

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

Vasylij Mukoviz

Ukrainian State University of Finance and International Trade

CAPITAL EVALUATION IN FISCAL ACCOUNTING WITH THE OBJECT OF BUSINESS OPERATION

Summary: Valuation of company's capital is considered a useful tool of its management; also it is considered to be criteria of economic well-being, basis of plans and strategies development, as well as determinant of management effectiveness and choice of directions and ways of development. Therefore, the study of the conditions and methods of the valuation of capital cost, which is presented in the present article, is relevant and topical within current economic conditions.

Key words: valuation, value, cost of capital, liabilities, efficiency, management.

1. Introduction

At the present stage of the development of the accounting system in Ukraine, a vital issue is the reformation of its methodological and managerial principles, reconsideration of the accounting concept itself, one of the main issue of which is the concept of accounting of enterprise equities (capital, property) and the capital that is attracted to enterprise activity, as a considerable agency of enterprise's value.

One should note a number of authors of modern studies on capital as a constituent of accounting under the term "equities". Among Ukrainian researchers one can mention M.T. Bilukha, F.F. Butynets, S.F. Golov, V.V. Sopko, N.M. Tkachenko, M.G. Chumachenko, V.G. Shwets, V.O. Shevchuk and others. Among foreign authors one should note the works of the following scholars: H. Anderson, Yi. O. Danylevskyi, W.D. Koldwell, V.F. Palii, Ya.V. Sokolov, E. Helfert, E.S. Hendriksen, A.D. Sheremet.

Increase of the effectiveness of enterprise capital (equities) management and its constituents is impossible without measuring its efficiency on the basis of a definition of the system of its activities.

The main task with respect to solving the issues of capital management is certainty in the evaluation of enterprise equities, since the enterprise equities, as a source of formation of its economic resources, are of great importance in to providing financial and economic activity and enterprise profit earning.

2. Evaluation as a method of liabilities recording

In the system of the foundations of capital formation, the notion of its value is of great importance. Scholars distinguish accounting and economic evaluation. Economic evaluation is realized on the basis of accounting evaluation with a corresponding application of calculations. As for the accounting evaluation of capital (property) of Ukrainian enterprises, all fundamentals are defined by the Law of Ukraine “On Accounting and Financial Reporting in Ukraine” and Accounting Provisions (standards). Thus, the law declares the methodological basis of the evaluation of the vast majority of equities articles, historical (actual) net cost is that methodological basis of the evaluation. However, there are also approaches, which are based on the implementation of some other principles of accounting: credibility, predominance of essence over form, etc.

3. Indicators of the cost of capital as a factor of company’s success on the market

The utilization of the activities concerned with equities evaluation is necessary for resolving managerial decisions in following issues:

- when choosing the direction and scheme of financing a new business (one should consider all alternatives); when determining the commercial value of a management agent (for sale);
- when evaluating the profit level;
- when evaluating integrated risks of financial and economic activity; in the case of a need to decide about the integration or disintegration of an enterprise;
- for the purpose of working out the financing policy of current and noncurrent assets, etc.

An important element of an overall evaluation of equities is consideration of capital as a factor of production, which, having its own value, can generate income. The economic indicators of capital value are important for all users, both internal and external. As for owners and workers, the interest arises concerning the value of expenses used for capital formation and operation. In other words, it means what price the agent of management pays for the use of capital and whether it is profitable for him or her. For investors and creditors, the level of capital value is estimated in terms of potential incomes that will be gained in the case of their investment in business. In this case, the matter concerns relative and absolute indexes.

4. Example of the valuation of one of the equity components – obligations

It is worth dwelling on the issue of evaluation of such equity constituent as liability. Therefore, to determine book value of liabilities, the following types of evaluation are used:

- the historical net cost is the amount of income gained in exchanged for liabilities or in other circumstances, the amount of cash means or their equivalents that are expected to be paid off for the purpose of meeting liabilities in the ordinary course of business;
- the current net cost is an undiscounted amount of cash means or their equivalents that would be currently required to meet liabilities. The cost of paying off is an undiscounted amount of cash means or their equivalents that are expected to be paid off for the purpose of meeting liabilities in the ordinary course of business;
- the cost of calculation (payment) depends on the type of liability;
- the present cost is the present (undiscounted) value of future net outflows of cash means, which are expected to be paid off for the purpose of meeting liabilities in the ordinary course of business.

If one requires applying current, present and estimated costs, the problems arise mostly when evaluating liabilities. As known from the regulatory documents, the condition of liabilities acknowledgement in the balance is the possibility of its reliable evaluation. In other words, the most successful and understandable evaluation is the evaluation, which is established according to the data of accounting and displayed, in basic (prime) documents. But this is not always possible. The consideration of the reliability criterion applies to those situations in which the payment amount for liabilities depends on future events. For instance, if contract provisions stipulate that the amount of advance payment for a specified quantity and quality of goods can be adjusted by the supplier in the case of a change in the foreign exchange relative to the hryvnia, or the alternative of a discount application is possible in the case of liabilities payment in a shorter period of time.

The peculiarity of corresponding liabilities is the dependence on future events. Actually, it is impossible to determine the extent of such liabilities; therefore, the amount, which is determined with the application of the previous expert or analytical judgments, is taken as a basis of evaluation. Liabilities indicated in accounting are represented as working balances and presented in the accounting period when goods were sold. When evaluating the abovementioned liabilities, scholars suggest considering the average percent of an actually attained level in the last accounting period, which is adjusted to the official (or predicted) inflation level of an accounting period.

In economic literature, it is recommended to distinguish capital according to the components (elements) when evaluating capital cost. As capital elements, it is recommended to use the capital that is attracted by the reinvesting of gained profit by an enterprise, the emission of privileged shares, the emission of common shares, the obtaining of a bank loan, the emission of bonds, financial leasing. The abovementioned elements differ considerably from the component source of economic means, which are represented in the accounting and balance-sheet. For instance, despite diverse names, the first constituent in the accounting is classified as undistributed income, the

second as capital issues, the loans are distinguished for repayment periods (long-term and short-term), etc.

It should be noted that the idea offered by the representatives of different research communities primarily relates to attempts at evaluate the capital and gained income over a period of time. Therefore, it will be appropriate to consider the basic concepts of capital retention, which determined the accounting models of the evaluation of the cost of an enterprise and its constituents.

In the conceptual framework of International Financial Reporting Standards, two main concepts of capital are distinguished: financial and physical. The notion of physical capital is based on the ideas of productive and operating ability of an enterprise, which are in its assets. The financial concept of capital provides acquisition of two forms: invested cash means and invested purchasing power. In both cases the capital of an enterprise is associated with enterprise's own capital and is synonymous with net assets.

The choice of a capital concept is determined by an approach to the support (renewal) of capital size, which is crucial from the perspective of a selection method for determining profit and needs of financial information users. Thus, profit growth will be the book value of assets (net assets) only under certain conditions. In agreement with the notion of capital concepts, it can be stated that the difference is in the evaluation method of the results of a change in the book value of enterprise capital.

At the theoretical level, one can form five concepts of capital saving. Thus, as the income for the period one recognizes only such financial results that could be distributed as dividends: firstly, without reducing the original value of equity at the end of the year in comparison with the beginning of the year; secondly, after the renewal of purchasing power of the equity at the end of the year in comparison with the beginning of the year; thirdly, after the renewal of production capacity of an enterprise at the end of the year in comparison with the beginning of the year; fourthly, the renewal of purchasing power enterprise assets at the end of the year in comparison with the beginning of the year; and lastly, after the renewal of the value of enterprise assets that were consumed during the year.

The implementation of national regulations (standards) of accounting increased the possibility of using mixed concepts of representation in the balance of assets and equities, which allows evaluating objectively the real cost of an enterprise on the basis of the property approach.

5. Conclusions

Taking into account the above mentioned issues, we can conclude that the basis for the admission of administrative decisions concerning investment, crediting, insurance and other issues related to the evaluation of property should be the indicators that characterize enterprise value. These indicators, apparently from the general accounting

model of valuation may be different depending on different types of information. In the present conditions, what is the most progressive to our mind is the approach according to which the strategic analysis and accounting are the most important information sources of the formation of a certain model.

The considered approaches and issues from the theoretical point of view can be solved by using certain transformational processes of available accounting information, and the combination of accounting evaluation with economic evaluation will be the basis for the admission of administrative decisions.

Consequently, the achievements of an appropriate level of the management of enterprise capital require the balanced approach to all the constituents of this process: accounting, control and analysis. But the central issue is the construction of the capital account (liability, property) as a whole and its individual components.

References

- Аналіз фінансової звітності: навч. посіб. для вузів / [Ю.В.Радченко]. – Ростов н/ Д: Фенікс, 2006. – 192 с.
- Бутинець Ф.Ф. Бухгалтерський управлінський облік : навч. посіб. для студентів спеціальності 7.050106 "Облік і аудит" / Ф.Ф.Бутинець, Л.В. Чижевська, Н.В. Герасимчук – Житомир: ЖІТІ, 2000 – 448 с.
- Велш Глен А., Основи фінансового обліку/ Глен А. Велш, Деніел Г. Шорт; [пер. з англ. О.Мінін, О.Ткач.] – К.: Основи, 1997. – 943 с.
- Закон України "Про бухгалтерський облік та фінансову звітність в Україні" від 16.07.1999 р. №996-ХІУ зі змінами і доповненнями. // Електронна бібліотека "Юрист-плюс". – К.: ЦКТ, 2000.
- Закон України «Про господарські товариства» від 14.10.1992 №2692-ХП [Електронний ресурс] / Верховна Рада України – Режим доступу: <http://zakon1.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=1576-12>
- Міжнародні стандарти бухгалтерського обліку 2000 / [перекл. з англ.; за ред. С. Ф. Голова]. – К. : Федерація професійних бухгалтерів і аудиторів України, 2000. – 1272 с.
- Развитие бухгалтерского учета и контроля в контексте европейской интеграции: [монография / под ред. Ф.Ф. Бутинца]. – Житомир – Краматорск: ЧП "Рута", 2005. – 588 с.

WYCENA KAPITAŁU W RACHUNKOWOŚCI FINANSOWEJ A ZARZĄDZANIE PRZEDSIĘBIORSTWEM

Streszczenie: Wycenę kapitału przedsiębiorstwa uważa się za pożyteczny instrument zarządzania oraz kryterium oceny sytuacji ekonomicznej przedsiębiorstwa. Wycena kapitału przedsiębiorstwa jest również podstawą dla opracowania planów i strategii rozwoju, określenia efektywności menedżmentu i wyboru kierunków oraz sposobów rozwoju. Dlatego badanie warunków i metod oceny wartości kapitału jest aktualnym i ważnym zagadnieniem w obecnych warunkach.

Słowa kluczowe: wycena, wartość, koszt kapitału, zobowiązania, efektywność, zarządzanie.