory of wages. London: Macmillan & Co.
- Jończy, R. (2010). Migracje zagraniczne z obszarów wiejskich województwa opolskiego po akcesji Polski do Unii Europejskiej: wybrane aspekty ekonomiczne i demograficzne. Opole and Wrocław: Wydawnictwo Instytut Śląski; Uniwersytet Ekonomiczny we Wrocławiu. ISBN 9788362105304.
- Kawczyńska-Butrym, Z. (2009). *Migracje: wybrane zagadnienia*. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej. ISBN 9788322730614.
- Kondoh, K. (2000). Legal migration and illegal migration: The effectiveness of qualitative and quantitative restriction policies. *The Journal of International Trade & Economic Development*, 9 (3), 223–241.
- Lee, E. S. (1966). A theory of migration. *Demography*, 3 (1), 47–57.
- Okólski, M. (2003). Migracje. In: J. Wojnowski (ed.). *Wielka encyklopedia PWN*. Vol. 17: Mao Moholy-Nagy (pp. 407–410). Warszawa: Wydawnictwo Naukowe PWN. ISBN 8301138270.
- PIP. (2016). Legalność zatrudnienia oraz ochrona praw pracowniczych cudzoziemców, w tym w szczególności obywateli Ukrainy, w świetle kontroli Państwowej Inspekcji Pracy. Warszawa: Państwowa Inspekcja Pracy.
- MRPiPS. (2019). *Informacje dla cudzoziemców* [online, accessed: 2019-08-14]. Warszawa: Ministerstwo Rodziny, Pracy i Polityki Społecznej. Retrieved from: www.gov.pl/web/rodzina/informacje-dla-cudzoziemcow.
- Personnel Service. (2018). Barometr Imigracji Zarobkowej. Ukraiński pracownik w Polsce [online, accessed: 2019-08-15]. Wrocław: Personnel Service. Retrieved from: http://personnelservice.pl/pl/biuro-prasowe/raporty.
- PWC. (2019). Rosnąca luka na rynku pracy w Polsce. Jak ją zniwelować? Raport. Gdańsk: Pricewaterhouse Coopers Polska.
- Sjaastad, L. A. (1962). The costs and returns of human migration. *Journal of Political Economy*, 70 (5, Part 2), 80–93.
- Skeldon, R. (2012). Going round in circles: Circular migration, poverty alleviation and marginality. *International Migration*, 50 (3), 43–60.
- United Nations Statistics Division. (1998). Recommendations on Statistics of International Migration, Revision 1
- Ustawa z dnia 12 grudnia 2013 roku o cudzoziemcach. Dz.U. z 2013 r. poz. 1650.

Migracje ekonomiczne do Polski w latach 2008–2018

Abstrakt: Artykuł przedstawia dane na temat strumienia migracji ekonomicznych do Polski w latach 2008–2018. W pierwszej części zaprezentowano migracje ekonomiczne w ujęciu teoretycznym, wyjaśniając pojęcie i prezentując definicje. Następnie przedstawiono uwarunkowania instytucjonalno-prawne migracji zarobkowych do Polski, ze szczególnym uwzględnieniem dokumentów dopuszczających do polskiego rynku pracy: zezwolenia na pracę, zezwolenia na pracę

sezonową i oświadczenia o powierzeniu wykonywania pracy cudzoziemcowi. W dalszej części zaprezentowano dane dotyczące liczby wydanych oświadczeń i zezwoleń na pracę, świadczących o potencjalnej liczbie migrantów ekonomicznych. Przedstawiono również dane Zakładu Ubezpieczeń Społecznych w zakresie cudzoziemców zgłoszonych do ubezpieczenia emerytalnego i rentowego. Dokonano analizy i oceny danych. Artykuł zakończono podsumowaniem.

Slowa kluczowe: imigrant, migrant ekonomiczny, zezwolenie na pracę, rynek pracy

Factors influencing the financial expectations of students of economics

Adam Metelski

Poznań University of Economics and Business, Poland Institute of Socio-Economics

ORCID: 0000-0003-1016-7579

Abstract: In the literature, a lot of attention is paid to factors which influence a person's level of income, but much less is focused on issues determining financial expectations. It is generally believed that a person's income is dependent on their academic achievements. There is an increasing number of articles noting that physical activity can have a positive impact on the professional lives of people, at least by being beneficial for their health. Another significant factor is gender because those women who hold similar positions to men tend to earn lower salaries. This article is focused on determining whether school grades, physical activity and gender may affect students' financial expectations. Students of economics participated in the study that was conducted by the author. As a result of the analyses carried out, it can be determined that physical activity and gender influence the financial expectations of students. In addition, the article also presents the financial expectations of Polish students and how they compare to those of other nationalities.

Key words: financial expectations, gender, academic grades, physical activity, young people

1. Introduction

Financial expectations can be influenced by a number of various factors. It seems self-evident that one of these factors is education. Economists often view schooling as a financial investment: that is, people pay money and devote time to education to improve their human capital in the hope of a better life (Oreopoulos and Salvanes, 2011). It should be noted that teachers in schools often try, sometimes to no avail, to convince their students that their school achievements will affect their later lives. This is not just hearsay, there are studies that confirm that educational attainment affects future professional life (French, Homer and Robins, 2015). On the basis of a grade average in high school, it is possible to calculate the probability that a person will continue their education at

Correspondence to:
Adam Metelski
Uniwersytet Ekonomiczny w Poznaniu
Instytut Ekonomiczno-Społeczny
Katedra Edukacji i Rozwoju Kadr
al. Niepodległości 10
61-875 Poznań, Poland
Tel.: +48 61 854 35 20
E-mail: adam.metelski@ue.poznan.pl

74 Adam Metelski

a higher level and successfully graduate. Obviously, higher education is also a factor that affects levels of earnings in later life. A one-point increase in the grade average in high school may increase the average salary in adulthood by about 12% for men and about 14% for women. Furthermore, it can be noted that, with regards to higher education, students continue their education due to the demands of the current labour market and not because of individual predispositions or academic preferences (Wronowska, 2015). Young people are aware that it is easier to achieve their dream jobs as a university graduate. It should also be noted that the relationship between academic grades and later income does not only apply to high school or university. Studies show that even kindergarten test results have an effect on salaries at age 27 (Chetty et al., 2011). In conclusion, learning and good grades during younger years can contribute to higher levels of earnings later in life (French, Homer and Robins, 2015). This relationship can be explained by two mechanisms. The first is the theory of human capital, in which education increases the skills and abilities of individuals (Becker, 1975; Schultz, 2014). The second view is that future employers use grades and education to compare job candidates and to select the most adequate one (Spence, 1973). Due to the fact that academic grades have an impact on later earnings, it seemed relevant to research if they also affect a person's financial expectation for income later in life.

The second, seemingly less obvious factor that can affect financial expectations is physical activity. Especially at a young age, the development of physical fitness is important because it often contributes to achieving a higher social status (Eccles, Barber, Stone and Hunt, 2003). Participation in sport also allows access to useful social networks that are not available to people outside teams. It is also worth noting that the impact of sport is not always reflected in academic grades. This is because most school tests typically measure cognitive skills, i.e. reading, writing and mathematical knowledge. Concentrating only on academic competencies, may not let a student obtain many of the skills that are useful in the labour market. For example, employers value skills such as: communicativeness, teamwork and leadership (Brunello and Schlotter, 2011). Such skills are often directly nurtured in sporting activities and are required in modern workplace practices which place great emphasis on social organization and the sharing of information. Playing sports creates the opportunity to learn valuable interpersonal skills and allows people to experience tangible successes that translate into greater confidence in other spheres of life (Bailey, Hillman, Arent and Petitpas, 2013). Furthermore, self-confidence is a factor that influences a person's later position on the labour market. A person's level of self-esteem, measured as early as in 10-year-old boys, is a good predictor of their future earnings (Feinstein, 2000). That is: the higher the confidence, the more likely it is that the person will achieve higher earnings. In addition, self-confidence reduces the risk of unemployment. Another positive aspect of sports is the positive impact on health. It is common knowledge that health can be improved by playing sports (WHO, 2010). People who feel healthy may have higher financial expectations because health has a decisive impact on the possibility of a person undertaking any activity (Idzik, Idzik and Majewski, 2011).

A factor that undoubtedly affects financial expectations is gender. There are significant differences related to the gender of the respondents—women typically expect lower earnings than men (Jakubiak, 2012; Menon, Pashourtidou, Polycarpou and Pashardes, 2012). This is confirmed by a labour market analysis, according to which women employed in similar po-

sitions to men earn less than them. This phenomenon has also been confirmed in other studies (Andonova, 2015). Women may expect lower earnings due to the limitations of their expected social functions (for example: mothers and caregivers), the fact that they more readily resign from their careers and an increased tendency to become professionally inactive.

In this study, it was decided that the three key factors, selected on the basis of studies of the relevant literature, influence the financial expectations of Polish students. Therefore, the aim of the article is to determine whether school grades, physical activity and gender affect the level of students' financial expectations for later life. Numerous statistical tests were carried out to verify the assumptions and the research results are presented later in the article, preceded by a presentation of financial expectations of Polish students and how they compare to other nationalities.

2. The financial expectations of Polish students

An international study has shown that students from Poland have low financial expectations (Domaradzki, 2013). Polish students expected that in their first job after graduation they would earn the equivalent of \$963 monthly. Their financial expectations were seven times lower than the Swiss, who had the highest expectations among all the nationalities participating in the survey. It should be emphasized that, due to their low expectations, Polish students were placed last in the ranking—being overtaken by the Indians (\$976), Chinese (\$1084), Mexicans (\$1268) and Russians (\$1310) among others. It is worth adding, however, that students in Poland expect higher earnings in the future, claim to have career prospects and expect professional training from employers—at least showing they have a positive future perspective in this sense. Therefore, it can be said that these results reflect badly on the level of remuneration on the Polish labour market, but well on the students themselves, and because they are aware of their reality—their expectations are slightly lower than the average actual salary in Poland. It should also be noted how the financial expectations of other nationalities relate to local market realities. For example, in the United States, the median expected annual salary after graduation is \$60,000 but data indicate that a graduate with work experience from 0 to 5 years earns \$48,400 annually (Brown, 2019).

A different study on the financial expectations of Polish students also showed that Polish students are aware of realities of the labour market (Jakubiak, 2012). Participants of the survey, who did not have professional experience, declared lower expectations than the national average wage. In turn, as educated people with 10 years of work experience, current students would typically expect a salary higher than the current average wage. It should also be noted that some respondents were not yet able to accurately determine their expectations of the labour market and professional goals. It seems that it may be difficult for young people who have no professional experience (Jakubiak, 2012).

A study in 2016 also analyzed the financial expectations of Polish students for their first jobs (Włodarczyk and Sikorska, 2017). However, the conclusions of this study are completely different from those described above. The highest percentage of indicated earnings was above PLN 4,000 take-home pay (20%). A similar percentage, i.e. 19%, of the respondents specified their expectations to be in the range of PLN 2,200–2,500. According to the

76 Adam Metelski

authors of this study, the results obtained indicate a lack of knowledge about the situation on the labour market among young people. They believe that the results may also indicate a lack of humility, which young people do not typically have, unaware that they still have a lot to learn at the beginning of their professional careers (Włodarczyk and Sikorska, 2017). However, Adam Sulich (2015) points out that students' financial aspirations are growing every year, which may be due to the growing needs of young people, including the need to improve their living conditions. It can also be assumed that the increase in pay ambition in recent years is largely associated with a major change in the labour market—a decrease in unemployment and the appearance of staff shortages.

In summary, it should be stated that despite the fact that some Polish students have high financial expectations, Polish students in general are well aware of the realities of the labour market. Even if the results of some studies indicate that the financial expectations of Polish students are high, in the international survey ranking Poland was last in terms of expected earnings. However, without deciding whether the financial expectations of Polish students are low or high, it is worth considering what factors affect their level. The next part of the article will present the results of research to check which factors affect the level of students' financial expectations.

3. School grades, sport and gender as factors shaping financial expectations

A survey targeted at determining students' financial expectations was conducted in 2018 among students of the Poznań University of Economics and Business (UEP). The study was carried out on 276 people, including 53.3% women and 46.7% men, and the average age of the participants was 21 years. Table 1 presents the minimum, maximum and average monthly financial expectations of students. The question in the survey about finance regarded the average monthly gross amount. Looking at the table, it should be noted that students expected that they would earn less than the average salary in Poland in their first job after graduation, which in the enterprise sector in May 2019 was PLN 5,057.82 (GUS—Central Statistical Office, 2019). It is also worth pointing out how the financial expectations of students are increasing. They tend to double almost every five years. The range of results is also large, as some students expect earnings several times higher in their first jobs than others ten years after graduation. However, on average, students would like to earn more than twice as much as the current national average after ten years of work. Summing up, it can be said that those participating in the study did not have excessive financial expectations for their first job after graduation, but they assumed that their salaries would increase rapidly.

Expected salary	Number Minimum salary Morespondents (in PLN)		Maximum salary (in PLN)	Average salary (in PLN)	
Immediately after university	273	1,800	10,000	3,422.95	
5 years after university	271	2,500	37,000	6,081.73	
10 years after university	269	3,500	370,000	10,807.99	

Table 1. Students' expectations of monthly salary

Source: Author's own elaboration.

Grade average was the first factor whose impact on financial expectations was reviewed. In the survey, students were asked to provide information on their grade averages at the end of high school, middle school and elementary school. The average grade for all of the respondents at the end of high school was 4.49, at the end of middle school 4.89, and at the end of elementary school 5.09. Table 2 presents the financial expectations of students broken down into people who obtained a grade average less than or equal to 4.5 and people with a grade average greater than 4.5 at the end of the type of school. The students were divided into those groups so the number of people in each group would be fairly equal.

Financial expectations (in PLN) Grade average in: Immediately 5 years after 10 years after after university university university <4.5 3,500.00 5,794.29 8,600.00 Elementary school >4.5 3,425.93 6,148.46 11,233.85 < 4.5 9,901.64 3,588.95 6,435.48 Middle school >4.5 5,991.02 3.381.97 11,133,41 ≤4.5 3,439.97 6,021.23 9,297.93 High school >4.5 3,432.63 6,250.42 12,960.68

Table 2. Grade average and financial expectations

Source: Author's own elaboration.

The table shows that the largest differences were recorded in the case of expected earnings 10 years after graduation—people with better grades expected higher earnings than people with lower grade averages. The largest average difference in financial expectations was recorded with regards to elementary school—an expected salary difference of PLN 3,663 between people with higher and lower grades. Despite some visible differences, however, it cannot be stated that they are statistically significant, as evidenced by the results of the Mann–Whitney U Test presented in Table 3.

78 Adam Metelski

Table 3. Mann–Whitney U Test results verifying the difference in financial expectations of people with a higher and lower grade average at the end of elementary, middle school and high school

Grade average in:	Financial expectations	Mann–Whitney U Test	Standardized Z-Test	Asymptotic significance (two-sided)
	Immediately after university	3,958.000	-0.161	0.872
Elementary school	5 years after university	3,975.500	-0.035	0.972
	10 years after university	3,661.000	-0.711	0.477
	Immediately after university	5,680.000	-1.477	0.148
Middle school	5 years after university	5,501.000	-1.668	0.095
	10 years after university	6,038.500	-0.408	0.684
High school	Immediately after university	8,728.000	-0.007	0.995
	5 years after university	8,203.500	-0.671	0.502
	10 years after university	8,369.000	-0.187	0.852

Source: Author's own elaboration.

The next factor that was analyzed was the practicing of sports. In the survey, the respondents were asked about how many hours a week they currently devoted to playing sports and how many hours a week they had devoted to doing sports in high school, middle school and elementary school. The respondents could indicate one of the following answers: 0, 1-2, 3-5, 6-10 and more than 10 hours. In the case of current sports, the largest percentage of students declared that they devoted 1-2 hours a week (42.4%) to sports, followed by 3-5 hours (33%), 6–10 hours (12.3%), 0 hours (7.6%) and more than 10 (4.7%). In answer to the question regarding playing sports in high school, the participants indicated as follows: 3-5 hours (42%), followed by 6–10 hours (23%), 1–2 hours (16.8%), more than 10 (15%) and 0 (3.2%). In middle school, the most respondents had devoted 3–5 hours a week (41.8%) to sports, followed by 6–10 hours (23.4%), more than 10 hours (16.8%), 1–2 hours (15.4%) and 0 (2.6%). Current students declared that in elementary school they had devoted to sports: 3–5 hours (34.7%), 6–10 hours (24.5%), more than 10 hours (21.5%), 1–2 hours (16.1%) and 0 (3.2%). The provided results indicate that the respondents were most physically active in the early school years (in the range of more than 10 hours). The financial expectations of students broken down by level of physical activity are presented in Table 4.

Table 4. Physical activity and financial expectations

Number of hours a week devoted to playing sports		Financial expectations (in PLN)				
		Immediately after university	5 years after university	10 years after university		
	0	3,088.89	5,500.00	9,466.67		
	1–2	3,497.73	5,667.44	8,662.79		
In elementary school	3–5	3,179.03	5,339.25	8,491.30		
	6–10	3,516.42	6,413.64	9,731.82		
	>10	3,715.78	7,320.69	17,739.47		
	0	3,114.29	5,642.86	9,314.29		
	1–2	3,297.62	5,348.78	8,290.24		
In middle school	3–5	3,361.50	5,904.87	9,215.18		
	6–10	3,264.05	5,604.76	9,323.81		
	>10	3,987.02	7,966.67	19,721.59		
	0	3,377.78	5,500.00	8,500.00		
	1–2	3,323.33	5,753.41	9,229.55		
In high school	3–5	3,353.90	5,830.43	8,762.61		
	6–10	3,229.03	5,967.74	10,508.87		
	>10	4,065.40	7,551.28	19,973.68		
	0	3,485.00	6,620.00	12,050.00		
	1–2	3,303.85	6,039.22	12,264.78		
Currently	3–5	3,438.63	5,911.11	9,093.33		
	6–10	3,675.00	6,318.75	10,193.55		
	>10	3,669.23	6,230.77	9,346.15		

Source: Author's own elaboration.

The highest financial expectations were recorded from people who had devoted more than 10 hours to playing sports, in elementary school, middle school and high school. Taking into account physical activity in elementary school, the next highest financial expectations were given by people who had spent 6 to 10 hours playing sports. With regards to the current level of physical activity, it is difficult to identify any specific tendency. The differences in financial expectations of people with different levels of physical activity turned out to be statistically significant when concerning activity that was carried out in elementary school, middle school and high school, as evidenced by the results of the Kruskal–Wallis H Test presented in Table 5.

80 Adam Metelski

Table 5. The results of the Kruskal–Wallis H Test verifying the differences in financial expectations of people with different levels of physical activity

Level of physical activity	Financial expectations	Kruskal–Wallis H Test	Number of degrees of freedom	Asymptotic significance (two-sided)
	Immediately after university	14.943	4	0.005
In elementary school	5 years after university	18.360	4	0.001
	10 years after university	14.170	4	0.007
	Immediately after university	14.866	4	0.005
In middle school	5 years after university	21.864	4	0.000
	10 years after university	15.433	4	0.004
	Immediately after university	18.318	4	0.001
In high school	5 years after university	14.102	4	0.007
	10 years after university	10.984	4	0.027
	Immediately after university	4.233	4	0.375
Currently	5 years after university	3.834	4	0.429
	10 years after university	3.000	4	0.558

S o u r c e: Author's own elaboration.

Finally, an analysis of the importance of gender in relation to financial expectations was carried out. Previous studies have shown that women expect lower earnings than men (Andonova, 2015). An analysis of the labour market also confirms that women employed in similar positions to men typically earn less than their male counterparts (Jakubiak, 2012). Table 6 presents the financial expectations of women and men who participated in this study.

	Fi	nancial expectations (in PLI	N)
Gender	Immediately after university	5 years after university	10 years after university
Female	3,094.18	5,336.21	8,355.52
Male	3,800.91	6,939.68	13,675.81

Table 6. Gender and financial expectations

Source: Author's own elaboration.

It should be noted that men expect significantly higher earnings than women. These results are consistent with the work of other authors (Andonova, 2015; Jakubiak, 2012). After graduation, men want to earn an average over PLN 700 a month more than women, after 5 years from graduation, the average difference increases to over PLN 1,600 and after 10 years from graduation to over PLN 5,000. A particularly large difference is visible in the expectations 10 years after graduation, because men expect a salary increase of up to 64% compared to women. The differences in financial expectations in all three periods which are considered turned out to be statistically significant, as evidenced by the results of the Mann–Whitney U Test presented in Table 7.

Table 7. The results of the Mann–Whitney U Test verifying the differences in financial expectations of women and men

Financial expectations	Mann–Whitney U Test	Standardized Z-Test	Asymptotic significance (two-sided)
Immediately after university	5,696.500	-5.584	0.000
5 years after university	5,725.500	-5.344	0.000
10 years after university	6,276.000	-4.286	0.000

Source: Author's own elaboration.

The study was intended to check what the financial expectations of Polish students are and what factors shape them. In the course of the research, it was found that the amount of expected earnings is affected by physical activity and gender. Despite numerous examples in the literature on the impact of school achievements on income levels, it has not been confirmed that they also affect financial expectations.

4. Conclusion

The purpose of this article was to determine whether school grades, physical activity and gender affect the level of students' financial expectations. The selection of factors was made on the basis of previous studies described in the literature. Firstly, the importance of school grades in financial expectations was checked. School achievements are undoubtedly impor-

82 Adam Metelski

tant for future working life (French, Homer and Robins, 2015). Research results even indicate that a grade average is a good predictor of earnings in later life (Chetty et al., 2011). The results of the conducted research indicated that people with better grades expected on average higher earnings 10 years after graduation, but these were not statistically significant differences. Therefore, it should be stated that it was not possible to confirm during this research that school grades affect the level of students' financial expectations. Perhaps this is due to the fact that people with higher grade averages are more aware of market realities, which is why their financial expectations are not excessive as compared to people with lower grade averages—especially at the beginning of their professional careers. The reason may also be that people with lower grade averages may believe that, regardless of their grades, they are able to achieve a satisfactory level of earnings. In addition, for some people, earnings are not the most important factor of professional success, and they pay attention to other aspects of a professional career, including development, balance and a sense of meaning derived from work. The lack of a significant correlation between grades achieved during the course of education and financial expectations may also result from the distinction of only two levels of grades (above 4.5 and up to 4.5) and the relative levelling out of student grades (people who study economics usually have high grades). A thorough explanation of this issue would, however, require additional research.

Physical activity was another factor that was analyzed. This was due to the fact that an increasing number of scientific articles indicate that practicing sports has a positive impact on professional life (Pfeifer and Cornelissen, 2010; Bailey, Hilman, Arent and Petitpas, 2013). In this study, it was possible to confirm that people who devoted a lot of their time to sports expected higher earnings. This especially applies to the period before starting university. It can, therefore, be said that physical activity is a factor that affects the level of financial expectations. It seems that this may be due to the fact that people who are competitive often decide to play sports. A competitive nature can translate into success in various aspects of life, including professional work and the pursuit of the highest possible income. Therefore, people who devoted more time to sports had higher financial expectations.

The next factor that was analyzed was gender. Other studies have shown that women expect lower earnings as compared to men (Jakubiak, 2012). As a result of the analyses that were carried out, the above-mentioned thesis can be confirmed. Particular differences were noted in the case of expected earnings 10 years after graduation, when the average expectations of men were 64% higher than women. There are inequalities in pay between men and women in the labour market, but the results of the study indicate that their genesis may take place before starting work—as soon as in the college. The responses of women participating in the study may also have resulted from the awareness of the reality of the labour market, which is why their expectations were lower than men's. The issue of women's and men's financial expectations is an interesting research issue and it would be worthwhile to determine at what age the differences begin to occur in future, subsequent studies.

The article also presents how the earning expectations of Polish students compare to other nationalities. To sum up, it should be stated that, despite the fact that some students have high financial expectations, Polish students know the realities of the labour market well. Even if

the results of some studies indicate that the financial expectations of Polish students are high, in an international survey—Poland was ranked last in terms of expected earnings.

A variety of factors can affect the financial expectations of students. In this article, the study analyzed three of them, i.e. school grades, physical activity and gender, because the current literature on the subject often emphasizes that these are factors that are important for earnings. Understanding the financial expectations of students is important because they will soon join the labour market. Therefore, it is worth knowing what factors can affect the amount of earnings they expect. This knowledge may be very useful, especially for people who manage human resources, but also for politicians at a local and national level. Among other causes, this is due to the fact that the desire for higher earnings is one of the main reasons for the migration of Polish people (Work Service, 2017).

References

- Andonova, M. (2015). Factors influencing the earnings expectations among Macedonian students: A comparative perspective with the EU students. *Croatian Economic Survey*, 17 (1), 71–110. DOI: 10.15179/ces.17.1.3.
- Bailey, R., Hillman, C., Arent, S., Petitpas, A. (2013). Physical activity: An underestimated investment in human capital? *Journal of Physical Activity & Health*, 10, 289–308. DOI: 10.1123/JPAH.10.3.289.
- Becker, G. S. (1975). Underinvestment in college education. In: G. S. Becker. *Human capital: A theoretical and empirical analysis, with special reference to education* (pp. 1689–1699). New York National Bureau of Economic Research. ISBN 0226041093. DOI: 10.1017/CBO9781107415324.004.
- Brown, M. (2019). Expectations vs. reality: Early career salaries [online, accessed: 2019-07-22]. Retrieved from: https://lendedu.com/blog/college-graduates-salary-expectations-realities/.
- Chetty, R., Friedman, J., Hilger, N., Saez, E., Schanzenbach, D., Yagan, D. (2011). How does your kindergarten classroom affect your earnings? Evidence from project STAR. The Quarterly Journal of Economics, 126 (4), 1593–1660.
- Domaradzki, K. (2013). Świadomy polski student: niewykwalifikowany i biedny [online, accessed: 2019-06-30]. Retrieved from: https://www.forbes.pl/kariera/rynek-pracy-studenci-z-polski-maja-bardzo-male-oczekiwania-finansowe/2y7s6sy.
- Eccles, J. S., Barber, B. L., Stone, M., Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59 (4), 865–889.
- French, M. T., Homer, J. F., Robins, P. K. (2015). What you do in high school matters: The effects of high school GPA on educational attainment and labor market earnings in adulthood. *Eastern Economic Journal*, 41 (3), 370–386.
- GUS. (2019). Obwieszczenie Prezesa Głównego Urzędu Statystycznego z dnia 19 czerwca 2019 r. w sprawie przeciętnego miesięcznego wynagrodzenia w sektorze przedsiębiorstw w maju 2019 r. [online, accessed: 2019-07-15]. Retrieved from: https://stat.gov.pl/sygnalne/komunikaty-i-obwieszczenia/lista-komunikatow-i-obwieszczen/obwieszczenie-w-sprawie-przecietnego-miesiecznego-wynagrodzenia-w-sektorze-przedsiebiorstw-w-maju-2019-roku,56,66.html.
- Idzik, A., Idzik, M., Majewski, J. (2011). Zdrowie i jakość życia mieszkańców Polski w ujęciu regionalnym. Zeszyty Naukowe Uniwersytetu Szczecińskiego, 689, 497–509.
- Jakubiak, M. (2012). Oczekiwania studentów kierunków ekonomicznych wobec rynku pracy. Zeszyty Naukowe WSEI. Seria: Ekonomia, 5 (2), s. 265–288.
- Menon, M. E., Pashourtidou, N., Polycarpou, A., Pashardes, P. (2012). Students' expectations about earnings and employment and the experience of recent university graduates: Evidence from Cyprus. *International Journal of Educational Development*, 32 (6), 805–813. DOI: 10.1016/j.ijedudev.2011.11.011.
- Oreopoulos, P., Salvanes, K. G. (2011). Priceless: The nonpecuniary benefits of schooling. *Journal of Economic Perspectives*, 25 (1), 159–184. DOI: 10.1257/jep.25.1.159.

84 Adam Metelski

Pfeifer, C., Cornelissen, T. (2010). The impact of participation in sports on educational attainment: New evidence from Germany. *Economics of Education Review*, 29 (1), 94–103. DOI: 10.1016/j.econedurev.2009.04.002.

- Schultz, T. W. (2014). Ekonomia kapitału ludzkiego. Transl. by A. Kliber, P. Kliber, Warszawa: Oficyna a Wolters Kluwer business. ISBN 9788326441707.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87 (3), 355–374. DOI: 10.2307/1882010.
- Sulich, A. (2015). Oczekiwania płacowe studentów i absolwentów Politechniki Wrocławskiej wobec pierwszego pracodawcy. *E-mentor*, 59 (2), 24–27. DOI: 10.15219/em59.1166.
- WHO. (2010). Global recommendations on physical activity for health [online, accessed: 2019-07-22]. Geneva: World Health Organization. ISBN 9789241599979. Retrieved from: http://apps.who.int/iris/bitstream/10665/44399/1/9789241599979 eng.pdf.
- Włodarczyk, K., Sikorska, J. (2017). Aspiracje zawodowe młodych osób na rynku pracy. Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, 310, 201–214.
- Work Service. (2017). Raport Work Service. Migracje zarobkowe Polaków VII [online, accessed: 2019-07-17]. Wrocław: Work Service. Retrieved from: http://www.workservice.com/pl/Centrum-prasowe/Raporty/Raport-Migracyjny/Migracje-Zarobkowe-Polakow-VII-listopad-2017.
- Wronowska, G. (2015). Oczekiwania na rynku pracy. Pracodawcy a absolwenci szkół wyższych w Polsce. Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, 214, 115–127.

Czynniki kształtujące oczekiwania finansowe studentów kierunków ekonomicznych

Abstrakt: W literaturze przedmiotu stosunkowo dużo uwagi poświęca się czynnikom wpływającym na poziom dochodów, natomiast mniejsze zainteresowanie wzbudza kwestia determinantów oczekiwań finansowych. Powszechnie uważa się, że wysokość zarobków osoby jest zależna od jej osiągnięć szkolnych. Coraz więcej artykułów naukowych zwraca także uwagę, że aktywność fizyczna może pozytywnie oddziaływać na życie zawodowe osoby, chociażby przez pozytywny wpływ na jej zdrowie. Kolejnym znaczącym czynnikiem jest płeć, ponieważ zazwyczaj kobiety piastujące

podobne stanowiska do mężczyzn wykazują niższe zarobki. Celem niniejszego artykułu jest określenie, czy oceny szkolne, aktywność fizyczna oraz płeć kształtują oczekiwania finansowe studentów. W przeprowadzonym badaniu wzięli udział studenci kierunków ekonomicznych. W wyniku dokonanych analiz można stwierdzić, że na wysokość oczekiwanych zarobków oddziałują aktywność fizyczna oraz płeć. Dodatkowo w pracy przedstawiono także oczekiwania finansowe polskich studentów oraz to, jak kształtują się one na tle innych narodowości.

Słowa kluczowe: oczekiwania finansowe, płeć, oceny szkolne, aktywność fizyczna, ludzie młodzi



Project value determinants in organizations¹

Katarzyna Bartusik¹ Jolanta Walas-Trebacz²

Cracow University of Economics, Poland Faculty of Management

ORCID: 1 0000-0002-3670-5550 ² 0000-0002-8266-8922

Abstract: The article discusses issues related to project value and factors affecting the creation of project value. Based on in-depth literature analysis, approaches to defining project value and project value management are presented. The results of empirical research based on the developed methodology and selected research instruments used in the study of 80 organizations were presented. The analysis of research results leads to the conclusion that the value of the project is influenced by a lot of internal and external determinants. A diagnosis of the level of determinants in the organization allows project managers to correctly and gradually plan the value of the project and to efficiently and effectively implement individual phases of project value management, as well as make decisions regarding raising this value in the future.

Key words: project value, management of project value, determinants of project value, project success

1. Introduction

In the era of increasing competition companies must competently seek to maintain and strengthen their market position. One of the factors which can contribute to achieving this objective is a company's enhanced effort aimed to implement its projects. Year by year, an increasing number of companies engage in implementing projects in various areas of their activities. They try to implement new projects being aware of their possible benefits which are confined to their specific final results, but they also relate to the value created for owners, clients, business partners, employees and other project stakeholders.

This paper aims to attempt to fill the existing research gap related to project value issues, and particularly to identify the type and strength of influence of factors for the value of the project. The theoretical part of the paper presents the interpreta-

Correspondence to: Jolanta Walas-Trębacz Uniwersytet Ekonomiczny w Krakowie Wydział Zarządzania Katedra Procesu Zarzadzania ul. Rakowicka 27 31-510 Kraków, Poland Tel: +48 12 293 56 18 E-mail: walasj@uek.krakow.pl

¹ This publication was financed from the resources allocated to the Faculty of Management of Cracow University of Economics, under the grant for the maintenance of the research potential.

tions of such fundamental terms as project value and project value management, offered by various authors, as well as the definition proposed by the authors of this paper which allows for identifying the scope of research and the type of adopted methods. The presented literature review and the research problems undertaken by Polish and foreign authors in 2006–2018 in the area of project value constitute a basis for identifying the research gap in the field in question. The empirical part presents the research objectives outlined by the authors and the results of the research conducted in organizations operating in Poland, based on the authors' methodology and choice of research tools. The major objective of the research study is to identify the impact of various external and internal factors on generating project value—one of the key issues in the field of effective project value management.

2. Project value and project value management—definitions and perceptions

Value is a term that can be defined in various ways both at scientific (theoretical) and practical levels. It is confirmed by a number of publications including: Bowman and Ambrosini, 2000, pp. 1–15; Łada and Kozarkiewicz, 2010; Laursen and Svejvig, 2016, pp. 736–747; Lepak, Smith and Taylor, 2007, etc. The authors stress the ambiguity (resulting from contextual use), complexity and diversity of the term *value*². Value is also an interesting research area in the context of projects. In the area of projects a number of issues can be identified which inspire research studies. One of them are project value determinants. In this context it is interesting to find out how to manage a project to maximize its value. Considerations related to value can refer, in practice, to various levels—individual cases, teams or organizations (Lepak et al., 2007). An analysis of project value should give attention to the identification of factors which affect value, in particular to the specific role played by value beneficiaries (stakeholders), as well as the diversified character of value creation sources. Also, literatures refer to the problems of value creation processes, value protection, value appropriation and value destruction (Lepak et al., 2007; Michel, 2015, pp. 136–147).

Based on a literature review, Table 1 presents several selected definitions of project value. It should be noted that the term is frequently identified with economic, financial, organizational, social and marketing benefits.

Author	Term
T. Grzeszczyk (2009)	Project value is understood, for example, as: - total cost of investment, regardless of the sources of financing - total investment costs incurred during the entire period of implementing a multi-year project - all expenditures (also one-time expenses, e.g. trainings, price fluctuation provisions, etc.) - the sum of costs of relatively small projects implemented separately (e.g. the construction of the subsequent sections of the same road).

Table 1. Project value definition

² Value can be considered in various scientific areas and disciplines (Kozarkiewicz, 2016, p. 254). It can be defined not only in an economic context but also in its social, ethical and philosophical dimensions (Walas-Trębacz, 2012, pp. 209–210).

M. Łada, A. Kozarkiewicz (2010)	Project value results from a promised benefit, which implies its attractiveness and convertibility to other goods.
A. Kozarkiewicz (2016)	Project value represents the benefits resulting from its implementation, the purpose of project-related activities, and the significance and profitability of the project in its broad economic and non-economic context.
E. Sońta-Drączkowska (2012)	Strategic project value = the ratio of adapting a project to strategy/ share of the project budget in the total project portfolio budget.

S o u r c e: Authors' own elaboration based on Grzeszczyk, 2009, p. 259; Kozarkiewicz and Łada, 2010, p. 19; Kozarkiewicz, 2016, p. 254; Sońta-Drączkowska, 2012, p. 59.

Monika Łada and Alina Kozarkiewicz (2010, p. 21) claim that project value is composed of such elements as product properties, the knowledge acquired during project implementation, internal procedures improved as a result of implementation, internal relations established with project leaders, economic and financial benefits (return on investment, profit and shareholder value), benefits correlated with project implementation (the anticipated benefits), technical, social and other benefits.

The definitions of project value should give consideration to different points of view represented, for example, by company owners or clients. Project value from owners' perspective represents the possible increase in their assets resulting from project implementation (Mills, 1999, p. 84). Customer value, on the other hand, reflects customers' expectations with regard to products and the price they are ready to accept (in other words: are customers satisfied with products?). The unique features of products imply that products can be designed to meet customers' specific expectations (Ulaga, 2001; Szymura-Tyc, 2003), hence two approaches can be identified in how this problem is perceived by customers (Ulaga and Chacour, 2001):

- 1) the value of the entire offering delivered to customers (represented by the price), i.e. gross value delivered to customers. From the perspective of a project, the value of the product of the project for customers is determined;
- the surplus of the delivered value over the paid price, i.e. net value delivered to customers. From the perspective of the project, it represents a profit for customers resulting from the purchase of the product of the project.

Another term which should be defined in the context of the undertaken problem is *project value management*. Scientific papers offer a number of definitions, and the differences between them result from a different approach to project management (because of the type of adopted methodologies for the needs of specific products), different types of implemented projects, as well as the level of broadly understood competences in the area of project management in organizations.

In its broadest sense, value management can be defined as the process of delivering benefits to customers. In the context of implementing a project, delivering expected results or organizing specific activities, value management refers to the benefits delivered to customers as a result of the successful implementation of a project. When a project creates value, it should be implemented and classified as a business category. Benefits are delivered to customers, and the implementing organization benefits from the perspective of its business operations.

Project value management increases the probability of achieving results and creating benefits (Linman, 2012).

Value management is a set of procedures and practices that support project management, and it aims to maximize its effectiveness.³ According to John Kelly, value management is a process during which the functional benefits of a project are defined and compared with a system of values defined by a customer (2014, p. 1). Also, it can be assumed that project value management is a process of dialogue between groups of project stakeholders, allowing for a mutual understanding and identifying expectations (Leśniak and Zima, 2009).

It is assumed for the purpose of this paper that project value management is a process of planning, measuring, assessing and developing a project, aimed to make effective decisions related to maintaining an optimal balance between the benefits, risk and costs of a given project with the use of properly selected instruments at each stage of creating project value.

It should be borne in mind that value creation can take place in various time horizons and perspectives—at the level of the entire corporation and its particular business units, at product levels and in particular projects implemented by an organization. Consequently, one of the significant research objectives is to determine whether projects implemented by an organization constitute a source of value creation (how much value and its dynamics), as well as to identify the share of undertaken projects (in terms of quantity and quality) in the overall value creation process and those participants who seek to hijack the process for their own needs. A good understanding of these issues in an organization enables it to determine whether projects can be regarded as a basic internal source of competitive advantage.

Project value is a key measure of success, but it can be difficult to explicitly determine its level and to identify it. It is due to the existence of two types of value resulting from a project:

- a) tangible value/ benefits (e.g. a product, device, technology, building, IT systems, etc.);
- b) intangible value (e.g. resulting from socially-oriented or ecological tasks, or knowhow, improvements in communication systems, good relations with stakeholders, a positive image of an organization, etc.).

The results of research studies conducted in a number of organizations indicate that the adoption of properly selected project value management methodology, along with the prompt identification of value creating factors, leads to effective project implementation, the achievement of better results thanks to more effective planning, more efficient proactive problem management processes, a more effective identification of potential threats, the development of plans aimed to respond to risk, the development of formal and informal communication, resulting in a better understanding of project objectives and the attitudes of various stakeholders, and the increased efficiency of financial management (Male, Kelly, Gronqvist and Graham, 2007; Lepak et al., 2007; Schryen, 2013; Kozarkiewicz, 2016; Laursen and Svejvig, 2016).

³ The term *value management* comprises three components: value planning (VP), value engineering (VE), and value reviewing (VR) (Kelly, Male and Graham, 2014, pp. 257–258).

3. Research on determinants of project value creation in organizations

3.1. Objective and research tools

A review of Polish and foreign literatures in the field of broadly understood project value management in 2007–2016 presents the research issues undertaken by various authors in the said period. They are presented in a synthetic way in Table 2.

Table 2. The scope of research areas in the field of project value in 2006–2018

Authors	Research areas undertaken in the field of project value
1) S. Spałek (2006) 2) S. Male, J. Kelly, M. Gronqvist and D. Graham (2007) 3) D. P. Lepak. K. G. Smith and M. S. Taylor (2007) 4) M. Łada, and A. Kozarkiewicz (2010) 5) A. Kozarkiewicz (2010–2015) 6) M. Trocki (2012) 7) R. Urbanelis (2014) 8) S. Michel (2015) 9) M. Laursen and P. Svejvig (2016) 10) M. Podgórska (2016) 11) M. Wirkus and K. Tubielewicz (2018)	Terminology of project success Relationships between project value and project success Analysis of project value in the context of stakeholder groups Value capture Identification of types of criteria facilitating project value assessment Role of strategic orientation in project management Identification of key success factors of projects and enterprises operating in a network

S o u r c e: Authors' own elaboration based on Kozarkiewicz, 2016, pp. 255–259; Laursen and Svejvig, 2016, pp. 736–747; Lepak et al., 2007, pp. 180–194; Łada and Kozarkiewicz, 2010; Male et al., 2007, pp. 107–114; Michel, 2015, pp. 136–147; Podgórska, 2016, pp. 409–419; Urbanelis, 2014, pp. 18–26; Wirkus and Tubielewicz, 2018, pp. 75–87.

In this article, it has been tried to fill the existing research gap in the field of the project value and especially the identification of the type and strength of the impact of internal and external factors on the value of projects in organizations. According to the authors of these issues, it has not yet been sufficiently clarified. In this goal, the authors have conducted empirical research in organizations operating on Polish territory. The presented results are based on the employed research methodology, enabling the authors to propose solutions to some specific problems that arouse the authors' interests.

The research process comprises the following stages: (1) identification of the subject and scope of the study, (2) setting the major objective and partial objectives along with research hypotheses, (3) identification of problems and research methods, (4) development of a research tool—a survey questionnaire (and its verification), (5) conducting surveys among owners and executives, (6) collecting data based on survey sheets, (7) analysis of obtained results, (8) interpretation of the results and formulating conclusions in the context of undertaken research problems.

The selected research tasks are presented for the purpose of this paper with regard to the following issues:

 identification of the main characteristics of the projects implemented by the analyzed organizations,

- determination of the significance and impact of the identified factors on the value of projects in the analyzed organizations,
- identification of the major factors reducing the value of the implemented projects.

A project leader should have the ability to critically assess and analyze all the factors which have an impact on project tasks and processes in order to consider possible alternative solutions and make relevant decisions. The main objective is to avoid unnecessary activities and a decrease in the anticipated value of various project elements.

3.2. Characteristics of the analyzed organizations and projects undertaken

The general objective of the presented results of the empirical research of organizations operating in the territory of Poland is to identify the significance and impact of the external and internal factors which contribute to project value creation—one of the key issues related to effective project value management.

The presented results constitute part of the study based on a survey questionnaire. The study was conducted from April to June 2019. The survey questions were addressed to the owners and executives of the organization who were engaged in developing, implementing and assessing projects. The analyzed organizations carried out production, service and trading activities in various industries.

The study comprised 80 people (in senior management positions or as owners) representing various organizations. The majority of analyzed organizations were the entities with the following characteristics: 11–20 years of operations (37.58%), limited liability companies (53.44%), based in the region of Małopolska (64.15%), IT (15.0%) and automotive companies (15.0%), more than 500 employees (38.68%), good financial standing (45.28%), service companies (76.96%), selling to domestic customers (49.06%), serving most enterprises as final customers (79.25%), using domestic capital (54.72%).

A significant research issue was the identification of the basic characteristics of the implemented projects. Answers to the survey questions allowed for collecting the following data:

- a) the number of implemented projects over the last 5 years in the selected areas: R&D, organization, investment, technology, and management systems;
- b) the quantity and value dynamics of projects in the above areas;
- c) average duration of projects in the particular areas in two periods: 2010–2014, and 2015–2019, and changes in the duration of projects;
- d) share of the particular projects in an organization's revenue, and the economic, social and environmental value of projects;
- e) relationships between intangible and tangible value of implemented projects. These relationships are determined on the basis of respondents' declared average share (%) of intangible value in a project's entire structure and the trends of changes in this structure in particular types of projects.

The results of the study are presented in Table 3.

The majority of projects in the analyzed organizations are implemented in the field of investment (average rate 1.78), followed by innovative (R&D) one year projects (1.59), and technology projects (1.59). In terms of the number of projects, the largest increase is recorded for innovative projects (R&D)—3.45, and technology (3.33), while the largest increase in terms of value is recorded for innovative projects (R&D)—3.49, and investment projects (3.28). Average durations are the longest in investments—from one to two years (3.25), with durations slightly shortened in the recent years (3.19). In the remaining areas implementation periods are slightly longer, which can be explained by the complexity of projects and the necessity to create larger interdisciplinary teams, as well as consultations and agreements with external entities with regard to project development and assessment tasks.

The obtained results indicate that technical projects have the largest share in generating revenue in the analyzed organizations (3.06, which accounts for 50% of revenue), and investment projects (2.81—up to 30% of revenue). Undoubtedly, it results from the highest level of economic value created by investment projects (2.31) or technical projects (2.14). It should be noted that organization-related projects (1.98) and management system projects (1.93) create the greatest social value. Investment projects (1.76) and technical projects (1.73) also have the greatest share in creating environmental value. It results from the use of increasingly advanced technologies which lead to the rational use of materials and energy, and the analyzed organizations must constantly adapt such projects to stricter ecological, quality and security standards.

Also, Table 3 shows that management system projects along with organization projects represent the largest share of intangible assets in the entire structures of projects (2.84 and 2.56, respectively—up to 50%), which undoubtedly results from the very character of such projects. However, the greatest increase in the share of intangible value in the recent years can be attributed to innovative projects (R&D) (3.18) and management system projects (3.11). In contemporary world an increasing attention given to the role of intangible value refers not only to creating a company's entire value, products or services but also to the process of developing and implementing projects.

Table 3. Basic characteristics of implemented projects

F. Intangible value of project		F1. % F2. Trend share of change		2.45 3.18			
e value		Environmental		1.56	1.56	1.56	1.56 1.76 1.33 1.73
E. Average value		Social		1.71	1.71	1.71	1.71 1.84 1.98 1.86
I		Economic Social	,	1.89	2.31	2.31	2.31
D. Share	ın revenue		2.58		2.81	2.81	2.81 1.84 3.06
erage ition period		Years 2015–2019	2.65	-	2.59	3.19	3.19
C. Average implementation period		Years 2010–2014	2.49		2.46	3.25	3.25
 amics 2014)		Value	3.49		3.10	3.10	3.10
B. Dynamics (2018/2014)		Quantity Value	3.45		3.25	3.25	3.25
A. Number of projects	during one year	٥	1.59		1.45	1.45	1.78
an area	of activity		1. R&D, innovation		2. Organization	2. Organization 3. Investment	Organization Investment A. Technology (including IT)

Adopted scales for the characteristics of implemented projects (in columns):

A. Number of implemented projects—0-3: 0—absence, 1—1 project during one year, 2—2 to 4 projects during one year, 3—more than 5 projects during one year. B. Dynamics—number and value—scale 1–5: 1—considerable decrease, 2—slight decrease, 3—stabilization, 4—slight increase, 5—considerable increase.

C. Average duration—scale 1—6: 1—less than 3 months, 2—3 to 6 months, 3—6 to 12 months, 4—1 to 2 years, 5—2 to 3 years, 6—more than 3 years.

D. Share of projects in generating revenue—scale 0-5: 0—no share, 1—very low (less than 10%), 2—low (11-30%), 3—average (31-50%), 4—high (51–75%), 5—very high (more than 75%).

E. Type of value created by implemented projects—scale 0-4, 0—no value, 1—low, 2—average, 3—high, 4—very high.

F. Intangible value of projects: F1. % share in the entire project—scale 0–6: 0—none, 1—less than 10%, 2—11 to 30%, 3—31–50%, 4—51–75%, 5—76–95%, 6—more than 95%; F.2. Change trend in share of intangible value (%)—scale 1–5: 1—considerable decrease, 2—slight decrease, 3—comparable with previous period, 4—slight increase, 5—considerable increase.

Sources: Authors' own elaboration based on obtained results.

It is the effect of environmental protection, health protection schemes, gaining access to information and knowledge, and creating a company's positive image and building its long-term cooperation relationships which, in the long run, also affect tangible value.

The obtained results also indicate that the greatest value is created by projects co-implemented with other entities (62.07% of respondents), followed by an organization's own projects (46.5%), while the smallest value is created by projects which are purchased and adapted to stakeholders' needs (12.07%). This approach results from the awareness of the fact that jointly undertaken projects enable the analyzed organizations to promptly and effectively raise their project standards, gain competences and share project management experience and knowledge thanks to cooperation with other entities, and to mitigate risks as a result of the effective identification of threats and greater responsiveness.

3.3. The factors affecting project value in the analyzed organizations

The key research task related to the undertaken area is the identification of the factors which have an impact on project value and contribute to creating value in the analyzed organizations. The identification of the types of factors in question is based on a literature review and the authors' own experience. For the purpose of the conducted study the authors propose an extended list of possible factors (the questionnaire includes 30 factors) which may affect project value and on the basis of responses describe the impact and significance of particular factors. Table 4 presents the obtained results. It should be noted that the content of the Tables 4 and 5 is limited to key factors which, in respondents' opinion, are regarded as those which have the greatest impact on creating project value (average assessment at the level of at least 3).

Respondents claim that project value is mostly affected by the competences of the project team (impact 3.97; range 2.40), and, in particular, the competences of project leaders reflected, among others, in their responsiveness to problems that occur in the course of project implementation (impact 3.66; range 2.23).

No.	Description	A. Impact on project value	B. Range in creating high project value
1.	Reliable and professional setting of objectives and project parameters (plan, budget, schedule)	3.61	2.39
2.	Accessibility of funding and other necessary resources at particular stages of project life cycle	3.65	2.29
3.	Competences of project team	3.97	2.40
4.	Appropriate atmosphere and relationships in project team	3.47	1.95
5.	Effective communication in project work	3.44	2.08
6.	Monitoring, status reports, cost control (project evaluation)	3.26	2.11
7.	Identification and control of risk and risk management	3.40	2.11

Table 4. The impact of factors on project value and their range in creating high project value

8.	Good relationships and cooperation with project stakeholders	3.56	1.90
9.	Acceptance of change	3.32	1.94
10.	Effective motivating system	3.29	1.79
11.	Application of IT tools in project management and organization	3.24	1.84
12.	Type of project	3.13	1.79
13.	Scope of project	3.03	1.98
14.	Well-defined project implementation strategy	3.26	2.11
15.	Sufficient experience in project implementation	3.32	2.11
16.	Focus on people (commitment to development, improvements in competences, motivation)	3.40	1.95
17.	Leaders' responsiveness to problems in the course of project implementation	3.66	2.23
18.	Appropriate identification of project limitations (time, costs, scope, quality, authority and resources)	3.47	2.16
19.	Stability of regulations	3.19	1.79
20.	Stability of customer preferences (ordering parties)	3.21	1.89
21.	Adherence to agreement provisions by business partners	3.45	2.08
22.	Good cooperation between partners	3.15	1.84

Scales in particular columns:

A. Impact—0-5: 0—no impact, 1—very low, 2—low, 3—average, 4—high, 5—very high.

B) Range—0-3: 0—no significance, 1—low significance, 2—average, 3—high significance.

S o u r c e: Authors' own elaboration based on obtained results.

An equally significant role from the perspective of project value in the analyzed organizations is played by the accessibility of funds and other necessary resources at the particular stages of project life cycles (impact 3.65; range 2.29), as well as reliable objectives and project parameters (impact 3.61; range 2.39). A high range of value creation indicates the proper identification of project limitations (time, costs, scope, quality, authority and resources—2.16), as well as organizational maturity in the area of the available project value management system (e.g. experience, well-defined strategy, monitoring and reporting, and project risk management—2.11). It should be noted that best assessed factors are personal (also managerial) and organizational ones. Respondents also stress a major impact of good relationships with stakeholders and effective cooperation (impact 3.56)⁴, as well as adherence to the terms of agreements and effective communication (2.08). Then again, respondents state that among the factors presented in Table 4 which affect project value the least significant

⁴ Significant factors contributing to project value creation include intraorganizational cooperation, interorganizational networks (especially their organization, strategies, manner and scope of control/ measures, as well as tools, types of implemented projects and broadly understood competences (Kozarkiewicz, 2014, pp. 287–293).

ones are project size and type, and a number of other factors included in the questionnaire but not stressed in their expressed opinions.

An analysis of the factors which influence project value should not be limited to those which have a positive impact. An equally significant role is played by the understanding of factors which reduce project value. The identification of such factors facilitates project management, mitigates implementation risks, and raises the level of organizational competences and maturity in developing strategies (procedures) for responding to value reducing factors.

Therefore, the next stage of the research study identifies the types and impact of factors that reduce project value in the analyzed organizations. Table 5 presents a list of the identified factors (among 43 factors proposed in the questionnaire, with the remaining ones accounting for less than 20% of responses).

Table 5. The impact of identified factors on reducing project value

No.	Description	Impact on reducing project value	No.	Description	Impact on reducing project value
1.	Unclear and unprofessional identification of objectives, parameters (time, costs, quality) and implementation limitations	72.58%	12.	Lack of commitment and motivation to work in a project team	25.81%
2.	Difficult access to funding and resources (human and material, or information) in the course of implementation	40.32%	13.	Lack or insufficient experience in imple- menting specific types of projects	22.58%
3.	Incompetent and improperly selected project team members	64.52%	14.	Ineffective reporting on project progress	27.42%
4.	Lack of good atmosphere and relationships in project teams	27.42%	15.	Lack of proper risk identification and control	37.10%
5.	Prolonged project life cycle	32.26%	16.	Ineffective internal communication	59.68%
6.	Cost and budget overruns	50.00%	17.	Improper selection of project methods and techniques	29.03%
7.	Failure to meet quality standards	51.61%	18.	Ineffective organiza- tional structure	22.58%
8.	Failure to comply with the terms of agreements	22.58%	19.	Inaccurate analysis of threats to project implementation	30.65%
9.	Lack of flexibility	33.87%	20.	Resignation of part- ners from participation	22.58%
10.	Ineffective external communication	38.71%	21.	Scope creep	22.58%
11.	Ineffective knowledge management	35.48%			

S o u r c e: Authors' own elaboration based on obtained results.

Similarly to the factors which affect project value, respondents identify, in the first place, the following project value reducing factors: unclear and unprofessional identification of objectives and parameters (time, costs and quality), implementation limitations (72.58%), and incompetent and improperly selected project team members (64.52%). Respondents point to other significant factors: ineffective internal communication (59.68%), failure to ensure project quality (51.61%), and cost overruns (50.00%). It can be concluded that significant project value reducing factors include personal, organizational, as well as financial determinants.

According to the respondents, project value is less affected by such factors as scope creep, lack of or insufficient experience in implementing specific types of projects, failure to comply with the terms of agreements, resignation of partners from participation or inappropriate organizational structures (the share of these factors stand at the same level of 22.58% of responses).

4. Concluding remarks and further research areas

The presented problems indicate that both in theory and practice there are various approaches to and interpretations of such concepts as project value and project value management. It relates to different types of projects, the use of different methodologies of project value management (hard and soft, classical and agile), as well as the resulting differences in the choice of instruments for identifying, calculating, analyzing or controlling project value. The research areas undertaken in this paper are not easily recognizable because the definition of project value itself is not unambiguous and depends on various points of view of the entities which define this concept.

The intention of the authors of the paper is to show the significance of project leaders' commitment to identifying the impact and range of internal and external factors in creating project value. Such an analysis enables project leaders to make more effective decisions in implementing particular project stages from the perspective of project value. The achievement of the anticipated project value is dependent on a number of factors which are subject to change. Therefore, it is necessary to monitor such factors and assess their contribution to project value. The identification of the most significant factors—which should be given special attention, or those posing a threat to the anticipated value—is very helpful in setting objectives in the entire project value management process, in negotiating the terms of project work with stakeholders and improving procedures for responding to any possible threats.

The most important conclusions resulting from the empirical research are:

- the strongest impact and the greatest importance in achieving high value of projects have: competence of the project team, availability of funds and other necessary resources at individual stages of the project life cycle, as well as reliable formulation of goals and parameterization of projects;
- the lowering of the project value is most often influenced by: imprecise and unprofessional indication of goals, project parameters (time, cost, quality) and restrictions on implementation, as well as an incompetent and incorrectly selected project team.

The issues undertaken in this paper do not offer answers to all the questions related to a broad area of problems faced by many contemporary organizations. Therefore, the authors believe that the presented issues require further research of project value creation which should focus on such problems as the identification of the contribution of implemented projects to an organization's value, the identification of possible opportunities for increasing project value and describing appropriate systems aimed to protect project value in organizations.

References

- Bowman, C., Ambrosini, V. (2000). Value creation versus value capture: Towards a coherent definition of value. *British Journal of Management*, 11 (1), 1–15.
- Grzeszczyk, T. (2009). Ocena Projektów Europejskich 2007–2013. Warszawa: Placet. ISBN 9788374881326. Ika, L. (2009). Project success as a topic in project management journal. Project Management Journal, 40 (40), 6–19.
- Kelly, J., Male, S., Graham, D. (2014). Value management of construction projects. Hoboken: Wiley Blackwell. ISBN 978111831239.
- Kerzner, H., Saladis, F. P. (2009). *Value-driven project management*. New York: Wiley, International Institute for Learning Inc. ISBN 9780470500804.
- Kozarkiewicz, A. (2014). Kontrola tworzenia i apropriacji wartości w sieciach międzyorganizacyjnych. In: E. Nowak, M. Nieplowicz (eds.). Rachunkowość a controlling (pp. 286–294). Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego. ISBN 9788376954691.
- Kozarkiewicz, A. (2016). Zarządzanie wartością projektów aktualne kierunki badań i nowe wyzwania. Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 444, 252–261.
- Laursen, M., Svejvig, P. (2016). Taking stock of project value creation: A structured literature review with future directions for research and practice. *International Journal of Project Management*, 34 (4), 736–747.
- Lepak, D. P., Smith K. G., Taylor M. S. (2007). Value creation and value capture: A multilevel perspective. *Academy of Management Review*, 32 (1), 180–194.
- Linman, D. (2012). Zarządzanie wartością w projektach definicja i cele [online, accessed: 2019-06-12]. Published August 18, 2010, updated December 21, 2012. Retrieved from: https://mymanagementguide.com/value-management-in-projects-definition-and-goals/.
- Łada, M., Kozarkiewicz, A. (2010). Zarządzanie wartością projektów. Warszawa: C. H. Beck. ISBN 9788325512033.
- Male, S., Kelly. J., Gronqvist. M., Graham. D. (2007). Managing value as a management style for projects. *International Journal of Project Management*, 25 (2), 107–114.
- Michel, S. (2015). Przechwycić więcej wartości. Harvard Business Review Polska, 7–8, 136–147.
- Mills, R. (1999). Shareholder value analysis—its use in measuring value creation. In: *The role of management accounting in creating value*. New York: International Federation of Accountants. ISBN 1887464360.
- Montequin, V. R., Cousillas, S., Ortega, F., Villanueva, J. (2014). Analysis of the success factors and failure causes in Information and Communication Technology (ICT) Projects in Spain. *Procedia Technology*, 16, 992–999.
- Podgórska, M. (2016). Sukces w zarządzaniu projektami zagadnienie definicji i jego oceny w świetle wyników badań empirycznych. Zeszyty Naukowe Politechniki Śląskiej. Seria: Organizacja i Zarządzanie, 89, 409–419.
- Schryen, G. (2013). Revisiting is business value research: What we already know, what we still need to know, and how we can get there. *European Journal of Information Systems*, 22 (2), 139–169.
- Sońta-Drączkowska, E. (2012). Zarządzanie wieloma projektami. Warszawa: Polskie Wydawnictwo Ekonomiczne. ISBN 9788320819939.
- Spałek, S. (2004). Krytyczne czynniki sukcesu w zarządzaniu projektami. Gliwice: Wydawnictwo Politechniki Śląskiej. ISBN 8373352031.
- Szymura-Tyc, M. (2003). Wartość dla klienta jako źródło przewagi konkurencyjnej. *Organizacja i Kierowanie*, 4, 17–32.
- Trocki, M. (2012). Kompleksowa ocena projektów. Studia i Prace Kolegium Zarządzania i Finansów, 113, 7–23
- Ulaga, W. (2001). Customer value in business markets. *Industrial Marketing Management*, 30, 315–319.

Ulaga, W., Chacour, S. (2001). Measuring customer-perceived value in business markets. *Industrial Marketing Management*, 30, 525–540.

Urbanelis, R. (2014). Sukces projektu: kryteria pomiaru i definicje. *Gospodarka Materialowa i Logistyka*, *1*, 18–26.

Walas-Trębacz, J. (2012). Znaczenie analizy łańcucha wartości dla organizacji. In: A. Stabryła, S. Wawak (eds.). Metody badania i modele rozwoju organizacji (pp. 209–224), Kraków: MFiles.pl. ISBN 9788393112890.

Walczak, W. (2010). Uwarunkowania i czynniki wpływające na sukces projektu. E-mentor, 3 (35), 17–24.
Wirkus, M., Tubielewicz, K. (2018). Kluczowe czynniki sukcesu projektu i przedsiębiorstwa w sieci tymczasowej. Ouarterly Journal. 3 (26), 75–87.

Young, T. L., (2006). Skuteczne zarządzanie projektami. Gliwice: Helion. ISBN 8324605010.

Determinanty tworzenia wartości projektu w organizacjach

Abstrakt: W artykule omówiono zagadnienia związane z wartością projektu oraz z czynnikami wpływającymi na tworzenie wartości projektu. Na podstawie pogłębionej analizy literatury przedstawiono podejścia do definiowania wartości projektu oraz zarządzania wartością projektu. Zaprezentowano wyniki badań empirycznych przeprowadzonych na podstawie opracowanej metodyki oraz dobranych instrumentów badawczych wykorzystanych w badaniu 80 organizacji. Analiza wyników badań prowadzi do stwierdzenia, że na wartość projektu ma wpływ bardzo wiele determinant wewnętrznych i zewnętrznych. Diagnoza poziomu występujących determinant w organizacji pozwala kierownikom projektu prawidłowo i rzetelnie zaplanować wartość projektu oraz sprawnie i efektywnie realizować poszczególne fazy zarządzania wartością projektu, a także podejmować decyzje w zakresie podnoszenia tej wartości w przyszłości.

Słowa kluczowe: wartość projektu, zarządzanie wartością projektu, determinanty wartości projektu, sukces projektu

Hospitality, tourism, and events industry competency model: Human resource management implications

Barry A. Friedman

The State University of New York at Oswego, USA School of Business

ORCID: 0000-0002-5637-2589

Abstract: This paper addresses the implications of hospitality, tourism and events industry competency modeling on human resource management for organizations and employees. To facilitate organizational effectiveness, competency models must explicitly define knowledge skills and abilities in key jobs, link to overall organizational strategy, and align human resource management with business objectives. The Employment and Training Administration under the sponsorship of the United States Department of Labor developed the most comprehensive competency model for the hospitality, tourism and event industry. This model provides a framework that aligns recruitment, selection, onboarding training and development, performance management, total rewards, human resource planning, and even employees' retirement in the hospitality, tourism and events industry. The paper concludes with competency model limitations and future research proposals.

Key words: competency model, hospitality, tourism, human resource management

1. Introduction

This paper addresses the implications of hospitality, tourism and events industry competency modeling on human resource management for organizations and employees. High performance organizations often employ competency models that explicitly define the knowledge skills and abilities (KSAs) required for exceptional work performance in key jobs (e.g., airline reservations agent, hotel manager). Muizu and Hilmiana (2016, p. 67) stated that "the ability of creative industries and tourism sectors in conducting human resource management activities depends on the management capacity to generate, modify and utilize competency of its human resources to achieve the desired result." Competency models link critical KSAs to organizational strategy, align human resource management initiatives, enhance organizational effectiveness, and allow greater flexibility to adapt to changing in-

Correspondence to:
Barry A. Friedman
The State University of New York at
Oswego
School of Business
SUNY Oswego
7060 State Route 104
Oswego, NY 13126-3599, USA
Tel.: +1 315 312 63 81
E-mail: barry.friedman@oswego.edu

102 Barry A. Friedman

dustry demands (De Vos 2016; Campion et al., 2011; Vakola, 2007). A competency is "a set of personal characteristics (e.g., skills, knowledge, attitudes) that a person acquires or needs to acquire, in order to perform an activity inside a certain context with a specific performance level" (Asame and Wakrim, 2018, p. 228). Knowledge is a "body of information needed to effectively perform critical tasks; skills are the proficiency to perform tasks and ability is the basic capacity for effectively performing a wide range of tasks, acquiring knowledge or developing a skill" (Aamodt, 2016, p. 54). For example, hotels and travel agencies have key jobs whose main responsibility is to assist customers (e.g., hotel concierge, tour guide). KSAs critical for highly effective performance in such jobs include the knowledge of customer service principles, being socially perceptive of customers' and coworkers' needs, and the ability to listen to and communicate clearly (Occupational Information Network, 2018). The use of competency models is so prevalent that some academic accrediting bodies require that programs adopt a competency approach (Abby et al., 2017).

Industry wide competency models identify KSAs that transcend specific jobs and organizations and therefore generalize across a given industrial sector. The Training Administration under the sponsorship of the United States Department of Labor developed the most comprehensive model to date (Hospitality, Tourism and Events Industry Model, 2017). I will refer to this competency model as the Hospitality, Tourism, and Events Industry Competency (HTEIC) model.

Specific implications of the HTEIC model for the following human resource management initiatives are pre-employment, recruitment and selection (i.e., staffing), onboarding (i.e., orientation and initial training), performance management, total rewards, training and development, human resource planning, and retirement of employees in the hospitality, tourism and events industry. The model aligns these HRM functions by incorporating a common core of competencies throughout the employee "life cycle" (from pre-employment to retirement). In other words, employees are recruited, selected, trained, provided performance feedback, trained and rewarded based on common criteria: the demonstrated mastery of competencies identified as critical for job performance and organizational effectiveness.

In this paper, I review recent literature addressing competency modeling in the hospitality, tourism and events industry. The HTEIC model is then described followed by its implications for effective human resource management from both organization and employee perspectives. The paper concludes with a discussion of model limitations proposed future research.

2. Literature review

2.1. Job specific competencies

Recent research identified competencies for specific jobs in the hospitality, tourism and events industry. Recognizing the importance of effective leadership and management for organizational success, Bharwani and Talib (2016) identified competencies for general managers. Building on earlier work on leadership competencies (Woodruffe, 1993; Spencer and Spencer, 1993; Tas, 1988; Boyatzis, 1982), these authors identified the following broad managerial competency clusters: cognitive competencies, functional skills, social skills, and Meta competencies. Cognitive competencies include strategic thinking, innovation and systems

thinking. Functional skills include service orientation and revenue management. Social skills conflict resolution, teamwork and communication skills. Finally, Meta competencies included emotional stability and achievement motivation. Bharwani and Talib (2016) offer an extensive literature review of managerial competency research, and included in their model only competencies that appeared in at least three studies. These competencies are collectively critical for managing around the clock dynamic hotels run by labor intensive and diverse workforces. Wessels et al. (2017) surveyed 254 accommodation managers across South Africa, and identified a wide range of competencies including personal characteristics (e.g., trustworthiness), forecasting, strategic thinking, human resource management, problem solving, communication, information technology, customer service and financial management. Goldman and Scott (2016) identified strategy development, implementation, and organizational alignment strategic thinking competencies as important for several, but mostly higher level managerial, jobs. Larionova et al. (2015) argued for increased education in the tourism industry to improve financial and economic competencies, especially in developing countries where tourism is growing. After surveying 500 hospitality professionals in Cyprus, Marneros and Gibbs (2015) argued that both technical industry specific (e.g. food and beverage cost control, housekeeping operations) and generic management competencies (e.g., marketing, human resource management) are essential for effective management performance.

As might be expected, many of the competencies described above may be common to managers across public and private industrial sectors. Other research focused on competencies of key jobs specific to the hospitality, tourism and events industry. Wan et al. (2017) identified "soft" and "hard" competencies for executive chefs in Taiwan. Soft competencies included emotional control and negotiation skills, while hard skills included culinary research. Al Jahwari and Sirakaya-Turk (2016) also studied tour guides because they affect tourists' first and lasting impressions and ultimate satisfaction with a destination. Tour guides serve as destination ambassadors, mentors, educators, hosts, and leaders. Al Jahwari and Sirakaya-Turk (2016) argued effective communication skills underlie tour guide success. Three hundred and eighty-seven (N = 387) professional tour guides in Antalya, Turkey completed surveys that measured communication skills. Using a modified Importance-Performance Analysis (Martilla and James, 1977), Al Jahwari and Sirakaya-Turk (2016) found assertiveness, interpersonal and cultural inclusion, poise, attentiveness, language ability, friendliness and approachability competencies important to tour guide effectiveness. A key finding was the importance of verbal communications skills related to the correct use of language (e.g., grammar, choice of words, understandability), and that the tour guides themselves felt that there was room for improvement. Shariff and Abidin (2015) developed a competency index for recent Malaysian tour guide and hospitality graduates. Eight competency domains were identified: "Management and Technology Competencies, Leadership Competencies, Organizational Competencies, Personal Effectiveness Competencies, Business-Oriented Competencies, Self-Oriented Competencies, Customer Related Competencies and Innovative Competencies" (Shariff and Abidin, 2015, p. 422).

104 Barry A. Friedman

2.2. Hospitality, Tourism and Events Industry wide competency model

A comprehensive competency model across jobs and organizational levels within a given industry has several advantages over single job competency models (e.g., chef, tour guide, accommodation manager). A common core of competencies that transcend levels facilitates business and human resource planning alignment. Organizations select, develop, reward and promote employees based on their mastering well defined and clearly communicated competencies. In essence, the organizational wide competencies pave the road to progressively greater value as one progresses higher in the organization. The Employment and Training Administration (ETA), the National Travel and Tourism Office (United States Department of Commerce and Department of Labor), and Careeronestep (Careeronestep, 2017) collaborated to develop the HTEIC model. This comprehensive competency model is the product of academic and business subject matter expert in-depth interviews and input from several leading industry associations: American Society of Travel Agents, National Concierge Association, and the National Federation of Tourist Guides Association. The model was updated in 2017 with input from the National Institute for Occupational Safety and Health's (NIOSH) to incorporate safety in the industry and finally by the International Association of Exhibitions and Events (IAEE) to reflect competencies in the event industry. The careeronestep website offers a more detailed description of the model's development (Careeronestep, 2017).

Figure 1 contains the Hospital, Tourism and Events competency model (HTEIC). The HTEIC model consists of five tiers of increasing competency levels: personal effectiveness (Tier 1), academic (Tier 2), and workplace (Tier 3). The first three tiers are generic in nature, and generalize across several industrial sectors. Tiers 4 and 5, however, are more specific to the hospitality, tourism and events industry: industry wide technical KSAs (Tier 4) and industry-sector technical competencies. The latter refers to competencies specific to "five key hospitality sub-sectors: Lodging; Destination Marketing and Management, Tourism and Travel Arrangement; Recreation, Amusements, and Attractions; and Meetings, Events, and Exhibitions Management" (Careeronestep, 2017, p. 4).

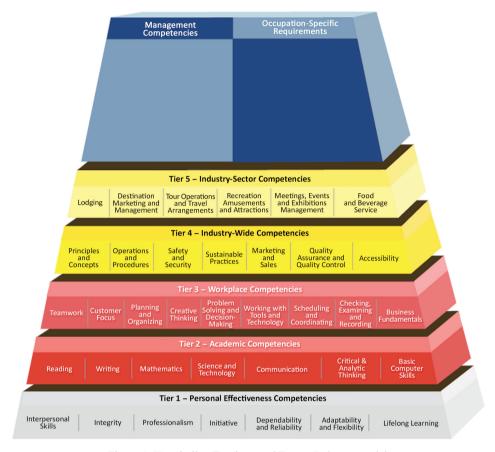


Figure 1. Hospitality, Tourism, and Events Industry model

S o u r c e: Employment and Training Administration, United States Department of Labor (www.doleta.gov). For more detail, see: https://www.careeronestop.org/CompetencyModel/competency-models/hospitality.aspx [accessed: 2019-12-10]. Used with permission.

Figure 1 illustrates specific competencies within each tier. For example, Tier 1 consists of personal effectiveness attributes such as integrity, initiative and flexibility. These competencies are general in nature across many jobs and industries. The acquisition of academic competencies found in Tier 2 begin early, starting in elementary education (e.g., reading), continued through higher education, and continue as one continues to acquire knowledge through lifelong learning experiences. Ongoing job duties, developmental assignments and mentoring help develop Tier 3 competencies. Tier 4 competencies such as safety and security and sustainable practices cut across the entire hospitality, tourism and events industry. On the other hand, Tier 5 competencies are specific to a particular sector within the industry (e.g., lodging). Careeronestep (2017) contains detailed competency descriptions. For example, the Tier 4 Operations and Procedures competency includes:

106 Barry A. Friedman

delivering, monitoring, controlling, and improving services common across the hospitality, tourism, and events sectors; know and follow all practices that ensure the safety and security of guests, visitors, attendees, and employees; demonstrate understanding of the operations performed within the hospitality, tourism, and events industry; and identify and pursue relevant professional development programs, including any commonly required certifications or other credentials (Careeronestep, 2017, p. 21).

3. Methodology

Thirteen State University of New York library search engines, including ABI/INFORM Global, Psychology and Social Science databases, contributed literature review sources. These databases search scholarly and trade journal articles, dissertations, scholarly working papers, and business cases in business and management. Key search terms included "competency", "hospitality", "tourism" "events" and "human resource management", and searches were limited to peer reviewed publications.

4. Human resource management implications

4.1. Human resource management life cycle

This paper employed an employee "life cycle" analogy to illuminate the human resource management (HRM) implications of the HTEIC model. Biological life cycles consist of a series of changes in the life of an organism, from birth to death. Similarly, an employee life cycle begins with education and socialization before employment (e.g., school, family, peer groups) and ends with retirement. In between these events are staffing (recruitment and selection), onboarding (i.e., orientation and initial training), performance management, total reward (e.g., compensation, benefits, and non-tangible rewards), human resource planning and career development (e.g., promotion, international assignments, and developmental assignments) and retirement. The implications of the HTEIC model to each one of these life cycle segments are explored below. The life cycle analogy is also useful at the organizational level of analysis. The HTEIC model has implications for system wide human resource planning and HRM initiative design as well. These implications are also explored below.

4.2. HRM implications

According to De Vos (2017, p. 2543), "the prominent role of competency development in enhancing the success of employees and organizations has drawn the attention of practitioners leading them to introduce competency development as a central part of their human resource practices." Table 1 illustrates the links among the life cycle, organizational HR initiatives, employee implications, and the HTEIC model.

Table 1. Hospitality, Tourism and Event competency model: Human resource implications for organizations and employees

Life cycle segment	Organization	Employee
Pre-employment	Engage in corporate social responsibility initiatives that align with future workforce (e.g., reading, writing and computer literacy). Engage in CSR initiatives that engage corporate reputation, including career mobility and competency development.	 Assess basic Tier 1 and 2 competencies and seek remedial tutoring to eliminate deficiencies. Research organization with respect to CSR efforts and career opportunities, especially with respect to marketable competencies.
Human resource management planning	Include competencies on job descriptions and job postings. Ask upwardly aspiring employees to develop a short and long-term career development plan. Develop tools that facilitate plan development. Train supervisors to develop their direct reports along the competencies required for their current and future jobs. Administer a management and career succession process that includes competency requirements for job families and different organization levels. Train supervisors to assess the readiness of their direct reports to take more responsibility and/ or be promoted to specific jobs.	 Establish a short-term developmental action plan to develop competencies in present job. Establish a long-term developmental action plan to develop competencies for future jobs (e.g., three to five year plans). Conduct a self-assessment of career aspirations, including ability and motivation to pursue more responsibility. Clearly communicate to direct supervisor specific career aspirations, including timetables.
Recruitment	 Define applicant labor market segments that process required Tier 1–3 competencies. Establish and maintain linkages with key recruiting sources. 	 Research openings and job postings for required competencies. Utilize options that increase visibility to desired organizations (e.g., search firm websites and networking). Develop customized resumes that include competencies where warranted.
Selection	 Increase quality of hire: validate employment tests that measure Tier 1–3 competencies and predict performance in a wide range of entry level and lower jobs. Increase quality of hire: validate employment tests that measure Tier 4 and 5 competencies for specific higher jobs. 	 Determine valued competencies via research on general industrial literature, company website and job postings. Practice at least three interview responses to likely behavioral event interview questions based on valued competencies. Ask for feedback even if not selected.
Onboarding	 Emphasize valued competencies (Tiers 1–5) during orientation. Reinforce competencies appropriate to the new employees' job responsibilities. 	Communicate closely and frequently with direct supervisor regarding performance feedback based on competencies.

108 Barry A. Friedman

Training and development	Conduct needs assessment that identify workforce competency gaps at all levels and tiers. Design training and development experiences that build competencies for key jobs.	Work closely with direct supervisor and human resources to participate in training and development activities that help de- velop competencies valued in higher jobs.
Performance management	Include appropriate competencies in the performance appraisal process. Include developmental action planning in the performance management system. Appraise manager performance based, in part, on how well subordinate competences are developed, and on subordinate development.	 Ask for specific feedback on performance related to competencies valued for present and future jobs. Obtain agreement regarding developmental action plans that focus on competencies. Follow up with supervisor regarding progress.
Total rewards	Conduct job evaluations that incorporate key competencies that provide value. Adopt a pay for performance compensation practice, and make pay contingent, in part, on developing competencies.	 Review job evaluation reports that identify competencies and their monetary worth in the compensation program. Aspire to jobs that require additional competencies or higher levels of competencies in present job.
Retirement	Provide transitional tools for employees near retirement, including printed materials and mentoring. Link competencies that employees have mastered to effective transition to retirement.	Establish and implement a retirement transition plan that capitalizes on competencies mastered during one's career.

Source: Author's own elaboration.

4.2.1. Pre-employment

Organizations strive to be visible and desirable to potential employees. Organizations often select corporate social responsibility (CSR) initiatives that strategically link to their mission and increase their attractiveness to applicants. For example, the mission of Marriott International, a leading global lodging company with more than 6,500 properties across 127 countries and territories, is to "delight and surprise our guests at every encounter". Marriott set a CSR goal to implement programs and partnerships that develop hospitality skills and opportunity among youth, diverse populations, women, people with disabilities, veterans and refugees (Marriott, 2018a), and plans to invest five million USD to reach this goal by 2025. Marriot's well-communicated CSR initiatives resulted in their excellent corporate reputation. In their Most Admired Companies Ranking, Fortune (2018) ranked Marriott as the best company to work for in the hotel, casino and resort industry. This excellent corporate reputation greatly enhances Marriot's ability to recruit applicants, especially millennials who are attracted to socially responsible companies. The CSR initiative that builds hospitality skills in

areas where Marriott properties are located enhances the quality of the local applicant pool, especially for, but not limited to, entry-level jobs.

Applicants can explore career and specific job opportunities in any of Marriott's hotels and resorts, complete with brief job descriptions and competencies. For example, entry-level lobby host jobs require basic Tier 1–3 skills, including customer focus, reading, and clear verbal communication skills. Prospective employees can self-assess their own competencies and seek remedial opportunities that develop Tier 1–3 competencies at the entry levels and Tier 4–5 competencies for higher-level jobs. Remedial opportunities include programs sponsored by Marriott as well as other educational options.

4.2.2. Human resource planning (HRP)

Organizations maintain adequate staffing levels by forecasting staffing supply and demand levels and implementing human resource plans (HRP). HRPs and business plans alignment facilitates organizational goal attainment. This includes not only management succession planning, but also replacement planning at all levels. HRP includes forecasting needs given employment trends (e.g., employee turnover, promotion rate, economic indicators, employment rate), establishing career paths, transition plans from one job to another, and the assessment of employee competencies and career motivation. Forecasts, workforce assessments, training supervisors to assess direct report readiness for future jobs, and creating career paths all involve the delineation of competencies such as those continued in the HTEIC model.

4.2.3. Recruitment

Prior to recruitment, organizations should identify labor markets of potential employees with prerequisite competencies. Labor markets are likely local or regional for lower level jobs, and regional, national or even international for higher-level jobs. To promote effectiveness and reduce recruiting costs, organizations should nurture strong relationships with contact persons in labor markets that have provided effective employees in the past. Specific colleges and universities are often excellent sources for mid-level jobs such as management trainees, as are vocational and technical schools, unions, and professional organizations. Regarding colleges, organizations can establish relationships with professors in given disciplines who then identify top students for internships well before graduation. Organizations are more likely to hire students that interned with them, as they can better assess students' competencies who they directly observed. The goal is to establish a diverse and qualified applicant pool.

Applicants, including students that desire an internship, can research organizational career paths and specific jobs, paying particular attention to the competencies the organization values. Applicants can then judge the extent that these competencies and their own competencies and values align. If sufficient alignment exists, applicants can customize their cover letters and resumes to fit organizational values and required competencies.

110 Barry A. Friedman

4.2.4. Selection

Employment selection refers to providing offers of employment to selected individuals in the applicant pool. Paramount to achieving a high quality of hire is the validation of tests that measure applicant potential to perform on the job. A "test" could be anything used to make an employment decision, which includes, but is not limited to, paper and pencil tests, interviews and reference checks. Paramount to determining the test usefulness is validation, which measures the relationship between test scores and future or current job performance. The Mental Measurements Yearbook (Carlson et al., 2014) lists employment tests previously validated for specific jobs. The MMY contains test validity and reliability information for approximately 2700 employment tests shown to be predictive of future job performance in various jobs, many of which are in the hospitality, tourism and events industry. Only validated employment tests that predict valued competencies should be used to select applicants. In the United States, only validated tests may be legally used for employment purposes (Uniform Guidelines for Employee Selection Procedures, 1978).

Applicants should research the company website and job openings to determine which competencies the target organization values and is likely to assess during the selection process (e.g., initial screening, interviews). Organizations often use behavioral event interviews to measure valued competencies. Interviewers ask applicants to provide specific instances where they demonstrated a given competency. For example, "tell me about a time where you achieved results on a team" requires that applicants provide evidence they possess the Tier 3 workplace competency "teamwork". The interviewer typically asks follow up probes designed to solicit relevant evidence of the competency, such as "what was the team goal, who was included, what was your role, what did you specifically do, and what were the results?" To best prepare for interviews, applicants should reflect on their past school, work and community experiences, and identify experiences that reflect their possession of competencies they believe are valued by the prospective employer. If not selected, applicants should ask for feedback so that they can improve their marketability moving forward.

4.2.5. Onboarding

Organizations' first opportunities to communicate value added competencies are new employee orientation and training programs. Organizations communicate Tiers 1–5 competencies at various organizational functions and meetings. Competencies relevant to the new employees' initial responsibilities can be emphasized, but competencies needed for a sustainable career can also be communicated.

With knowledge of valued competencies for their present and future jobs, new employees should work closely with their supervisors to identity strengths and areas for improvement with respect to competencies. Supervisors and employees determine initial developmental actions that ensure that new employees feel valued and that the organization is committed to their development.

4.2.6. Training and development

Among the first steps in a talent management process is to determine job competency requirements and conduct a needs assessment of the current workforce. Training programs and developmental experiences close the gap between competency requirements and competencies the workforce processes. Organizations can deliver training and development programs internally or externally. Alternatively, organizations can hire employees they already possess required competencies, reducing the need for extensive training. The important goal is that the workforce has Tier 1 through 5 competencies required to effectively compete in their marketplace and achieve organizational objectives. Responsibilities and resources (i.e., budget) for training and development initiatives must be allocated and managed.

While supervisors are responsible for their subordinates' development, most organizations place a heavy burden on employees to actively seek out and take responsibility for their own development. With organizational support, employees must first achieve excellence in their current jobs, then actively pursue a career path and participate in developmental opportunities. A career path is not simply moving from job to job, but instead represents continuous learning whereby employees build upon progressively valued competencies. The HTEIC model provides a road map of progressively more valuable competencies as one moves from Tier 1 to 5.

4.2.7. Performance management

An organization's performance management system (PMS) is the "series of activities designed to ensure that the organization gets the performance it needs from its employees" (Mathis et al., 2014, p. 334). Important PMS elements include performance feedback, subsequent performance improvement, and employee development that results from evaluations/appraisals supervisors conduct with their direct reports. Many performance evaluation programs have two parts: performance objective achievement and development actions that improve employee performance and readiness for future jobs. Competency improvement is especially suited for the latter where the supervisor and employee agree upon and initial development action plans. Performance evaluation ratings link with compensation merit increases, lump sums, incentive pay, and promotions. Organizations should reward achievement and mastering of competencies.

Employees have a vital interest in their performance evaluations because compensation, promotions and in some cases, continued employment are contingent on their performance review ratings. Competencies play a key role, especially with respect to developing competencies for future assignments and continued upward mobility. Employees should therefore work closely with their supervisors and human resources to ensure continued competency growth as they seek to add greater amounts of value to the organization.

4.2.8. Total rewards

Job evaluation is the "systematic means to identify the relative worth of jobs within the organization" (Mathis et al., 2014, p. 389). The most frequent job evaluation method is the point factor method whereby important KSAs, known as compensable factors, are rated across jobs. Com-

112 Barry A. Friedman

pensable factors are often competencies. The more competencies, or level of competency, a job requires for effective performance, the greater it's "worth". The higher the worth, the higher job incumbents are paid. For example, entry-level lobby hosts at Marriott are required to perform basic tasks such as assist guests entering and leaving property, inform guests of property amenities and local areas of interest and activities. These basic tasks require basic Tier 1, 2 and 3 HTEIC model competencies. On the other hand, higher compensated Marriott Assistant Banquet Managers require a greater number and level of competencies, including more education (high school diploma; Tier 2 academic competencies), two years of experience in the event management, food and beverage, or related professional area (Tier 3 workplace competences), supervises the banquet staff (Tier 3 teamwork), communicates and executes departmental and property emergency procedures and ensures staff are trained in safety procedures (Tier 4 safety and security), and leads banquet operations (Tier 4 operations and procedures) (Marriott, 2018b).

Employees should work closely with their supervisors and human resource to explore career paths and competencies needed for advancement. Job descriptions should include job objectives, responsibilities, tasks and competencies required for effective performance. Employees should therefore first review their current job description and master the competencies inherent in their present job. Employees can concurrently develop competencies needed for future jobs as well, but advancement is often contingent on performing at a high level in ones' present job. While not universally true, many organizations share job descriptions with supervisors and employees for this purpose.

4.2.9. Retirement

Retirement refers to the transition from active employment to retirement as well as the actual post retirement years. Most of the emphasis is on retirement benefits intended to make retirement economically feasible (e.g., pension and health care benefits). Organizations should also provide transitional tools for retirement that address financial, social, and psychological retirement challenges.

In surveys, employees often state that they "never plan to retire", but research has shown that this intention may be driven by employees' lack of retirement planning (Hanna et al., 2017). Several of the competencies in the HTEIC model are relevant in this context. Tier 3 workplace competencies play a key role in retirement transition and retirement. For example, planning and organizing fosters a logical pre-retirement plan, teamwork helps retirees establish and expand social networks so important when one departs the workforce, and creative thinking facilitates the generation of innovative ways to provide meaning in retirement. Organizations should invest in transitional tools that capitalize on these and other competencies that employees worked so hard to master.

Employees need to capitalize on their Tier 3 workplace competencies in retirement planning and in retirement. They need to plan their retirement, generate new social networks and establish new ways to derive meaning in retirement. Retirees can also build on their Tier 4 and 5 industry and sector wide competencies by consulting with hospitality, tourism and/ or events organizations, or by serving on organizational boards of directors. These Tier 4 and 5 competencies can well employees and organizations after retirement.

5. HTEIC Model limitations and future research

Like all competency models, the HTEIC model must incorporate subsequent research findings and industry change. Competencies required for effectiveness performance are likely to change as the hospitality, tourism and event industry evolve and global competitiveness increases. The HTEIC model must be updated frequently to maintain its efficacy moving forward. For example, Demirciftci et al. (2017) argues that revenue management (RM) competencies will be required for hotels to remain competitive, but that the supply of competent employees is inadequate. RM is a "strategic process that attempts to match demand and supply at optimum levels through variable pricing in such a way that creates maximum revenue for an organization" (Demirciftci et al., 2017, p. 500). Tier 4 and 5 industry and sector competencies include marketing and sales, but not financial competencies.

Recent research has also found that e-service innovation is a competency important for hotels to be competitive (Chuang and Lin, 2015). E-service innovation refers to serving customers better through information technology and marketing. After surveying 126 Information Technology and Marketing managers across 126 companies in Taiwan, Tsou (2016) concluded that organizations should increase their e-service innovation intellectual capital. Tier 2 basic computing skills and Tier 4 marketing industry wide competencies do address this emerging need. Similarly, the HTEIC model does not include competencies to implement e-commerce initiatives.

Knight and Paterson (2018) developed a competency model for sustainability and corporate social responsibility leaders. Other than in the Tier 1 professionalism competency (e.g., do not abuse controlled substances), CSR leadership competencies are not addressed in the HTEIC model, and should be included in future updates. Wroblowská and Ruda (2015) noted that the competencies required of product managers change over time, a finding not unexpected given advances in marketing.

The methods and techniques used to identify competencies critical for job and organizational success are many, including subject matter expert interviews, critical incident technique, extensive job analyses, and information collected during performance appraisals and training needs assessment (De Vos et al., 2015). Future research should address the relative effectiveness of different methods, paying particular attention to issues of validity, reliability, and association with job and organizational performance.

The generalizability of the HTECI model must also be assessed (Competency models and culture, 2015; Vickers, 2013), questioned the cross-cultural generalizability of competencies generated using the behavioral event interview technique. The model was the result of extensive interviews in the United States and extensive job descriptions in the Occupational Information Network, a comprehensive repository of job descriptions in the United States. Future research can explore the model's generalizability outside the United States.

Organizations should consider comprehensive competency models such as the HTEIC model has a starting point only. Organizations are unique in their history, marketplace, culture and methods, and as such should adapt the HTEIC model to their unique circumstances. At the least, organizations can form cross-functional committees to explore the applicability of competency models to their organization.

114 Barry A. Friedman

Future research should determine the relationship among competency model use, employee satisfaction, motivation, and retention. Do organizations that clearly use, communicate and develop employee competencies throughout the employee life cycle reduce turnover, increase upward mobility, and improve employee performance? On a more macro level, the relationship between competency model alignment with business objectives, organization reputation, and organizational performance needs exploration.

6. Summary and conclusions

This paper explored the human resource management implications of competency modeling in the hotel, tourism and events industry. From employees' perspective, a career is a series of work-related jobs occupied over his/ her working life (Mathis et al., 2014). Employees must "identify personal competencies and interests, plan life and career goals, and assess alternative career paths inside and outside the organization" (Mathis et al., 2014, p. 306). Most importantly, employees must gain their supervisors' support in the pursuit of their career aspirations. Supervisors should show their support by advocating for their direct reports in succession planning meetings, procuring needed resources, and removing barriers to career goal accomplishment. HTEIC model deployment suggests implications for both organizations and employees. Future research should test hypotheses that the alignment of competency models with business plans and weaving competencies throughout the employee life cycle benefit both the organization and its employees.

References

- Aamodt, M. G. (2016). Industrial/ organizational psychology: An applied approach. 8th ed. Boston, MA: Cengage Learning. ISBN 9781305118423.
- Abby, S. K., Schumacher, E. J., Dellifraine, J., Clement, D., Hall, R., O'Connor, S., Stefl, M. (2016). Competency development and validation: An update of the collaborative leadership model. *The Journal of Health Administration Education*, 33 (1), 73–93.
- Al Jahwari, D. S., Sirakaya-Turk, E., Altintas, V. (2016). Evaluating communication competency of tour guides using a modified importance-performance analysis (MIPA). *International Journal of Contemporary Hospitality Management*, 28 (1), 195–218.
- Asame, M. E., Wakrim, M. (2018). Towards a competency model: A review of the literature and the competency standards. *Education and Information Technologies*, 23 (1), 225–236.
- Auker, T. V. (2018). Wegmans customers donate \$1.8 million to hunger relief in Fall 2017 [online, accessed: 2018-05-17]. Wegmans Food Markets News Media. Retrieved from: https://www.wegmans.com/news-media/press-releases/2018/wegmans-customers-donate--1-8-million-to-hunger-relief-in-fall-2.html.
- Bharwani, S., Talib, P. (2017). Competencies of hotel general managers: A conceptual framework. *International Journal of Contemporary Hospitality Management*, 29 (1), 393–418.
- Boyatzis, R. (1982). The competent manager: A model for effective performance. New York: John Wiley & Sons. ISBN 047109031X.
- Campion, M. A., Fink, A. A., Ruggeberg, B. J., Carr, L., Phillips, G. M., Odman, R. B. (2011). Doing competencies well: Best practices in competency modeling. *Personnel Psychology*, 64, 225–262.
- Careeronestep. (2017). Hospitality, Tourism, and Events Industry Model [online, accessed: 2018-05-16]. Employment and Training Administration, United States Department of Labor. Retrieved from: https://www.careeronestop.org/CompetencyModel/competency-models/hospitality.aspx.
- Chuang, S. H., Lin, H. N. (2015). Co-creating e-service innovations: Theory, practice, and impact on firm performance. *International Journal of Information Management*, 35, 277–291.
- Competency models and culture (2015). Human Resource Management International Digest, 23 (6), 27–29.

- De Vos, A., De Hauw, S., Willemse, I. (2015). An integrative model for competency development in organizations: The Flemish case. *The International Journal of Human Resource Management*, 26 (20), 2543.
- Destler, D. (2017). The SuperSkills model: A supervisory microskill competency training model. *The Professional Counselor*, 7(3), 272–284.
- Demircifici, T., Cetin, G., Bilgihan, A. (2017). Coping with RM challenges in hospitality education. *Journal of Revenue and Pricing Management*, 16 (5), 499–512.
- Fortune (2018). Fortune 100 Best [online, accessed: 2018-05-17]. Retrieved from: http://fortune.com/worlds-most-admired-companies/marriott-international/.
- Goldman, E., Scott, A. R. (2016). Competency models for assessing strategic thinking. *Journal of Strategy and Management*, 9 (3), 258–280.
- Hanna, S. D., Zhang, L., Kim, K. T. (2017). Do worker expectations of never retiring indicate a preference or an inability to plan? *Journal of Financial Counseling and Planning*, 28 (2), 268–284.
- Knight, B., Paterson, F. (2018). Behavioral competencies of sustainability leaders: An empirical investigation. *Journal of Organizational Change Management*, 31 (3), 557–580.
- Larionova, A. A., Dzhandzhugazova, E. A., Minervin, I. G., Yakimenko, R. V., Balitskaya, I. V. (2015). Shaping financial and economic competencies in the process of training personnel for the hospitality industry. *Journal of Environmental Management and Tourism*, 6 (2), 402–405.
- Marneros, S., Gibbs, P. (2015). An evaluation of the link between subjects studied in hospitality courses in Cyprus and career success. *Higher Education, Skills and Work-Based Learning*, 5 (3), 228–241.
- Marriott International (2018a). 2025 Sustainability & social impact goals [online, accessed: 2018-05-18]. Retrieved from: http://serve360.marriott.com/sustainable-goals/.
- Marriott International (2018b). *Careers* [online, accessed: 2018-05-18]. Retrieved from: https://jobs.marriott.com/thehosts/jobs/18001D9B?lang=en-us.
- Martilla, J. A., James, J. C. (1977). Importance-performance analysis. *Journal of Marketing*, 41 (1), 77–79.
- Mathis, R. L., Jackson, J. H., Valentine, S. R. (2014). Human resource management. 14th ed. Stamford, CT: Cengage Learning. ISBN 9781133953104.
- Muizu, W. O. Z., Hilmiana, H. (2016). Competency development of culinary creative industries. Academy of Strategic Management Journal, 15 (3), 67–72.
- Shariff, N. M., Abidin, A. Z. (2015). Developing an index of the Malaysian tourism and hospitality graduates' competencies. *International Journal of Business and Society*, 16 (3), 422–435.
- Spencer, L. M. J., Spencer, S. M. (1993). Competence at work: Models for superior performance. New York, NY: John Wiley & Sons. ISBN 047154809X.
- Tas, R. F. (1988). Teaching future managers. Cornell Hotel and Restaurant Administration Quarterly, 29 (2), 41–43.
- Uniform Guidelines for Employee Selection Procedures. (1978). Section 60–3: Uniform Guidelines on Employee Selection Procedures (1978); 43 FR 38295 (August 25, 1978).
- Vakola, M., Soderquist, K. E., Prastacos, G. P. (2007). Competency management in support of organizational change. *International Journal of Manpower*, 28, 260–275.
- Vickers, D. (2013). A comparative study of UK and Taiwanese chemical plant managers. *Cross Cultural Management: An International Journal*, 20 (3), 386–401.
- Wan, T., Hsu, Y., Wong, J., Liu, S. (2017). Sustainable international tourist hotels: The role of the executive chef. *International Journal of Contemporary Hospitality Management*, 29 (7), 1873–1891.
- Wessels, W., Engelina, D. P., Slabbert, E. (2017). Key competencies and characteristics of accommodation managers. SA Journal of Human Resource Management, 15.
- Woodruffe, C. (1993). What is meant by a competency? *Leadership and Organization Development Journal*, 14 (1), 29–36.
- Wroblowská, Z., Ruda, T. (2015). The identification and comparison of the requirements placed on product managers during the recruitment process. *Journal of Competitiveness*, 7 (3), 110–125.

116 Barry A. Friedman

Model kompetencyjny w sektorze usług turystycznych – implikacje dla zarządzania zasobami ludzkimi

Abstrakt: W artykule poruszono problem wpływu modelowania kompetencji w branżach: hotelarskiej, turystycznej i eventowej, na zarządzanie zasobami ludzkimi na poziomie organizacji i jej pracowników. Aby zwiększyć efektywność organizacyjną, modele kompetencji muszą wyraźnie określać umiejętności i możliwości w zakresie kluczowych zadań, łączyć się z ogólną strategią organizacyjną i dostosowywać zarządzanie zasobami ludzkimi do celów biznesowych. W artykule przedstawiono kompleksowy model kompetencyjny dla branż:

hotelarskiej, turystycznej i eventowej, opracowany przez Urząd ds. Zatrudnienia i Szkoleń działający przy Departamencie Pracy USA. Model ten pozwala regulować działania związane z rekrutacją, selekcją, szkoleniem i rozwojem nowych pracowników, zarządzaniem ich efektywnością, nagradzaniem, planowaniem rozwoju zasobów ludzkich, a nawet przechodzeniem na emeryturę osób zatrudnionych w wymienionych branżach. Wskazano ograniczenia tego modelu i podano propozycje dalszych badań w tym zakresie.

Słowa kluczowe: model kompetencyjny, hotelarstwo, turystyka, zarządzanie zasobami ludzkimi

The role of the organization's leadership in risk management according to norm ISO 31000:2018

Janusz Ząbek

Małopolska School of Economics in Tarnów, Poland Department of Management

ORCID: 0000-0003-4150-9850

Abstract: The main aim of the article is to determine the role of leadership in risk management in the organization in accordance with the ISO 31000: 2018. An additional goal of the article is to make an attempt to identify the risk factors occurring in business activities and to create management styles that take into account their existence.

The study shows that some various factors of a political, economic and social nature might be the source of risk. These factors create both opportunities and threats for the organization. It turns out that the normative approach to risk means the existence of two levels of supervision in risk management. There is a structural supervision implemented in relation to the organization's policy and strategy. There is also a task supervision, carried out in particular in relation to the level of operational activity. The research shows that according to the ISO 31000:2018 standard, management, regardless of the type of supervision exercised, is an element of the risk management framework and the principles of risk management are the basis of management's operations. The provision of resources and documenting risk management are the most important management tasks related to risk management.

Key words: organizational management, top management, risk management, quality, ISO standards

1. Introduction

In practical management, more and more attention is devoted to methods and tools enabling the organization to gain a competitive advantage. Acquiring a competitive advantage is usually possible when in a given company actions are done earlier than in competition. This is often associated with unconventional decision making. Sometimes this means making decisions based on unconventional premises. This behavior is associated with risk. Therefore, leaders who want to gain a competitive advantage consciously include risk in their decisions.

Correspondence to:
Janusz Ząbek
Małopolska Wyższa Szkoła
Ekonomiczna
Katedra Zarządzania
ul. Waryńskiego 14
33-100 Tarnów, Poland
Tel.: +48 14 65 65 535
E-mail: janusz.zabek@mwse.edu.pl

118 Janusz Ząbek

The main goal of the article is to determine the role of management in risk management in the organization in accordance with ISO 31000:2018. The additional goal of the article is to make an attempt to identify risk factors present in business operations. The article also deals with the topic of developing warning systems in the organization. The study touches as well on the problem of shaping managerial leadership styles in the face of changes. It should be noted that in managing an organization, the risk aspect is often treated without due attention. Often unproven practices are used. Such activities usually do not allow full protection of the organization against the effects of risk.

This article is of a review and research nature. The semantics of risk-related concepts are examined based on selected literature sources. In turn, the content of the normative act was analyzed. Based on the analysis and based on the result of observation of the business activity market, conclusions are formulated.

Sources of uncertainty in the environment of the organization and their impact on the implementation of processes—selected preliminary concepts

In economic reality, there is no clear definition of risk. Often, the concept of risk is related to the fact that enterprises operate in a changing environment and are exposed to unpredictable factors that affect the effects of their activities. Most terms associated with defining risk relate to the relationship between uncertainty, its timing and objectives. In a significant number of risk opinions, risk is a quantified uncertainty (Emblemsvag and Kjolstad, 2002). According to Zachorowska (2013), uncertainty means the occurrence of specific, unknown effects. Uncertainty means the inability to achieve the intended goal. In the ISO 31000:2018 standard, which is the basis of the article, risk is defined as the impact of non-compliance on goals. At the same time, both the nature of the impact and the type of purpose are not limited. This definition also shows that the effect of this impact can be both positive and negative. Both effects of risk may occur at the same time. Circumstances for the existence of unpredictable effects may be: inside the organization, in the immediate environment of the organization and outside the organization in the so-called distant surroundings.

An overview of the causes of unforeseen phenomena is presented in Table 1. The division includes factors that are inside the organization and in the immediate environment.

Direct (closer) surroundings of the organization

Internal conditions of the functioning of the organization

Conduct of ownership organs
Conduct of contractors
The organization on the local market
Social impact

Internal conditions of the functioning of the organization

Type of organization structure

The nature of operating activities

Property structure

Construction and architectural solutions

Table 1. Overview of unpredictable factors affecting the functioning of the organization

Source: Zabek, 2013, p. 85.

The data presented in Table 1 shows that in the environment of the organization the occurrence of risk depends on the owners and contractors. Concluding poorly prepared contracts or using suppliers based on faulty criteria is a set of risk-stimulating factors. Bad asset structure and incorrect decision-making procedures increase the likelihood of unpredictable phenomena.

As mentioned earlier, also the further environment of the organization is a place where the unpredictable circumstances for the organization occur. This is because in this environment, interdependent factors related to the occurrence of economic crisis are activated. According to Kołodko (2010), there are at least five major sources of crisis and risk that affect the functioning of the organization. These are:

- recession spread from trading partners;
- global financial flows and capital transfers;
- currency crisis;
- migration;
- expectations.

Table 2 contains elements of economic reality in which threats to the stability of the managed organization arise. These factors are found in the further environment of the organization.

Table 2. The review of selected determinants of the business market broken down by the level of stability of conditions

Selected determinants of the economic market	Characteristics in conditions of stabilization	Characteristics in variable conditions
Economic cycle	Predictable	Unidentified
Economic growth	Specified (average every 7 years)	Unpredictable
Recession	Defined (average every 10 months)	Irregular phenomenon
Consumer preferences	Evolving in a uniform and predictable way	Containing elements of a sense of danger
Consumer awareness of purchasing rights	Constant	Evolving hesitantly towards a claim attitude
Economic policy	Predictable	Unpredictable
Implementing new technologies	Stable and uniformly evolving	Chaotic

S o u r c e: Author's own elaboration based on Kotler and Castione, 2009.

Table 1 and Table 2 show that there is a zone of unpredictable factors constantly affecting organizations within the functioning of enterprises. These factors depend on the complexity of the organization's environment. Factors determine decision-making processes. It should be emphasized that management is effective when no risk-based circumstances are ignored during the decision.

In the literature on management and finance, the concept of risk is treated as one of the most important in economic sciences (Jajuga, 2007). At the beginning of defining the relationship between uncertainty and decision-making, the financial and investment area were

120 Janusz Ząbek

considered. In other words, the phenomenon of risk was clearly related to the uncertainty of the capital management result (Nowak, 2010). The aforementioned uncertainty as to the result of capital management lay at the root of the Dźwigoł view (2011). He considered it necessary to have a system in the organization that triggers decision-making corrections (the so-called warning system). The consequence of introducing corrections is obtaining a risk of known nature and recognizable value (Buk, 2006).

The occurrence of uncertainty means disrupting the organization's ability to achieve its goals. Under changing operating conditions, this ability depends on the organization's adaptability. Uncertainty may affect the financial result. It can also affect product development and offer diversification in a timely manner. In other circumstances, uncertainty determines the pace of business expansion or other similar ventures. The consequences of the lack of corrective impact on risk are presented in Table 3. They have been presented in terms of factors conditioning decision making.

Level of processes carried out in the organization	Areas of potential effects of uncertainty in the course of individual processes
Operational processes	 Business continuity The importance of the product on the market Environmental impact Implementation of operational goals
Supervisory processes	 Transposing strategic goals to operational level Image of the organization Structure of staff roles and responsibilities
Auxiliary processes	Selection of contractors Management of material assets Migration of employees Shaping systems for updating knowledge and skills at every level of the organization Selection of data for analysis

Table 3. The impact of uncertainty on the implementation of processes in the organization

S o u r c e: Author's own elaboration based on Stasiuk-Piekarska and Koliński. 2015.

Table 3 identifies three levels of decision-making: managerial, operational and supportive. It should be noted that the presented catalogue of uncertainty does not contain all possibilities. This means that prediction of specific results by decision makers of individual processes is difficult. The excessive level of uncertainty before decision-making bodies means the inability to predict the effects of decisions and the inability to estimate the effects of events occurring in the environment (Jędralska, 2010). At this point, it should be clearly noticed that their essence is very often associated with the probability of accurate predictions of the future during making decisions (Bizon-Górecka, 2002). In the reality of unpredictable events identified in such a way, one of the solutions is to use tools that allow taking into account existing risks. Their selection depends on the specifics of the organization and its size (White and Fortune, 2002; Bryde, 2003). An important remedy in such a situation is the ability to adapt the organization to changes occurring in its environment and the ability to capture signals that imply taking specific pre-emptive actions (Kozakiewicz, 2008).

Leadership in risk management—practical task schedule in the light of ISO 31000:2018

In the marketing literature, there are many views on the role of management in risk management. In Kaczmarek's opinion (2010), the risk in the organization is managed by a person examining and analyzing the probability of accidental damage that may affect a given company. According to Kaczmarek, the task of this person is to develop a system enabling the identification of a given risk and minimizing it. In turn, according to Jedynak and Szydło (1997), conscious risk management means employing a risk manager in the organization. The risk manager will accurately recognize the risk and provide relevant information for decision making. The manager's action will limit the possibility of failure and will enable the determination of the likely result.

It is increasingly recognized that the optimal determination of the role of management in risk management and defining management tasks is possible through a systemic approach. Anyway, this idea is consistent with the view that a particular department or unit should be devoted to risk management in the organization. In Kendall's opinion (2000), a Risk Management Board should be established in the organization. The board's responsibilities should be strictly defined, unchanged and focused on risk management. It should be noted that the essence of the functioning of this council in Kendall's intention should only apply to those areas of the organization's operation that relate to risk management. On the other hand, according to other views, all problems related to risk in the organization are addressed directly to the president of the management board of the organization (Pikett, 2006). According to this theory, the president of the board owns all risk management processes implemented in the organization. Other members of the management have supportive functions in relation to risk in accordance with the defined powers and competences. According to Pikett, senior executives perform an auxiliary role in four groups:

- analysts—dealing with the analysis of individual types of risk and assessment of the size of potential threats;
- regulators—dealing with the development of procedures used in the process;
- methodologists—examining the effectiveness of the tools used in the process;
- department managers—dealing with the entire entity's risk assessment.

However, the most optimal solution in terms of sanctioning management's attitude towards risk occurring during organization management is presented in the ISO 31000 standard published in 2018.

122 Janusz Ząbek

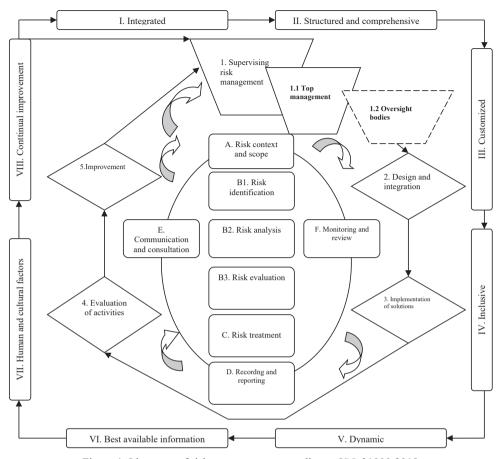


Figure 1. Ideogram of risk management according to ISO 31000:2018

Source: Author's own elaboration based on ISO 31000:2018.

Figure 1 presents the ideogram of risk management implemented in accordance with ISO 31000:2018. The ideogram presented shows the existence of three dynamic spaces for conscious risk treatment in the organization. The first area shows the principles of risk management, which are marked with Roman numerals in the figure. The rules reflect premises that are taken into account when managing an organization keeping risk in mind. The second area for shaping a conscious understanding of risk is the risk management framework. The standard defines the term *framework structure*. Elements of the frame structure have been marked in the drawing with Arabic numerals. The layout of individual elements of the frame structure is presented in the drawing in the appropriate order. This is the order in which individual actions regarding the risk are activated.

Management relevant to risk management belongs to its management framework. According to ISO 31000:2018, supervision plays an important role in management regarding risk. Supervision makes top management as a basic statutory/ organizational body. Oversight bod-

ies support the supervision of risk management. The analysis shows that the repetitive cyclicality including planning, implementation, evaluation and improvement clearly refers to the essence of the Deming cycle. This feature of the framework structure results in the constant adaptation of its elements to the changing conditions of the organization's operations referred to in point 2. In turn, capital letters in Figure 1 identify the individual stages of risk management.

There is a clear division of roles and tasks for the two management groups identified. The essence of the demarcation of these roles is presented in Table 4. The data presented in Table 4 shows that the top management is responsible for the functioning of the entire organization. In the context of risk occurrence, this is related to the responsibility for the organization's accomplished goals. In addition, Table 4 shows that a lot of tasks in relation to risk can be assigned to either the body appointed to oversee the risk management of the so-called supervisory body or directly to top management. It turns out that adjusting elements of the framework structure, developing policies for implementing risk management, and allocating resources can be under the responsibility of both top management and oversight bodies. Similarly, performing risk management reviews and documenting risk management is an area of top management or oversight bodies.

Table 4. The structure of management tasks in relation to risk management (based on ISO 31000:2018)

Management group supervising risk management	List of tasks assigned to be performed by top management
Top management	Strategy and supervision level: - Responsibility for overall risk management in the organization and its effects from the point of view of the plant's objectives - Appointment of oversight bodies
Top management or oversight bodies	Strategy and supervision level: - Constant customization of individual elements of the frame structure - Developing and implementing risk management policies Operational level: - Commitment to risk management - Assign roles and responsibilities - Provision of resources - Carrying out measurements and documenting risk management - Reviewing the risk management system and continuous improvement
Oversight bodies	Operational level: - Ensuring adequate communication in the field of risk management - Determining risk management at an operational level in relation to the organization's goals - Ensuring effective functioning of individual elements of the risk management system - Ensuring the adequacy of the risk management approach used in the context of the (variable) operating conditions of the organization

Source: Authors' own elaboration based on ISO 31000:2018 Risk Management—Guidelines, Williams et al., 2006.

124 Janusz Ząbek

The management's schedule of tasks presented in Table 4 shows that the existence of oversight bodies is an important management representative in the area of selected risk management tasks at the operational level. The oversight bodies are responsible for communicating the effects of risk management in the organization. The oversight bodies are also responsible for applying adequate risk management solutions and correlating operational objectives with the organization's objectives, taking into account risk existence.

Nevertheless, the observation of the business market and the analysis of the ISO 31000: 2018 standard show that the existence of the oversight bodies depends on many factors of the organization's functioning. In particular, it has to do with the external and internal context of the organization's functioning. For this reason, in the ideogram shown in Figure 1, this body becomes a dashed line. In the case of organizations in which the oversight bodies have not been appointed, the tasks referred to Table 4 are carried out directly by top management.

4. Summary and conclusions

The study shows that risk is an important factor affecting the functioning of any organization. It should be recalled that a variety of political, economic and social factors are the source of risk. They create opportunities and threats for the organization. In decision-making priorities, prevention of the negative effects of risk usually has priority over actions to take advantage of existing opportunities. The hierarchy demonstrated also applies to the treatment of categorized sources of risk that are in the environment of the organization. The area located in the closer surroundings of the organization or inside the organization is removed from risky sets by current organizational activities.

With regard to many elements creating the uncertainty of the organization's functioning in its further environment, the effects of this "independence" of the factors from the organization require a systematic approach to the problem of generated risk. Research shows that such systematicity guarantees compliance with the requirements of ISO 31000:2018. It turns out that the three-dimensional approach to risk enables comprehensive mapping of managed areas. It enables full protection of the organization against uncertain operating conditions affecting the achievement of its goals.

The paper demonstrates specific sanctioning of the role of leadership in the risk management system in the organization. To sum up, it should be stated that the standard provides for two-level supervision in risk management. These are:

- for structural supervision, implemented in relation to the organization's policy and strategy, performed by statutory/ organizational bodies, e.g. in the form of top management;
- task supervision, carried out in particular in relation to the level of operational activity, performed in the event of appointment by oversight bodies (purposeful) or in the absence of such bodies being established by statutory/ organizational bodies, e.g. in the form of top management.

Based on the research carried out, it should be stated that the normative approach to risk management according to ISO 31000:2018 in any organization situates management in the following formula of activity:

- leadership, regardless of the type of supervision exercised, is part of the risk management framework structure;
- risk management principles are important factors in undertaking tasks by leadership;
- providing resources, including identifying responsible people with responsibility assignments, are the basic leadership tasks occurring at the operational level of each organization, regardless of the industry represented and the size of the organization;
- existing responsibility for documenting risk management and ensuring relevance to changing circumstances as a result of improvement.

The introduced risk management standard sanctions a specific formula of implemented leadership in an organization. At all levels of the organization, the role of leadership is defined; the adequacy of these attachments in relation to the circumstances is ensured. This is valuable because the management's activity that determines the effectiveness of management is achieved as a result of awareness of the issues without additional expenditure.

References

- Bizon-Górecka, J. (2002). Systemowe zarządzanie ryzykiem jako panaceum na ryzyko zarządzania organizacją. *Przegląd Organizacji*, 9, 38.
- Bryde, J. D. (2003). Project management concepts, methods and application. *International Journal of Operations and Production Management*, 23 (7), 75–93.
- Buk, H. (2006). Nowoczesne zarządzanie finansami. Warszawa: C. H. Beck. ISBN 8374831340.
- Dźwigoł, H. (2011). Kontroling w procesie zarządzania współczesnym przedsiębiorstwem. Gliwice: Wydawnictwo Politechniki Ślaskiej. ISBN 9788373358171.
- Emblemsvåg, J., Kjølstad, L. E. (2002). Strategic risk analysis—a field version. *Managament Decision*, 40 (9), 842–852.
- Jajuga, K. (2007). Zarządzanie ryzykiem. Warszawa: Wydawnictwo Naukowe PWN. ISBN 9788301154035.
 Jedynak, P., Szydło, S. (1997). Zarządzanie ryzykiem. Wrocław: Zakład Narodowy im. Ossolińskich. ISBN 8304043564.
- Jędralska, K. (2010). Niepewność jako źródło paradoksów strategicznych. In: J. Lichtarski, H. Jagoda (eds.). Kierunki i dylematy rozwoju nauki i praktyki zarządzania przedsiębiorstwem. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu. ISBN 9788376950167.
- Kaczmarek, T. T. (2010). Ryzyko i zarządzanie ryzykiem. Ujęcie interdyscyplinarne. Warszawa: Difin. ISBN 9788379304554.
- Kendall, R. (2000). Zarządzanie ryzykiem dla menedżerów. Transl. by M. Sieczyk. Warszawa: K. E. Liber. ISBN 8388170090.
- Kołodko, G. W. (2010). Świat na wyciągnięcie myśli. Warszawa: Wydawnictwo Prószyński i Spółka. ISBN 9788376484914.
- Kotler, P., Castione, J. A. (2009). *Chaos. Zarządzanie i marketing w erze turbulencji*. Warszawa: Wydawnictwo MTBiznes. ISBN 9788361732419.
- Krzakiewicz, K. (2008). Kognitywne podejście do zarządzania strategicznego. W: J. Rokita (ed.). *Ku nowym paradygmatom nauk o zarządzaniu*. Katowice: Górnośląska Wyższa Szkoła Handlowa im. Wojciecha Korfantego. ISBN 9788360953150.
- Nowak, E. (2010). *Rachunkowość w zarządzaniu ryzykiem w przedsiębiorstwie*. Warszawa: Polskie Wydawnictwo Ekonomiczne. ISBN 9788320818529.
- Stasiuk-Piekarska, A. K., Koliński, A. (2015). Analiza ryzyka operacyjnego w kontekście efektywności procesu produkcji. *Gospodarka Materiałowa i Logistyka*, 1, 2–8.
- White, D., Fortune, J. (2002). Current practice in project management—an empirical study. *International Journal of Project Management*, 20 (1), 1–11.
- Williams, R., Bertsch, B., Wiele, T. V. D., Iwaaden, J. V., Dale, B., Smith, M., Visser, R. (2006). Quality and risk management: What are the key issues. *The TQM Magazine*, 18 (1), 67–86.

126 Janusz Ząbek

Zachorowska, A. (2013). Zarządzanie ryzykiem inwestycyjnym. In: D. Wielgórka (ed.). *Wybrane procesy zarządzania w przedsiębiorstwach i instytucjach publicznych*. Częstochowa: Wydawnictwo Wydziału Zarządzania Politechniki Częstochowskiej. ISBN 9788363500573.

Ząbek J. (2013). Doradztwo organizacyjne w przykładowym modelu ewolucji przedsiębiorstw motoryzacyjnych. Problemy Zarządzania, 11 (3), 73–88.

Rola kierownictwa organizacji w zarządzaniu ryzykiem zgodnie z normą ISO 31000:2018

Abstrakt: Celem głównym artykułu jest określenie roli kierownictwa w zarządzaniu ryzykiem w organizacji zgodnie z normą ISO 31000:2018. Dodatkowym celem artykułu jest próba identyfikacji czynników ryzykogennych występujących w działalności gospodarczej i kreowania stylów zarządzania uwzględniających ich istnienie.

W pracy wykazano, że źródłem ryzyka są różnorodne czynniki o charakterze politycznym, gospodarczym i społecznym stwarzające dla organizacji zarówno szanse, jak i zagrożenia. Z przeprowadzonych rozważań wynika, że w normatywnym podejściu do ryzyka

przewiduje się dwupoziomowy nadzór w zarządzaniu ryzykiem. Jest to nadzór strukturalny, realizowany w stosunku do polityki i strategii organizacji, oraz nadzór zadaniowy, realizowany w szczególności w stosunku do poziomu działalności operacyjnej. Z badań wynika, że według normy ISO 31000:2018 kierownictwo, niezależnie od rodzaju sprawowanego nadzoru, jest elementem struktury ramowej zarządzania ryzykiem, a istotnymi czynnikami podejmowania zadań przez kierownictwo są zasady zarządzania ryzykiem. W obszarze najważniejszych zadań kierownictwa związanych z zarządzaniem ryzykiem znajdują się zapewnienie zasobów oraz dokumentowanie zarządzania ryzykiem.

Słowa kluczowe: zarzadzanie organizacja, najwyższe kierownictwo, zarzadzanie ryzykiem, jakość, normy ISO

Practical implications on ergonomic assessments resulting from EN16710-2—ergonomics methods: A methodology for work analysis to support design

Marcin Butlewski¹ Wiktoria Czernecka² Agata Szczepaniak Marta Pojasek Marcin Baran

Poznan University of Technology, Poland Faculty of Engineering Management

ORCID: 1 0000-0002-2663-4082 2 0000-0003-2060-4488

Abstract: Ergonomic workplace analysis is a basic element of every ergonomic project. In many cases, however, carried out in a fragmented and unstructured manner it gives an incomplete picture of the assessed work processes. Authors on the basis of their own experience and methodologies contained in EN 16710-2 Ergonomic methods-Part 2: Methodology of work analysis to support design, presented the procedure and the most important elements, the conclusion of which enables reliable ergonomic analysis. The key task in the field of ergonomic analysis is to determine the applicability of the data acquisition apparatus under specific conditions, which can be done by analyzing scientific publications or reports from professional literature. An important element of the report is also evidence that the assessment was carried out by a competent person to whom the Euro-Ergonomist institution can be used, or at least by such a person checked. It should also be ensured that the report contains evidence that a sufficiently large part of the system has been tested. Fragmentary analysis is possible as long as conclusions from it are not extended and areas not covered by it. A very important but often overlooked element of ergonomic analysis is the indication of how the project solved incompatibilities (which are an inherent element of almost every research procedure in the area of production). It allows to determine the validity of the inference based on the collected material, as well as to determine deviations from the applicable standards. The article also presents the method of triangulation as an element of protection against incorrect diagnosis of the method of work implementation.

Key words: ergonomic analysis, project management, work safety management, ergonomic design

Correspondence to:
Marcin Butlewski
Politechnika Poznańska
Wydział Inżynierii Zarządzania
Katedra Ergonomii i Inżynierii Jakości
pl. Marii Skłodowskiej-Curie 5
60-965 Poznań, Poland
Tel.: +48 61 665 33 77
E-mail:
marcin.butlewski@put.poznan.pl

1. Introduction

The growing demand for safe and ergonomic working conditions, further strengthened by demographic changes, forces enterprises to implement systems that allow managing work effects (Butlewski and Misztal, 2016, p. 72). Among the negative effects of work, one of the more important groups are

musculoskeletal disorders (Work-related Musculoskeletal Disorders—WMSDs). For this reason, companies are increasingly deciding to invest in improving working conditions. However, in order for them to hit and give the assumed effect, they must be preceded by a thorough analysis in order to identify the main factors affecting the reduced ergonomic quality at the workplace.

The aim of the article is therefore to present the methodology of ergonomic analysis based on the PN-EN 16710-2:2016-05. Ergonomic methods—Part 2: Methodology of work analysis to support design, which significantly supports the processes of analyzing working conditions. Based on the standard, the authors have identified key factors conducive to conducting reliable ergonomic analyzes, supporting this with the proposal of setting ergonomic goals in projects and including in the organization structure of projects in the enterprise consultancy in ergonomics—at the organizational level (creation of the Ergonomics Commission) or external (specialist, e.g. Euro Ergonomist).

2. Ergonomic analysis as part of project management

In modern enterprises, attempts are being made to solve existing problems by creating and managing projects. This allows categorization and structuring of undertaken activities, and also favours the selection of personnel most adequate to ensure the success of the project. Appropriate division of tasks is conducive to the optimal use of the potential of the project team members and allows for an unambiguous division of responsibility for achieving the objectives set.

Increasingly, ergonomic analyses are components of projects in enterprises, which may constitute the main element of the project (ergonomic design) or be part of other ongoing projects (e.g. construction, reorganization of workplaces, related to the occupational health and safety management system, consisting in planning the use of new machines and work tools). Regardless of the purpose of undertaking ergonomic analyses within projects and project management methods, e.g. PMI, SCRUM, TenStep (Ćwiklicki, 2010, p. 18; TenStep Polska, 2018), their management can be an element of project management and should be included in the schedule and allocation of resources. As part of project management in terms of ergonomic analysis, measurable goals should be identified along with aggregation measures, control points and ways of verifying the results obtained in individual stages of the project should be established (Figure 1).

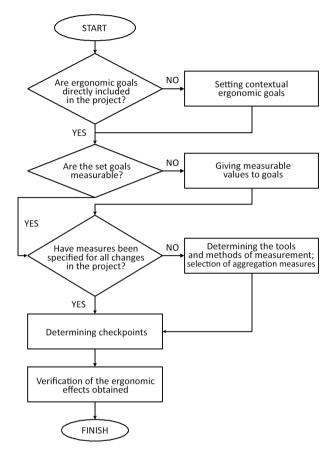


Figure 1. Algorithm for selecting assessment tools in project management

Source: Authors' own elaboration.

In enterprises that do not employ people competent in the field of ergonomics, but undertake (or plan to undertake) ergonomic projects as part of their activities, there may be difficulties in project management resulting from:

- lack of personnel with the knowledge necessary to conduct the analysis and incorporate
 the applications into the key stages of the project (in this case it is necessary to extend the
 project team by an external person);
- problems in estimating the necessary financial and material resources to perform ergonomic analysis;
- problems in integrating ergonomic analysis with other project assumptions to achieve the set goal;
- problems arising from the determination of the significance of individual results of ergonomic analyses (only selection of results to achieve the goal set in the conceptual phase).

The above difficulties should be taken into account in project management, therefore it is proposed to take actions related to ergonomics (embedded in the generally accepted framework for organizing and conducting projects) in accordance with the following model (see Figure 2).

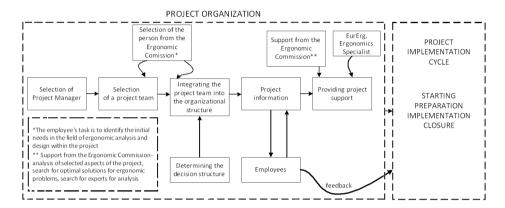


Figure 2. Elements of management through ergonomics against the background of the preparatory process of the project

S o u r c e: Authors' own elaboration based on Wyrwicka, 2011.

The key element is to include in the project team a person associated with the enterprise's ergonomics unit or an employee with knowledge and skills to support the project at individual stages, whose task will be to identify the needs of ergonomic analysis. Such a person would also provide support for the project, including problem analysis and solutions, and seeking external experts (if necessary).

3. The algorithm of conduct in the analysis of work processes

When carrying out an ergonomic analysis of the work process, information on various aspects of the work process (e.g. work environment, its organization, how tasks are performed) should be recognized. It is also necessary to collect data on the individual predispositions of the employee (e.g. age, seniority, gender, physical activity, professional experience) and contextual aspects needed to conduct the analysis in accordance with the selected methods or tools (Figure 3). An example of such a contextual and insignificant factor is the commute time, which completes the information on the gross length of the working day.

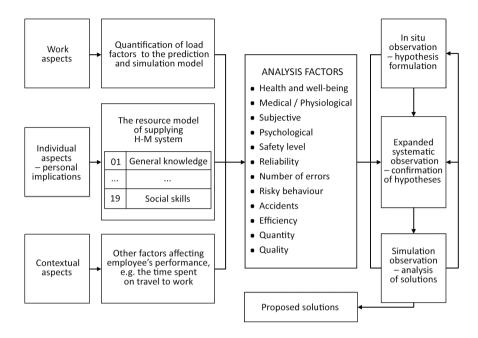


Figure 3. Practical implications for conducting ergonomic audits

Source: Author's own elaboration based on EN 16710-2 and the resource model from Butlewski, 2018.

Contextual analysis of the work allows the identification of factors that are the subject of further considerations, leading to the formulation and confirmation of hypotheses, which is then the basis for proposing solutions that ergonomically shape the working conditions.

It should be remembered that the process of ergonomic analysis should take into account the real activity of the employee during work (Figure 4), because it may differ from the assumed values. This fact may result, for example, from the individual physical and health conditions of the employee, affecting the manner and pace of performing individual activities, the lack of effectiveness of some organizational solutions in the work process, and the informal division of individual tasks between employees.

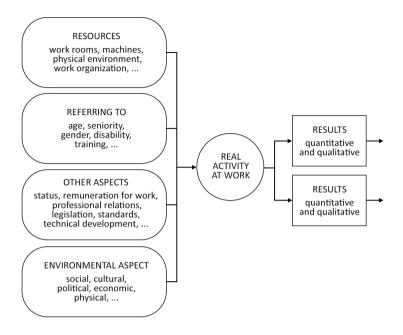


Figure 4. Components of the employee's actual activity at work

Source: Authors' own elaboration based on the EN 16710-2 standard.

In the analysis process, depending on the methods and tools used, it is possible to obtain information on the employee's work load in the form of a qualitative or quantitative result. Methods and tools should be selected before the start of the analysis, depending on the type of position, the possibility of collecting data necessary to carry out the correct analysis and the purpose of conducting it, which may be, for example, examining the impact of the employee's load on the efficiency and quality of his work or health and safety.

If irregularities are found during the ergonomic analysis, an in-depth analysis should be performed. For this purpose, additional, missing information should be collected by repeatedly observing the environment or use data previously used for the analysis, if it is sufficient. Then, an analysis of the possibilities of eliminating these irregularities should be carried out or ways should be developed to reduce their impact on the employee's burden. At this stage, solutions should be simulated, e.g. by re-analyzing the impact of the work process (using the method previously used) on the employee's burden, taking into account the solutions proposed, and assessing their impact on the overall result of the analysis. This allows to choose the optimal solutions that limit the negative impact of the work process on the employee not only because of their effectiveness, but also because of the cost of their introduction and maintenance.

4. Guidelines for ergonomic audits

In European countries, one of the most common ways to reduce the impact of factors adversely affecting the health of employees is to conduct cyclical ergonomic audits. On their basis, it is possible to monitor the current state of ergonomics of the surveyed workstations and to present proposals for solutions aimed at improving the segments in which unsatisfactory results were obtained.

The audit report should contain the following elements (according to EN 16710-2 standard):

- an indication of what standards have been applied and justification for choosing these standards;
- evidence that the assessment was carried out by a competent person, as appropriate for the procedure;
- evidence that a sufficiently large part of the system (in the workplace or elsewhere) has been tested to ensure reliable results for the entire system;
- description of identified non-compliances and how to limit or eliminate them;
- justification of deviations from applicable standards and practice in the field of ergonomic analysis.

Correct ergonomic analysis therefore requires the auditor to gather sufficient data. In order to obtain information on the assessed workstation, objective and subjective methods are used. Objective methods are aimed at presenting and assessing the state of ergonomics at a given workplace in a manner consistent with the actual state, regardless of the opinions and feelings of employees. Objective methods of obtaining information include making measurements, observations and reviewing the documents necessary for the proper functioning of the examined area. The auditor usually first proceeds to review documents in the audited entity. This serves to assess the state of ergonomic solutions in the company by performing an analysis of the company's procedures and meeting legal requirements and standards set for a given type of work. The auditor, as a result of analyzing documentation, is required to compare the collected data with the standards and guidelines in force in national law with international standards, if they introduce more restrictive provisions. The documentation also shows who is the decision maker in the context of the recommended solutions that should be implemented in the company. All procedures and diagrams describing the position and the employee performing specific tasks are subject to analysis, demographic and contextual data are also indicated, which include the frequency and severity of accidents and the number of reported occupational diseases. As a result of the documentation review, the measurable parameters of the working environment are also assessed. Audited measurements should be performed in advance by competent auditors, using appropriate equipment and techniques. It is also important to consider not only individual elements of the physical environment, but also take into account the synergy effect that can occur as a result of combining several factors.

A comprehensive analysis of the work process also includes the subjective feelings of employees that are examined using questionnaires and interviews. Employees should therefore be involved at every stage of the analysis (Burgess-Limerick, 2018, p. 91). Information collected in an interview with an employee can be considered reliable only if it is properly

performed. Questions asked to the employee should be short and unambiguous, and also formulated using simple vocabulary known to the employee. The questioned person has the opportunity to answer precisely and truthfully when the question is fully understood. Therefore, the auditor must take into account that when an employee has a problem with the correct interpretation of a given question, it is usually better to ask it differently than to repeat it in the same form. It is also good practice to ask the operator a question again to confirm that the auditor understands the answer correctly or as a way to get more information. Examples of questions an auditor may ask an employee during an interview are listed below:

- "I noticed you move often to see the product. Can you explain why?";
- "Is your work always done in the same way?";
- "Why did you touch the machine cover?";
- "What do you do in the event of a machine failure?";
- "What happens if you fail?";
- "What is the most tiring in this job?";
- "Is there anything else you would like to talk about?".

The notes formulated during both the observation and the interview should be consistent with the actual state and the statements of the questioned person, without reformulation or interpretation by the auditor. It is recommended to literally quote the employee's words and then interpret them, which reduces the risk of distortion. This requires confidentiality and employee consent. Notes and recordings should be destroyed when the analysis process is completed. Comparisons between sources (individual employees) usually confirm the information gathered during interviews, however possible conflicts should be taken into account. Another important activity during an ergonomic audit is the observation of the workplace by the person conducting the audit. The literature on the subject distinguishes three types of observation: initial, extended (systematic) and simulated. The first of these aims to collect basic information about the employee, such as: gender, age and qualifications, work schedule. It is also important during initial observation to determine the resources necessary to perform activities at the workplace: tools, materials and equipment used. The workspace and environmental factors such as noise, lighting, vibrations and dust should also be taken into account when conducting the initial observation. On the other hand, if there is more than one operator at the workstation, the division of tasks between employees and the synchronization mode should also be analyzed. The auditor should pay special attention to verbal communication, gestures and signals made by employees as well as communication barriers.

Extended observation should be performed using structured methods of ergonomic analysis, such as REBA, RULA or ERA (described in the next chapter). By using these tools, it is possible to determine the physical and task load of an employee, as well as to determine the direction of looking, moving and posture. When conducting this type of observation, it is possible to register incidents and ways of solving them, which indicates dysfunctions, job variability or operator competences.

5. Types of ergonomic methods and the scope of their application

For the analysis of ergonomics at workstations, a various set of available methods or a certain combination thereof (selected depending on the type of work performed at the workstation, the method of its performance and the required accuracy of analysis) can be used. Table 1 presents the characteristics of selected methods, including the area of their application and restrictions resulting from the assessment parameters and the possibility of analyzing factors other than those related to the position adopted by the employee during work.

Table 1. Selected methods used in ergonomic analysis

Designation	Application	Restriction
MSD Hazard Risk Assessment Checklist	Checklist to assess the risk of musculoskeletal disorders in employees. It allows to evaluate many work parameters—from the position at work, including the location of individual body segments, to determine the impact of vibration, stress (grip, lifting, pushing) at risk level. The advantage of the method is a simple design that allows rapid evaluation of the desired parameters (OHSCO, 2007).	It is recommended that the use of the checklist be a preliminary analysis of the occurrence or absence of a specific type of factors at work that may affect the development of musculoskeletal disorders in employees. The results of the assessment can be used to plan further analysis using more advanced methods. The method should not be used in the case of: job evaluation after the employee's return, selection of employees for the job, assessment of the relationship of work with the injury (OHSCO, 2007).
Washington Ergonomics Assessments	The method used for the initial analysis of ergonomic risk factors, mainly at workplaces in the manufacturing industry. The assessment covers, among others working movements performed during work, position of upper limbs and torso during work, as well as additional factors, e.g. vibrations. It also evaluates the opinions of employee performing activities regarding their difficulties (WSPS, 2011).	The method is recommended for the initial analysis of ergonomic risk factors—additional tools are required to perform a reliable assessment. The method does not take into account the assessment of pushing force and leg position.
Washington State Checklists (Caution/ Hazard Zone)	Checklist for assessing the occurrence of risk factors for employees at work. It is possible to identify weird positions at work with their repeatability and duration (over 4 hours per shift), position of specific body segments during work, highly repetitive work movements, repetitive impact of a specific way of performing work on the occurrence of employee complaints (Robledo Gallegos, 2010; WSDL&I, 2018).	The method only gives the possibility to indicate that a given risk factor occurs without point evaluation, which may result in the need for other methods to support the analysis.

Designation	Application	Restriction
ACGIH: Lifting TLV	The method allows determining the recommended organization of the workplace at which manual lifting is performed. During the assessment, the permissible masses of weights are determined, taking into account: the duration of lifting (per shift) and the frequency of repetitions. It is also possible to take into account additional factors, such as: extended working shift, large lifting asymmetry and working conditions, e.g. humidity or temperature (Nelson & Associates, 2010).	The method does not take into account grip and pushing forces, vibrations and stresses. It is impossible to determine the risk factors associated with the position of the upper limbs and legs during work.
NIOSH Lifting Equation	A method of assessing work requiring weight transfer during work, used for two-handed, symmetrical or asymmetrical work. Using the equation allows to determine the optimal value of the mass of the transferred goods (Middlesworth, 2012).	The method does not take into account grip, pushing forces, and vibrations. It is impossible to determine the risk factors associated with the position of the upper limbs and legs during work. It is also impossible to use it when lifting with one hand, in the case of a work shift lasting over 8 hours, with high frequency of repetition of working movements and in the case of work carried out in a squat or sitting position.
Snook Tables	Tables for risk analysis, providing the opportunity to assess the psychophysical parameters of work and find a percentage of the population able to sustain a given effort. The assessment covers: lifting, pushing and pulling, moving loads (<i>Using the Snook Push/ Pull Tables</i> , 2018).	The method does not take into account grip strength, vibration and body stress nor the position of the hands and wrists during work. Using tables requires evaluation experience.
MAC (UK)	A tool that allows to identify risk factors at workplaces, generated by lifting and moving (also team) loads during work. The results indicate which transfer or lifting operations require action to reduce the workload of the employee (HSE, 2018).	The method does not take into account the force of pushing and grip, vibrations and body stress. It also does not take into account the position of the hands and wrists during activities, and the position of the lower limbs is not assessed.
ACGIH: HAL	A method of assessing the risk associated with monotypic, repetitive activities lasting less than 4 hours per work shift (Nelson & Associates, 2010).	The method only takes into account the position of the hand and wrist during work, it also does not take into account additional factors, such as vibrations, stresses, the employee's attitude during work.

Designation	Application	Restriction
RULA	The method is used to assess the employee's effort during work related to body position, including the position of the torso, head, shoulders, forearms and wrists and hands. The method enables evaluation of position repeatability over time (Rivero, Rodríguez, Pérez, Mar and Juárez, 2015).	The method does not apply to work-places where work is carried out in a standing position (it is not possible to assess the position of the legs). The method does not take into account parameters other than those related to the position and load of the employee, e.g. work rhythm, or non-work-related factors that burden the employee, which may affect the way the work is performed, e.g. stress. It also doesn't take into account vibration, stress, gripping force and lifting.
Strain Index	Ergonomic risk assessment method, which includes the assessment of the position of the hand, wrist, forearm and elbow (Moore and Garg, 1995). The following parameters are assessed: intensity and duration of the effort, position of the hand/ wrist during work, speed of work and duration of the task per working day (Budnick, 2014).	The method does not take into account the impact of vibrations (which in the case of working with tools generating them significantly influences risk evaluation). Stresses are also not included. The method does not allow identification of distal neuromuscular disorders of the upper limb. The limitation is also the high subjectivity of the assessment—half of the parameters are estimated only on the basis of the evaluator's experience (Michael, 2002).
CTD Risk Index (CTD-RAM)	A method for assessing the ergonomic risk associated with loading the upper limb during work. The following parameters are subject to evaluation: cycle repeatability, gripping/ lifting/ pushing forces, the method also takes into account additional factors such as: contact with sharp edges, vibrations, type of action taken (dynamic, static, moderate), temperature (cold, heat) (CTD Risk Index, 2018).	The method is limited to assessing work in terms of upper limb load. It may also be characterized by inaccuracy, due to the fact that some parameters are assessed only in terms of their occurrence or not.
LUBA	A method of assessing postural loads, taking into account the assessment of position during work, including the position of the neck, shoulders, hands and wrists and back (Kee and Karwowski, 2001, p. 359).	The method has many limitations. First of all, it does not take into account the repeatability of the actions performed by the employee and their duration, and neither the gripping force, lifting nor pushing can be determined. The method does not take into account the impact of vibration and stress on the ergonomic risk associated with the work performed, and it is not possible to evaluate the position of the legs.

Designation	Application	Restriction
OCRA	A method used to identify the load on the musculoskeletal system (upper limbs) of an employee in repetitive activities (Roman-Liu, 2002; Occhipinti, 1998, pp. 1290–1311). It includes vibration, lifting, gripping and pushing. Ergonomic risk assessment using this method can be carried out according to the guidelines of the EN1005-5: 2007 standard (Roman-Liu, Groborz and Tokarski, 2013, p. 1584).	The method focuses on determining the position of the forearm, without taking into account the position of the arm. Strength assessment can be subjective. The position of the forearm and hand can only be described as 'good' and 'bad', which is a limitation on the accuracy of the results obtained (Roman-Liu, Groborz and Tokarski, 2013, p. 1584).
QEC—Quick Exposure Check	A method of assessing physical and psychological risk factors associated with positions taken by an employee at work, consisting of observation and self-reporting. It allows to assess the strange positions of the neck, back, shoulders and hands/ wrists (Li and Buckle, 1998, p. 1353). It takes into account the repetition of activities, lifting, working time, the use of tools that generate vibrations, as well as the pace of work and stress (Erdinc, 2015, p. 429).	The assessment of the pace of work and stress is characterized by a large dose of subjectivity. The authors of the method did not take into account the guidelines regarding risk targets. The method does not take into account grip forces and values of pressures, stresses and impacts.
REBA	The method is used to assess the employee's effort during work related to body position, including the position of the torso, legs, head, shoulders, forearms and wrists and hands (Hignett and McAtamney, 2000, pp. 201–205). The method allows the assessment of position repeatability over time and additional employee load, e.g. lifting (Roman-Liu, 2009, p. 12).	Application of the method is difficult for positions where work is performed in a sitting position. The method does not take into account parameters other than those related to the position and load of the employee, e.g. work rhythm, or non-work-related factors that burden the employee, which may affect the way the work is performed, e.g. stress. It also doesn't take into account vibration, stress, grip strength.
ERIN	A method of assessing an employ- ee's postural loads, including the assessment of the position of the torso, shoulders, wrists of the hands (including the frequency of taking the position) and neck. Additionally, the speed of work, effort at work and the level of stress experienced by employees (self-assessment) are assessed (Rodríguez, Viña and Montero, 2013, p. 64).	The application of the method does not allow the assessment of ergonomic risk, including the lifting of objects during operation. The assessment of rhythm (speed of work) and stress at work is characterized by a large dose of subjectivity.

Designation	Application	Restriction
ManTRA	Matrix method of assessing the load on the musculoskeletal system of individual body segments during work taking into account the duration of activities, vibrations, strength and speed of tasks. Based on the assessed risk, it is possible to propose corrective solutions (Straker, Pollock, Burgess-Limerick and Egeskov, 2007, pp. 21–22).	The method does not allow to take into account pressures, stresses and impacts. The assessment may be characterized by a large dose of subjectivity, e.g. vibrations are assessed only in terms of their occurrence and not according to specific ranges of values.
OWAS (Ovako Working Posture Analysis System)	A method for assessing the ergo- nomic risk of musculoskeletal dis- orders. The assessment covers: the position of individual body segments (torso, arms, legs), exerting force, estimating the position of the body as forced or unforced (Karhu, Kansi and Kuorinka, 1977, p. 200). Risk assessment is based on work tim- ing (Roman-Liu and Tokarski, 2010, p. 28).	The method does not take into account the assessment of the position of the hand and wrist, which is why it cannot be used to assess e.g. precision work, it also does not take into account vibrations, pressures, stresses and impacts.

S o u r c e: Authors' own elaboration based on sources indicated in the 2nd and 3rd column.

It should be noted that the restrictions on the use of selected methods indicated in the table above are not a complete statement. During the assessment of the workplace, obstacles unforeseen by the assessors may appear, preventing the application of the tool for a given type of work.

6. Conclusions

The constant pursuit of humanization of work and shrinking employee resources mean that ergonomic changes in the workplace are not only the good will of the employer but also a necessity. Therefore, enterprises should implement properly adapted ergonomic methods in their management systems, which will ensure the desired orientation of implemented changes. According to the authors, it is advisable in this context to use practical guidelines from applicable legal provisions and standards. Accessible for interpreters, the interpretation of the records (as indicated on the example of the EN 16710-2 standard) can significantly help enterprises in implementing changes. In addition, structuring ergonomic analyzes and dividing them into stages favours the possibility of including them in various projects undertaken as part of business operations (also directly not related to ergonomics and occupational safety). The authors' suggestion is to implement ergonomic advisory units in enterprises that take part in the implementation of projects at various stages.

References

- Budnick, P. (2014). Review of hand/wrist/arm ergonomics analysis Methods. Part 2 [online, accessed: 2018-07-15].
 Carefree: Ergoweb. Retrieved from: https://ergoweb.com/review-of-handwristarm-ergonomics-job-analysis-methods-part-2/.
- Burgess-Limerick, R. (2018). Participatory ergonomics: Evidence and implementation lessons. Applied Ergonomics, 68, 289–293.
- Butlewski, M. (2018). Projektowanie ergonomiczne wobec dynamiki deficytu zasobów ludzkich. Poznań: Wydawnictwo Politechniki Poznańskiej. ISBN 9788377755068.
- Butlewski, M., Misztal, A. (2016). Kierunki zmian procesowych w systemie zarządzania zmęczeniem pracowników. Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie, 3 (31), 72–75.
- CTD Risk Index [online, accessed: 2018-07-15]. Retrieved from: http://home.spin.net.au/safehands/reference%20documents/CTDRisk.pdf.
- Ćwiklicki, M. (2010). Scrum nowa metoda zarządzania złożonymi projektami. *Przegląd Organizacji*, 4, 16–19.
- Erdinç, O. (2015). Applications of Quick Exposure Check in industrial tasks and a proposed improvement [online, accessed: 2018-07-15]. In: G. Tuzkaya, B. Sennaroğlu, S. Bulkan (eds.). ICOVACS 2015 International Conference on Value Chain Sustainability, 12–13 March: Proceedings (pp. 429–435). Istanbul: Marmara Üniversitesi. e-ISBN: 9789754003925. Retrieved from: http://katalog.marmara.edu.tr/muyayinevi/YN831.pdf.
- Hignett, S., McAtamney, L. (2000). Rapid entire body assessment (REBA). Applied Ergonomics, 31 (2), 201–205.
- HSE. (2018). Frequently asked questions: What is MAC? [online, accessed: 2018-07-15]. Health and Safety Executive website. Retrieved from: http://www.hse.gov.uk/msd/mac/faq.htm.
- Karhu, O., Kansi, P., Kuorinka, I. (1977). Correcting working postures in industry: A practical method for analysis. Applied Ergonomics, 8 (4), 199–201.
- Kee, D., Karwowski, W. (2001). LUBA: An assessment technique for postural loading on the upper body based on joint motion discomfort and maximum holding time. *Applied Ergonomics*, 32 (4), 357–366.
- Li, G., Buckle, P. (1998). A practical method for the assessment of work-related musculoskeletal risks-Quick Exposure Check (QEC). Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 42 (19), 1351–1355.
- Michael, R. (2002). *The Strain Index Job Analysis Method: Q & A* [online, accessed: 2018-07-14]. Carefree: Ergoweb. Retrieved from: https://ergoweb.com/the-strain-index-job-analysis-method-q-a/.
- Middlesworth, M. (2012). A step-by-step guide to using NIOSH Lifting Equation for Single Task [online, accessed: 2018-07-15]. ErgoPlus. Retrieved from: https://ergo-plus.com/niosh-lifting-equation-single-task/.
- Moore, J. S., Garg, A. (1995). The strain index: A proposed method to analyze jobs for risk of distal upper extremity disorders. *American Industrial Hygiene Association Journal*, *56* (5), 443–458.
- Nelson & Associates. (2010). Analysis of manual lifting using ACGIH Lifting TLVs [online, accessed: 2018-07-15].
 Bryan: Nelson & Associates. Retrieved from: http://www.hazardcontrol.com/factsheets/ml-mh/ACGIH-lifting-TLV.
- Occhipinti, E. (1998). OCRA: A concise index for the assessment of exposure to repetitive movements of the upper limbs. *Ergonomics*, 41 (9), 1290–1311.
- Occupational Health and Safety Council of Ontario (OHSCO). (2007). MSD Risk Assessment Checklist [online, accessed: 2019-10-19]. Carefree: OHSCO. Retrieved from: https://terraform-20180423174453746800000001. s3.amazonaws.com/attachments/cjjeeexqz01wqmqm2itthhqn9-10-msd-risk-assessment.pdf.
- Rivero, L. C., Rodríguez, R. G., Pérez, M. R., Mar, C., Juárez, Z. (2015). Fuzzy logic and RULA method for assessing the risk of working. *Procedia Manufacturing*, *3*, 4816–4822.

- Robledo Gallegos, A. (2010). Complementing the Washington Ergonomics assessment method with the Strain Index [online, accessed: 2018-07-15]. Retrieved from: www.iise.org.
- Rodríguez, Y., Viña, S., Montero, R. (2013). ERIN: A practical tool for assessing work-related musculoskeletal disorders. *Occupational Ergonomics*, 11 (2), 59–73.
- Roman-Liu, D. (2009). Ocena ryzyka rozwoju dolegliwości mięśniowo-szkieletowych z zastosowaniem metody REBA. *Bezpieczeństwo Pracy*, 11, 12–15.
- Roman-Liu, D. (2012). Ocena obciążenia układu mięśniowo-szkieletowego i ryzyka rozwoju dolegliwości kończyn górnych [online, accessed: 2018-07-15]. Warszawa: Centralny Instytut Ochrony Pracy Państwowy Instytut Badawczy. Retrieved from: https://www.ciop.pl/CIOPPortalWAR/appmanager/ciop/pl?_nfpb=true&_pageLabel=P30001831335539182278&html_tresc_root_id=300004576&html_tresc_id=300004577&html_klucz=19558&html_klucz_spis=.
- Roman-Liu, D., Groborz, A., Tokarski, T. (2013). Comparison of risk assessment procedures used in OCRA and ULRA methods. *Ergonomics*, 56 (10), 1584–1598.
- Roman-Liu, D., Tokarski, T. (2010). Ocena obciążenia statycznego z zastosowaniem metody OWAS. Bezpieczeństwo Pracy, 7/8, 28–31.
- Straker, L., Pollock, C., Burgess-Limerick, R., Egeskov, R. (2007). An introduction to ManTRA: A tool for manual task risk assessment. In: L. Straker (ed.). Proceedings of the 43rd Annual Conference of the Human Factors and Ergonomics Society of Australia (pp. 20–23). Baulkham Hills: Human Factors and Ergonomics Society of Australia. ISBN 0980306329.
- TenStep Polska. (2018). Official website. Warszawa: TenStep Polska Sp. z o.o. [online, accessed: 2018-07-18]. Retrieved from: http://tenstep.pl/.
- Using the Snook Push/ Pull Tables [online, accessed: 2018-07-15]. Retrieved from: http://www.ergonomiesite.be/documenten/trekkenduwen/Snook-tabellen.pdf.
- WSDL&I (2018). *Hazard Zone Jobs Checklist* [online, accessed: 2018-07-15]. Tumwater: Washington State Department of Labor and Industries. Retrieved from: https://www.lni.wa.gov/safety/SprainsStrains/evaltools/HazardZoneChecklist.PDF.
- WSPS. (2011). MSD Hazards Checklist [online, accessed: 2018-07-15]. Ontario: Workplace Safety and Prevention Serivices. Retrieved from: http://www.wsps.ca/wsps/media/site/resources/downloads/msd_hazards checklist final.pdf.
- Wyrwicka, M. K. (2011). Zarządzanie projektami. Poznań: Wydawnictwo Politechniki Poznańskiej. ISBN 9788377750513.

Praktyczne implikacje dla analiz ergonomicznych w zarządzaniu projektami wynikające z normy EN 16710-2 Metody ergonomiczne. Metodyka analizy pracy wspierająca projektowanie

Abstrakt: Ergonomiczna analiza stanowisk pracy jest podstawowym elementem każdego ergonomicznego projektu. W wielu przypadkach jednak przeprowadzana w sposób fragmentaryczny i nieustrukturyzowany, daje niepełny i mylący obraz ocenianych procesów pracy. Autorzy na podstawie własnych doświadczeń i metodyk zawartych w EN 16710-2 Metody ergonomiczne – Część 2: Metodologia analizy pracy do wspomagania projektowania przedstawili sposób postępowania i najważniejsze elementy, których zawarcie umożliwia rzetelną

analizę ergonomiczną. Wskazano kluczowe elementy analizy ergonomicznej, którymi są: (1) ustalenie zastosowalności aparatu pozyskiwania danych w określonych warunkach, (2) zastosowanie triangulacji w stosowanych metodach badawczych, zarówno w analizie jakościowej, jak i ilościowej, (3) dobór odpowiedniej części analizowanego systemu, a w przypadku analizy fragmentarycznej zapewnienie przenoszenia wniosków jedynie na obszary nią objęte. Bardzo ważnym, aczkolwiek często pomijanym elementem analiz ergonomicz-

nych jest wskazanie, w jaki sposób rezultaty związane z realizacją projektu przyczyniły się do rozwiązania problemów niezgodności, które są inherentnym elementem prawie każdego postępowania badawczego w obszarze organizacji pracy. Pozwala to na ustalenie,

na ile zasadne jest wnioskowanie na podstawie zebranego materiału, a także ustalenie odchyleń od obowiązujących standardów. W artykule przedstawiono również schemat zarządzania przedsięwzięciami, tak aby uzyskiwane mogły być kontekstowe cele ergonomiczne.

Słowa kluczowe: analiza ergonomiczna, zarządzanie projektami, zarządzanie bezpieczeństwem pracy, projekt ergonomiczny

E-learning in the activities of Polish public libraries

Małgorzata Hankiewicz

Adam Mickiewicz University in Poznań, Poland Faculty of Biology

ORCID: 0000-0002-8527-6799

Krzysztof Hankiewicz

Poznan University of Technology, Poland Faculty of Engineering Management

ORCID: 0000-0001-6850-2259

Attention was also paid to the growing importance and interest in this type of education. The paper discusses the possibilities of using e-learning in teaching, with particular emphasis on education conducted as part of the activities of public libraries. The article presents the offer of e-learning courses mainly in provincial and pedagogical libraries. The purpose of the analysis was to verify the scope of e-learning use by libraries, check the availability of training offered and the ease of finding them on library websites. The number of courses offered and their topics were also examined. Moreover, it was taken into account to whom the prepared courses were addressed. The paper presents the current state, possibilities for further development and suggestions of the authors, which are based on the growing technological possibilities, with more common access to the Internet. Research shows that the use of e-learning platforms by provincial public and pedagogical libraries is unfortunately not common. This situation may be dictated by the lack of funds to prepare such projects. This limitation should, however, lose its significance due to the decreasing costs of platform implementation as well as the increasing funds supporting library activities. In addition, the pressure of potential users can motivate the development of e-learning platforms in libraries.

Abstract: The article characterizes the specificity of public library activities

and their role in education. The possibilities of using e-learning in the educa-

tion process were also presented, with particular emphasis on public education.

Key words: e-learning, education, public libraries, higher education

1. Introduction

E-learning is becoming more and more popular way of educating oneself in various fields. It is used not only in academies and during employees training, but also on every level of education, at least as a supplement of the main track of classes. Technological development, especially in terms of information technologies, imposes necessity of knowledge update for those who finished their education long time ago. It can be caused by constantly changing professional requirements or be part

Correspondence to:
Krzysztof Hankiewicz
Politechnika Poznańska
Wydział Inżynierii Zarządzania
Katedra Zarządzania i Systemów
Informatycznych
ul. Strzelecka 11
61-845 Poznań, Poland
Tel.: +48 61 665 34 08
E-mail:
krzysztof.hankiewicz@put.poznan.pl

of preparation for running one's own business, especially when it comes to constantly changing law regarding its activity.

Technology influenced the development of the libraries as well. Their invaluable educational role appeared at the beginning of the twentieth century, when public library became "university of the people". Independently of the fact whether particular library has its own formal education programme or not, key function of its employees is to educate groups as well as individuals how to use library tools in the process of research (Burke, 2016, p. 105).

In Poland, function of popularization of knowledge and education in various fields by public libraries is determined by law: "Purpose of public libraries is to fulfill educational, cultural and informational needs of the society and to participate in promulgation of knowledge and culture" (Journal of Laws 2019, pos. 1479, Act of 27 of June 1997 on libraries).

Public libraries, apart from their basic functions consisting of data's collection, compilation and sharing, fulfill their mission as centres of information and culture, which can be seen in particular in minor cities. As an addition, pedagogical libraries serve the need of education and upbringing, including education of teachers.

Changes in the society and common access to the Internet influenced how libraries are fulfilling their tasks. They added online resources, which can be accessed at any time as part of their services. They are often accompanied by short online courses, demonstrating how to access and use those services. E-learning courses are one of the forms of those online courses.

2. E-learning in educational process

Not all interactive resources, even in the form of courses, can be named as e-learning. Various definitions differ from one another when it comes to technology used, as well as the role of the teacher in the process. Pollard and Hillage (2001) define e-learning as "delivery of possibility to learn based on information technologies, Internet and WWW sites and its management aiming at support of learning process of individuals." Such definition could be interpreted in a way that any educational content delivered via Internet is an e-learning. Remaining question is how to organize such courses and their formalization in the aspect of achieving their educational purposes.

General definition of e-learning is given by Mhouti, Erradi i Nasseh (2018, p. 896):

E-learning system is an application or a platform created for elasticity of learning process, which aims at implementation of learning process theory consisting of organization of content and resources, conduct of courses and training programmes, tracking, recordkeeping and management tasks.

Useful introduction to the terminology used in regards to e-learning is presented by Urdan and Weggen (2000). They are defining e-learning as delivery of educational resources and content via various forms of electronic media, including Internet, intranet, extranet, satellite transmission, audio/video tape, interactive television and compact discs. In their definition, e-learning is education based on technology. They defined "e-learning as a subset of distance learning, as distance learning would include all elements of e-learning plus text-based and correspondence-based learning or courses. However, they see online learning (or web based

learning, WBT) as only one element of e-learning, describing only the Internet, intranet or extranet elements of e-learning. Therefore, online learning is set within e-learning, which in turn is set within distance learning" (see Figure 1).

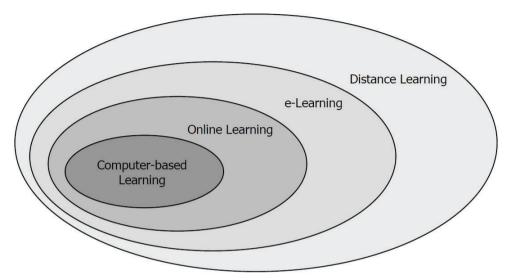


Figure 1. Subsets of distance learning

Source: Urdan and Weggen, 2000, p. 17.

Development of distance education can be divided into following phases (Hankiewicz 2011):

- correspondence courses;
- education via radio and later the television;
- two-way communication in the form of teleconferences;
- usage of computer networks (e-learning);
- multimedia presentations, simulations and virtual systems;
- mobile technologies (m-learning).

Various sources provide comparisons of e-learning definitions. For example, Leszek Kozioł defines e-learning as "method of gaining knowledge, technique of teaching and way of learning with the use of information technologies" (2013).

Usage of e-learning in the teaching process has its advantages, but also drawbacks. Among the benefits of using e-learning, the practical ones deserve special attention:

- e-learning materials can be available at the most convenient time, divided into short fragments;
- adaptability to student's needs;
- low costs in comparison to traditional way of teaching;
- contents of the courses can be easily updated from one central point;
- shorter learning time due to individual approach and broad selection of available materials;
- limitation of shyness factor and fear of failure—people can learn in a relatively anonymous way;

- integrity and comparability of various courses;
- introduction of interactive courses, also those with learning through play in mind;
- easy progress tracking and assessment tests conducting;
- raising people's IT skills.

It seems obvious e-learning limits direct contact with the teacher and ability to learn in the group. Michał Kozioł points out that e-learning increases one's screen time in comparison with traditional methods (2013).

In addition, potential difficulties when using e-learning may include:

- dependence on technology—users need access to hardware, software and Internet to fully use benefits of such education;
- not suitable for some types of training—particularly for soft skills, which are based on interpersonal relationships, team building, communication and presentation skills;
- impersonality of such courses;
- such courses require a high level of self-discipline and motivation;
- high entry costs when it comes to IT infrastructure;
- often requires the support of trained employees, when it comes to explanation how the platform works, and additional support during learning process.

Some may say that e-learning is only suitable for highly motivated people that understand how to make the most out of educational materials. They need to show some proficiency in the use of Internet (Hills, 2016, p. 6).

3. Analysis of e-learning use in public libraries

Purpose of the analysis was to verify the scope of e-learning use in public libraries, check availability of trainings offer and their accessibility with the use of libraries websites. Number of courses and their topics as well as their target audience were taken into consideration.

Only those public and pedagogical libraries were selected for the study which are seen as central in relation to others in a given voivodeship.

The study is based on methodology proposed by Ewa Jadwiga Kurkowska, which can be described as "analyzing the offer available on the Internet with the assumption that if the library conducts e-learning based training it would be reflected on its website as the Internet is the most popular way of providing information in the modern world" (2012). In addition, the study was extended with verification of target audience and software used of available courses.

4. Research results and conclusions

Out of sixteen voivodeship libraries, only one had an e-learning platform and offered courses through it. It was Voivodeship Public Library and Culture Animation Center in Poznań. The library has completed the project "Construction of integrated and distributed catalogue of regional bibliography of Greater Poland using an e-learning platform". The project was implemented and financed under the programme of the Ministry of Culture and National Heritage "PATRONAGE 2010", which led to the creation of eWBPiCAK e-learning platform (Figure 2). Originally, the system was supposed to be used for online training for librarians, but was extended to serve as a platform for e-learning courses for library's users as well.

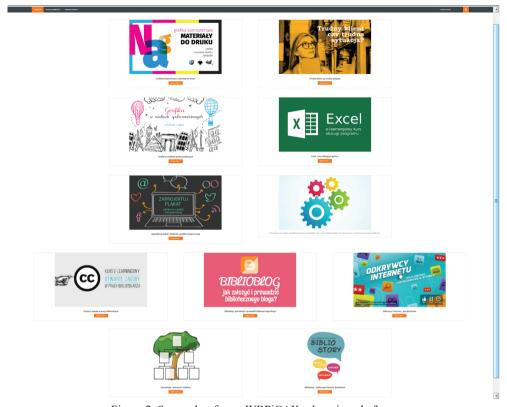


Figure 2. Screenshot from eWBPiCAK e-learning platform

Source: WBPiCAK, 2019

One of the libraries had in its offer e-learning foreign languages courses, but they were available only locally, inside its building and couldn't be accessed from the website (Silesian Library in Katowice).

Four libraries out of sixteen offered their users some online courses, including online library catalogue access training, ability to sign-up online (Voivodeship and City Public Library in Rzeszów), virtual tour (Voivodeship Public Library in Kraków) and interactive map. User guides for all services were provided as PDF documents or short multimedia presentations. Trainings were publicly available and easy to find on library's website. Such form of training cannot be categorized as e-learning, rather than attempts to provide some resources online.

Situation seems to differ when it comes to e-learning resources provided by voivodeship pedagogical libraries. Links to external e-learning platforms such as Moodle were provided on websites of eight out of sixteen libraries. CEN Pedagogical Library in Białystok provides e-learning system based on Moodle platform, which is integrated into the website.

E-learning platforms "can be divided into commercial solutions with closed codebase and open source ones with publicly accessible source code" (Skrzypek, 2015, p. 249). Research shows that public libraries usually choose open source platforms such as Moodle (Modular Object-Oriented Dynamic Learning Environment).

Moodle platform features include (Tabot, Oyibo and Hamada, 2013, p. 18):

- tasks defining;
- discussion board;
- file download:
- grading system;
- internal messages;
- online calendar;
- online messages and announcements;
- online quizzes;
- Wiki.

Moodle platform is world's most popular learning management system, which offers *MoodleCloud* service for e-learning courses hosting and *Moodle Mobile App*, providing easy access to Moodle platform from mobile devices, example of which is depicted in Figure 3.

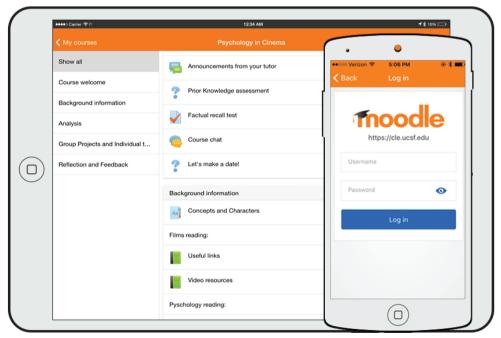


Figure 3. Moodle Mobile App of University of California San Francisco Library

Source: UCSF Library, 2019.

An example from a library based in the United States was used, as none of analyzed Polish libraries using Moodle platform does not provide mobile access to it.

In one case among analyzed pedagogical libraries websites e-learning platform was inactive (Pedagogical Voivodeship Library in Gdańsk), while Moodle platform is replaced by educational system based on Wordpress called WEBowadbp in Lower Silesian Pedagogical Library in Wrocław. Although Moodle platform integrates both LMS (Learning Management System) and CMS (Content Management System), it's not intuitive (in comparison to the competition) interface is the main factor of the recent shift to alternative content management systems such as WordPress (Tangient LLC, 2010). Constantly changing needs of educational platform's users play also a huge role in such transition. The choice of platform by the organization depends on (Plebańska and Kula, 2011, p. 63):

- educational needs of the organization implementing the solution;
- number of users;
- target audience;
- didactic processes implemented on the platform;
- administrative processes implemented on the platform;
- hardware and network infrastructure,
- experience with e-learning platform implementation and maintenance.

In three cases e-learning platform is available for signed-in users. Example of user creation form from Pedagogical Voivodeship Library in Warsaw website is given in Figure 4.

Username*	The password must have at least 8 characters, at least 1 digit(s), at least 1 lower case letter(s), at least 1 upper case
	letter(s), at least 1 non-alphanumeric character(s)
Password*	□ Unmask
More details —	
Email address*	
Email (again)*	
First name*	
Surname*	
Surname* City/town*	

Figure 4. New account creation form for e-learning platform of the Provincial Pedagogical Library in Warsaw

Source: PBW, 2019.

E-learning platform offered by Pedagogical Voivodeship Library in Rzeszów is available even for guest accounts and the one offered by Lower Silesian Pedagogical Library in Wrocław does not require any authentication at all.

Analyzed e-learning courses can be divided into two categories. The first one is for all potential users, the other is for teachers and librarians. First category includes such courses as: blogging (offered by Lower Silesian Pedagogical Library in Wrocław), photo editing course (offered by Pedagogical Voivodeship Library in Katowice) or information and media course for children and teenagers (offered by Voivodeship Public Library and Culture Animation Center in Poznań).

Courses for teachers and librarians are focused on:

- didactic competences such as the use of online resources in education process including online catalogues access and bibliography creation;
- resources used to make classes more interesting including lesson plans, tests, puzzles, colouring books or educational games, perfect example of such resources are those provided by Lower Silesian Pedagogical Library in Wrocław;
- raising competencies of librarians by providing Excel or computer graphics training (offered by Voivodeship Public Library and Culture Animation Center in Poznań).

One of the types of e-learning is "blended-learning", which is combination of online courses and classes held in the library. Such courses are available at Pedagogical Library in Białystok. They are mostly in Polish with exception of one, conducted in Ukrainian.

Basic purpose of e-learning course is, as mentioned earlier, to develop competences of the user, which can only be achieved if training is properly prepared and conducted. Requirements for e-learning courses under development relate to:

- didactic purposes—determine the skills that a course participant should acquire;
- course description—brief summary of the significant learning experiences for a course, schedule or starting date;
- course requirements—skills and knowledge as well as all the hardware or software needed to participate in the course;
- final assessment—what elements make up the final grade and what are the criteria of such assessment:
- contact information—ways in which teacher and participant can communicate with each other.

A benchmark example of e-learning courses can be those offered by Voivodeship Public Library and Culture Animation Center in Poznań. Each of them is provided with set of information including schedule, agenda, target audience, goals, training techniques and contact information (see Table 1). Such preparation is rare to find as most of the libraries provide only basic information such as short description.

Table 1. Example of a perfect e-learning course description

Schedule:

- from 2 to 30 September 2019 (4 weeks).

Where:

- course conducted on WBPiCAK e-learning platform.

Target audience: Employees of public libraries in the Greater Poland Voivodeship.

Agenda:

- 1. Spreadsheets basics:
 - ribbon commands and workspace
 - mouse pointer
 - spreadsheet operations.
- 2. We create our own sheet, meaning:
 - formatting—appearance settings
 - data input.
- 3. Formulas and functions, meaning:
 - what is the formula and how it is created
 - basic mathematical functions
 - selected functions with the use of conditions
 - selected statistical functions.
- 4. Table operations
 - panes freezing
 - filtering and sorting
 - charts
 - printing.

Goals of the training:

Participants:

- get to know basic features of Excel spreadsheet,
- are able to create own sheets, charts and prints,
- are able to modify sheets for data analysis.

Conditions for completing the course:

To complete the course and receive a certificate, participants must score 80% of the points.

Methodologies:

- individual computer work.

Requirements:

- basic knowledge of computer and Internet skills (Adobe Reader, Internet browser, e-mail).

Teacher:

Magdalena Rusnok, Instructor of the Methodological and Instruction Department WBPiCAK

Source: WBPiCAK, 2019.

It should also be noted that the ease of access to courses presented on the website results (as the authors have presented in an earlier publication) from the ease of searching available on the homepage (Hankiewicz and Hankiewicz, 2014, p. 27). In analyzed cases websites' layouts were readable and it was not hard to find where e-learning resources are placed.

5. Conclusion

Public libraries, which fulfill their mission being information, education and self-development centres for communities they operate within and, in the case of pedagogical ones, assisting in teachers education, should benefit from the use of modern technologies. E-learning courses should become an integral part of libraries' services and address their users' needs.

However, results of the study clearly show that usage of e-learning platform is not a common practice among voivodeship public and pedagogical libraries. E-learning platforms are used in half of the analyzed pedagogical libraries. While in the group of pedagogical libraries surveyed, half of them use e-learning platforms to conduct various types of courses, only one in the voivodeship library group does the same. As the platform was created with the support of European Union, it seems that external funding is crucial in the process of creation new e-learning systems. They can come from European Union as well as from central or local government units. Development of online resources should be closely tied with training programmes for librarians covering creation process of such systems. With constantly decreasing costs of implementing e-learning platforms it will also be easier to get funding for this purpose. Even in those libraries that didn't have any e-learning platform, some of the resources could be accessed online, which can lead to conclusion that the awareness of importance of online presence is constantly rising among librarians. In this case, proper training covering creation, implementation and day to day usage of e-learning platforms is of high importance. Recognition of local community needs in regards to access to information, knowledge and culture and ways of fulfilling them should be a large part of such courses. Close collaboration between libraries experienced in the process of e-learning platforms and those which want to introduce such systems would be invaluable in this case. Raising qualifications by librarians will result in the active promotion of library services and activities in the local community. Increasing attractiveness and availability of offered e-learning courses can positively influence perception of libraries as an important place in the process of social education.

Dynamic situation in researched field requires further analysis to check whether awareness regarding usage of e-learning platforms as a tool to build knowledge-based society raises among librarians.

References

- Burke, J. (2016). Neal-Schuman library technology companion: A basic guide for library staff. 5th ed. Chicago: Neal-Schuman. ISBN 9780838913826.
- Hankiewicz, K. (2012). Ocena oferty e-learningowej poznańskich uczelni publicznych. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług, 88 (703), 156–164.
- Hankiewicz, K., Hankiewicz, M. (2014). Użyteczność serwisów internetowych bibliotek jako cecha determinująca sprawność korzystania z usług bibliotecznych. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług, 113 (vol. 2), 21–30.
- Hills, H. (2016). Individual preferences in e-learning. Abingdon, Oxon: Routledge. ISBN 9780566084560.Kozioł, L. (2013). Determinanty rozwoju e-learningu korporacyjnego. Zeszyty Naukowe Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach. Seria: Administracja i Zarządzanie, 98, 61–72.
- Kozioł, M. (2013). Wykorzystanie e-learningu w procesie szkolenia pracowników małych i średnich przedsiębiorstw. Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie, 22 (1), 113–122.
- Kurkowska, E. J. (2012). Platformy e-learningowe w działalności dydaktycznej bibliotek publicznych uczelni akademickich. E-mentor, 4 (46).

- Mhouti, A. E., Erradi, M., Nasseh, A. (2018). Using cloud computing services in e-learning process: Benefits and challenges. *Education and Information Technologies*, 23 (2), 893–909. DOI 10.1007/s10639-017-9642-x.
- PBW. (2019). Official website of the Pedagogiczna Biblioteka Wojewódzka im. Komisji Edukacji Narodowej w Warszawie [= Pedagogical Voivodeship Library in Warsaw; online, accessed: 2019-07-12]. Retrieved from: http://www.pbw.waw.pl/.
- Plebańska, M., Kula I. (2011). *E-learning. Treści, narzędzia, praktyka*. Warszawa: ALMAMER Szkoła Wyższa. ISBN 9788362644117.
- Pollard, E., Hillage, J. (2001). Explaining e-learning, IES Report nr 376. Brighton: The Institute for Employment Studies. ISBN 1851843051.
- Tabot, A., Oyibo, K., Hamada, M. (2013). E-learning evolution: Past, present and future. In: M. Hamada (ed.). E-learning: New technology, applications and future trends (pp. 1–32). New York: Nova Science Publishers. ISBN 9781626189614.
- Tangient, L. L. C. (2010). *Moodle pros and cons* [online, accessed: 2015-04-04]. Retrieved from: http://www.blenderwiki.wikispaces.com/Moodle+Pros+and+Cons.
- UCSF Library. (2019). Official website of University of California San Francisco Library [online, accessed: 2019-07-20]. Retrieved from: https://www.library.ucsf.edu/.
- Urdan, T. A., Weggen, C. (2000). Corporate e-learning: Exploring a new frontier [online, accessed: 2019-07-20]. WR Hambrecht and Co. Retrieved from: http://cclp.mior.ca/Reference%20Shelf/PDF_OISE/Corporate%20e-learning.pdf.
- WBPiCAK. (2019). Official website of the Wojewódzka Biblioteka Publiczna i Centrum Animacji Kultury w Poznaniu [= Voivodeship Public Library and Culture Animation Center in Poznań; online, accessed: 2019-07-04]. Retrieved from: http://wbp.poznan.ekursy.eu.

E-learning w działalności polskich bibliotek publicznych

Abstrakt: W artykule scharakteryzowano specyfikę działalności bibliotek publicznych i ich rolę w zakresie edukacji. Przedstawiono również możliwości zastosowania e-learningu w procesie kształcenia, ze szczególnym uwzględnieniem edukacji powszechnej. Zwrócono też uwagę na rosnące znaczenie i wzrost zainteresowania takim sposobem kształcenia. Praca pokazuje możliwości zastosowania e-learningu w nauczaniu ze szczególnym uwzględnieniem edukacji prowadzonej w ramach działalności bibliotek publicznych. Artykuł prezentuje ofertę kursów e-learningowych głównie w wojewódzkich bibliotekach publicznych i wojewódzkich bibliotekach pedagogicznych. Celem analizy było zweryfikowanie zakresu wykorzystania e-learningu przez biblioteki, sprawdzenie ogólnodostępności oferowanych szkoleń oraz łatwości odnalezienia ich w internetowych serwisach bibliotek. Badano ilość

oferowanych kursów oraz ich tematykę. Wzięto też pod uwagę, do kogo skierowane były przygotowane kursy. W pracy przedstawiono dotychczasową praktykę, możliwości dalszego rozwoju i propozycje autorów, które opierają się na rosnących możliwościach technologicznych, przy coraz powszechniejszym dostępie do internetu. Przeprowadzone badania pokazują, że korzystanie z platform e-learningowych przez wojewódzkie biblioteki publiczne i pedagogiczne nie jest niestety powszechne. Taka sytuacja może być podyktowana brakiem środków na przygotowanie takiego projektu. Bariera ta powinna jednak tracić na znaczeniu ze względu na malejące koszty wdrożenia platform z jednej strony, jak i rosnące środki wspierające działania bibliotek z drugiej strony. Ponadto presja potencjalnych użytkowników może wpłynąć motywująco na rozwój platform e-learningowych prowadzonych przez biblioteki.

Słowa kluczowe: e-learning, edukacja, biblioteki publiczne, szkolnictwo wyższe

Information for the Authors

The Editorial Board accepts for publication only scientific articles dedicated to economics, management, tourism and recreation problems. Entries should be submitted in electronic form (MS Word document sent on a CD/DVD or via e-mail). The length of work (including illustrative material, bibliography and abstracts) must not exceed 15 pages. The publication should be divided into parts and contain headings. The text must be accompanied by an abstract in Polish and English (150–200 words) including: purpose, methods, obtained results and conclusions as well as key words in English and Polish, which do not repeat words from the title. The detailed information on how to prepare a text print (format of the footnotes, bibliography, descriptions of tables and figures) is posted on the journal's website: http://zn.mwse.edu.pl.

Prepared texts which do not adhere to the editorial guidelines will not be accepted for publication. We kindly ask the Authors to attach their full contact details (including telephone number and e-mail address), as well as affiliate information (title, name of institution or other entity).

The Editorial Board does not accept texts that have been published in other publications. The condition for publication is a positive review by the Publishing House. The Editorial Board does not return the submitted texts and does not pay royalties. Papers published in *The Malopolska School of Economics in Tarnów Research Papers Collection* are protected by copyright; they may only be reprinted with the consent of the Editorial Board.

Informacja dla Autorów

Redakcja przyjmuje do publikacji wyłącznie teksty o charakterze naukowym poświęcone problemom ekonomii, zarządzania, turystyki i rekreacji. Prace należy składać w formie elektronicznej (dokument MS Word przesłany na płycie CD/DVD lub e-mailem). Objętość pracy (łącznie z materiałem ilustracyjnym, bibliografią i streszczeniami) nie może przekraczać 15 stron. Opracowanie powinno być podzielone na części i zawierać śródtytuły. Do tekstu należy dołączyć streszczenie w języku polskim i angielskim (150–200 słów) zawierające: cel, metody, uzyskane wyniki oraz wnioski, a także słowa kluczowe w języku polskim i angielskim, które nie powtarzają słów z tytułu. Szczegółowe informacje o sposobie przygotowania tekstu do druku (format przypisów, bibliografia, opisy tablic i rysunków) są zamieszczone na stronie internetowej czasopisma: http://zn.mwse.edu.pl.

Teksty przygotowane w sposób niezgodny ze wskazówkami redakcji nie będą przyjmowane do druku. Autorów prosimy o dołączenie do pracy pełnych danych adresowych (wraz z numerem telefonu i adresem e-mail), jak również informacji afiliacyjnej (tytuł naukowy, nazwa uczelni lub innej jednostki).

Redakcja nie przyjmuje tekstów opublikowanych w innych wydawnictwach. Warunkiem publikacji jest pozytywna recenzja wydawnicza. Redakcja nie zwraca nadesłanych tekstów i nie wypłaca honorariów autorskich. Prace opublikowane w "Zeszytach Naukowych Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie" są chronione prawami autorskimi, ich przedruk może nastąpić wyłącznie za zgodą Redakcji.