## **ABSTRACT**

The habilitation thesis "Developments and deepening of environmental accounting for sustainable organizations" summarizes the main scientific results and professional achievements of the candidate after obtaining their doctorate in economics in 2010 at the University "Alexandru Ioan Cuza" Iasi, and in the field of accounting at the Academy of Economic Studies in Bucharest, in 2011.

The research directions presented in this habilitation thesis fall within the sphere of managerial and environmental accounting, but also aim at the significant influences of the new perspectives on corporate reporting. The contributions mentioned in this thesis refer mainly to the research experience accumulated after obtaining the doctorate in accounting, and they are based on the candidate's belief that: environmental accounting and sustainability reporting, in their diversity, serve these new worlds to achieve the complex balance between people and the environment.

The first part of the habilitation thesis is organized into four chapters that blend the candidate's areas of interest: developing the conceptual framework of environmental accounting, sustainability reporting, corporate governance systems and the impact of technology on the accounting process.

The first chapter presents the main scientific, conceptual and practical results of environmental accounting as a result of the emergence of a new type of costs, the environmental costs or environmental protection costs, which must be incorporated into business decisions. In the research carried out, the main objectives were: applying the normative framework; analysing the challenges and benefits of using environmental accounting; achieving uniformity and stability in accounting and environmental reporting; identifying vulnerabilities and strengths of green costing methods; green cost control; the use of fair value in environmental accounting and the link between environmental accounting and the optimization of green business processes. The author's personal achievements, well anchored in the context of the current state of scientific research at a national and international level in this thematic field, materialized both in the theoretical component with reference to the interpretation of recommendations regarding the creation of synthesis documents specific to environmental managerial accounting from the use of multi-

instruments for measuring environmental performance, as well as in the empirical component by presenting, developing and adapting the concepts and principles of calculating green costs applied to the specific accounting of economic entities in Romania.

The second chapter approaches the scientific achievements on sustainability reporting from the perspective of both the regulatory frameworks for non-financial disclosure and the theories underlying voluntary social and environmental reporting, as well as the main guidelines – with special reference to the Global Reporting Initiative and to Integrated Reporting Frameworks – which can support the construction of an integrated report.

Another area of concern has been allocated to the means of communicating sustainability by Romanian companies, communication that can contribute to maintaining the company's reputation and can help reduce the cost of equity, especially in competitive markets. The positive differentiation of a company with a good reputation and performance can be achieved by disclosing information on its sustainability commitments. This research has been continued in several articles, while the conceptual and empirical extension has been achieved by highlighting aspects related to the correlation of sustainability strategy with sustainability reporting and auditing.

The third chapter presents the main scientific concerns regarding corporate governance systems and their link to non-financial reporting and organizational performance. The author discusses the role of corporate governance structures in reporting for sustainability, on the one hand, and the relationship between corporate sustainability practices and financial performance, on the other.

All personal contributions on the implementation of corporate governance systems put forward in this chapter have shown that it is necessary to address the valences of corporate governance in the field of accounting reporting and to consider its impact on the management and control system. The research methods used are diverse and include quantitative and qualitative studies on representative samples at national, European and international level.

The last chapter of the first section of the habilitation thesis contains a series of results of the research on the impact of technology on the accounting reporting process. The research focused on efforts to implement fundamental changes in line with the requirements of the new performance reporting standard in the context of digital economic entities in Romania, but also other significant contributions to circular economy research and innovative technology brought about by the fourth industrial revolution, Industry 4.0. The first research included in this chapter presents directions and barriers regarding the use of Industry 4.0 in the reporting process at the level of Romanian companies and how new technologies can contribute to business development. The main results

are that the development of Industry 4.0 at the level of Romanian companies requires superqualified personnel, and this presents challenges for the specialists called to meet the reporting requirements in environmental accounting.

Another objective of this research was to determine the impact of digital transformation on managerial and environmental accounting. Thus, another study explores the boundaries of the concept of digital transformation using the cyberaccounting lens that will help leaders increase organizational performance and build a strong economic entity by developing a better business model. Next, a series of researches analyze the factors that influence the acceptance and use of the accounting platforms available online by the company's managers through developing the construction model called "the unified theory of acceptance and use of technology" (UTAUT). The major contributions of this research were the use of two variables considered significant in the study: the perceived credibility and the risk perception. The study's results showed that performance expectations, social influence and the perceived risk have a positive influence on the intention to use the accounting platforms available online, while perceived credibility shows a much more significant and stronger influence.

Moreover, in the same thematic register, the present thesis advances the creation of a real-time analysis system in order to minimize trading risks, which adapts daily, allowing the best management decision based on real-time predictions for companies with state or majority state capital. This system is based on a system of agents, some of them intelligent, that benefit from a type of learning based on neural networks. The results of this research are a vision and a way forward for the development of concrete decision support tools, with a dual role: to alert – an early warning for the protection of strategic companies, and to increase the company's profitability.

The second part of the habilitation thesis briefly presents the individual ability of the candidate to coordinate teams in the field of research aimed at environmental accounting, to address interdisciplinary research directions, and to organize and manage teaching activities.

The third part of the habilitation thesis approaches the development plan of the academic, scientific and professional career of the author, focusing on the following directions: didactic activity and professional contributions, scientific research and academic perspective.

The didactic directions and the professional development proposals aim at: updating the informational content of the specialized disciplines that should include elements of novelty at an international level; improving and periodically reviewing teaching strategies focused on student-centered teaching; stimulating students' interest in the learning process by providing relevant case studies; coordinating the research activity of the students in order to elaborate their bachelor's

theses or to participate in conferences; developing interpersonal communication skills; increasing the degree of professional and personal development.

The proposed scientific research directions will continue to develop in-depth research on quantifying environmental costs, tools for exercising green control, measuring the quality of corporate governance, but also addressing the interconnections of environmental accounting with sustainability and contemporary eco-innovative developments. Furthermore, the research agenda will include organizing and participating in prestigious international scientific conferences, establishing research partnerships between universities and labor market actors, and also intensifying the connection to national and international academic networks.

The final section of the habilitation thesis is intended for bibliographic references, respectively the quoted personal scientific contributions of the candidate.

Date: November 02, 2020 Signature,

Ionica Oncioiu