

GUIDING MARKS REGARDING THE REASONING OF SCIENTIFIC RESEARCH IN ACCOUNTING

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ABSTRACT: *The scientific research activity in accounting is governed by the principles of logic thinking, is not subject to change and must be conducted according to a strict and rigorous schedule. For these reasons, it is a planned activity, but it shouldn't be seen as rigid, because it can withstand changes or adjustments during its deployment. Naturally, scientific reasoning is at the foundation of any research undertaking, including in the area of accounting. This paper deals with issues related to the positioning of accounting within the areas of research, the components of the reasoning used in all the stages involved in accounting research, from establishing its objective or research subject to exploiting the obtained results.*

KEY WORDS: *scientific research; accounting, reasoning.*

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1. INTRODUCTION

Today, competence is the main validation criterion in the profession, regardless of the work's content and the conquered position in the social frame.

Given the liberalization of international economic and political relations, the existence of a world without borders and of a global market, the scope and features of interface are conferred by the existence of a research object and by expressing an opinion about it, by using specific exploration and research methods and techniques, by using scientific language, by demonstrating the validity of the obtained results, by pursuing a theoretical goal that has practical applicability and is recognized and accepted by specialists.

J.J. Rousseau thought that "the excess of books kills science" because there is the risk of believing that what was read is known and then believing that is not longer necessary to "learn" what was read (Ristea&Ioan Franc, 2009). Today, this sentence is

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tougher because the information explosion makes the assimilation of the content of a multitude of publications uncertain, even more so as the quality of scientific research is in tandem with time pressure and growing requirements regarding their qualitative level.

Accounting, as a major area of scientific and practical concerns, deals with preparing, interpreting and using financial information and other crucial economic information to manage and assess the organization's activities (Andone, et. al., 2011).

At the root of improving human condition is knowledge (including in accounting) built on the reasoning of those who wish to understand and govern better the world behind the accounting figures.

The existence and development of accounting start from observed facts and stop at its theoretical ideas. Methodology is interposed between them as an organized ensemble of intellectual persuasion, which operates in transforming the research object into scientific ideas.

2. RELATIONSHIPS AND FORMS OF SCIENTIFIC RESEARCH IN ACCOUNTING

Considering the other areas of scientific knowledge or of the socio-economic context, contemporary accounting research doesn't go through a self-sufficient type of development.

Research in accounting has been more influenced by other social sciences (such as economy, psychology and sociology) than the other way around. Accounting researches have the tendency to borrow models, metaphors and methods from other scientific disciplines that have a prestige measured through the advertising space in journals and the allocated funds for research. Consequently, economy, mathematics, psychology and sociology have started to become models for the contemporary accounting researcher.

In turn, accounting is (or could be) a subject of interest for research in other fields, such as anthropology and sociology, which study human behaviour, accounting being a human activity, practiced by accountants. Many discussions in accounting have a philosophical interest and concepts like profit, accurate picture and business continuity are (also) philosophical concepts.

Accounting is a specific system of information because of its multiple valences, among which are included: providing real, comparable, synthetic and analytical information for the analysis of various aspects taken on by economic phenomena; communicating information starting with the moment of occurrence and ending with its use; enhancing the control function regarding economic phenomena; the considerable growth of the provisional role, etc.

Any act of knowledge has a very broad feature. The science regarded as a form of specialized knowledge, strictly focused on a certain field, is a clearly circumscribed "part" of the general framework of knowledge.

Science represents the organized body of data that shows the objective and subjective knowledge of reality, organized in a coherent, intelligible and tidily system according to a system in perfect tune with logical principles (Enachescu, 2007). It aims

at studying the laws that govern facts and which can be used to develop scientific provisions (Raboaca & Ciucur, 1999). Knowledge about a certain area of reality is crystallized into a science only when it is integrated in a theory on the basis of principles and laws.

Regardless of its complicated (Einstein) or simple (Kotarbinski) definitions, science is revealing its content if we assert that it represents a set of information that is systematized and verified/validated by practice, a knowledge based on real facts that explain and resolve practical problems, but a knowledge that can be empirically (experimentally) verified and confirmed, because science deals with studying the laws that govern reality and which can be used to develop scientific provisions (Andone, et. al., 2011).

During the accounting research process, the existence of a theory (on the basis of which a hypothesis is identified, which will subsequently be tested or recommended as the foundation of a model resulted from observing the real world) is crucial. With the help of the theory, we try to organize and explore certain issues existing in a knowledge field.

The following theories have been outlined in accounting:

- Normative theories provide explanations about “how” to build the representation of an “accounting reality” (Ionascu, 1997). They are rather predicative than descriptive and are based on deduction; the normative research may also be used to detect the endangered accounting concept and treatments or to influence the future accounting regulation by making decisions to maintain, redefine or abandon an accounting principle, an accounting treatment or an accounting concept.
- Accounting positivism – implies that any theoretical formulation can’t be valid unless it is empirically verified, aims to explain and forecast accounting behaviour and deals with accounting sociology;
- Constructivist theories – according to which accounting is a social “construct”, developed according to certain norms and values internalised by the accountant or researcher. The focus is on language, interpretation and understanding human action. This research also includes subjects ignored by positivists (to role of women in accounting) or less approached issues (the social implications of accounting systems). Accounting constructivism places a great deal of importance on political and social aspects, integrating ideologies in research.

There are researchers who support the theory titled “grounded theory” or “field theory” (Andone, et. al., 2011), a derivate of the study of the phenomena they represent. The starting point of this theory is the relevant phenomena from which is developed a theory that can explain them on the basis of the observations resulted from research.

Another theory, titled decision theory, demonstrates the concept of financial statement. In accounting, in order to conduct a viable study, researchers use concepts from economy, finance, financial markets, etc. Accounting researchers should focus on the decision theory, as it is enunciated by other sciences (starting with management science), to work in a pertinent manner with theories relative to decision, communication, economy and philosophy of the entrepreneur.

The accounting research helps conduct rational investigations with the aim of improving communication between users of accounting information and society so that the accounting practice will progress continuously.

3. THE PRINCIPLES OF SCIENTIFIC RESEARCH IN ACCOUNTING

The principles of scientific research are absolutely necessary guiding marks to which a serious and honest researcher should continuously relate his ideas and activity in order to maintain and follow “the right path”, namely the method, in finding and discovering the truth applied to the object of his research (Enachescu, 2007).

They are also “moral guiding marks” that force and impose a certain ethical attitude to the researcher towards his study object, and especially towards the results obtained after the methodical analysis of the investigated subject.

The principle represents the assertion that underlines a deduction. The principle provides explanations for a large number of cases, being checked thoroughly. The principle derives its validity from previous empirical tests, unlike the hypothesis, which “derives its validity not from what precedes it, but from what follows it”.

Achieving the fundamental objective of accounting, the accurate picture, requires turning to accounting postulates, principles and rules. When referring to research in accounting, the synthesis of the principles to be observed by researchers is:

- Setting the objective. According to this principle, the accounting research’s subject has a certain objective that represents the aimed goal of that research.
- Truth. The scientific research in accounting should aim to discover the truth about the studied object, to be coherent, logical and continuous and to be consistent with the reality of the researched object. At the same time, the results of the scientific research should be expressed by using an articulate, precise and intelligible language, avoiding subjectivity or speculation in thinking.
- Methodology. The research should be conducted on the basis of a rigorously established plan. It is necessary to keep in line with the stages and working methods, and the working techniques and methods should be appropriate to the nature of the studied subject, as well as to the objectives of the research.
- Demonstration. The research’s results should be demonstrated and verified. They should also be included in the data system of the scientific area where the accounting research is integrated.
- Correlation. The results of the scientific research in accounting should be correlated with the available data in the field or the data in related scientific fields.
- Assessment of the results. All the results of the research should be accurately assessed in a strictly rational approach, and compared with the data available in literature.
- Utility. Other specialists should routinely use the research’s results in theory and practice.
- Psycho-morality. Scientific research in accounting should be conducted according to deontological principles of an elite profession; collaboration with experts in the field or in related fields in order to avoid overlapping or errors that may occur when obtaining and interpreting the results; it should be opened and sincere.

These principles lend to the strategy of the scientific research volume and coherence, fluidity and unity, open horizons, analysis and synthesis skills, ability to express and to make connections and predictions.

4. SCIENTIFIC REASONING OF ACCOUNTING RESEARCH

Scientific research in accounting should be consistent with a certain type of scientific reasoning. It should be adapted to the particularity of the knowledge field, it should be appropriate to the nature of the researched subject and it should have precise final goals in order to obtain positive results that reflect the pursued truth, both in theory and in practice.

The reasoning behind a scientific research was analysed for the first time by the Japanese researcher Takeda and his collaborators.

The layout of the research’s design (including in accounting) is presented below:

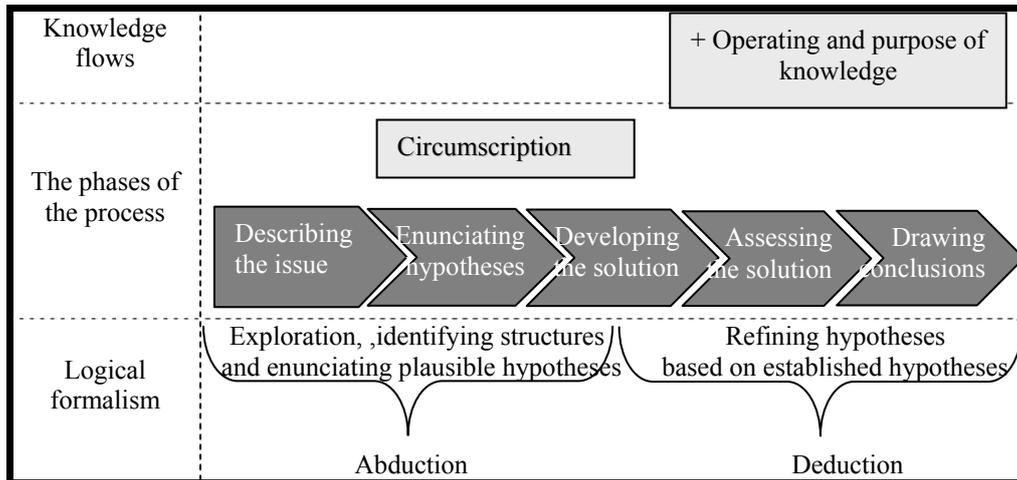


Figure 1. Research design (Takeda 1990, adapted after Andone et. al., 2011)

The elements of logical formalism help understand the researched phenomena, and induction adds quantitative details to knowledge.

In the general theory of scientific research, regardless of its area, scientific reasoning must be consistent with a single plan or model that represents a certain scientific thinking.

According to B. Colasse, accounting research has three main functions:

- Assorting and theorizing accounting practices;
- “Engineering” of the accounting system, meaning adapting accounting to the new needs of information, extending the scope of accounting, etc.;
- Advancement of knowledge in accounting (Ionascu, 1997).

“Those who want to deepen accounting as science will first understand that it isn’t a cluster of facts, but an observation and interpretation of facts” (Rusu, 1977).

The accounting science also has another dimension due to its particularities concerning art: it shows reality by eliminating subjective aspects. It has a paradigmatic core and a structure that includes: factual material gathered over time, confirmed and unconfirmed hypotheses, results of experiments and observations, research methodology or a research model of reality (Andone, et. al., 2011). The aesthetic aspect of art entwines objective reality with human subjectivity.

To achieve the three functions mentioned previously is recommended to develop a draft of the research plan with the following structure:

The precise delimitation of the research scope and of the interest area of the involved research team;

The precise delimitation of the research subject, mentioning:

a. if the theoretical knowledge (basic research) of the research object is aimed – in this case, the problem that needs solving is a knowledge problem;

b. if it concerns an applied scientific research – the problem that needs solving is substantive, with practical meanings

- Setting the goal and the objectives aimed by the scientific research that will be conducted;
- Establishing the stages of the scientific research (gathering data and information; analysing and interpreting data);
- Defining the final exploitation of the scientific research/exposing results (Ristea & Ioan-Franc, 2009).

The known and the unknown are two necessary scientific poles. The known is based on previous research, and the unknown is searching the great truths, for which reason and experience are trying to find a scientific enunciation.

The details of the research plan are reflected in a structured content as follows:

- The introduction – describes: the chosen research area, the subject, its importance, the stage of the research, existing approaches of the subject, research limits and contributions;
- The description of past achievements, which is intended to ensure a research framework and to justify the research's originality;
- The description of the research methodology based on: simulation model, data collection techniques, measurement techniques, experiments, historical methods of analysis;
- The illustration of research's results and their analysis;
- Summary and conclusions directed towards obtained results and personal contributions, suggestions for future research (Lungu, 2007).

“We know nothing to be certainly good or evil, save such things as really conduce to understanding, or such as are able to hinder us from understanding” (Spinoza, 2000).

Therefore, a scientific research should have the formal aspect of a logical reasoning, in which are distinguished: the overall stage (where the scientific reasoning of the research begins), the stage of the actual research and the conclusion stage, followed by a verification of results (Enachescu, 2007).

Using critical thinking to find solutions during the accounting research process means using in a rigorous manner the eight elements of reasoning, namely: goal,

problem, information, concepts, hypotheses, interpretation, implications and conclusion (And one, et. al., 2011).

In conclusion, the accounting research requires a systematic and logical approach based on analysis and critical thinking in order to obtain an unbeatable proof, which represents the conclusion and the solution to the accounting problem.

5. RESULTS OF THE RESEARCH – END ... AND START AGAIN FOR THE SCIENTIFIC REASONING IN ACCOUNTING

Scientific research in accounting has to answer the question “what is the use of the results obtained by the conducted scientific research?” on one hand, and, on the other hand, “what is the meaning of that scientific discovery?”.

The results of a scientific research in accounting can be systematized as follows:

- All the results of a scientific research satisfy a certain intellectual need, a certain need for knowledge;
- Results produce a state of emotional satisfaction by reducing or even cancelling emotional and intellectual tension that exist within the researcher and are related to his questions and doubts;
- They represent the solution to theoretical or practical problems, therefore contributing to the overall scientific knowledge (Enachescu, 2007).

The significance of the discovery that results from the scientific research may be enunciated in terms of two aspects: theoretical value and practical-applicative value. Society needs theoretical research, as well as practical research.

Any accounting research leads to a conclusion, which will build a scientific theory. This is either added to the previous ones, complementing or changing them, or will represent an element of prediction, the starting point for another scientific research.

The horizon of scientific knowledge in accounting involves discovery also. It is a complex process that requires ability: to see something where others cannot see, or, if they see, they don't understand; to understand things, phenomena or people; to analyze and then to rebuild observed objects or phenomena; the mental ability to suddenly grasp what is essential.

But not every discovery has scientific value. It must reveal the scientific truth, it must be verified and accepted by other researchers through different methods and techniques, leading to the same results; it must be generally accepted; it must be imposed as a reality for all the accounting specialists. In other words, reasoning is at the foundation of any scientific research.

6. CONCLUSIONS

Knowledge is the most important good of any researcher and the key of his rise in the era of spectacular changes in all the fields of science.

Accounting research is developing in a dynamic environment as a result of the continuous development of professional standards, economic globalisation, the use of

modern communication and information technologies, the increased power of investing in capital markets, etc., even if research clarifies endlessly the concern for seeking the truth: “A cripple in the right way may beat a racer in the wrong one. Nay, the fleeter and better the racer is, who hath once missed his way, the farther he leaveth it behind” (Francis Bacon).

In other words, the rational and ethic attitude in achieving a higher qualitative level in accounting research is crucial. Perseverance and stimulus are also added to this. Man cannot fight unless he is heated by the flame of enthusiasm, by the light of hope, by the grimness of hatred. What he needs in this fight is not “the truth”, but “the stimulus” (Karl Marx).

Scientists do not grow in trees (Friedman), discoveries are not something to be ordered (Lavoisier), so, in order to raise the knowledge level in accounting, morality, legitimate values and scientific reasoning are needed.

The scientific research in accounting means the sublimate achieving of higher intellectual instincts, for which the researcher doesn't have to issue final verdicts. This is due to the fact that “the principle of intangibility” is applied in research, namely the terminus of a research process is the beginning of a different research process. The circle of scientific knowledge never closes. This shouldn't be discouraging. Researchers should persevere in order to achieve a richer, more diverse and subtle universe of knowledge.

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