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THE ROLE OF BEHAVIOURAL RESEARCH IN MANAGEMENT ACCOUNTING

Abstract: The changes that are currently taking place in economic sciences cannot remain without effect on accounting. The purpose of this article is to present the role of behavioural accounting research in management accounting as a vital trend which has been developing in response to the shifting fundamentals at the base of economics. The proposed aim has been achieved applying critical analysis of domestic and international literature in the field of economic sciences, including accounting and behavioural science. At the beginning, the text shows the origin of behavioural research in economic sciences. Then, the essence of behavioural research in accounting is highlighted, as a vital, prospective trend in accounting research. Finally, emphasis is placed on the role of behavioural research in management accounting, with particular attention given to the pillars of the contemporary studies.

Keywords: accounting, management accounting, behavioural accounting.

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*The economist may attempt to ignore psychology,
but it is sheer impossibility for him to ignore human nature*

J.M. Clark [2009, p. 96]

1. Introduction

The evolution and progress, which occurred in economics in the 20th century resulted in departing from the classical axiom of fully rational model of *homo oeconomicus*. The changes that are currently taking place in economics cannot remain without effect on accounting. Because of its nature, tightly focused on assisting the decision making process, behavioural research plays a particularly important role in management accounting.

The purpose of this article is to present the role of behavioural accounting research in management accounting as a vital trend which has been developing in

response to the shifting fundamentals at the base of economics. The proposed aim had been developed applying critical analysis of domestic and international literature in the field of economic sciences, including accounting and behavioural science.

At the beginning, the text shows the origin of behavioural research in economic sciences. Then, the essence of behavioural research in accounting is highlighted, as a vital, prospective trend in accounting research. Finally, emphasis is placed on the role of behavioural research in management accounting, with particular attention given to the pillars of the contemporary studies.

2. Behavioral research in economic sciences

Only a couple of decades ago the concept of including psychology in economic sciences was regarded by economists as a mysterious curiosity. Scientists would rather not pay much attention to the results collected in a growing number of experiments. Handbooks relative to doing business or investing in the stock market were dominated by recommendations such as: “do not make spur-of-the-moment decisions,” “turn off emotions,” “always act logically.” Taking into consideration the fact that people cannot turn off emotions, this kind of advice must have a doubtful value [Zalaśkiewicz 2012, p. 11].

Within the economic sciences, it was management sciences that were first to accept the paradigm of cognitive and emotional impact of a human being on his economic behaviour and decisions [Wach 2010, p. 102]. Economics as a science also increasingly draws on the latest developments of psychology, particularly cognitive psychology, to better understand the economic decisions taken by market participants. This approach contributed to creating a separate subdiscipline called behavioural economics which is currently the fastest growing trend in economics [Polowczyk 2009, p. 3].

It should be emphasized that most of the concepts of behavioural economics are not new. The great pioneer of behavioural economics was Adam Smith. His first major work was *The Theory of Moral Sentiments* (1790) in which he attempted to describe the human nature. However, in the first half of the 20th century almost all psychological influences were eliminated from economics [Polowczyk 2009, pp. 3, 4]. The spectacular return to taking into account the psychological aspects of economics is attributed to the works of D. Kahneman and A. Tversky, who show that humans, while making economic choices, do not follow the rules of logics and probability calculus, but use simplifications, which allows them to make fast decisions.

As stated by Zalaśkiewicz [2012, pp. 33, 34] the starting point of the analysis conducted by behavioural economists is usually one of the classical economic theories. The second stage of the analysis is to locate the anomalies, for example deviations from the theoretical assumptions in the people’s actual behaviour. The discovery of the difference between the normative and descriptive level allows

for proposing a new, alternative model which takes into account the psychological peculiarities of economic behaviour. The advantage of such an alternative model is its highly descriptive value. The final stage of the examination procedure typical of behavioural economics is subjecting the alternative model of behaviour to empirical tests. Unlike classical economics, behavioural approach uses for this purpose the method characteristic of psychology, that is, for example, an experiment. The end point of this process is creating a completely new theory, or at least complementing the classical theory of behavioural elements.

As Polowczyk argues [2009, p. 6], behavioural economics increases the explanatory potential of economy by providing more realistic psychological foundations. The increase of realism should improve economy, and thus contribute to a better understanding, describing and predicting economic processes.

A very important part of behavioural economics is behavioural finance, which is related to research on how psychology affects individual financial decisions. Without doubt that thesis changes the approach to investing and modifies the vision of many processes and phenomena. As stated by representatives of behavioural finance, common mistakes connected with the psychological background can in many cases lead to periodic incorrect valuation of securities. A self-regulating market mechanism does not always work properly because professional market participants are also susceptible to behavioural reactions [Szyszka 2009, p. 36].

Accounting also opens increasingly to the above-mentioned issues, which allows consideration of economic activity from the viewpoint of behavioural implications. As stated by A. Karmańska [2013, p. 3]: “The basic assumptions of economics and management are changing before our eyes. The homo oeconomicus model is crumbling down. The basis of the economics and management typical to the industrial age, that is that a human being always makes decisions based on rational choices, changed more and more convincingly. So do not be surprised that a revolutionary change also reaches an accounting.”

3. Behavioural accounting: Key concepts

Behavioural accounting research is frequently multidisciplinary, drawing on the diverse fields of economics, political science, organization theory, psychology, and sociology [Lord 1989].

The origin of the behavioural accounting research is the result of criticism of the main objectives of economics and finance, as was shown in the previous section of this paper. As stated by Hellmann [2013], mainstream accounting research is dogmatized by the assumption of the efficiency of capital markets, in which investors make fully rational decisions, assessing the risks and returns on alternative investments. Behavioural research in accounting has challenged these simplified assumptions and developed successfully from the 1950s. It is associated with an attempt to explain and predict human behaviour in the accounting context of such as: the usefulness of

the data from the financial statements, the impact on users decisions related to the use of alternative accounting procedures, or the impact of culture and language on the interpretation and application of accounting standards, and many others [Breitkreuz 2009, p. 7].

Behavioural studies in accounting are not a homogeneous group. J.G. Birnberg and J.F. Shields [1989, p. 26] distinguished five major areas of researches, such as(after [Artienwicz 2013, p. 17]):

- control and steering,
- processing of information in financial accounting,
- accounting information system design,
- auditing (external and internal),
- organizational sociology.

The first of these areas focused on issues such as leadership, conflict, decision making, feedback, participation in the budgeting process and the impact of this process on behaviour.

The most interesting and complex issues seem to be the behavioural aspects of corporate financial reporting. Part of the research in the field of data processing includes such issues as: making judgments and estimates, analysis of the course of the entire decision making process, decision making processes of different groups of users of financial statements, the perception of entity's financial position, the perception of the relevance and usefulness of disclosures. Behavioural implications of designing an information system include studies in the selection of accounting policies by the entity's management, or the ability of users to extract relevant information depending on the structure and form of reports.

According to Masztalerz [2010], the context of financial reporting includes the following problems:

- whether the information contained in the financial statements affects the valuation of shares and can be used by investors to achieve above average returns?
- how quickly and with what strength investors react (if at all) to the information contained in the financial statements?
- whether the market reaction to the information contained in the financial statements is reasonable and consistent with the expectations of report drafters?
- whether the change in accounting policy affects the valuation of shares and the decisions taken by investors?

In auditing area researches are conducted in the field of decision-making by the auditors, their skills, judgment, cognitive aspects of audit planning.

The impact of the environment on the organization of the accounting system, the forces causing changes in the accounting systems, organizational responsibility and the impact of organizational structures on the behaviour and control systems are issues undertaken by researchers of organizational sociology.

In conclusion, the permeation of behavioural research into study of accounting is a natural implication of the dominance of mainstream economics and finance in

recent decades. As stated by M. Bąk [2011, p. 58], “the interpretation of information from accounting should take into account the psychological aspects. It is important to identify psychological phenomena and attitudes, since it helps to know and understand human behaviour, as well as decisions taken by people on the basis of and during the generation of data in the accounting system.”

4. The role of behavioural research in management accounting

According to the definition presented by the Institute of Management Accountants [2008] “management accounting is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization’s strategy.

As is apparent from the above definition, management accounting deals with the provision of accounting and non-accounting information to internal users for the purpose of facilitating their decision making. While technical in nature, management accounting still functions in a behavioural environment shaped by the behaviours of management accountants as producers of information and managers as internal users, as they react to the information produced or received, the context created, the attitudes and perceptions generated, and the outcomes desired [Riahi-Belkaoui 2002, p. XI].

The past two decades have witnessed considerable change in managerial accounting practice. From its traditional emphasis on financially oriented decision analysis and budgetary control, managerial accounting has evolved to encompass a more strategic approach that emphasizes the identification, measurement, and management of the key financial and operational drivers of shareholder value. A similar evolution has occurred in managerial accounting research. Empirical studies of budgeting and financial control practices are giving way to research in a variety of “new” techniques such as activity-based costing, the balanced scorecard, strategic accounting and control systems, and economic value performance measures. This variety is partly due to the fact that much of the empirical research in managerial accounting is conducted outside North America. While North American universities tend to emphasize economics in their doctoral programs and research, many universities in other parts of the world put greater emphasis on behavioural disciplines, such as organizational behaviour and sociology. This behavioural focus is reflected in citations, with significantly more references from the behaviourally-oriented *European Journal of Accounting, Organization and Society*, rather than from leading economics-oriented North American journals [Ittner, Larcker 2001, s. 357].

Currently, many of the behaviours we observe, which are inappropriate responses to the accounting data, are deemed dysfunctional or opportunistic. The behaviour, not the system, is considered to be the problem. However, when we recognize the changing environment within which managers must act, their actions reflect appropriate responses to inappropriate accounting systems. These opportunistic or

dysfunctional behaviours are likely to have more serious consequences in the post-modernist management accounting period as managers strive to deal with a dynamic environment, new organizational structures, and significant number of users in nonmanufacturing firms [Birnberg 2000, pp. 713, 714].

Behavioural accounting research has a long history in management accounting. Several topics have been analyzed during the years combining management accounting notions and theories from other social sciences. Without pretence of completeness, Dalla Via [2011, p. 19] exposed three broad topics which represent the pillars of the contemporary studies.

The first one is the budget with its related determinants and characteristics; the second one is performance management and rewards; the last one is information and decision making.

The oldest and broadest issue studied in the management accounting field with a behavioural approach is the budgeting process, which includes budgetary participation, the effects of motivation, leadership style, and budgetary slack.

The second issue is represented by performance management and assignment of rewards. D.C. Hayes [1977] explores the contingent factors, internal or external to the organization, contributing to the explanation of the performance assessments of the organizational departments. Another contingent study in this area is the examination of the interaction between environmental uncertainty and performance evaluation.

The third issue regards information and decision making and includes data fixation and matters of representation. Moreover, influence on decision making of cost management and the emergence of particular types such as sticky costs, sunk costs, and opportunity costs are possible opportunities to apply behavioural concepts.

A pioneer in behavioural research in management accounting was Argyris. He identifies several ways in which pressure to achieve budgets can create cognitive inconsistency in employees' minds (e.g. "I want to achieve my budget and be a good organization citizen but I can't achieve my budget if I am to follow organization policies"). This cognitive inconsistency results in stress, interpersonal conflict, and distrust, which in turn cause dysfunctional behaviour (e.g. gaming, reduced effort, poor communications). Argyris' principal recommendation for reducing these dysfunctional effects of budgeting is to use participative budgeting (i.e. a superior lets a subordinate be involved with and have influence on setting of the subordinate's budget) and avoid pseudo-participative budgeting (i.e. a superior lets a subordinate be involved with but have no influence on setting the subordinate's budget) [Chapman et al. 2011, p. 602].

The variety of issues that can be studied using a behavioural perspective implies broad and different implications in practice. The traditional empirical and theoretical managerial accounting articles have the purpose to deepen the knowledge about a technique, its determinants and the possibilities for improvement. The consideration of the "user" of such a technique opens a different stream of research with practical consequences and implications. It is not possible to abstract completely

from the cognitive processes applied by a subject during the operationalization of the accounting and control procedures. For example, the findings on the budgeting process and the implication of participation, goal difficulty, motivation, and role ambiguity should give important insights into how to design the best procedure to manage both the psychological needs of the individuals and to best serve the organization. The reasoning could be extended also to the performance measurement systems and to the incentive payment schemes [Dalla Via 2011, p. 24].

5. Conclusions

Behavioural accounting research provides extremely important and valuable perspective of the tools used in the accounting. As stated by Kamela-Sowińska [2013]: “Maintaining a significant role of accounting as a source of data for economic decision-making demands more and more changes.” It is reasonable to assume that the only way to make a reasonable change in accounting is to recognise the real, human aspects of accounting. When designing new solutions, we must take into account the reactions of real user who do not conform to the fully rational human being model postulated by accountant. This is particularly important in the case of management accounting. Behavioural research in management accounting has experienced considerable, almost exponential, development and growth. Findings have shown that an understanding of individual behaviour is crucial in promoting organizational activities and enhancing performance. For as long as people develop communities, their behaviours will influence organizational functioning.

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ROLA NURTU BEHAWIORALNEGO W RACHUNKOWOŚCI ZARZĄDCZEJ

Streszczenie: Zmiany, jakie zachodzą w naukach ekonomicznych, nie mogą pozostać bez wpływu na rachunkowość. Celem niniejszego artykułu jest przedstawienie roli nurtu behawioralnego w rachunkowości zarządczej jako istotnego nurtu, który rozwija się w odpowiedzi na zmiany założeń dokonujących się u podstaw nauk ekonomicznych. Założony cel został osiągnięty przy wykorzystaniu krytycznej analizy krajowych i zagranicznych opracowań z zakresu nauk ekonomicznych, w tym rachunkowości oraz nauk o zachowaniu. W tekście ukazano źródła nurtu behawioralnego w naukach ekonomicznych. Następnie uwagę skupiono na istocie rachunkowości behawioralnej, jako istotnego i przyszłościowego nurtu w nauce rachunkowości. Na koniec zaprezentowano rolę nurtu behawioralnego w badaniach prowadzonych w rachunkowości zarządczej, ze szczególnym uwzględnieniem głównych obszarów badawczych.

Słowa kluczowe: rachunkowość, rachunkowość zarządcza, rachunkowość behawioralna.