



Corporate Reporting in the (Post)Modern Society: Reflections on Romania

Univ. Prof. Ion IONAȘCU, Ph. D.,
The Bucharest University of Economic Studies,
e-mail: ionascui@gmail.com

Associate Prof. Mihaela Ionașcu, Ph. D.,
The Bucharest University of Economic Studies

Abstract

This study aims to discuss the role of corporate reporting in contemporary society, characterized by dematerialization and digitalization, the increased importance of environmental and social aspects in business, and the need for (re)legitimizing actors participating in the production, auditing and publication of corporate information, with the multiplying forms of risk, uncertainty and globalization. The paper also sets out to discuss the extent to which the current corporate reporting model satisfies the needs of stakeholders and ensures a better functioning of markets and society.

Key words: accounting profession; emerging information technologies; accounting for sustainability; corporate reporting; accounting research

JEL Classification: M14, M41, M42, Q56

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1. Introduction: Accounting as a professional practice

The study aims to present the mutations suffered in the field of accountancy in the last decades, but also an interrogation into the future of accounting and its profession. Although the term ‘*accounting*’ has been given different connotations: language of business, management technique, scientific discipline, information system etc., the present paper construes accounting as an “*organizational and professional practice*” (Volmer, 2019) based on calculative techniques, providing financial and non-financial information for decision making and ensuring the functioning of companies, public administrations and non-profit organizations, as well as society as a whole.

As a social practice, accounting emerged with the ability of man to reason, being according to some views the precursor of abstract counting and ancient writing (Mattessich, 1989). Although accounting is a multi-millenary social practice, its professionalization occurred only in the modern era, with the Industrial Revolution, starting in the mid-19th century. The new economic paradigm of industrialization and financing companies on capital markets has been associated with new information needs of investors and creditors satisfied by accountants, and financial accounting - aimed at reporting to capital providers, was “a creature of the industrial period” (Elliott and Jacobson, 2002:72-73). The first bodies of the accounting profession have emerged in this era, the oldest being in Scotland (1854) and England (1870) (Perks, 1993:45).

However, so far, we do not have a universal definition of the *accounting professional*. In a strict sense, the accounting professional is defined as a person who is a member of a body that is part of the International Federation of Accountants (IESBA, 2018:243). However, this definition is a simplified one. In other terms (IESBA, 2011:7), the accounting professional is defined as a “person who has expertise in the field of accountancy, achieved through formal education and practical experience, and who: i) Demonstrates and maintains competence; ii) Complies with a code of ethics; iii) Is held to a high professional standard; and, iv) Is subject to enforcement by a professional accountancy organization or other regulatory mechanism”. The difficulty of defining the accounting profession was discussed and recognized internationally (IFAC, IAESB,

2014:8-10). However, after public debates, the *International Accounting Education Standards Board (IAESB)* of IFAC has defined the accounting professional as the person “who achieves, demonstrates, and further develops professional competence to perform a role in the accountancy profession and who is required to comply with a code of ethics as directed by a professional accounting organization or a licensing authority” (IAESB, 2015:5).

Starting from this definition and from the terminology of the International Code of Ethics of Accountants (IESBA, 2018), a few clarifications can be made on the different positions in which an accounting professional can operate. Thus, the term ‘professional accountant’ can refer to an *individual professional accountant in business*, as well as to a *professional accountant in public practice*, when conducting professional activities in a company providing accounting related service (e.g. accounting, auditing, taxation), as a contractor, employee or owner. So, the term professional accountant covers a wide variety of roles – employee, contractor, partner, director (executive or non-executive), owner-manager or volunteer, in different organizations – companies, public sector, education and non-for-profit entities. The activities of the accounting professional include accounting, auditing, taxation, managerial consultancy and financial management services (IESBA, 2018:243). Therefore, in practice, the accounting professional features various labels, each referring to a certain functional specialization: accountant, auditor (internal or external), tax consultant, management consultant etc. At the level of a local jurisdiction, there may be a single licensing body of accountants, regrouping different accounting specializations, or several professional bodies, delineated by different specializations. The local bodies of the accounting profession in various jurisdictions are represented internationally by the International Federation of Accountants (IFAC). Accounting professionals meet the specific needs for financial and non-financial information for decision-making purposes of a wide range of users: managers of organizations, investors and creditors, public administrations etc. contributing to the efficient functioning of markets and society (IAESB, 2015:4).

As a social practice, accounting is a part of the contemporary society which undergoes a new stage of its becoming: *postmodernity*. This new perspective on the world represents a rift from the modern period,

characterized by transitional states, fragmentation and radical changes, without universal laws, and history appears as a multitude of continuously changing interpretations of events (Montagna, 1997:125). Postmodernism is not only a philosophical doctrine, but influences various constituent parts of the current society: architecture, arts, literature, social sciences, organizations and managerial practices etc. From an economic perspective, postmodernism is linked to the post-industrial period, featuring changes in organizations and management sciences: *i.e.* the “changed meaning of work, the impact of information technology on social reality, changed work patterns in industry and the recent development of alternative organization forms, etc.”. After Ghomshei (2009:103), the beginning of the postmodern period is marked by several historical events such as: the emergence of the Internet as a new global communication tool, the increasing importance of ecological movements triggered by global warming and resource sustainability, the nanotechnology revolution; the social and economic globalization, as well as the fall of the Berlin Wall as the beginning of the global democratization movement.

Under the impact of postmodernist tendencies, classical organizations, based on a pyramidal structure of the hierarchy, over-specialization through excessive division of labor and impersonal roles of employees, undergo mutations in their organization and functioning.

In the postmodern era, based on information technology, organizations become virtual entities, characterized by the emergence of electronic and flexible files that describe their activity (Montagna, 1997: 130-131), and classical management tools, such as accounting, are regarded as social constructions used to legitimize power relations within organizations and society. As a result, in today's society, characterized by unprecedented dynamism due to science and technology, accounting must ‘reinvent itself’ as it undergoes certain mutations generated by the phenomena characteristic to postmodern society, and, in turn, accounting influences the functioning of postmodernity.

In this context, this study aims to identify *the main mutations affecting accounting as a social practice in the foreseeable future*. In our opinion, the most important determinants that could affect change in the practice of accounting in the postmodern world are *information technology* and *scientific knowledge*, resulting from research. Scientific knowledge acts both as an

exogenous element of accounting, being provided by other fields of scientific research, as well as an internal factor, in the case of accounting research. Information technology and scientific research can cause changes in the functioning of the accounting model of organizations, which requires new regulations – technical standards, as well as ethical norms, and the assimilation of good practices that could legitimize accounting as a knowledge-based social practice in the postmodern society.

2. Accounting facing the challenges of postmodern society

2.1. Research Methodology

To articulate possible answers to the questions of the paper, we employed a qualitative approach analyzing the reactions of the various parties involved in the social technology of accounting – professional bodies and standards setters, academia etc. – which try to anticipate possible mutations in accounting practice as a result of the changes in the postmodern society and their perceived adaptation solutions as well as the possibilities to manage the risks involved.

2.2. Accounting in the face of new information technologies

The biggest upheaval and challenges that accounting as a social practice, with all its professional differentiations – book-keeping, financial and non-financial reporting, managerial accounting, taxation, auditing etc. – could expect come from outside the field of accountancy, from an area that has led to the reconfiguration of the functioning of contemporary society (a society that is increasingly based on the production and consumption of information, and which tends to become an information society): namely from information science with its applied part - *information technology*.

New information technologies – such as *Artificial intelligence*, *Blockchain technology* etc. – are research and innovation results coming from outside the accounting and management sciences field, but which will affect the future practice of accounting. However, it is difficult to estimate the impact of these scientific innovations on the accounting labor market and the

manner in which financial and non-financial reporting of the various entities and their auditing will be affected. Nonetheless, there are some estimates in this regard. Some of the most radical approaches posit that in the near future, the accounting related professions will be dramatically affected by robotization, with consequences on the labor market, while others believe them to be only subjected to technological changes, to which they will adapt, the professions being transformed and even growing in size. Frey and Osborne (2013) of the University of Oxford investigated the impact of computerization on the labor market on 702 occupational fields and estimated that 47% of all jobs in the US have a high risk of being affected by automation in the next 10-20 years. According to the results obtained by Frey and Osborne (2013:71), bookkeeping, accounting, and auditing professionals are at the top of the risk of automation with a probability of 98%. Their research has sparked interest and raised more controversy, particularly in respect to the fact that professions considered at high risk of automation – such as accounting and auditing, also include a significant number of tasks that are hard to computerize.

Arntz *et al.* (2016) conducted similar research for 21 OECD member countries using an approach based on job-tasks, given the heterogeneity of tasks in occupations, and concluded that on average only 9% of job-tasks are automatable, from this perspective, occupational automation risk being much smaller compared to Frey and Osborne (2013)'s profession-based approach. As regards the accounting and auditing profession, the research carried out by Arntz *et al.* (2016:14) shows that 76% of all employees in this profession cannot perform their professional tasks without teamwork and face-to-face interaction. However, irrespective of the methodology used to measure the risk of computerization capable of affecting accounting in the near future, one thing is certain: the trend of automation of the accountants' tasks exists and must be managed.

Therefore, in order to cope with the immediate foreseeable future, new information technologies, called *emerging technologies*, must be appropriated both by those who are preparing to enter the accounting profession and by the professionals already working in the field of accountancy. In the accounting information systems (AIS) research literature the *emerging technologies* most frequently addressed are: XBRL, Continuous/online/digital/e-reporting; Artificial

intelligence; Continuous audit and continuous monitoring; Big data, data analytics/mining; Internet technologies (various); Informatics, textual analysis, text mining; Cloud computing, etc. (Chiu *et al.*, 2019:34).

For training accountants with skills and knowledge in information technology, the standard of accounting accreditation A5 AACSB (2018: 27) (The Association to Advance Collegiate Schools of Business) – a non-governmental institution for international accreditation of accounting and business schools that activates for the creation of new generation of business leaders – calls for the integration of information technology into accounting and business university curricula so that teachers and students possess skills and knowledge to adapt to emerging technologies as well as master the current ones. Chiu *et al.* (2019:39) shows that in AIS related journals, most articles are concerned with the application of emerging technologies in the field of auditing and financial reporting, taxation being almost ignored. Of these emerging technologies, we pay attention to the impact of *blockchain technology* on accounting and auditing, due to both its novelty and its frequency in AIS research literature (EU, 2018; Chiu *et al.*, 2019; Grover *et al.*, 2019, Schmitz and Leoni, 2019).

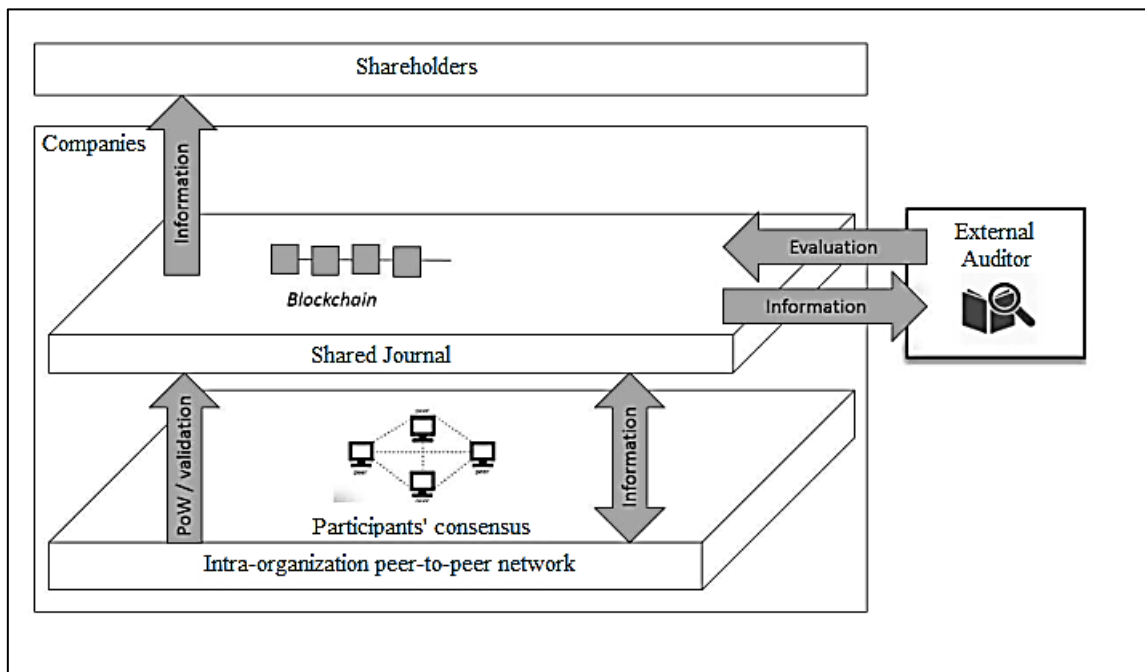
Blockchain technology is a new area of information technology, officially defined as “a private, permissioned distributed ledger technology (DLT), comprising a database made up of sequential blocks of data that are added with the consensus of network operators” (EU, 2018:4). Blockchain technology was introduced in 2008 by the programmer Satoshi Nakamoto together with the Bitcoin virtual currency as a computer software for transferring digital cash without financial intermediaries. It is currently mainly applied in the financial industry and banks (Grover *et al.*, 2019; Desplebin *et al.*, 2019). Being considered a technology capable of generating revolutionary transformations comparable to the Internet, *blockchain* technology has become an important area of interest for academic research in accounting and auditing which tries to identify possible mutations on the functioning of entities' accounting information systems, financial reporting and auditing. In this respect, the study conducted by Grover *et al.* (2019: 739) on blockchain technology in the academic literature shows that of all scientific domains, business, management and accounting fields have occupied the third position in terms of the interest in this topic. Schmitz and Leoni (2019) show that four themes are recurrent in the

academic and professional literature addressing the impact of blockchain technology in the field of accounting and auditing: governance, transparency and trust in the blockchain ecosystem, continuous audit, smart contracts and the changing roles of accountants and auditors.

The application of *blockchain* technology in accounting allows for keeping a public journal (a public database) organized in chronological order and which can be accessed by a decentralized network of users, such as the Internet, having several specific features apart from traditional databases (Desplebin *et al.*, 2019): any alteration of a previous record will require a restatement of all blocks in the chain, which excludes data

manipulation and constitutes a solution for *data security*. This accounting database allows for a *degree of controlled transparency*, by defining access for each category of users, blockchain technology being a support for accounting records – e.g. journals and ledgers – accessible and shareable within an organization and to authorized third parties, such as shareholders and financial auditors. *Blockchain technology* allows authorized users – managers, shareholders, accountants, auditors, tax authorities etc. – a shared and real-time access to an entity's accounting information (*real-time accounting*), as shown in *Figure no. 1*.

Figure no. 1. Representation of an intra-organizational accounting system based on blockchain technology



Source: Adaptation based on Rückeshäuser, 2017, quoted by Desplebin *et al.*, 2019:10

Smart Contracts based on *blockchain technology* constitute 'intelligent' software operating autonomously by automatically monitoring and executing the contracts' terms (Desplebin *et al.*, 2019; Rozario and Vasarhelyi, 2018). They can change how records are kept by automating accounting operations and controlling procedures, giving rise to '*Smart Accounting*', and how the audits of financial statements are carried out through '*Smart Audit Procedures*', by means of automated

execution of procedures for quasi-real-time reporting of audit results.

New information technologies will not eliminate the accounting profession – with its various functional branches (accountants, auditors, consultants etc.), but will bring about important transformations (see **Table no. 1**). For example, Blockchain technology that guarantees data inalterability will change the way in which the audit of financial statements is performed by

automating audit procedures and transforming it into a *continuous audit* (Desplebin *et al.*, 2019:16).

Accounting procedures will also suffer mutations: automation of some accounting operations will allow for successive execution of ‘smart contracts’ after transaction validation and errors elimination, which will reduce the times used for performing accounting tasks. In recent years, the application of *blockchain technology* has spread to various industries – financial services, in particular, financial technology (fintech), telecommunications, medical services, media, etc., and government institutions in different countries (Deloitte, 2019). Also, this technology has penetrated the Big Four audit and accounting firms. For example, Deloitte has a research and development division

‘Deloitte US Blockchain Lab’ dedicated to providing customers support in the use of *Blockchain* technology, the Deloitte *Blockchain* community counting more than 800 professionals from 20 countries. Since April 2018, EY has developed ‘EY Blockchain Analyzer’, used in auditing tasks, which allows auditing companies using cryptocurrencies such as BitCoin, Ether, LiteCoin, BitCoin Cash and testing other *crypto-assets* (Kruskopf *et al.*, 2019:5-6). Also, *Blockchain* technology came to the attention of several bodies of the accounting profession in various countries concerned with training their members in the use of this new technology. For instance, ICAEW included the topic within its training curriculum for certified public accountants (ICAEW, 2018:12).

Table no. 1. The impact of emerging technologies on the accounting profession qualifications

Emerging information technologies	Accounting information system	New accounting qualifications
<ul style="list-style-type: none"> • XBRL, continuous/online/digital/e-reporting • Artificial intelligence • Continuous auditing/monitoring • Big data, data analytics/mining, etc. • Internet Technologies • Informatics, textual analysis, text mining • Cloud Computing • Blockchain and smart contracts • Other emerging technologies 	<p>Mutations</p>	<ul style="list-style-type: none"> • Blockchain Accountant • Cybercrime Accountant • Data Security Accountant • Fintech Accountant • Historical Accounting Analyst • Strategic Accounting Analyst • Cloud Accounting Specialist • Blockchain Auditor • Etc.

Source: Adaptation based on Chiu *et al.* (2019:34) and Kruskopf *et al.* (2019:9).

Furthermore, as regards the effects of *blockchain* technology on accounting and auditing, McCallig *et al.* (2019) suggest that this technology will increase the representation faithfulness of the information provided by corporate financial reporting, as this technology allows the use of shared data from independent entities, a transparent system and an immutable storage space with open access. Similarly, the same authors believe that *blockchain* technology allows auditors to access information in the system to formulate their audit opinions, as well as stakeholders who need credible information about the entity.

2.3. Towards a new corporate accounting model: accounting for sustainable performance

The traditional economic paradigm has postulated that companies’ only social responsibility is to increase their

profit (Friedman, 1970). However, in a postmodern perspective, the process of creating wealth in society is connected to other dimensions such as diversity, difference, inclusiveness, sustainability etc., and the postmodern discussion about the nature of corporate social responsibility is construed as a plurality of competing narratives reflecting subjective interpretations of the nature and activities of corporations and their effects on human beings and on the environment (Roseberry, 2007:2). As a result, from a postmodern viewpoint, the creation of value by companies must be connected with their responsibility towards society and the environment for sustainable development. In the past decades, *sustainability science* has risen as an emerging scientific field on sustainable development (Bettencourt and Kaur, 201, Kates, 2017), being considered by some as ‘the first postmodern discipline’ (Brinkman, 2014).

Corporate reporting has been and is centered on *financial reporting*, primarily aimed at the financial information needs of the equity-capital providers, lenders and other creditors (IASB, 2018, par. 1.2). In order to disclose the way in which companies obtain financial performance and its impact on society and on the natural environment, financial reports must be complemented with information on corporate social responsibility. This is why, in the postmodern age, corporate reporting, especially for large companies, tends to transform into *sustainability performance reporting* that integrates financial performance information with social and environmental data. As a result, the practice of corporate reporting includes *financial reporting* and *sustainability reporting*, also called *sustainability accounting* or *non-financial reporting*.

If financial reporting has already a history of standardization, both at a national and at an international level by the spread of International Financial Reporting Standards (IFRS) as a single set of global standards, regulating the corporate sustainability reporting is still in an emerging phase. So far, there is no specialized body that produces corporate sustainability reporting standards that are accepted globally, as in the case of IFRS. Today, the process of standardization of global sustainability accounting is fragmented between several international bodies, a number of sustainability reporting frameworks being defined at a national, EU and international level. Among the most influential bodies attempting to regulate sustainability accounting is the *Global Reporting Initiative* (GRI) – an independent non-governmental organization founded in 1997 that has developed a new framework for reporting corporate sustainable performance: *GRI Sustainability Reporting Standards* (*GRI Standards*). GRI Standards have replaced the old GRI G4 Guidelines reporting framework, which are applicable to corporate sustainability reports drawn up from July 1, being considered the best global practice of corporate sustainability reporting (GRI, 2019). Even though the application of the GRI sustainability reporting framework is non-compulsory, it was the most used framework for sustainability reporting by the largest 250 companies worldwide (KPMG, 2017:28).

In 2010, the International Integrated Reporting Council (IIRC) was established as a global non-profit organization through the association of various

stakeholders – regulators, investors, companies, standardization bodies, academics, the accounting profession and NGOs in order to advance corporate reporting for global sustainable development (IASPlus, 2019).

In the IIRC vision, integrated reporting is for the benefit of all stakeholders interested in the organization's ability to create value over time, including employees, trading partners, local communities, regulatory factors and legislators (IIRC, 2013:4). In 2013, IIRC published the *International Integrated Reporting Framework (IR framework)*, defining integrated reporting, its purpose and users, mentioning the principles-based regulatory concept, defining the fundamental concepts and principles guiding integrated reporting, as well as the constituent elements of an integrated report. Although one of the three fundamental concepts of the integrated reporting framework of the IIRC (2013) is the "*value created for the organization and others*", it was criticized by Flower (2015) on the grounds that it is oriented towards the creation of 'value for investors' at the expense of 'value for society'. The general framework of the IIRC (2013) has influenced the practice of global integrated reporting, as about two-thirds of the largest 250 companies at a global level have also referenced the IR Framework in the preparation of integrated reports (KPMG, 2017:24).

Furthermore, the International Organization for Standardization (ISO) published in 2010 the international standard **ISO 26000 – 'Guidance on social responsibility', a voluntary applicable guide for different types of organizations, regardless of size or field of activity. The ISO 26000 approach promotes an 'integrated thinking' in reporting corporate social responsibility, which is why this standard is considered to be complementary to the IR framework developed by IIRC for integrated reporting (ISO, 2015:9).**

In a comparative analysis of the three international reporting frameworks on social responsibility/corporate sustainability (ISO 26000, GRI and IR Framework), Idowu *et al.* (2016) showed that they have many common elements, and that most of the principles and definitions in ISO 26000 and GRI G4 are also found in the International Integrated Reporting Framework (IR), concluding that integrated reporting represents an evolution in corporate reporting developed on the basis of the standard on social responsibility (ISO 26000) and the GRI sustainability framework.

However, perhaps the most important attempt at standardizing sustainability accounting at an international level belongs to the European Union (EU) which endorsed the Directive 2014/95/EU (EU, 2014), also called the 'non-financial reporting directive', as it introduces a form of *compulsory sustainability reporting* for large companies pertaining to member states. Under the Directive 2014/95/EU, public-interest companies with more than 500 employees are obliged to include non-financial statements in their annual reports starting in 2018 (for the financial year 2017), presenting the policies they implement in relation to the protection of the natural environment, social responsibility and the treatment of employees, respect for human rights, fighting corruption and bribery, diversity on boards (age, gender, education and vocational training). The directive was supplemented in 2017 with a guide on reporting non-financial information (non-financial information reporting methodology), which is non-mandatory (EC, 2017/C 215/01), and in 2019 the European Commission published guidelines on reporting climate information. EU member countries must integrate the provisions of the non-financial reporting directive into their national law, but also other governments, regulatory factors and stock exchanges play an important role in the production of regulations and the imposition of corporate social responsibility reporting (KPMG, 2017:15-20).

The existence of several corporate sustainability reporting frameworks at international and national levels determines differences in practice. For instance, there are companies integrating sustainability information into their annual report, a practice illustrating the concept of *integrated corporate reporting* (financial and non-financial information), which was also included among the requirements of the EU non-financial reporting directive (para. 1, Directive 2014/95/EU). Other companies publish an annual report on corporate social responsibility, separate from their financial reporting, which supports the concept of *corporate sustainability reporting*. A study conducted by KPMG (2017:6-7) shows that in the reporting practice of large companies there is a tendency to integrate non-financial information on sustainable development into annual financial reporting, as companies construe social and environmental dimensions in terms of their effects on the creation of

value – i.e. the extent to which they affect financial performance, both in the short and long term.

However, *accounting for sustainability* is far from being a true reflection of the complex – economic, social and environmental – reality in which companies operate and a useful tool for comparisons in the decision-making process. Aaron *et al.* (2013) exposed a lack of comparability between social responsibility reports for companies in the same sector, which was mainly generated by the plurality of reporting standards. The research by Boiral and Henri (2017) on sustainable performance reporting, which analyzed 92 indicators defined by the GRI Framework for similar companies, showed the impossibility of a rigorous assessment and an effective comparison of sustainable performance reported by companies operating in the same sector, and which follow strictly the same basis of reporting, due to various reasons (qualitative aspects of sustainability, non-compliance with GRI protocols, ambiguous or incomplete information, heterogeneity of data, etc.).

Also, Diouf and Boiral (2017) showed that GRI principles are applied in an elastic and uncertain manner in sustainability reporting, and the perception of stakeholders is that these reports are the results of *Impression Management Strategies*, used by companies to highlight positive aspects of sustainable performance and camouflage negative results. These findings indicate that the lack of a global concertation of sustainability reporting standardization generates theoretical inconsistencies and practical impediments to corporate reporting in the postmodern era. In this respect, Barker and Kasim (2016) showed that integrated reporting shares the same paradigm with financial reporting, but not with sustainability reporting, which does not lead to a paradigm shift, but to the existence of two competing corporate reporting paradigms.

Accounting for corporate social responsibility – with its various designations – has emerged in recent decades as a vast area, in its incipient phases in terms of regulation and corporate reporting practices, being a possible response to postmodern discussions about the role of companies in society. At the same time, accounting for sustainability tends to impose itself as a new reporting paradigm and as a "complex and pressingly important area of research" (Unerman and Chapman, 2014:392).

2.4. Accounting research as a source for improvement of accounting practices

Accounting is a model of representing reality based on evolutionary concepts and conventions that underpin professional standards and rationales employed in financial and non-financial reporting aimed at supporting the decision-making process. Financial reports provide information on economic phenomena (IASB, 2018, par. 2.2). However, the current accounting model of representing reality is limited, as it only partially reflects the reality of economic, social and natural phenomena, and this limitation results from the way accounting concepts and conventions are defined. For example, the concept of *assets* as defined by IASB (2018, par. 4.2) refers to an economic resource consisting of “a right that has the potential to produce economic benefits”, which only partly satisfies the notion of economic resources due to the incomplete recognition of human and natural capital involved in economic activities, which are difficult to measure. The emergence of *sustainability accounting* or *non-financial reporting*, providing information on companies’ environmental, social and economic implications to ensure sustainable growth, is a possible, incomplete, response to this limitation, however, both practices and research in the area of sustainability accounting are still in the early stages of their development. That is why we believe that an important role in improving the current accounting model used to represent reality with its multidimensional facets – economic, social and environmental - can be played by scientific research, the results of which could support regulatory efforts and refine accounting practices.

The academia is the main provider of higher education in the field of accountancy, but also of scientific knowledge fueling accounting practices in organizations. There are many examples of good practices in accounting, auditing, taxation and accounting information systems, etc., which have been developed based on academic research (Moehle *et al.*, 2009). However, the impact of research results on accounting practices (defined broadly, with all professional differentiations) still remains little recognized. In the last two to three decades, the *mainstream* accounting research has been accounting positivism, which requires that validation of scientific truth must be based on observing the facts. This approach based on quantitative methodologies for verifying assumptions lead to more scientific knowledge in the field of accountancy and to

bringing accounting closer to natural sciences in terms of theory validation criteria. However, there are also risks involved, as positive accounting research tends to transform the discipline into a quantitative sociological theory related to the behaviors of actors involved in the social game of accounting, a research perspective that develops without pursuing a certain goal. In some cases, it was noted that the dependence of accounting research on quantitative techniques has produced a decoupling of academic research from the needs of regulators and practice in the field of accountancy (Tort, 2014: 22). Consequently, the question arises: what is the purpose of accounting research and to whom should it serve? A first answer would be that accounting research, like any type of scientific research, must have as final objective providing scientific knowledge, independently of its purpose, based on academic freedom. However, this perspective must be adjusted to the status of accounting, which is an organizational practice. As a result, accounting research must pursue the *improvement of accounting practices* as its final objective, which will allow for a better functioning of markets and society. That is why, there must be a biunivocal relationship between accounting research and accounting as a social practice. In this respect, accounting research should provide a basis for reflection and action on the evolution of accounting practice in the future. And, in turn, the profession must be responsive and permissive to accounting research by facilitating access to the empirical material necessary to identify new knowledge that would increase the science of accounting and improve the quality of accounting and auditing practices.

The *Commission on Accounting Higher Education (Pathways to a Profession)*, a joint body of the AAA and the American accounting profession (AICPA) recommends integrating accounting research into theoretical and practical training of students, accountants and educators (Behn *et al.*, 2012:597). In some jurisdictions, the standardization bodies of the accountancy profession and the business environment are involved in stimulating accounting research. For example, in France, the national regulatory body (*Autorité des normes comptables*: ANC) has as its main mission the encouragement of accounting research activities, by proposing research topics and providing for their funding, starting in 2010, since the establishment of the institution (ANC, 2019). Also, in France, the auditors’ professional body (Compagnie Nationale des

Commissaires aux Comptes: CNCC)) is involved in scientific research, facilitating access to field research, proposing research topics in the field of auditing, providing funding for university researchers and supporting an applied research journal (Bouquot, 2019:64). In Romania, CAFR – the professional body of financial auditors – edits the research journal 'Financial Audit'.

We can conclude that, although accounting research is associated with academia, the support of all interested parties (state bodies, accounting regulators, the business environment and the profession) would be beneficial, as research is a key resource for improving accounting practice and for a better functioning of society.

3. Conclusions: Directions to be followed by academia, accounting standard-setters and the accounting profession in Romania in the foreseeable future

In Romania, basic training in the accounting profession, with all its functional differentiations, is provided by higher education institutions, which provide bachelor, master and doctoral programs in the field. The professional bodies in the field of accounting, auditing and taxation in Romania – CECCAR, CAFR, CCF and the Association of Internal Auditors in Romania (AAIR) provide only continuous education for their members. The university, through its accounting-related academic tracks, is the sole supplier of research in the field of accountancy, auditing and taxation in Romania.

Given the specificity of the Romanian university environment in the field of business administration and accounting, the accounting standardization, as well as the way of structuring and regulating the accounting profession in Romania, in order to cope with the new challenges that will affect the profession in the near future as a result of emerging information technologies and the sustainable growth model, several major directions of evolution can be proposed based on the research literature and international practices:

- Reconfiguring *the university curricula* to provide higher accounting education that will include the (new) *emerging information technologies* to provide professional skills required by the evolving information society;
- Integrating research trends on *sustainability accounting* in the *university curricula* in the field of accounting and business administration;
- Introducing the topics of *emerging information technologies* and *sustainability accounting* in the *continuous education of professional accountants*, from various areas (accountants, financial auditors, internal auditors, tax consultants);
- Ensuring *integration* between *academia* and *professional bodies* in order to support academic research in general, and *applied research*, in particular, in the field of accounting;
- Including in the *standardization process of Romanian accounting* by various institutions involved (Ministry of Public Finance, National Bank of Romania and Financial Supervisory Authority) and *in the regulation-setting process* by the various bodies of the accounting profession (CECCAR, CAFR, CCFR, AAIR) of a *research stage* to study the theoretical implications and practical bearing of the new regulations, which should include academic research, in order to ensure a quality, coherent and stable regulation of the business environment, public administrations and the Romanian accounting profession;
- Elaborating local normative frameworks in the form guidance principles or regulations on *sustainability accounting*, based on the requirements of the European Directive, international best practices and research results, with the participation of accounting regulators, the profession and the academia;
- Involving the *business environment* and *professional bodies* in *applied research* in the fields of accounting, auditing and taxation by proposing doctoral research topics and supporting their funding.

Currently, trends specific to Western postmodern society are beginning to penetrate the Romanian environment. Even if local accounting research is in an incipient stage compared with the highest international standards, information technologies – e.g. the internet and access to some databases – allow the local researcher to

observe advanced research findings provided in the international literature. The review of several possible changes in the accounting profession and corporate reporting induced by current developments in the postmodern society indicate the need for rethinking the social technology of accounting in Romania through the

institutions that ensure its functioning: the university, as the main provider of education and research in the field of accounting, the business environment, as the beneficiary, and the accounting profession, as the bearer of professional knowledge, all cooperating for supporting scientific research.

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