

PRACE NAUKOWE

Uniwersytetu Ekonomicznego we Wrocławiu

RESEARCH PAPERS

of Wrocław University of Economics

263

Quantitative Methods in Accounting and Finance



edited by

Edward Nowak

Ruslan Motoryn



Publishing House of Wrocław University of Economics
Wrocław 2012

Reviewers: Tadeusz Galanc, Jan Turyna

Copy-editing: Marcin Orszulak

Layout: Barbara Łopusiewicz

Proof-reading: Joanna Szynal

Typesetting: Comp-rajt

Cover design: Beata Dębska

This publication is available at www.ibuk.pl, www.ebscohost.com,
and in The Central and Eastern European Online Library www.ceeol.com
as well as in the annotated bibliography of economic issues of BazEkon
http://kangur.uek.krakow.pl/bazy_ae/bazekon/nowy/index.php

Information on submitting and reviewing papers is available
on the Publishing House's website
www.wydawnictwo.ue.wroc.pl

All rights reserved. No part of this book may be reproduced in any form
or in any means without the prior written permission of the Publisher

© Copyright by Wrocław University of Economics
Wrocław 2012

ISSN 1899-3192

ISBN 978-83-7695-274-1

The original version: printed

Printing: Printing House TOTEM

Contents

Preface	7
Natalia Bielous: Methodology overview of the assessment of the economic security of an enterprise	9
Magdalena Chmielowiec-Lewczuk: Business insurance costing for the purpose of decision-making calculi	16
Edward Nowak: The possibilities of applying quantitative methods in postulated costing	27
Anna Isayeva: Topical issues of the disclosure of information about financial investments in financial statements	38
Joanna Koczar: Organization of accounting in the Russian Federation. Selected issues	44
Natalia Kovtun, Anzhela Ignatyuk: Multidimensional assessment of the potential and development level of Ukraine's economy with respect to economic activities	53
Mirosława Kwiecień: The fair value dilemmas	69
Lesya Leshchiiy: Methods used to define performance evaluation of innovative processes and products	73
Grzegorz Lew: An application of statistical methods in financial statements auditing	80
Michaylo Maliuzhenko: Methods of defining the interest rate amount based on the analysis of the dynamics of the IGLB market of Ukraine	91
Ruslan Motoryn: Harmonization of accounting and the system of national accounts	101
Tetiana Motoryna: Scope for using financial accounting data for the purposes of the system of national accounts	109
Vasylij Mukoviz: Capital evaluation in fiscal accounting with object of business operation	116
Maria Nieplowicz: A review of the measures used in the assessment of municipality management	121
Bartłomiej Nita: Two approaches to external financing needs estimation in financial planning	130
Maciej Norkowski: The Beyond Budgeting concept and multifaceted criticism of traditional budgeting	140
Marta Nowak: Advantages and disadvantages of auditor profession according to students of economics	150
Michał Poszwa: Models of business tax result statement	162
Alfred Szydelko: Application of the actuarial method in measuring provisions for future employee benefits	173
Marcin Wierzbiński: The main aspects of energy management	182

Streszczenia

Natalia Bielous: Systematyka metodycznych podejść do oceny ekonomicznej sytuacji przedsiębiorstwa	15
Magdalena Chmielowiec-Lewczuk: Kalkulacja kosztów ubezpieczeń dla przedsiębiorstw na potrzeby rachunków decyzyjnych	26
Edward Nowak: Możliwości zastosowania metod ilościowych w rachunku kosztów postulowanych	37
Anna Isayeva: Aktualne problem ujawnienia informacji o finansowych inwestycjach w sprawozdawczości finansowej	43
Joanna Koczar: Organizacja rachunkowości w Federacji Rosyjskiej. Wybrane problemy	52
Natalia Kovtun, Anzhela Ignatyuk: Wielowymiarowa ocena potencjału i rozwoju gospodarki Ukrainy na podstawie pozycjonowania rodzajów działalności ekonomicznej	68
Mirosława Kwiecień: Dylematy wartości godziwej	72
Lesya Leshchiiy: Metoda oceny systemu wskaźników funkcjonowania innowacyjnych procesów i produktów	79
Grzegorz Lew: Wykorzystanie metod statystycznych w badaniu sprawozdań finansowych	90
Michaylo Maliuzhenko: Metody określania wysokości stopy procentowej wykorzystujące analizę dynamiki rynku OWPP Ukrainy	100
Ruslan Motoryn: Harmonizacja rachunkowości i systemy rachunków narodowych	108
Tetiana Motoryna: Możliwości wykorzystania danych z rachunkowości finansowej do celów systemu rachunków narodowych	115
Vasylij Mukoviz: Wycena kapitału w rachunkowości finansowej a zarządzanie przedsiębiorstwem	120
Maria Nieplowicz: Przykładowe mierniki służące do oceny zarządzania miastem	129
Bartłomiej Nita: Dwa podejścia do szacowania zapotrzebowania na zewnętrzne źródła finansowania za pomocą planowania finansowego	139
Maciej Norkowski: Koncepcja <i>beyond budgeting</i> i wielopłaszczyznowa krytyka tradycyjnego budżetowania	149
Marta Nowak: Zalety i wady pracy audytora według studentów studiów ekonomicznych	161
Michał Poszwa: Modele rachunku wyniku podatkowego przedsiębiorstwa	172
Alfred Szydełko: Zastosowanie metody aktuarialnej do pomiaru rezerw na przyszłe świadczenia pracownicze	181
Marcin Wierzbiński: Podstawowe aspekty zarządzania energią	190

Joanna Koczar

Wrocław University of Economics

ORGANIZATION OF ACCOUNTING IN THE RUSSIAN FEDERATION. SELECTED ISSUES

Summary: The main goal of accounting is to deliver information to recipients who then use it to make decisions. That goal can be achieved by a proper organization of accounting as a process. In the historical context decisions relating to an economic entity were not made on a management level of that entity (e.g. they were made on the federal level – by the owner and decision-maker). Regulations which were valid back then still have an influence on the modern accounting organization and that inclines us to ask a question whether practical choices made by economic entities are reasonable.

Key words: reasonability, subjectivism, accounting organization, the Russian Federation, balance law.

1. Introduction

Problems relating to the organization of accounting by entities who conduct economic activity in the Russian Federation compose the objective scope of the present article. The article was written under the inductive and deductive inference and was based on studies of the professional literature (mainly Russian) and on an analysis of the balance law of the Russian Federation. The author aims to answer the question whether the Russian balance law in its current shape enables economic entities to make reasonable choices.

As pointed out in source materials, in the Polish language the term “to organize” originates from French *organizer* and means “to arrange something into proper forms, to subordinate to proper rules and norms, to bring order and organization into something; to organize” [Dubisz (Ed.) 2003]. Accounting understood as a logical course of actions must also be organized in a way that enables it to carry out its informative function.

The modern outlook on the organization of accounting has allowed defining it through the lens of reasonable thinking and informative needs of management and

external recipients of information. Therefore, accounting organization is defined “as a set of methods allowing to make an organized connection of various actions and devices which are crucial to the realization of the information process, in order to maintain proper functionality of accounting in the economic entity, including its specific characteristics, technical and personnel possibilities and reasonable usage of resources and labour” [Kiziukiewicz 2002]. In practice, that definition comes down to answering three basic questions:

- What (in what shape, from whom and when) should accounting and financial services receive?
- What (in what shape, how and when) should accounting and financial services do on that basis?
- What (in what shape, for whom and when) should accounting and financial services deliver? [Fałowski 2005].

To acknowledge the usage of resources and labor as reasonable, that is, as an action which will lead to the fulfillment of all accounting functions, one must organize:

- information process in the accounting system,
- accounting department.

In consequence, that arrangement must include such elements as accounting documentation, accounting records, inventory, internal control and financial reporting (as the elements of an information process) and elements which compose a department, that is, the position of an accounting department in a management structure of an entity, internal structure of that department, a division of work inside a department, its technical background and the proper selection and preparation of personnel [Kiziukiewicz 2002]. The subordination of the aforementioned elements should be carefully planned and put under control afterwards.

In the Polish professional literature, it is emphasized that the quality of those actions, that is, the organization of accounting, influences the quality of the whole process afterwards. It is also worth mentioning that the process of “organizing” cannot be performed only once after the foundation of entity. Because the process is streamlined, the costs relating to that process are also streamlined and because the informative needs of recipients can shift – the order that was once introduced should be systematically verified and actions related to the organization of the process should be redone when necessary. It all comes down to realization of one superior goal – to deliver information to interested entities, and without doubt among them management is the most important.

In the Russian professional literature, accounting organization is understood as an arranged system of elements, which secures necessary conditions for the materialization of accounting methodology and realization of its basic tasks. Those elements include:

- finding an accounting department with an effective functional structure inside an entity,
- employing accountants whose tasks are divided in a reasonable fashion,
- providing an optimal technical equipment and software,
- formulating an accounting policy which is based on the scientific and practical ground,
- having support from the state as a source of methodology and regulations [Стражев 2010].

On the other hand, it is emphasized that the accounting organization should be subjected to the realization of tasks relating to punctual delivering of reliable and necessary information to entity's management. Decisions about the shape of accounting organization should be made after considering all the factors which can influence it, including traditions and specific circumstances related with entity's activity and the size of accounting work [Астахов 2011].

To sum up, according to the methodology presented in the professional literature, accounting organization should lead to such arrangement of all elements that will allow delivering necessary information, mainly to management. The balance law in a democratic state with a free market economy should help with the realization of those assumptions. However, the analysis of the valid Russian balance law questions those assumptions. The realization of the rationalism principle in the accounting organization process is also questionable, especially the rationalism considered from the economic entity's perspective.

2. The concept of rationalism

When considering the concept of rationalism, it is good to look at it from various perspectives. Reasonable behavior or rationalism (from Latin *ratio* – “mind”; *rationalis* – “rational, sensible”) means something reasonable, sensible, purposeful, well considered [Doroszewski (Ed.) 1995]. At the same time, it is emphasized in the professional philosophical literature that rationalism is subjective. In his papers J.M. Bocheński stressed that rationalism is a postulate of reasonable, coherent behavior – a behavior that is consistent and also in accordance with proper rules from a given domain.

In the professional economic literature, rationalism is considered from the economic entity's perspective. Rationalism or reasonable behavior has subjective nature; therefore, what is reasonable in the eyes of one entity does not have to be seen in the same way by another entity. According to the economy principle and the highest productivity principle, an economic entity tries to optimize benefits and achieve that goal by a proper allocation of owned resources. However, to talk about rational economy one must first assume that the entity always has the possibility of choosing different solutions and that choice criteria have been already formulated.

The economic entity must possess an ability to assess the significance of its goals and it must know how it can realize them in conditions that both internally and externally limit its actions.

In the law interpretation field there exists a concept of a reasonable legislator which means that law and its interpretation should meet requirements of a democratic lawful state and compose practical wisdom. Therefore, accounting organization should be rational from the subjective point of view. In principle, to consider it as rational the entity should be given a freedom of choice. Stated law can limit that choice; however, in a democratic and lawful state that limitation should also bear reasonable characteristics, so that, on the one hand, no interests of potential recipients are violated but, on the other hand, the economic entity should be able to achieve its assumed goals (such as the realization of informative needs).

3. Accounting organization in practice

In the 15th century Luca Pacioli advised merchants who wanted to achieve perfection in their profession to be good accountants, because otherwise “they will wander in the darkness of their own affairs” [Pacioli 1494/2007]. The advice was directed to merchants, but it does not mean they kept their books single-handedly. The essence of the treatise implies that they received help from various assistants, including accountants [Pacioli 1494/2007]. In principle, books were supposed to deliver information mainly to merchants themselves (owners and managers in one person); however, hints about tax institutions and customs relating to registration of the books at official offices that were appearing in some cities [Pacioli 1494/2007] suggest that others also obtained information from this source. However, using the modern language, organization of both financial and accounting department as well as methodology of keeping the books were at discretion of an economic entity. Accounting was organized in a reasonable way from the merchant’s perspective. There was no balance law during that period of time; therefore, it could not be an obstacle nor did it help with the realization of informative needs of a given “economic entity”.

Today, in economic practice apart from the internal factors mentioned in the definition, accounting organization is also influenced by external factors, among which special place is hold by geo-political circumstances (both past and present) and valid law regulations.

The Russian professional literature is dominated by the opinion that in the 1950s the accounting system in CCCP seen as a science ceased to exist as an effect of the degradation process which had started in that country twenty years earlier. In practice, it leads to the destruction of the accounting theory [Соколов, Соколов 2011]. It is actually possible to assume that it was a natural effect of the fact that the USA efforts in the 1930s were channeled to increasing the scope of information

provided to investors and shareholder [Hendriksen, van Breda 2002], while at the same time in CCCP the state was the main recipient of the accounting information from particular economic entities. The state in planned economy conditions was virtually the only entity authorized to make investment decisions on different economic fields [Мезенцева, Немцова 1998]. Economists emphasize that in the planned economy conditions planners (and decision makers at the same time) were deprived of tools that would allow them to run economic account [Callahan 2004]. The logical effect of that action was a detailed regulation of accounting, though in those circumstances maybe it would be better to use the term “record”, which was used mainly for statistical purposes. Can those legal solutions be accused of the lack of rationalism? In the course of time, it can be said that from the owned perspective such behavior was as reasonable as was the organization of accounting for specific needs of a given merchant. The state as the main recipient of information and as the decision maker imposed solutions that allowed gathering information needed on a central level. That information was supposed to help with controlling the economy (results achieved by those actions are not a subject of the present study). Gathering information with that goal in mind and in that way lost its justification after changes in politics and economy. However, it must be mentioned that such an imposed form of accounting organization exists also today, but in Polish conditions in the case of the public finance sector the “head accountant of the country” (the Minister of Finance) determines charts of accounts for budget entities or budget institutions in a decree form, similarly as he or she determines them for the state budget or local budgets [Rozporządzenie Ministra... 2010]. At the core of such regulations there lies a need to synthesize specific information on various levels of state finance management. However, forcing economic entity to use a specific method of accounting organization in the case of not so important (as it would seem) issues only to realize the superior goal – that is, to deliver information – seems to contradict the rationalism principle.

Social and economic changes which occurred in the 1990s in the Eastern Europe also happened in the still existing CCCP. “Perestroika” brought about first discussions whether accounting should have been centralized or decentralized and what changes were necessary for accounting to become a system which will meet requirements of new economic entities, which were no longer a part of the state (i.e., so-called “cooperatives”). The year 1992 in the Russian professional literature is commonly recognized as a year when the accounting system of the Russian Federation became closer to the norms valid in other countries.

Accounting has retaken its position. It once again became a system that is supposed to deliver information to make economic decisions, therefore mainly for the management of economic entities.

However, despite the harmonization of accounting regulations with the international standards, it is hard not to notice that in the valid balance law in the Russian

Federation an influence of the previous system (centrally planned economy) can still be seen, which in practice prevents the accounting organization in economic entities from entirely fulfilling expectations of their decision-makers. It is also hard to find rationalism behind some of the imposed solutions.

Imposing accounting organization solutions within a department of accounting is one of the key problems. The balance law (on a federal accounting law level) and the standards (statements) concerning accounting and financial reporting in the Russian Federation determine accounting organization in that domain, indicating that the manager of an economic entity has the right to (depending on how much work that entity has in relation with keeping the books):

- to establish a department of accounting separated within internal structure, that is, managed by a head accountant,
- to establish a position of an accountant,
- to hand over keeping of the accounting books, in accordance with contract conditions, to a centralized department of accounting, specialized organization or specialist – accountant,
- to keep the books personally [Федеральный закон... 1996, 6.1.а,б,в,г; Положение по ведению... 1998, I.7. а,б,в,г].

However, the standard indicates that except for the first option others are recommended for companies that with accordance to the Russian Federation law are viewed as small. On the one hand, the possibility of outsourcing shows that the legislator aims at introducing international solutions; on the other hand, recommending solutions in accordance with an affinity for specific sector shows that the legislator tries to remain control over the organization of financial and accounting services, questioning the ability of economic entities to make reasonable choices in that matter. Would it not be better to assume that an economic entity, which regardless of the size of performed activity is aware of its limited resources and costs related with conducting an activity and its informative needs, will make a rational choice from its own perspective? An additional incentive to make a reasonable choice comes from the fact that in the Russian Federation there exist different regulations than those found (for example) in Poland concerning the responsibility for accounting as a whole and its specific elements. As an example one can use the fact that the accountant and not the management of an entity is burdened (so, a person that in fact keeps the books) with the responsibility to determine a scope of the basic activity for the purposes of profit and loss account [Комментарий к ПБУ 10/99].

The second problem comes from maintaining in force the rule that a valid chart of accounts for economic entities is constructed and approved by the Ministry of Finance [Приказ Минфина РФ]. Economic entities that conduct activity on a free market and belong to various owners have only the right to adjust it to their needs by expanding it into a so-called “working” chart of accounts. In practice, this

creates a number of problems with acquiring needed information from a financial accounting system by economic entity's management and with introducing solutions that originate in a management accounting. With regard to the necessity to keep the books with accordance to the imposed chart, solutions used in practice cause e.g. duplication of some tasks or multiple data processing only to fulfill valid external requirements and informative needs of entity's management. In such a situation it is hard to talk about a subjective choice. It also seems obvious that if economic entities could independently and basing on available patterns build a chart of accounts tailored to their needs, then they would still provide consistent information for external users (that would fulfill requirements of a financial statement), but it would happen in a reasonable way (from the subjective perspective of an economic entity). Specific regulations about positions in a financial statement and account numbers do not match variable market conditions.

Another solution that does not fit in the free market is the necessity to have different accounts for tax purposes. According to the valid law, entities have an ability to use information coming from a financial accounting system for tax purposes. However, it is a purely theoretical possibility, because in an economic practice meeting the requirements of the tax law requires them to have separate accounts, which has the effect of doing twice some tasks and multiplying information.

Document patterns are also subjected to specific regulations, which have a force of accounting evidences. As an example we can use documents, such as a record of disposing of a fixed asset (excluding buildings) and a record of disposing of a fixed asset (building), or a record of disposing a group of fixed assets (excluding buildings). As many others each of the aforementioned documents was approved in the appropriate statement [Постановление Госкомстата РФ от 21.01.2003 г. N 7]. Is it not be better to assume that parties in transaction will keep the appropriate care during an act of signing a contract, because preserving that care lies in their own well comprehended interest?

It can be noticed in the currently valid solutions that, on the one hand, the Russian Federation is opening itself to changes and attempts to adjust the federal law to international standards, but on the other hand, the legislator tries to maintain control over economic entities, i.e. in the a form of solutions approved in the federal statistics.¹ It is hard not to notice that both the enforcement of a chart of accounts as well as a practical necessity to maintain tax registries or document patterns are simplifications for that group of external recipients of information,

¹ Most documents, which are filled in, begin with an instruction relating to a legal responsibility for the violation of rules used during the preparation of statistical information and for delivering unreliable information, those rules come from two specific regulations: 13.19 Кодекса Российской Федерации об административных правонарушениях от 30.12.2001 № 195-ФЗ oraz 3 Закона Российской Федерации от 13.05.92 № 2761-1 "Об ответственности за нарушение порядка представления государственной статистической отчетности".

which include various controlling or statistical institutions, whereas this solution is definitely unfavorable for economic entities.

4. Summing-up

After taking into consideration past solutions in the case of accounting organization in the economic entities which conduct activity in the Russian Federation, it can be noticed that positive changes for the entities have occurred. Among them there is the acknowledgment of the priority of the accounting over the tax law or the establishment of the federal regulations which are similar to international solutions. However, it is hard not to notice the fact that the attempts (successful) of an excessive interference into accounting organization on the economic entity level are still clearly visible. Imposed solutions within accounting organization do not bring any benefits for economic entities. After the conducted analysis, it can be stated that the present legal solutions limit possibilities of economic entities to make reasonable choices in an irrational way. What may have been right during times when the state was the investor and the decision maker is not right today – in a state which is democratic at least in theory. Additional changes are needed before it can be stated that the legislator in this country is reasonable. Recently in the Russian Federation actions aimed at further adjustment to the international solutions have been performed. At present it is hard to say whether these actions will result in major changes in possibilities to make choices on an economic entity level. Only after its adaptation will it be possible to reassess them and state whether the literature definition of accounting organization has any practical application.

References

- Астахов В.П., *Бухгалтерский (финансовый) учёт*, Юрайт, Москва 2011.
- Callahan G., *Ekonomia dla normalnych ludzi. Wprowadzenie do Szkoły Austriackiej*, Fijor Publishing, Warszawa 2004.
- Doroszewski W. (Ed.), *Słownik poprawnej polszczyzny*, Wydawnictwo Naukowe PWN, Warszawa 1995.
- Dubisz S. (Ed.), *Uniwersalny słownik języka polskiego*, Wydawnictwo Naukowe PWN, Warszawa 2003.
- Fałowski W., *Podstawy prawne i organizacja rachunkowości*, [in:] T. Cebrowska (Ed.), *Rachunkowość finansowa i podatkowa*, Wydawnictwo Naukowe PWN, Warszawa 2005.
- Федеральный закон “О бухгалтерском учете” от 21 ноября 1996 №129ФЗ.
- Hendriksen E.A., Breda van M.F., *Teoria rachunkowości*, Wydawnictwo Naukowe PWN, Warszawa 2002.
- Kizikiewicz T., *Organizacja rachunkowości w przedsiębiorstwie*, PWE, Warszawa 2002.
- Кодекс Российской Федерации об административных правонарушениях от 30.12.2001 № 195-ФЗ. Комментарий к ПБУ 10/99.

- Мезенцева Е.С., Немцова Е.С., *Гармонизация системы бухгалтерского учёта в соответствии с Международными Стандартами Бухгалтерской Отчётности*, Серия “Экономика”, выпуск 1, Северо-Кавказский Государственный Технический Университет, 1998.
- Pacioli L., *Tractatus XI de Computis et Scripturis, Summa de Arithmetica, Geometria, Proportioni et Proportionalita*, Wenecja 1494, Polish edition: Stowarzyszenie Księgowych w Polsce, Warszawa 2007.
- Положение по ведению бухгалтерского учёта и бухгалтерской отчётности в Российской Федерации, утверждено Приказом Министерства Финансов Российской Федерации от 29 июля 1998 г. № 34н.
- Постановление Госкомстата РФ от 21.01.2003 г. N 7.
- Приказ Минфина РФ от 31 октября 2000 г. N 94н “Об утверждении Плана счетов бухгалтерского учета финансово-хозяйственной деятельности организаций и инструкции по его применению” (с изменениями от 7 мая 2003 г., 18 сентября 2006 г., 8 ноября 2010 г.).
- Rozporządzenie Ministra Finansów z dnia 5 lipca 2010 r. w sprawie szczególnych zasad rachunkowości oraz planów kont dla budżetu państwa, budżetów jednostek samorządu terytorialnego, jednostek budżetowych, samorządowych zakładów budżetowych, państwowych funduszy celowych oraz państwowych jednostek budżetowych mających siedzibę poza granicami Rzeczypospolitej Polskiej, Dz.U. 2010, nr 128, poz. 861.
- Соколов Я.В., Соколов В.Я., *История бухгалтерского учета*, Магистр, Инфра-М, 2011.
- Стражев В. И., *Теория бухгалтерского учёта*, Вышэйшая школа, Минск 2010.
- Закон Российской Федерации от 13.05.92 № 2761-1 “Об ответственности за нарушение порядка представления государственной статистической отчетности”.

ORGANIZACJA RACHUNKOWOŚCI W FEDERACJI ROSYJSKIEJ. WYBRANE PROBLEMY

Streszczenie: Głównym celem rachunkowości jest dostarczanie informacji odbiorcom, którzy na tej podstawie mają podejmować decyzje. Prawidłowa organizacja procesu, jakim jest rachunkowość, ma zapewnić realizację tego celu. W kontekście historycznym nie zawsze decyzje dotyczące danego podmiotu gospodarczego były podejmowane na poziomie zarządzających danym podmiotem gospodarczym (były, na przykład, podejmowane na poziomie państwa – właściciela i decydenta). Obowiązujące wówczas normy nie pozostają bez wpływu na dzisiejsze warunki organizacji rachunkowości, co skłania do zadania pytania o to, czy wybory dokonywane przez podmioty gospodarcze są w praktyce racjonalne.

Słowa kluczowe: racjonalność, subiektywizm, organizacja rachunkowości, Federacja Rosyjska, prawo bilansowe.