International Journal of Economics, Business and Management Research

Vol. 8, No.10; 2024

ISSN: 2456-7760

The Impact of Climate Changes and Climate Risk on the Accounting and Accounting Professions

Desa Kosarkoska PhD[1], Irina Joldeska PhD[2],

[1]Faculty of Tourism and Hospitality, Ohrid, University St Kliment Ohridski, Bitola, Republic of North Macedonia

[2]Faculty of Tourism and Hospitality, Ohrid, University St Kliment Ohridski, Bitola, Republic of North Macedonia

doi.org/10.51505/IJEBMR.2024.81019 URL: https://doi.org/10.51505/IJEBMR.2024.81019

Received: Oct 19, 2024 Accepted: Oct 24, 2024 Online Published: Oct 30, 2024

Abstract

If we are to identify the most defining global issue of our time, we would undoubtedly conclude that it is climate change and the associated risks for modern society and life across all sectors. Over the past two decades, the disclosure of information regarding corporate activities relevant to climate change has increased substantially. Decision-makers must choose between two options: confronting the issue and addressing it with appropriate business models and policies, or persisting with outdated business practices. With the latest Global actions there will not be chouse. The climate-related disclosures will become mandatory across much of the global economy. Accounting, as the language of business, must engage with these requirements. Integrating climate and other environmental and social values into traditional reporting is a crucial challenge for the Accounting today. Identifying and providing models for analyzing the interdependence of these risks, represents another significant challenge for Accounting recent years. Accountants can play a vital role in this risk analysis, supplying data to inform new policies and strategies, and implementing plans that facilitate informed decision-making, In this article, we explore how modern Accounting and Accounting profession, on a global scale, have adapted and responded to these new challenges, as sciences disciplines and as empirical profession as well.

Keywords: accounting for sustainable development, accounting branches, accounting professions, climate change, impact

1. Introduction

Climate change is one of the most pressing challenges of our time, influencing various sectors and fundamentally altering the landscape in which modern society and businesses operate. As global temperatures rise, weather cycles become increasingly unpredictable, and extreme weather events become more frequent, the ramifications for businesses and organizations, for society and peoples are profound. In this context, the Accounting and Accounting profession stands at a pivotal juncture in their late history development. Over the past two decades, the disclosure of information regarding corporate activities relevant to climate change has increased substantially. Accounting and accounting profession will play a vital role in this risk analysis, supplying data to inform new policies and strategies, and implementing plans that facilitate informed decision-making. Almost every industry faces threats from the effects of climate change, either directly or indirectly. For companies contemplating how the changing climate may impact their operations, ensuring that reporting is accurate, consistent, transparent, and fully considers environmental risks is paramount. They must monitor, measure, and control costs, as well as manage information systems to ensure outputs are accurate and reliable issues that the accounting profession must confront. The demands for increased disclosure and standardization of that disclosure is most important than ever before. The cooperation between the theory and practice as well is too important. There was luck of such cooperation in past three decades. Holistic and interdisciplinary approach toward solving the Sustainable Development problems in each area of modern humanity development is an imperative today and tomorrow. Until recently, companies could decide whether to share information about their greenhouse gas (GHG) emissions and how climate change might affect their business models. But that's changing rapidly. A suite of new laws most notably in the European Union and United States will soon make "climate-related disclosures" mandatory across much of the global economy. But it's not just that: Companies have long seen the global patchwork of disclosure frameworks as an impediment to reporting. But these are consolidating as regulators develop a better understanding of how climate change affects business performance. This is making reporting standards clearer and thus easier for firms, dispelling one of the key arguments against climate disclosures. The bottom line is that climate disclosure has reached a tipping point. Mandates are becoming the norm. And where differences lie between more stringent and 'weaker' mandates, current trends point toward the stronger rules pulling ahead, Amanda Carter(2024).

In this article we explores: first, the impact of climate changes and climate risks and the activities regarding this modern global society problem on the Accounting as scientific field, especially on his content. Our aim is to develop new approach to this issue. <u>So, the 1st exploring question is (1steq)</u>: *How the climate changes and involving risk impact the traditional Accounting content?* Modern Accounting content has become more complexity under this impact. "Numerous"new branches of accounting are emerging in response to this evolving landscape. Indeed, it only one branch developed as respond to all challenges, but numerous terms was used for defining this branch.

Further, in this article, we explore this impact on the Accounting professions, as empirical field as well. Accordingly, our <u>2d exploring question (2nd</u>eq) in this research study is: *How the climate changes and involving risk impact the accounting professions?* On empirical side, Accounting as profession live the most dynamics times in his developing history, almost like those in the 14 Century when Double Entering System was discover, or with those processes at the end of 19 Century when Industrial Revolution and Industrial companies needs for financial information's, led to develop Bookkeeping toward Accounting as modern information system. The accounting profession will face significant changes in the next decade, and professional organizations, their members, and educational institutions should respond. The three changes—evolving smart and digital technology, continued globalization of reporting/disclosure standards, and new forms of regulation are also major challenges for the profession. In recent years, sustainability has become a paramount concern for businesses and investors worldwide. With growing recognition of the Environmental, Social, and Governance (ESG) factors, organizations are now expected to account for their impact beyond financial performance. This shift in mindset has led to the emergence of sustainability accounting a practice that integrates ESG metrics into financial reporting and decision-making processes, Joseph, Aldeia (2023). The main hypothesis based on basic observation in this research study is: Climate changes and climate risk have significant impact on Accounting and accounting profession, too much significant which can lead toward big adjustments and adoptions. We use deductive investigation to conclude the study, which will in return, reject or accept the hypothesis. Qualitative research method will be used to explain the topic. Conducting in-depth interviews with experts in the field will be the research technical.

2. Methods

How modern Accounting and Accounting profession, on a global scale, have adapted and responded to new challenges connected with climate changes and connected clime risks are the main exploring problem in this article. *The main point is the impact of climate changes on Accounting and his content as science, and the impact on Accounting and Accountants as professions.* Developing and practices new accounting branch, Accounting for Sustainable Development (ASD), has become an imperative for organizations, for society, for people, worldwide. This research paper follows the IMRaD format. So the structure of the study is:

Title: **The impact of climate change and climate risk on the Accounting and Accounting professions**
Abstract: pages 1, words 217, characters (no spaces), 1.331, characters (with space) 1.550, paragraphs3, lines 17
I***ntroduction:***pages2. words 837, characters (no space) 5.012, characters(space), 5.855, paragraphs 4, lines 59
Methods: pages 3, words 529, characters (no space) 3.304, characters (with space) 3.831, paragraphs 14, lines 48.
Results: pages 7, words 2.657, characters (no space), 16.536, characters(with space) 19.607, paragraphs 55, lines 267
Discussion: pages 2, words 774, characters (no space) 4.686, characters (with space), 5.462, paragraphs 9, lines 59
Conclusion: pages 2, words 399, characters (no space) 2.516, characters (with space) 2.914, paragraph 2, lines 30
References. 32

In our researching we formulate two main questions in order to find answer for our investigation aim. To collect dates for 1st eq question, we have been made and qualitative research using conducting in deep interweaves with experts in the field using the Research Gate platform (one of the most valuable platform for academic researchers).

Question (1): Which is the best term for accounting branch concern the climate changes and substantial development?April29, 2024,https://www.researchgate.net/post/Which_is_the_best_term_for_accounting_branch_concern_the_climate_changes_and_substantiable_development

For some dates (number of writing papers concern Sustainable development impact on Accounting, we collected dates for several academic databases (Scopus, Web of Science, PubMed, or Google Scholar). For the different terms used for naming the accounting branch concern Suistantable development we collected dates from other publications. Our targets were: journal articles, excluding other publication types, such as books, book chapters, and conference proceedings, Hartanto& Firmansyah (2023). We used deductive investigation to conclude the study, which will in return, reject or accept the hypotheses. Qualitative and quantities research methods were used to explain the topic. Bibliometric analysis and his tools we used for analyzing books, articles, or other publications. Conducting in-depth interviews, one single question composite, with experts in the field was the research technical. For the 2nd eq, carefully observation of the theory and practice activities for the exploring problem was made by the authors. We used thematic analysis as a technique (for reading deep interiors transcripts and to generate new insights and conclusions for the 1steq. Content analysis we used to as well, for analyzing the dates from articles, books, books chapters and other publications, Kibiswa, N. K. (2019).

3. Results

Research results spoke that the increasing awareness of global environmental changes and climate risks has profound implications for the Accounting as science and Accountingas profession. As businesses face mounting pressure from stakeholders to adopt sustainable practices, the role of accounting is evolving to encompass not only financial metrics but also social and environmental considerations. This shift is driven by the recognition that traditional accounting frameworks may not adequately capture the risks and opportunities associated with sustainability. Financial accounting, Cost accounting and Management accounting are the main branches in tradicianolly accounting content approach. The aim and tasks of financial accounting are preparing financial statements and financial reporting. On the other hand, management accounting is meant for the internal purpose of the organizations. Cost accounting is a part of management accounting through which company plan, analyses and control its costs.

It is obvious that none of the above parameters based on accounting branches have any connection with the impact of climate change on the social and ecological landscape. So, this accounting concept does not include a branch in its content, which will be will be aimed to generate information about the impact of modern corporate activities on the environment and people's lives. We live in a period in which clime change and climate risks are the most important problem for modern society. The importance of information about the impact of the organization's work in all social areas is vital for human survival on Earth. Including the new accounting branch as a new in tradicianary accounting content concept, born as response to all the above social and environmental events faced by modern human living, is imperative for the modern Accounting as science and Accounting profession, and for the responsible institutions and regulatory bodies. Under this impact, the traditional concept for the Accounting content is going to be change. Accounting in his history, from the early beginning in Mesopotamia and Egypt, then Venetia and Dubrovnik, than industrial revolution in England,, always has been follow society events and have been produced reports with information's for this events. This information has been addressed toward different internal and external users. Following these trends, at the last decades of 20 century,(1970 is the years which is connected with the starting of developing this branch) , new era in Accounting as science and as profession has begun.

3.1 Accounting for Sustainable Development

A plethora of research articles, books, conference papers, blogs, and other publications take this problem in the center of their researching. "According to Ozili (2021), practitioners and academics have used several titles to describe sustainability accounting, such as environmental accounting (Gray et al. 1995; Larrinaga-Gonzalez and Bebbington 2001; Lamberton 2005; Jones 2010), environmental reporting (Sahay 2004; Clarkson et al. 2011), social accounting (Mathews 1984; Mathews 1993; Dillard 2014; Retolaza et al. 2016; Perkiss and Tweedie 2017), social and environmental accounting (Ball and Craig 2010; Cormier et al. 2011), corporate social reporting (Gray et al. 1995; Sotorrío and Sánchez 2010; Carnevale et al. 2012; Brennan and Merkl-Davies 2014), corporate social responsibility reporting (Bouten et al. 2011; Belal and Cooper 2011; Dhaliwal et al. 2011), and non-financial reporting (Stolowy and Paugam 2018; La Torre et al. 2018; Dagilienė and Nedzinskienė 2018)", Miriam, Jankalova, Radoslav.Jankal. (2024).

Recent four years a few researches article has been written on this topic systematic literature review for clime change impact on accounting, researchers about the question what, how many, by which authors, from which countries and other criteria, Pawan Adhikari et al.(2025).All this paper stresses the emergency of urgent developing of new accounting branch and put this branch to work: produced financial reports witnew metrics, and nonfinancial information. In above citeted publications, we can see that several new terms for defining this new branch was used: Accounting for climate changes, Accounting for climate, Carbon accounting, Green accounting, Environmental accounting, Social accounting, and many others. In this paper we are going to create our concept for the new content of contemporary accounting and for the name of new accounting branch concern the climatechanges. Our perspective on standardizing terminology in scientific research, especially for clarity and effective communication, is valid and important. Using a unified term such as "Accounting for Sustainable Development" can indeed facilitate greater understanding and coherence in discussions, research, and literature. Establishing a common language is particularly crucial in interdisciplinary fields like sustainability, where various stakeholders may have different backgrounds and focus areas. In our new concept the main branch in contemporary accounting are: Financial Accounting (FA), Cost Accounting (CA), Management Accounting (MA), and Accounting for Sustainable Accounting (ASD). The base for above our proposal is the analyzing results of deep interview dates.

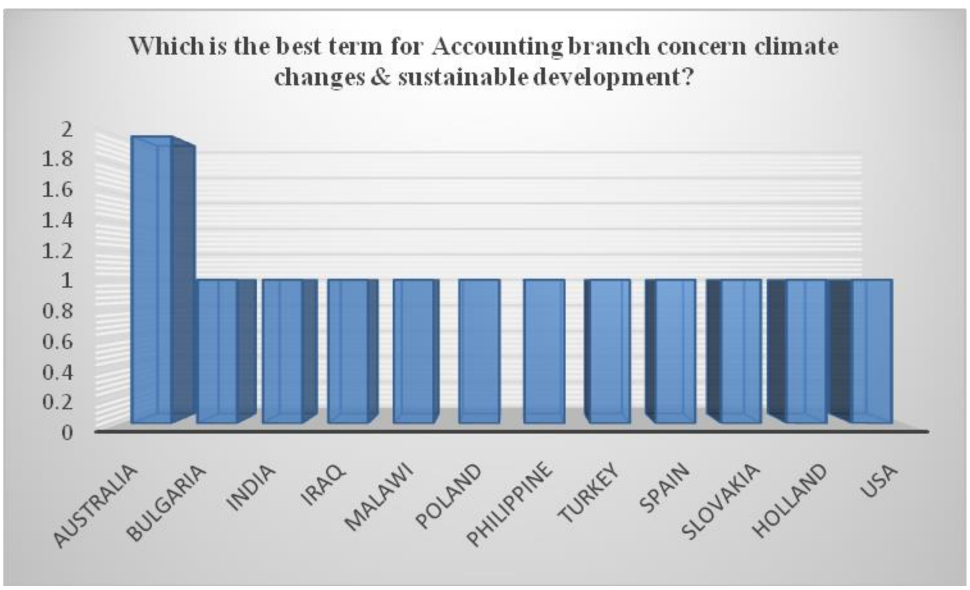
Vol. 8, No.10; 2024

ISSN: 2456-7760

Main point of almost 90% of the answers are:

"The intertwined relationship between science and accounting regarding the subject matter is ustainability"
"We have Sustainable Development Goals, so we must have an information system information system that will follow the achievement of these goals. This can be done by developing new Accounting concept…."
We have IFRS (International Financial Standards) Foundation and ISSB-International Sustainability
Standard Board. In 2021 announced a decision for establishing the ISSB develops a comprehensive global blaseline of sustainability disclosure to meet investors' information needs. So, Accounting for Sustainable Development or Sastantibility Accounting, can be the best standardization term for concerning branch:

Table 1. Deep interview answers by researchers from different countries



The researchers in our deep interview were strongly united about the right term for the new accounting branch concerning the sustainability business and society development. Almost 92% of them accept the term Accounting for Sustainable Development as the most adequate term.

Table 2. Answers in percentage (%)

Which is the best term for accounting branch concern the climate changes and substantial development?	
Accounting for Sustainable Development (ASD)	92%
Other	8%

Table3. Accounting for Sustainable Development (ASD) and his subsidiary branches in the new Contemporary Content Accounting Content –CCAC (*authors creation*)

Sustainability reporting **ES G reporting** **Environmental Accounting** **Sustainability Cost Accounting** **Social Accounting** **Integrated Reporting** **Triple Bottom Line (TBL) Accounting** **Green Accounting**	**Disclosure**: ↘↘↘ Financial information in accounting reports –old concept→PROFIT ↖Nonfinancial information in →accounting reports	**Contemporary Accounting Content:** ↖Financial accounting ↖Cost accounting ↖Management accounting Sustainable Development ←Accounting well-being of people and the planet. This means organizations that adopt TBL framework

Each of those main branches has their own subsidiary branches. Accounting for Sustainable Development as primary accounting branch is composition from the following subsidiary branches: ***Sustainability Reporting:*** focuses on the disclosure of non-financial information regarding a company's environmental, social, and governance performance. ***ESG Reporting:*** specifically relates to the reporting of environmental, social, and governance factors, often aimed at investors and stakeholders. ***Environmental Accounting:*** concentrates on measuring and reporting the environmental costs and benefits associated with business operations. ***Social Accounting:*** addresses the social impacts of a company's activities, measuring aspects like community engagement and social responsibility. ***Integrated Reporting:*** combines both financial and non-financial data into a single report, providing a cohesive view of organizational performance. Triple Bottom Line Accounting: Assesses a company's commitment to social, environmental, and economic responsibilities. ***Triple Bottom Line Accounting:*** the TBL is an accounting framework that incorporates three dimensions of performance: social, environmental and financial. This differs from traditional reporting frameworks as it includes ecological (or environmental) and social measures that can be difficult to assign appropriate means of measurement. In economics, the triple bottom line (TBL) maintains that companies should commit to focusing as much on social and environmental concerns as they do on profits. TBL theory posits that instead of one bottom line (profit), there should be three: profit, people, and the planet, better, planet, people, profit. A TBL seeks to gauge a corporation's level of commitment to corporate social responsibility and its impact on the environment over time. ***Sustainability Cost Accounting:*** focuses on determining the costs associated with sustainable practices and the benefits of sustainability initiatives. Using those subsidiary terms alongside Accounting for Sustainable Development can help delineate specific areas of focus within the broader field. Each subsidiary branch has their subsubsudiary branches.

3.1.1 Accounting Sustainable Development reporting principles

Analyzing all this collect dates, we can make the following constitutions:

- sustainability accounting can improve a company's reputation and competitive advantage. By demonstrating a commitment to sustainability, this can help attract and retain customers, employees, and investors who value sustainability.
- sustainability can also spur innovation, resulting in new products, services, and business model.

To achieve this important aims, SDA, develop seven main principles on which his functionality will be based, Saumya Tyagi(2023). When we say Principles of Sustainability Reporting, we are talking about the concepts and practices that underpin, and guide the process and content of sustainability reporting. Think of it as a best-practices framework for reporting that ensures that the finished report is authentic and credible. Those principles are: *Materiality:* having a clear conception of what sustainability issues are material/relevant to a business is fundamental to the reporting process. Companies have to prioritize the topics that are key with regard to their economic, social, and environmental impact, *Stakeholder Inclusiveness:* in a way, stakeholders are the audience for whom the report is made. These include internal stakeholders like employees, management, shareholders, and investors as well as external stakeholders like consumers, suppliers, the government, communities, etc. Essentially a stakeholder is any individual or entity that is affected by or can influence the workings of the concerned business, *Accuracy,* the other principle is. A sustainability report contains informational content in the form of quantitative and qualitative data. For example, reporting on waste is mostly quantitative while reporting about supplier selection criteria is qualitative. It is important to maintain a high degree of accuracy for both. In practice, accuracy means providing relevant supporting information such as methodology. Sharing with the stakeholders how the data was gathered and analyzed is an important part of the report. Also, in cases where data from direct sources is not available and instead, it is either estimated or proxy data is used, it is important to provide the sources and techniques used for the calculations. (A common example of this is with regard to GHG emissions calculations). Then, *Clarity.* It is important that stakeholders can find the desired information in the report without too much effort. The information should be presented in a way that any stakeholder, who has even a basic understanding of the operations of an organization, can find it and be able to underset. *Comparability*is the next principle, and his meaning is that the information provided in the sustainability report should be comparable across organizations and time. This means that stakeholders should be able to compare the reporting company's performance over time and, to a degree, with other companies. To keep the information comparable over time, consistency has to be maintained. Material topics have to stay consistent, and methodologies used to calculate data. To achieve comparability across organizations, companies use sustainability reporting standards. The disclosures in these standards can be used by stakeholders to compare the reporting company with its peers, within or across industries as well as geographical areas. Next principle is *timeliness*. Timeliness plays an important role in a sustainability report's effectiveness as stakeholders heavily rely on timely information and use it for decision-making. The principle of timeliness has two key aspects: regularity, and how timely is the information with regard to the impacts being described? This is achieved by having a regular reporting schedule. Usually, unless dictated by regulation, companies report either annually or biannually. This helps keep the information timely and relevant to the stakeholders. It also gives enough of a period of time between two reports to be able to access the data better in terms of changes through time. A sustainability report is at the core of a company's sustainability communication. A lot of its value lies in its credibility. A reliable sustainability report is able to effectively perform its compliance functions as well as be trusted by stakeholders. So, ***Reliability*** is the next principle. Companies can ensure reliability by: Practicing standards-based reporting. There is multiple sustainability reporting standards available. Some of the key ones are: GRI (Global Reporting Initiative), IIRF (International Integrated Reporting Framework), and SASB (Sustainability Accounting Standards Board). Providing evidence for shared information, and clear explanations of any associated uncertainties. Documenting the decision-making processes behind the report, including processes for determining content, topic boundaries, and stakeholder engagement. By getting the report audited/assured externally, by a sustainability professional/auditor.

3.2 Process of Implementing Accounting for Sustainable Development in companies

Each company needs Sustainability Accounting to promote sustainable development, and reduce its impact on the Environment, Society, and Economy (ESG concept). Sustainability performances were tracked and reported using financial and managerial accounting for a long time, but not successfully. Accounting for Sustainable Development has the vital role to help businesses and organizations tracked and informed sustainable performances with success next years and decades.

Table 4. Key steps in the ASD process implementation

1 > Setting sustainability goals

2 > Measuring and reporting sustainability performance

3 > Integrating sustainability into decision-making processes

4 > Engaging with stakeholders

In the process of implementation the Accounting for Sustainable Development in some business, there are four key steps to be considered:**1**)setting sustainability goals: identify sustainability issues relevant to your business. Defining clear and specific sustainability goals. Align sustainability goals with overall business strategy.**2**) Measuring and reporting sustainability performance: this step involves selecting sustainable measures and indicators, collecting data, analyzing results, and reporting on company sustainability performance to internal and external stakeholders.**3**) Integrating sustainability into decision-making processes. This involves incorporating sustainability considerations into business decision-making processes such as: investment decisions, product development, supply chain management, and risk management. **4**) Engaging with stakeholders. This involves engaging with your internal and external stakeholders, such as employees, customers, suppliers, investors, and communities, to understand their sustainability expectations.

3.3 Accounting profession in this process – future changes

The accounting profession will face significant changes in the next three decades, and professional organizations, their members, and educational institutions should respond. According to USA Association of Chartered Certified Accountants (ACCA) research has explored these important changes, expected to be encountered by the year 2025. Three of those changes we highlighted here:

- Accountants will use increasingly sophisticated and smart technologies to enhance their traditional ways of working, and these technologies might even replace the traditional approach.
- Continued globalization will create more opportunities and challenges for members of the accounting profession.
- Increased regulation, and the associated disclosure rules, will have the greatest impact on the profession for years to come.

Social and environmental issues, along with the associated measurement and reporting complexities of these issues, has allowed accounting professionals to open their minds to the possibility that accounting has the capacity to change. The important implication is that all professional accountants will be expected to look beyond the numbers, which will, in turn, enhance collaborations among members of multiple professions, including accountants, doctors, lawyers, environmental scientist, sociologists, and so on. Future accountants will increasingly need education in digital technology, including cloud computing and use of big data, globalization, outsourcing of accounting services, and evolving regulations (tax regulation, new forms of corporate reporting, integrated reporting regulation, and so on). At present, accountants lack knowledge in transformation of new disclosure regulations, new forms of disclosures, and awareness of the interconnections of financial and non-financial reporting and it's importancy for modern society development. Professional accountants will need the skills to provide more all-inclusive corporate reporting, which tells less about the numbers and more about the narrative of the organization.

4. Discussion

The results present above show significant gaps between the developing processes of adaptation the accounting to the clime changes from one side, and regulatory requirements and authoritative guidance regarding climate disclosure at on national and global scape. The demands for increased disclosure and standardization of that disclosure is nowadays is most important than ever before. Various stakeholders, including investors, customers, and regulatory bodies, are demanding greater transparency regarding corporate sustainability efforts. This has led to the development of frameworks and standards, such as those established by the Sustainability Accounting Standards Board (SASB), which guide companies in reporting sustainability issues that, could affect their financial value. Businesses can prepare for ISSB-aligned reporting now by ensuring their climate data is traceable, transparent, and reliable. In January 2024, new standards from the International Sustainability Standards Board (ISSB) kicked into effect. These standards — IFRS S1 and IFRS S2 — have been endorsed for use by securities regulators worldwide and will create a new global baseline for mandatory and voluntary climate disclosure. Businesses can prepare for ISSB-aligned reporting now by ensuring their climate data is traceable, transparent, and reliable.

After all that we wrote the next steps must be the following:

- universities should make chouse to invest in existing faculty members for developing new curricula, training and learning or recruit experts to coordinate and lecture new lectures concerning tha sustainability development and sustainability accounting,
- big accounting firms have to conduct surveys on cloud computing,
- concerning the problem of big data, technological change, new forms of fraud and corruption, the corporate sustainability for addressing the ongoing and future opportunities and challenges facing the profession must be developed,
- many accounting academics must investigate more narrative corporate reporting and work on new accounting study curricula
- a growing number of accounting academics and their PhD students have to look at social and environmental sustainability issues and the associated global frameworks.

Despite ongoing efforts by professional accounting organizations and academic researchers, there is a surprising gap in research that deals with the changes that will impact accountants and professional accounting organizations. Future research should drive business collaborations and collaborations between interdisciplinary academic researchers to reveal strategic responses to and pro-active strategies on changes in digital technology, the continued globalization of standards, and new forms of regulation and associated stakeholder expectations. "The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries—developed and developing—in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth—all while tackling climate change and working to preserve our oceans and forests."Farrukh Rehman (2024). The cooperation between the theory and practice as well is too important. There was luck of such cooperation in past 3 decades. Holistic and interdisciplinary approach toward solving the Sustainable Development problems in each area of modern humanity development is an imperative today and tomorrow. This necessity is because climate change disclosures politicizes are complex question concern several global phenomena's: about greenhouse gas (GHG) emissions intensity and energy use, participation in emissions trading schemes, Global Institutions and corporate governance and strategy in relation to climate change, performance against GHG emissions reduction targets. Jullie Cotter, et al. (2011). Sustainable development accounting, which aims to integrate environmental, social, and governance (ESG) factors into traditional accounting practices, has faced several challengesobstacles that have impeded its widespread success. Here we are going to stress some of the main: lack of standardization, regulatory challenges, fragmentation of initiatives, perception issues, resistance to changes, educational and awareness, short-term focus and resource allocation. With the latest actions taken by the Nacional and international professionals authority Bodies, above stressed problems have to be overcomes next years.

We are going to finish our discussion with the following assumption: someone in our in-depth interviews conversation told to us that practicing the Accounting for Sustainable Development and measuring, reporting and disclosure the business Clime changes performances is like teaching money to play tango. That's mean that this process will be hard. Yes, it's clear that the process go slow last 2 decades and isn't easy. But go, never stop and go faster. Nowadays, more than ever, there are clear formulated guidance's, principles and standards as strong foundation of the process. This process can't stop because it's too important for the Planet Earth and peoples surviving next decades and centuries.

Conclusion

Accounting for Sustainable Development (ASD), known as Sustainability Accounting (SA) as well, originated in the 1970s is the new Accounting branch in modern Accounting Content Concept. This branch was developed under the impact of climate changes on the socity. The focused of ASD is on the disclosure of non-financial information regarding a firm's performance to various stakeholders. This includes measuring, analyzing, and reporting a company's social and environmental impacts, which are increasingly relevant in today's business landscape. ASD offers many benefits to businesses by improving: resource efficiency, transparency, stakeholder participation, risk management, reputation, and competitive advantage, helps companies assess their resource use and improve resource management. Businesses may save expenses, and waste, and conserve resources by tracking resource utilization. This can result in increased efficiency, reduced environmental impact, and improved profitability. Sustainability Accounting helps companies measure and disclose their social and environmental impacts. This improves transparency by giving stakeholders accurate and reliable company performance data. The evolving landscape of Accounting for Sustainable Accounting presents both challenges and opportunities for accounting professionals. As the demand for sustainability reporting grows, accountants must adapt their skills and knowledge to effectively measure and communicate the impact of environmental changes on business performance. This research show that the maturity of the company on national scale to climate change (throughGHemissions), climate change cost increases through emissions trading or other regulations, and the physical effects of climate change such as variable weather, uncertain access to water and extreme weather events slowly go up, at the end of last century, and go more and more up at the end of second decades of 21 century. Too much have to be done, next months and years, in all concern spheres on Accounting as science/theory and as profession as well. This can be a relevant themes in further researchers paper on this issue. The accounting profession will face significant changes in the next decades, and professional organizations, their members, and educational institutions should respond. With growing recognition of the Environmental, Social, and Governance (ESG Concept) factors, organizations are now expected to Accounting and accountants for their impact beyond financial performance. Accounting as science and Accountants as professionals, have a vital role to play in integrating ESG (Envaermental, Society, and Government) metrics into financial reporting and decision-making processes. By embracing sustainability accounting practices, organizations can enhance their credibility, respond to stakeholder expectations and contribute to a more sustainable future.

References

Amanda, Carter. (2024), *Corporate Climate Disclosure Has Passed a Tipping Point. Companies Need to Catch Up*, World resources Institute https://www.wri.org/insights/tipping-point-for-corporate-climate-disclosure"

Miriam, Jankalova, Radoslav.Jankal. (2024), *Review of Sustainability Accounting Terms, Adm. Sci. Adm. Sci.14*(7), 137; https://doi.org/10.3390/admsci14070137

Meyer, D.Glantz.(2013), Chapter 2 – The Terminology of Addictive Behavior,https://www.sciencedirect.com/science/article/abs/pii/B9780123983367000024.

Daniel, Susskind, (2017), *Expect the Unexpected - How to Lead in a Changing World will take place on 20 September at the EICC*, The ISAC Conference2017,https://www.icas.com/members/professional-development?a=249291

Joseph, Aldeia.(2023), *the Rise of Sustainability Accounting: Integrating ESG Factors into Financial Reporting and Decision-Making. Available online*, https://www.linkedin.com/pulse/

Faye, Chua. *Big data: its power and perils*, https://accaglobal.com/gb/en/technical-activities/technical-resources-search/2013/december/big-data-its-power-and-perils.html

Julie. Cotter. At. al.(2011), *Standardized reporting of climate change information in Australia*. (2011), Sustainability Accounting Management and Policy Journal 2(2):294-321DOI:10.1108/20408021111185420, https://www.researchgate.net/publication/235268738

United Nations, General Assembly. Economic and Social Council. (2024), *Progress towards the Sustainable Development Goals*, Report of the Secretary-General,

THE 17 GOALS | Sustainable Development (un.org)SG-SDG-Progress-Report-2024-advanced-unedited-version.pdf

Ashley, Shedlock. (2024), *8 Examples of Qualitative Research*, https://www.greenbook.org/insights/qualitative-market-research/8-examples-of-qualitative-researchi

Budi, Harsanto. (2023), A twenty years bibliometric analysis (2002 – 2021) of business economics research, in ASEAN, DOI:10.1080/23311975.2023.2194467License BY 4.0, https://www.researchgate.net/publication/369736380_A_twenty_years_bibliometric_analysis_2002_-_2021_of_business_economics_research_in_ASEAN

Kibiswa, N. K. (2019), *Directed Qualitative Content Analysis (DQlCA): A Tool for Conflict Analysis*. The Qualitative Report, 24(8), 2059-2079. https://doi.org/10.46743/2160-3715/2019.3778

Gulluscio, Carmela.et al. (2020), *Climate Change Accounting and Reporting*, A Systematic Literature Review12 (13), 5455; https://doi.org/10.3390/su12135455

Doddy, Setiawan. et al. (2023), *A bibliometric analysis of evolving trends in climate change and accounting research*, Cogent Business & Management, Volume 10, 2023 - Issue 3,https://www.tandfonline.com/doi/full/10.1080/23311975.2023.2267233

Jaua, Sharma. (2024), *What is the Difference between Financial, Cost and Management Accounting?* Jhttps://www.shiksha.com/online-courses/articles/difference-between-financial-cost-and-management-accounting-blogId-157721))

Marie. Elodie. Perga. et al.,(2023), *The climate change research that makes the front page: Is it fit to engage societal action?* https://www.sciencedirect.com/science/article/pii/S0959378023000419

Pawan, Adhikari. et al, (2025), *Climate Change Accounting, Reporting and Accountability: Responses by Governments, Not-for-Profit Organizations and Charities*, Journal of Public Budgeting, Accounting & Financial Management (submitted paper).

Saumya, Tyagi. (2023), *Principles of Sustainability reporting*,https://askelsustainabilitysolutions.com/7-principles-of-sustainability-reporting

Workbook-E Conducting in Depth Interviews, (2023), https://wallacefoundation.org/sites/default/files/2023-09/Workbook-E-Indepth-Interviews.pdf:

Sarah, Elsie. Baker. (2023), *How many qualitative interviews is enough?*Content Middlesex University and Rosalind Edwards, University of Southampton, NCRM Methods Review paper file:///C:/Users/Taseska/Downloads/how_many_interviews.pdf, Google Lens.

Mercia Group. (2022), *Introducing the Future of Sustainability Accounting: ESG,* https://www.mercia-group.com/mercia-news-and-blog/sustainability-accounting-esg/

Will, Kenton. Et al. (2024), *Triple Bottom Line,*https://www.investopedia.com/terms/t/triple-bottom-line.asp#toc-what-is-the-triple-bottom-line-tbl

Muhammad, Azizul. Islam. et al.(2017), Future of the Accounting Profession: Three major changes and Implications for Teaching and Research, https://www.ifac.org/knowledge-gateway/discussion/future-accounting-profession-three-major-changes-and-implications-teaching-and-research

Farrukh,Rehman.(2024), Building fair and inclusive future, https://www.ifac.org/knowledge-gateway/discussion/islamic-finance-and-sdgs-building-fair-and-inclusive-future

Julie Cotter at al.2011, Standardized reporting of climate change information in Australia, https://www.researchgate.net/publication/235268738

Kosarkoska, Desa.Irina.Joldeska.(2012), The Main Process In the International Financial Reporting at the Beginning of 21st Century.*Procedia - Social and Behavioral Sciences* 44:241–249 DOI:10.1016/j.sbspro.2012.05.026, License CC BY-NC-ND 3.0

Aisa, Trei, Agustini at al. (2024), Climate Change Accounting and Disclosure: a Systematic Literature Review, *The Indonesian Accounting Review*DOI:10.14414/tiar.v14i1.3829

Dumoulin,Andre.George.(2024),Global Climate action in mid-2024, https://www.ciat.org/ciatbloaccion-mundial-por-el-clima-a-mediados-de-2024/?lang=en

Robert, S. Kaplan et al., (2021), Accounting for Climate Changes, *Harward Business Review*. https://hbr.org/2021/11/accounting-for-climate-change

ACCA, Think Ahead,: Climate change and IFRS Accounting Standards, https://www.accaglobal.com/gb/en/student/exam-support-resources/professional-exams-study-resources/strategic-business-reporting/technical-articles/climate.html

Joldeska, Irina et al., (2022), Environmental Management Accounting in Service Sector. *European Journal of Economics, Law and Social Sciences,* 6 (2). pp. 128-134. ISSN 2519-1284

Aggarwal, Rimjhim. et al, (2024), Accounting for Climate Risks in Costing the Sustainable Development Goals, IMF Publications, March 8, 2024. https://www.imf.org/en/Publications/WP/Issues/2024/03/08/Accounting-for-Climate-Risks-in-Costing-the-Sustainable-Development-Goals-544040

Source: KPMG(Klym Belt Peat Marwick Goerdeler)International Limited, multinational professional services network and on for the big four accounting organization, along with Ernest Yang Deloitte and PwC. - Пребарување на Google