

PRACE NAUKOWE

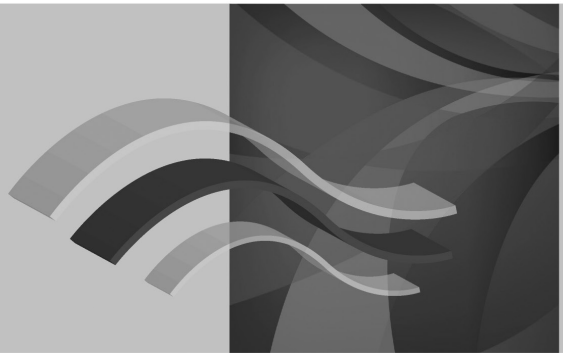
Uniwersytetu Ekonomicznego we Wrocławiu

RESEARCH PAPERS

of Wrocław University of Economics

290

Performance Measurement and Management



edited by

Bartłomiej Nita



Publishing House of Wrocław University of Economics
Wrocław 2013

Copy-editing: Marcin Orszulak

Layout: Barbara Łopusiewicz

Proof-reading: Barbara Łopusiewicz

Typesetting: Małgorzata Czupryńska

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 2013

ISSN 1899-3192

ISBN 978-83-7695-385-4

The original version: printed

Printing: Printing House TOTEM

Contents

Preface.....	7
Agnieszka Bieńkowska, Anna Zgrzywa-Ziemak: Controlling and other methods of management – the results of the empirical study in the enterprises functioning in Poland	9
Joanna Dyczkowska: The controller's function in stabilizing crisis in an enterprise	21
Tomasz Dyczkowski: Designing managerial control and reporting systems for non-governmental organisations	32
Marek Masztalerz: Value-based accounting – challenge or utopia?	43
Maria Nieplowicz: The Balanced Scorecard in the public sector in Poland. The case of implementation in the customs service in Poland	52
Bartłomiej Nita: Segmental reporting in responsibility accounting under International Financial Reporting Standards.....	60
Marta Nowak: Controllers, non-controllers and potential future controllers. Preferences on individualism or collectivism in professional work.....	72
Edward Nowak: Operating segments for reporting purposes and responsibility centres for performance evaluation purposes	87
Karolina Rybicka: Information aspects of the cash flow of a production company.....	97
Patrick Siegfried: Development a service engineering concept for SMEs.....	113
Małgorzata Wasilewska: Comparison between portfolios of real options and portfolios of financial options.....	128
Wiesław Wasilewski: Prerequisites for using the Balanced Scorecard in cultural institutions	136

Streszczenia

Agnieszka Bieńkowska, Anna Zgrzywa-Ziemak: Controlling i inne metody zarządzania – wyniki badań empirycznych w przedsiębiorstwach funkcjonujących w Polsce.....	19
Joanna Dyczkowska: Rola controllera na etapie stabilizacji kryzysu w przedsiębiorstwie	31
Tomasz Dyczkowski: Projektowanie zarządczych systemów kontroli i raportowania dla organizacji pozarządowych	42
Marek Masztalerz: <i>Value-based accounting</i> – wyzwanie czy utopia?	51

Maria Nieplowicz: Zrównoważona karta wyników w sektorze publicznym. Przypadek wdrożenia w urzędzie celnym.....	59
Bartłomiej Nita: Raportowanie segmentowe w rachunku odpowiedzialności według międzynarodowych standardów sprawozdawczości finansowej ...	71
Marta Nowak: Controllerzy, niecontrollerzy i potencjalni controllerzy. Preferencje dotyczące indywidualizmu bądź kolektywizmu w pracy zawodowej	86
Edward Nowak: Sprawozdawcze segmenty działalności a ośrodki odpowiedzialności za dokonania.....	96
Karolina Rybicka: Informacyjne aspekty rachunku przepływów pieniężnych przedsiębiorstwa produkcyjnego	112
Patrick Siegfried: Opracowanie koncepcji inżynierii usług dla małych i średnich przedsiębiorstw	127
Małgorzata Wasilewska: Porównanie portfela opcji finansowych i opcji realnych (rzeczowych).....	135
Wiesław Wasilewski: Przesłanki do zastosowania <i>Balanced Scorecard</i> w instytucjach kultury.....	144

Marek Masztalerz

Poznań University of Economics

VALUE-BASED ACCOUNTING – CHALLENGE OR UTOPIA?

Summary: The measurement and valuation of economic phenomena is the central issue in financial and management accounting research and practice. The purpose of this paper is to consider the possibility of bridging the gap between financial and management accounting approaches to value and valuation. Karmańska [2009] argues that economic value measurement may be (potentially) a new accounting paradigm. This potential (not so obvious and, perhaps, impossible) paradigm – referred to under a working name of “value-based accounting” – should be able to unite financial and management accounting views on value. A framework of value statement is proposed and its potential issues for three accounting research paradigms (positivist, interpretive and critical) are considered.

Keywords: value, paradigm, accounting theory, measurement.

1. Introduction

The measurement and valuation of economic phenomena, resources and results have been (and undoubtedly will be) the central issue in financial and management accounting research and practice, although both of these fields of accounting concentrate on different definitions, scopes, aspects and problems. Value is also an important issue in performance measurement and management. Around each enterprise there are groups of stakeholders (investors, customers, suppliers, competitors, lenders, creditors, employees, managers, public authorities, society) which are interested in different aspects of organization’s performance. Despite many differences in particular information needs of stakeholders, there is a performance indicator important for all the groups of interest – the value of an enterprise. All stakeholders have an interest in enterprise value growth (maximization) because they all – more or less directly – participate in a value creation process as well as in a value consumption process.¹ The problem is that there are numerous different

¹ The problem of distribution of value created is an interesting and important issue, but for another paper. See for example: Charreaux, Desbrières [1998], Bourguignon [2005].

value creation measures, but each of them is somehow flawed and not necessarily value relevant.

The purpose of this paper is to consider the possibility of bridging the gap between financial and management accounting approaches to value and valuation. Karmańska [2009] argues that economic value measurement may be (potentially) a new accounting paradigm.² In my opinion, this potential (not so obvious, and, perhaps, impossible) paradigm – referred to under a working name of “value-based accounting” (VBA)³ – should be able to unite financial and management accounting views on value (if it has to be universal). The main question at this point is whether such a paradigm is possible and needed. Is VBA a challenge or a utopia? In addressing this question, I will use three approaches, namely: mainstream (positivist), interpretive and critical accounting paradigms.

2. Significance of accounting paradigms

Any discussion about value is, indeed, a discussion about paradigms. A paradigm is a body of knowledge (including theory, application and instrumentation), which produces coherent traditions. It is a set of practices that define a scientific discipline. A paradigm is based on the common models of thought that are used to establish rules of practice. In a broad sense, a paradigm is a disciplinary matrix that stands for “the entire constellation of beliefs, values, techniques that are shared by the members of a given community” [Kuhn 2009, p. 297]. In a narrow sense, it denotes one sort of element in that constellation, a concrete puzzle-solution which, employed as models or examples, can replace explicit rules as a basis for the solution of remaining puzzles of normal science.

Accounting paradigms in a narrow sense have been variously classified.⁴ For example, as mentioned earlier, the “economic value” might be seen as an emerging, new accounting paradigm [Karmańska 2009]. In a broad sense, accounting paradigms refer to the research traditions of social science, where paradigms are defined as basic metatheoretical assumptions concerning the subjective/objective dimension (ontology, epistemology, methodology, human nature and axiology), and social order/conflict (regulation or radical change) dimension. In considering accounting as social science, three distinct accounting paradigms may be distinguished: positivist (mainstream), interpretive and critical.⁵

² Karmańska [2009] considers accounting paradigms in the narrow sense of the word.

³ The term “value-based accounting” is used in financial accounting literature and refers to fair value accounting.

⁴ For more information and typologies see: Szychta [1996], Riahi-Belkaoui [2004], Masztalerz [2011b].

⁵ For more information and typologies see: Chua [1986], Riahi-Belkaoui [1996], Masztalerz [2011a].

Positivists see the empirical reality as objective and external to the subject. They use preferably quantitative research methods to analyse “hard”, replicable data in order to discover, verify laws and rules so that they can be used to predict or influence future events.

Interpretive accounting researchers believe in a socially constructed reality, where the role of the researcher is to understand and to explain social phenomena. The interpretive paradigm does not envisage social reality as a natural world existing “out there”, governed by general laws or characterised by regularities. The social world is constructed by reflection and interpretation of purposes, motives, feelings, beliefs and intentions of human beings. It is a product of the subjective experience of individuals. Knowledge is not discovered, but rather created by logical constructions based on subjective interpretation.

The critical paradigm rests on the assumption that there are structural contradictions and conflicts in society, of which people need to be aware, and from which they need to be emancipated. Consequently, analysing and interpreting the *status quo* is not sufficient. The interpretive researcher is unable to analyse forms of false consciousness and domination that prevent actors from knowing their true interests. Critical researchers believe that human potentiality is restricted by prevailing systems of domination which alienate people from self-realisation. Social reality, although it is real and objective, is constructed and sustained by individuals who try to change it to escape from alienation or false consciousness. Objective and social laws are products of particular forms of domination and ideology.

3. Nature of value: philosophy, economics, accounting issues

Value is an ambiguous word, containing a lot of meanings,⁶ which can be subdivided into three large groups, i.e. measurement, economic and philosophical value [Bourguignon 2005]. The measurement value refers to the concept of measurement, which is the process of assignment of numerals to objects or events. The economic value refers to the exchange value (relation between supply and demand, i.e. market price) or to the usage value (individual or social utility of products). The philosophical value, which can be defined as an object of judgment, may refer to: subjective value (the character of things consisting in the fact that they are esteemed or desired to a greater or a lesser degree by a subject or a group of subjects), objective instrumental value (the character of things consisting in the fact that they satisfy a certain purpose) or objective intrinsic value (the character of things consisting in the fact that they deserve a greater or lesser degree of esteem).

In accounting, value generally refers to the measurement of economic resources and phenomena. On the one hand, value is claimed to be an objective,⁷ measurable

⁶ For further possible meanings of the term “value” see, for example: Karmańska [2009], Mazur [2011].

⁷ Obviously, interpretive and critical researchers would not agree.

and verifiable monetary attribute of resources or phenomena but, on the other hand, value is also subjective in the sense that it can be estimated based on various methods and approaches, which provide various results. Value in accounting is not a fixed attribute of phenomena, because it depends on the object, subject, time, place, purpose and method of measurement. In other words, it depends on what and by whom, when and where, why and what for, and how is something measured. Value is thus open to manipulation.

If we consider the value of an enterprise as a whole, we might refer to three general value concepts (levels), which are of significant importance in accounting:

- book value (result of financial accounting valuation of assets and liabilities, reported in a financial statement),
- market value (result of supply and demand game at the stock exchange),
- economic value⁸ (actual or fundamental value estimated as the present value of discounted future economic benefits, e.g. cash flows or residual incomes).

A matrix presenting relationships between accounting paradigms and value levels in philosophical, economic and accounting terms is constructed in Table 1.

Table 1. Philosophical status of value levels in the light of accounting paradigms

Paradigm \ Value level	BOOK VALUE	MARKET VALUE	ECONOMIC VALUE
POSITIVIST	objective instrumental value		objective intrinsic value
INTERPRETIVE	subjective value		
CRITICAL	subjective value instrumentally objectified		

Source: own elaboration.

4. Financial and management accounting views on value

Valuation is the very essence of accounting, although financial accounting and management accounting embrace different aspects of value and valuation (see Table 2). The most important difference is that financial accounting concentrates on valuation of assets and liabilities, whereas management accounting concentrates on value creation⁹ process and company's (namely intrinsic/fundamental) value.

The function of financial accounting is not to value a business as a whole, but rather to convey value information about the economic resources of a business. According to IASB [2010, p. 10], general purpose financial reports are not designed to show the value of a reporting entity, but they "provide information to help existing

⁸ Economic value may also refer to a concept of ideally "true" value of an enterprise, which theoretically resides in an entity, but practically is not measurable. In this idealistic sense, economic value would be certainly seen as an objective intrinsic value, regardless the paradigm adopted.

⁹ The "value" which is referred to in value creation process is not the usual accounting "value". Value creation is not an accounting, but a strategic concept [Bourguignon 2005].

and potential investors, lenders and other creditors to estimate the value of the reporting entity”.

Table 2. Comparison of financial and management accounting views on value

Criteria	Financial Accounting	Management Accounting
What to measure?	Value of assets and liabilities	Value of an entire company, processes, projects, customers
Entity’s value	Book value	Intrinsic (fundamental) value
Preferred methods of value measurement	Historical cost Fair value	Present value of future economic benefits
Competing approaches	Historical cost vs. fair value	Cash flow vs. residual income
Use of quoted market price	Rather high	Rather low
Users of information	Financial statement users	Stakeholders
Primary users	Potential and existing investors Lenders and other creditors	Managers Shareholders
Units of measurement	Monetary	Monetary and non-monetary
Performance measures	Financial result (e.g. net profit or loss, comprehensive income)	Value creation measures (e.g. EVA, MVA, SVA)
Economic value reference	Exchange value	Exchange value Usage value

Source: own elaboration.

An interesting point of disagreement is the use of market prices. Financial accounting willingly refers to the market: in the historical cost approach the value of an asset (at the moment of acquisition) is equal to its market price, and in the fair value approach market price of an asset is seen as the best and most objective method of valuation. Management accounting rather rejects (or, at least, rarely refers to) market prices and focuses on the estimation of economic benefits. In management accounting market value of a company is used only for comparative purposes. At this point there arises a question whether market prices are really objective measures, but this is not an accounting question and cannot be addressed in this paper.

The necessity of estimating a company’s intrinsic value results from the fact that there is a discrepancy between an enterprise’s market value and book value. Moreover, neither of these values is free from imperfections. Book value, first of all, does not include the values of resources such as knowledge and skills, brand, reputation and customer relations; and, secondly, it may be based on historical cost valuation.¹⁰ On the other hand, market value is investors’ averaged view (thus, subjective) on how

¹⁰ Fair value measures the current value of assets and liabilities, and is claimed to be more value relevant. Empirical evidence from positivist research indicates that fair value rather than historical cost numbers is more strongly associated with stock returns.

much a given company is worth, which – particularly in the light of behavioural finance findings on anomalies in the capital market, as well as investors' irrational behaviour and perception errors – calls into question the efficiency of the capital market and the reliability of market valuation. The relations between book value and market value are called “value gap”. Positivists argue that it is the duty of accounting to narrow this gap by improving the measurement principles of an enterprise's value, i.e. by determining the object of measurement (what to measure?) and the method of measurement (how to measure?). However, as already mentioned, financial reporting is not aimed to present the value of a company, but to provide relevant information which can be used to estimate company's value by information users (at their own risk).

5. Relevance of value relevance research

If both market and book values are not reliable measures, there is a need for such value measures that could reliably reflect the “true” intrinsic value of an enterprise. Certainly, management accounting offers a number of value creation measures, but there is no strong evidence proving that those measures are more value relevant than financial accounting numbers (e.g. book profit). Value relevance empirical studies (under the positivist paradigm) show that most of the performance measures used by companies and analysts have their merits, but they are not perfect. Value relevance of accounting variables should be defined in terms of the extent to which they explain the economic intrinsic value. However, mainstream financial and management accounting research focuses rather on the market value: an accounting figure is value relevant if it has the significantly strong predicted association with stock prices and stock market indicators, such as price-earnings (P/E) or price to book (P/B) ratios.

Value relevance studies are usually based on the assumption that the stock market is efficient at least in the semi-strong form, i.e. share prices reflect all publicly available information and no excess returns can be earned by trading on that information. In my opinion, such research is undoubtedly important and interesting (in the mainstream paradigm). However, a question arises: how “valuable” or “relevant” are the findings of value relevance research if markets are not efficient and stock prices do not reflect the “true” value of a company?

6. Value-based accounting framework

Karmańska [2009] argues that economic value measurement may be a new accounting paradigm. This potential paradigm – referred to in this paper as value-based accounting (VBA) – should be able to bridge the gap between financial and management accounting approaches to value and valuation, if it has to be a universal framework. In order to construct a VBA model, many difficult (but important from both, theoretical and practical viewpoints) questions should be addressed, considered and resolved. Some of these questions are listed below:

- What is the definition of value in the VBA in economic and philosophical terms?
- What is the object (resources and phenomena) of valuation in VBA?
- Who is the user of VBA information?
- What methods of value measurement should be used in VBA?
- Should market prices matter in establishing intrinsic value?
- What is value relevance? How to verify (validate) the correctness of valuation?
- How to report value? Should “a value statement” be a part of the financial statement?
- Should “a value statement” be revised and accepted by a public accountant?

Certainly, it is impossible to answer these questions at once. Rather, the problems presented above outline desired issues and directions of future debates and discussions on value-based accounting.

The proposed final product of VBA (referred to as “value statement”) should present information about intrinsic value of a company (referred to as “statement of value position”) and the value created over the reported period (referred to as “statement of value creation”). Additional information concerning the assumptions, methods and methodology of valuation should be also included in a report (see Figure 1).

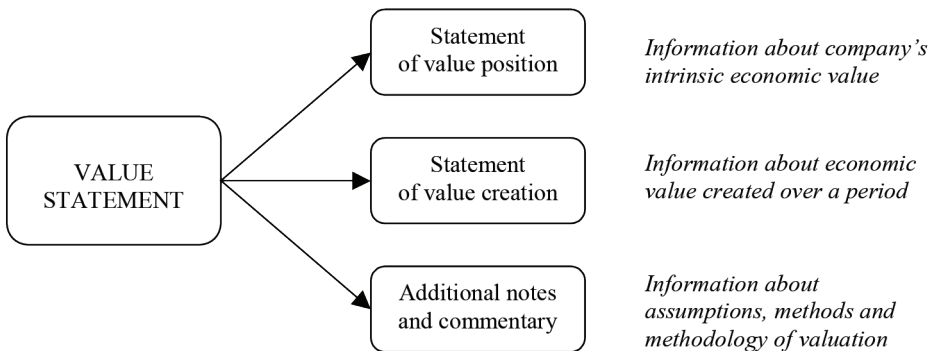


Figure 1. Elements of the value statement

Source: own elaboration.

The elements of the proposed value statement are structurally based on the current IFRS concept of the financial statement presentation form, but it is not suggested that a value statement should substitute the latter – it is rather envisaged as a complementary statement. The proposed presentation form, similar to the commonly recognized financial statement, would be transparent and intelligible to information users. The statement of value position (complementary to a balance sheet or a statement of financial position) would report the estimated value of a company, and the statement of value creation (complementary to an income statement) would

report value created over the reported period. Additional notes and commentary would provide supplementary information and explanation, particularly underlying assumptions and methodology of valuation.

The value statement would undoubtedly raise many questions under three accounting paradigms mentioned earlier. Positivists would be interested in the value relevance of value statement numbers and could examine (using statistical tools) to what extent the proposed framework reflects the market value of a company. Interpretive researchers would be interested in explaining and understanding (by means of case studies) the use of VBA by both value statement preparers and its users. Finally, under the critical paradigm, potential hidden and masked interests (such as maintenance of domination) of value statement preparers would be a central issue of research.

7. Conclusion

The book value of an enterprise – reported in a financial statement – is often inconsistent with its market value. Furthermore, both the book and the market value are not reliable value creation measures. The book value disregards intellectual capital of an enterprise and often uses historical cost as a basis for valuation. In turn, the market value encapsulates different opinions of capital market participants (investors). If capital markets were really efficient (if share prices reflected all available information), the market value could be treated as a good value creation measure. Unfortunately, given the evidence of behavioural finance (concerning irrational investors, capital market anomalies and perception errors), the market value cannot be viewed as a reliable intrinsic value measure. A question arises, though, whether and, if so, to what extent, accounting, being an information system, can narrow the “value gap” and whether this task is not bound to fail from the very beginning.

The possibility of bridging the gap between financial and management accounting approaches to value and valuation was considered above. A value-based accounting (VBA) framework was finally proposed. VBA and its product in the form of a proposed value statement, being expression of convergence of financial and management accounting approaches to value and valuation, may be seen simultaneously as a challenge or as a utopia. On the one hand, this framework would encompass company’s value and results of value creations processes, thus it would provide new and relevant information. On the other hand, there would probably arise many difficulties in creating a coherent theoretical model of VBA and implementing it in practice. The proposed framework raises many question which could be addressed by financial and management accounting researchers regardless of the adopted paradigm.

References

- Bourguignon A., Management accounting and value creation: the profit and loss of reification, *Critical Perspectives on Accounting* 2005, vol. 16.
- Charreaux G., Desbrières P., Gouvernance des entreprises: valeur partenariale contre valeur actionnariale, *Finance Contrôle Stratégie* 1998, vol. 1, no. 2.
- Chua W.F., Radical developments in accounting thought, *The Accounting Review* 1986, vol. 61, no. 4.
- IASB, *The Conceptual Framework for Financial Reporting 2010*, London 2010.
- Karmańska A., *Wartość ekonomiczna w systemie informacyjnym rachunkowości finansowej*, Difin, Warszawa 2009.
- Kuhn T.S., *Struktura rewolucji naukowych*, Wydawnictwo Aletheia, Warszawa 2009.
- Masztalesz M., Accounting and capital market – the usefulness of financial statements for investors, [in:] W. Gabrusewicz, J. Samelak (Eds.), *Selected Problems and Perspectives of the Process of Global Harmonization and Standardization of Accounting*, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Poznaniu, no.163, Poznań 2010a.
- Masztalesz M., Management accounting as a multi-paradigm discipline of social sciences, [in:] B. Nita (Ed.), *Performance Measurement and Management*, Research Papers of Wrocław University of Economics, Wrocław 2011a.
- Masztalesz M., Performance reporting in the financial statement, [in:] B. Nita (Ed.), *Performance Measurement and Management. Concepts and Applications*, Publishing House of Wrocław University of Economics, Wrocław 2010b.
- Masztalesz M., Typologie paradygmatów rachunkowości, [in:] W. Gabrusewicz, J. Samelak (Eds.), *Kierunki zmian we współczesnej rachunkowości*, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Poznaniu, nr 191, Poznań 2011b.
- Mazur A., *Wartość godziwa – potencjał informacyjny*, Difin, Warszawa 2011.
- Riahi-Belkaoui A., *Accounting, a multiparadigmatic science*, Greenwood Publishing, Westport 1996.
- Riahi-Belkaoui A., *Accounting Theory*, Cengage Learning EMEA, 2004.
- Szycha A., *Teoria rachunkowości Richarda Mattessicha w świetle podstawowych kierunków rozwoju nauki rachunkowości. Studium metodologiczne*, Fundacja Rozwoju Rachunkowości w Polsce, Warszawa 1996.

VALUE-BASED ACCOUNTING – WYZWANIE CZY UTOPIA?

Streszczenie: Pomiar i wycena zjawisk gospodarczych leżą w centrum zainteresowań teorii i praktyki rachunkowości finansowej i zarządczej. Celem artykułu jest rozważenie możliwości wypełnienia luki pomiędzy podejściem do wartości w rachunkowości finansowej i zarządczej. Karmańska [2009] twierdzi, że wartość ekonomiczna może być (potencjalnie) nowym paradygmatem rachunkowości. Ten potencjalny (wcale nieoczywisty i, być może, niemożliwy) paradygmat – okreśłany tutaj roboczo „rachunkowością wartości” (*value-based accounting*) – powinien być zdolny połączyć punkt widzenia rachunkowości finansowej i zarządczej. Zaproponowano ramy sprawozdania z wartości i rozważono potencjalne problemy dla trzech paradygmatów badawczych rachunkowości: pozytywistycznego, interpretatywnego i krytycznego.

Słowa kluczowe: wartość, paradygmat, teoria rachunkowości, pomiar.