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A REFERENCE WORK ON THE SCIENCE AND ART OF WRITING A SCIENTIFIC PAPER¹

Introduction

Motto:

"Some think but do not write, others write without thinking; many think after they write, few write after they think" Theofil Simenschy

In the modern world, marked by hyper-competition, globalization and a great explosion of the means of information and communication among people, dissemination of scientific research findings takes on a particular significance. It is closely connected with the access to information and its speed of propagation, making the current transmission system look strikingly different from the one of the previous century.

According to Stiglitz, the marketplace of ideas with all its imperfections does not guarantee, at least in the short term, that the best ideas will prevail (Stiglitz, 2010, p. 426). Identification of the most effective ways and means of making the most of the scientific research results depends not only on the mechanisms for conveying information but also on securing the paternity of problem-solving solutions. Equally important is the way in which the process of communicating the research results is conducted. The holistic approach to communication (Kotler and Keller, 2012, p. 58) interprets this

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process as the integration of all means and tools whereby the "product" – in this case, research findings – is brought to the attention of all its potential beneficiaries. In order for the user to get the most of scientific research, its concept, writing and dissemination must be entirely accomplished in a systemic manner. This calls for an interdisciplinary approach in which natural, technical and social sciences work together (Homburg and Krohmer, 2009, p. 195). As the abovementioned process is cybernetically-oriented, the reverse connection between

¹ Vasile Dinu, Gheorghe Săvoiu, Dan-Cristian Dabija (2016), Conceiving, writing and publishing a scientific paper, A.S.E. Publishing House, Bucharest, 402 p.

beneficiaries and authors of research is ensured. One more thing needs to be added, namely, the success of communicating the research results also depends on the way in which this communication is accomplished. Socrates said that "...those who know what any given thing is can also expound it to others, while those who do not know are misled themselves and mislead others" (quoted by Simenschy, 2008, p. 761).

Economics – as a subfield of social knowledge – ensures the connection between the nature (the main provider of resources) and satisfaction of human needs, using market as the main agent. Economics stands apart from natural sciences by the multitude of random and undetermined universes (Florescu, 1987, p. 105) in which decisions are taken, making ample room for uncertainty. This, however, should not negatively affect its place in the competition for more scientific knowledge.

A certain gap between emerging and developed economies is significantly felt with regard to visibility and dissemination of economic research results. One of the underlying causes of this situation is the modest level of habilitation among those who conduct research on conceiving, writing and publishing scientific papers. The book published by professors Dinu, Săvoiu and Dabija comes out to narrow this gap. The synthetic approach to the subject, from the beginning to the end of the process of conceiving, writing and publishing a scientific paper, aims to familiarize the many categories of readers with everything one needs to undertake in order to get the greatest benefit from such a work.

The book is intended for a large but well-structured audience made up of undergraduate, master's and PhD students as well as researchers and academics in the field of economics and business administration, in a word, for the entire higher education staff interested in effective dissemination of their research fruitage. Whereas the book is addressed to clearly outlined categories of target audience at the national level, its table of contents and abstract in English, French and German may stir up the interest of scholars and researchers in the field of economics from other Central and Eastern European countries.

Extensive theoretical coverage, in which the results of economic research are dealt within the context of scientific rigor, focuses primarily on highlighting the requirements for writing a scientific paper. As part of this major concern, the authors develop the chapters on the structure and citation optimization of a scientific paper and those dealing with plagiarism and the related law. The book preserves its harmony up to the end where it provides the researcher with the ways and means to publish the results of his /her research.

The narrative style is sober and precise, in accordance with the requirements typical of a scientific paper. Detailed relevant examples placed in each chapter and paragraph make the understanding of the entire material much easier. Given its great practicality, the book as a whole is way more than a mere guide of good practice because it helps the reader form a complete and correct image of the entire process of conceiving and writing a scientific paper. It was the authors' initial intention not to touch on the subject beyond the scope of a scientific paper. They deliberately withhold from approaching the subject from the perspective of larger works such as treatises, monographs, manuals etc. The reason behind this limitation is given by the precise destination of the work under review. Drawing on the international and national regulations concerning the assessment of scientific performance in economic research, the authors emphasize the leading role of the assessment of articles to the detriment of larger scientific works. This approach does not curtail the author's freedom of expression. If fact, they formulate a number of critical views based on arguments against the current Romanian system of performance assessment for academic promotion. The criticism is accompanied by constructive proposals on the improvement of the legal framework in this field. In this context, it should be pointed out the need to promote qualitative assessment criteria over the quantitative ones adopted by the current assessment system. The qualitative assessment of performance is certainly a lot more difficult to carry out than the quantitative assessment since the former,

unless it is sufficiently balanced and transparent, comes under suspicion of bias. The example of internationally-renowned schools shows that first-rate, unbiased qualitative assessment is possible. For instance, how can one assess the capacity of a university professor to create and develop a school in the field in which he or she is habilitated? Naturally, the higher the level of international visibility of his or her academic performance, the clearer is the answer to this question. And it is not only his or her own visibility that matters, but also that of his or her students. Such an approach, however, calls for a change in the mentality of decision-makers in the field of scientific work assessment. As professor Malita states, this change of mentality should not be embraced by only a single individual but should prevail in an entire community, in our case the scientific community (Malita, 2010, p. 235).

Each of the five chapters of the book deals with a different subject in the process of searching for truth through scientific research up to the point when it is put in print, as required by professional deontology. To circumscribe the theme of the book – the economic research – in the general context of the scientific research, the first chapter is dedicated to outlining the typology and characteristics of modern economic research. Based on the precepts of the logic of science, as formulated by Karl Popper, the characteristics of scientific objectiveness are contrasted with the elements of subjective conviction. This distinction can be quantified by the degree of falsifiability and testability of a scientific theory (Popper, 1975, pp. 86-140). The chapter next expounds on the synthetic cycle of scientific research, constantly subject to uncertainties and random variables. We believe it is important to highlight the authors' inter-, trans- and multidisciplinary approach to contemporary economic scientific research. This is due to the shift in the approach to the economic processes and phenomena, from a unilateral approach to an integrative approach, both horizontally and vertically (Zaharia *et al.*, 2009, pp. 170-193). Emphasis is also placed on the role of measurement of phenomena and theory validity as essential elements of economic research.

Special consideration is given to the key terms used in economic research, dealt with throughout four successive investigation cycles. This concern for terminological clarifications helps the reader interpret correctly the instrumentation used in the entire work. Being aware of the significance of communication in the process of dissemination of economic scientific research results, the authors devote considerable space to this aspect, both at conceptual and practical/operational level, for the benefit of the informed reader.

The second chapter of the book starts with the morphology of the components of a scientific paper, grouped in pre-text elements (title, authors, key words, JEL classification), text elements (introduction, body of the article, results, discussion) and post-text elements (conclusions, bibliography, annexes). The scientometric criteria for assessing a scientific paper are then dealt with at length for the purpose of optimizing its citations, thus contributing to its dissemination. Special attention is devoted to prestigious international databases (Thomson Reuters in Web of Science and Elsevier in Scopus) and the importance of the Hirsch index for the international acknowledgment of the value of a scientific paper. The content of the chapter is customized with examples from the field of economics and business administration.

Writing a scientific paper makes up the body of the third chapter of the book. The recommendations on the scientific writing style accompanied by many examples are followed by those concerning the writing of bibliography. Of great import is the distinction that one should make between the reference list and bibliography. The detailed exemplification and clarifications concerning the types of citation styles – author-number system and author-date system (Harvard system) – cover the entire array of situations encountered in the economic literature. A distinction is also made between the citation styles in a scientific article and those in a scientific report or conference. The chapter ends with some useful typing rules.

One topic that ignites fierce debate over ethics in research is plagiarism and plagiarism legislation, to which the authors dedicate the entire fourth chapter. The issue of protection of

intellectual property is essential in the postmodern world in which lurks the danger of collage. "Clipping" from various sources by "citing correctly" and putting the information together may yield a "genuine" review of literature but not an original scientific paper. In his characterization of *Homo fraudensis*, professor Maliţa refers to "...the impressive adroitness in handling a complicated, intricate, unclear language for the purpose of concealing an intellectual fraud" (Maliţa, 2012, p. 180). By paying attention to the phenomenon of plagiarism and its precursor – similitude – an important step is made in promoting ethics in scientific research.

The semantic paradigm of plagiarism in scientific research is debated with respect to its concepts and typology. The authors also deal with situations of common knowledge, which are not susceptible to charges of plagiarism. However, the authors' deeply held beliefs in original wording and their consistency in advocating the respect for original ideas permeate the entire chapter. The historical enquiry into the plagiarism legislation properly rounds out the part dedicated to the protection of intellectual property. The presentation of a diverse typology of situations, from plagiarism to self-plagiarism and from institutional self-plagiarism to cryptomnesia, familiarizes the reader with the variety of perils that might appear when writing a scientific paper and helps him/her to avoid them. The multitude of examples provided is again a great help in better understanding each individual situation. The ways and means of preventing and avoiding plagiarism are the perfect "ingredients" to round off the chapter.

The final part of the book (chapter five) is dedicated to dealing with the manner in which the publishing of a scientific paper should be accomplished. It is also the part that opens the prospect for current debates on the assessment of scientific performance in the economic academic environment. These debates are expected to foster the much-needed change previously referred to in this presentation, that is, the more courageous shift from quantitative assessment to qualitative assessment of academic performance. The critical aspects highlighted by authors are backed up by a wide range of examples. The authors do not withhold from approaching the touchy subject of the funding of economic scientific research and the reduced willingness of the business environment to get involved in it under mutually beneficial conditions. The assessors' full impartiality is not overlooked either. A very useful guiding tool for exploiting the results of economic research is represented by the main international databases in which scientific journals are indexed. The monographic approach to this aspect is highly significant in helping the researcher willing to capitalize on the fruitage of his or her investigation make informed decisions. A similar approach is adopted to the debate on how to determine the scientific profile of a journal so that the author may have the needed information to make the best choice when publishing his or her own material. The method of calculation of scientometric indicators of the most important international databases also helps the reader in the choice he or she is about to make.

The book ends with the analysis of relevant criteria for choosing an economic scientific journal. The journal visibility, the publishing costs incurred, the subject areas of a journal or of each of its issues, the total amount of time needed up to publication as well as many other aspects allow the reader to survey all factors that have to be taken into account when deciding to publish a scientific article. At the end of this book review, one cannot ignore the comprehensive bibliography accompanying each chapter and representing a valuable source of documentation.

The book is also a challenge for those called upon to develop the legal framework for the regulation of the assessment of the economic scientific research. Such people are called upon to assess correctly the exchange of ideas and how it is accomplished. The marketplace of ideas is not perfect, as Stiglitz suggests, "...just like the products, capital or labour force market. Consequently ... the best ideas will not prevail always, not at least in the short term" (Stiglitz, 2010, p. 426). What is important is the creation of a climate of genuine scientific debate on the whole set of measurement/assessment criteria and tools capable of "weighing"

scientific performance against the present, and especially the future requirements. The present book is a challenging tool for this kind of debate.

One final conclusion: writing a scientific article is an endeavor that, in itself, pertains to science but which also involves a lot of skill, even artistic skill. This skill is the result of the writer's experience and ability to find the most successful way to make known the fruitage of his or her epistemic work.

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