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Sustainability Accounting: Theoretical Integration and Approaches Conceptual

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ABSTRACT: The acceleration of changes in practice and in scientific research in the field of sustainable development has not yet made it possible to clearly understand its role in science in the field of accounting. The research method is in the form of deductive and inductive reasoning accompanied by descriptive and comparative analysis, where this article provides an explanation of research studies on sustainability accounting from a theoretical and practical point of view based on research sourced from the web of science database from a period of time. time 2000 – 2020.

The results of this research describe sustainability accounting which is carried out based on accounting theorization and describes the conceptual framework in scientific development in the field of accounting. The conceptual framework approach of sustainability accounting is able to complement the space shown in research based on accounting theorization. The aim of the sustainability accounting conceptual framework approach is to propose a structure, assumptions and objectives to ensure that stakeholders and external stakeholders have credible information on sustainable development performance.The findings of this research are in the form of a proposed conceptual framework as a basic element of a schematic approach to the integration of sustainability accounting objectives which is able to describe accounting tasks in an accountability system.

KEYWORDS: sustainability accounting, theorization, integration, accountability

I. INTRODUCTION

The increasing growth in public awareness of sustainable impacts has given rise to the need for business solutions that are in line with the concept of accountability (Bebbington & Larrinaga, 2014). The basic principle is to determine the company's relationship with shareholders and stakeholders, who in turn are able and can influence the company's financial and non-financial value (Maqsood Ahmad Sandhu & Shamsuzzoha, 2018). The company's sustainability strategy that has been implemented so far can in turn influence financial value. However, the expected accountability innovation is only considered a fad so that it can create inefficiencies and not achieve the expected goals (Schaltegger & Wagner, 2006).

Reporting on conceptual sustainability is able to develop rapidly throughout the world. Scientific research discussing sustainability accounting is very extensive, however, the development of accounting changes is very slow and little can be known and used about the successful implementation of sustainability accounting (Zyznarska- Dworczak, 2019). So, however, the development of accounting science is still considered to require significant conceptual changes. in accordance with the company's business trends in the company's business information system. There is still no sustainability accounting framework as an instrument in providing reliable corporate economic, social and environmental performance to stakeholders and shareholders, because the normative approach presented in the literature is still rather general (Andrianto, 2019).

This article aims to present sustainability accounting scholarship from a conceptual perspective and to propose a theoretical framework as a normative solution (Halog & Manik, 2011). In accounting theory it is used to reason concepts inductively and thus it is possible for us to show an inductive reasoning and the state of development of accounting in sustainable business, and to diagnose the main gaps in accounting development which in turn through accounting theory from the logic of deductive reasoning (Zyznarska- Dworczak, 2019). This article can recognize the expected changes in accounting science, and support the reporting of sustainable development achievements, as well as managing companies sustainably. This article also proposes the author's solution in the form of a conceptual approach to sustainable accounting science and rather shows a further scientific program in postulating a detailed theoretical framework for sustainable accounting. The problem formulation allows the author to propose a thesis as follows:

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1. What is the importance of the concept of sustainable development in practice and science which requires unification of various approaches in the role and importance of accounting science.
2. How accounting changes are influenced by the concept of sustainability and future developments in sustainability accounting that can be interpreted from accounting theory.
3. What is the conceptualization of sustainability accounting which requires a framework with certain structures, assumptions and objectives which aims to provide reliable information to external and internal stakeholders about the company's achievements in sustainable development.

II. RESEARCH METHODS

The research method in this article is based on deductive and inductive reasoning theory as well as descriptive and comparative analysis. This article is structured as follows, the first part, contains the background to the research study and presents the development of sustainability accounting from a theoretical and practical perspective. In this case the author needs a bibliometric analysis that includes research data on sustainable reporting and sustainable accounting carried out from 2000-2020. The database contains 500 publication data related to accounting research, which includes research articles, confrontation papers, and review papers. This section presents bibliometric data on trends in the number of publications and regions analyzed, geographical origins of research and ranking of publications by author. The second stage from the bibliometric angle that reflects citations to items infected by the web of science from 2000-2020 is dedicated to matters related to sustainability accounting research. Another thing, it is based on a collection of statistical data on different quotes. Ranking of the most cited articles by web of science. The third part of this paper provides insight into sustainability accounting issues based on the concepts of positive and normative theory and detects the main gaps in the development of sustainability accounting. The next section presents the author's concept of a sustainability accounting approach as a normative solution for further prospects in the development of sustainability accounting is also demonstrated. Finally, this paper provides the author's comments.

The research results can determine the future outcomes, scope and character of sustainability accounting, and thus can assist shareholders and stakeholders in understanding and using the value concept of environmental, social and governance performance in the creation of long-term value. Where its use can provide valuable support for practitioners, legislators and scientists. The results of this research can also be useful for a conceptual framework in applying sustainability accounting as a practice model for various companies which is a source of reliable and verifiable information in the preparation of sustainability reporting and for making sustainable decisions. Normative proposals based on a pragmatic orientation that can also support regulators in harmonization and standardization of reliable and verifiable reporting on sustainable development achievements and their validation involve accountants or professional accountability skills. Apart from that, the conceptual approach to sustainability accounting can be a benchmark for accounting research that focuses on reporting sustainable development and managing sustainable business entities.

III. SUSTAINABLE ACCOUNTING AND REPORTING IN THEORETICAL CONCEPTS OF SUSTAINABLE DEVELOPMENT

Discussing the concept of sustainable accounting and reporting does not escape the concept of accountability (Lewis, 2014). This concept is defined in various ways, and the term accountability itself is used in various concepts in scientific literature. On the other hand, the concept of accountability is still far from the original concept, namely the "mono-dimensional" concept. For the purposes of this paper, it can be adopted that various concepts of accountability mean that the obligation to account for the impact on the natural environment and society itself, and accounting is one of the instrumental tools to support problem solving involved in the concept of accountability (Lamberton, 2005).

With increasing calls for transparency, organizational management must require accountability in various corporate governance contexts which are increasingly expanding in corporate sustainability strategies, as well as sustainability reporting itself. The context of the sustainability strategy itself focuses on the long-term value of the company by improving strategic operations and improving its risk management reputation (Biondi & Bracci, 2018). Of course, this requires major improvements by developing superior production processes, products and services, using strong market influences and also social, environmental and political influences (Mathews, 1997). The increasing number of sustainable businesses certainly needs to meet the expectations of various stakeholders and participate in providing multi-dimensional results for company sustainability.

Therefore, in determining the company information system, including in particular sustainable accounting and reporting, which has the function of representing the effects and impacts of risks from environmental, social and political aspects on business organizations, but in its development it cannot be done in parallel (Schaltegger & Wagner, 2006).

Strategy in sustainable reporting is one of the most concrete ways of describing how companies can achieve sustainable development goals for the company (Sisaye, 2013). Of course, this will be considered and seen as a manifestation of the concept of much greater accountability towards stakeholders, as well as a manifestation of the implementation or sustainable business model of the business organization even though the position of sustainable reporting is not mandatory for most companies, the number of CSR reports on sustainable development has experienced a significant increase in development (Hasseldine & Morris, 2013). The analytical capabilities of the reports carried out for the purposes of this article were based on a database of continuous disclosure and reporting starting from 2000-2020, where the results of the analysis reveal that almost 60% of all reports and almost 90% are the results of the last eight years. . Apart from that, a rapidly growing trend is also occurring in reporting business organizations. In the period analyzed there were 15,000 reporting organizations and 80% of them reported in the previous five years.

Geographical analysis also shows that sustainable reporting is considered the most popular in Europe. However, in recent years analytical tools for reporting levels in Europe have been outperformed by Asia, where reporting growth dynamics are considered the strongest.

Figure 1 above shows an increase in research interest in sustainable reporting, where the content in this topic is more dynamic compared to research related to sustainability accounting. The trend line visualizes the different trends in the development of scientific interest and the potential level of change in the future that can be analyzed (Ivan, 2009). So it can be concluded that the role of sustainability accounting does not always appear in sustainability reporting, which can be confirmed by scientific research.

According to the author, this explanation proves that there is a dissonance between theoretical approaches and conceptual approaches to research on sustainable reporting and sustainable accounting.

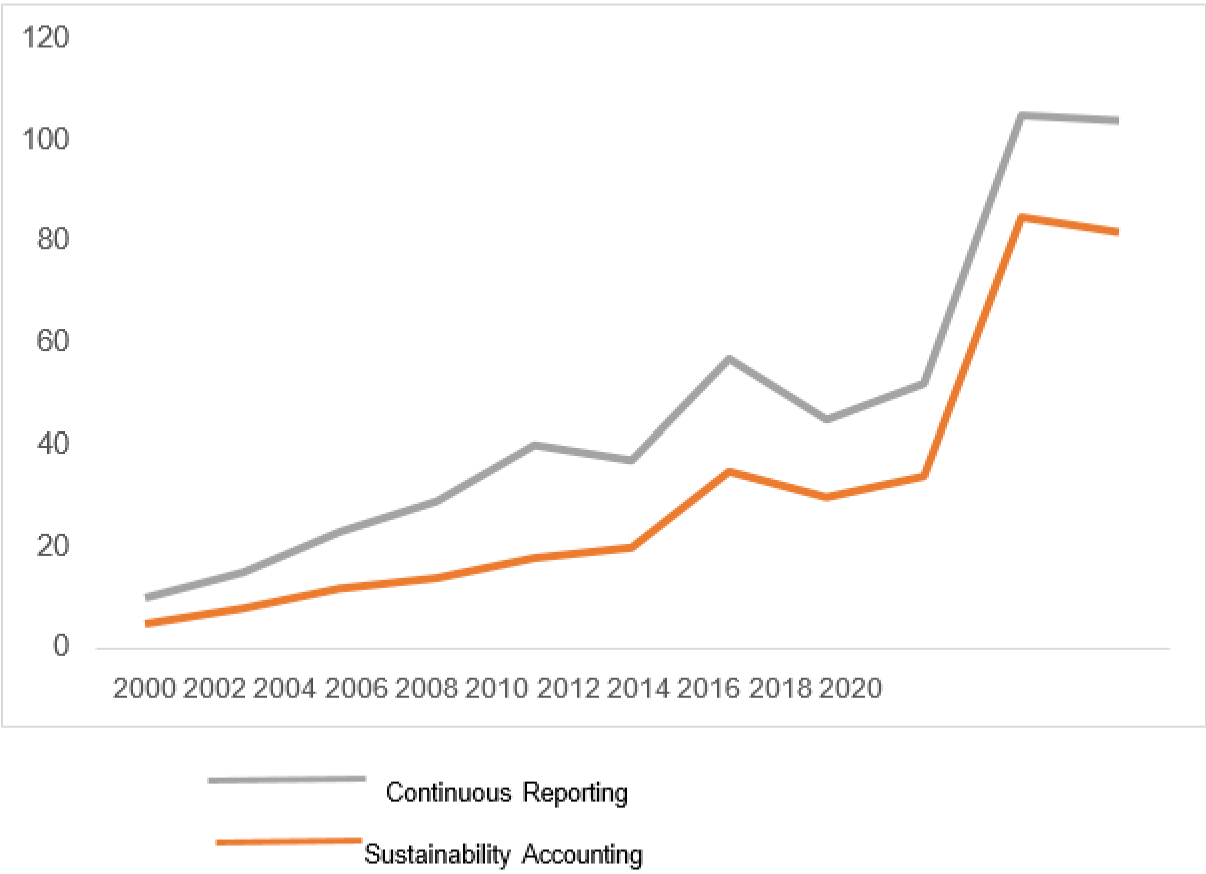

Figure 1.Trend of growth in the number of articles included in the web of science database regarding sustainability reporting and sustainability accounting in 2000 – 2020. Source: based on the web of science database.

Table 1.Number of ranked articles in the Web of Science database relating to the geographic origin of research on sustainability reporting and sustainability accounting in 2000 – 2020.

Country	Continuous Reporting	Sustainability Accounting

United States of America	15.0%	26.7%
Australia	10.2%	8.9%
English	10.5%	10.1%
Italy	9.6%	3.6%
German	9.2%	3.6%
Spanish	8.3%	7.9%
China	4.3%	5.5%

Figure 2 shows that the continuation of related studies on sustainable reporting and sustainable accounting began in the early 2000s – 2020s. At the beginning, the development of sustainability accounting started with a macroeconomic approach and could provide an explanation to the general public about the use of overall asset resources (Young, 2013). By expanding the subjects and objects of corporate accounting which were initially mainly related to environmental and social aspects in the last two decades have been able to bring developments specifically related to the topic of sustainability accounting and sustainable reporting (Zyznarska-Dworczak, 2019), and there has been a rapid increase in increased scientific interest in the analyzed field in the last two decades. Scientific interest in research related to sustainable reporting and sustainable accounting has been able to penetrate more than 80% of the total research in the data base.

Within the scope of geographical research areas on topics related to sustainability accounting and sustainable reporting, with regions with the highest levels of sustainability reporting reaching above 65% of the research on topics analyzed in 2000-2020 came from eight countries as shown in table 1.

In table 1 above, it shows that eight countries are considered the most productive in research interest studies in sustainable reporting, so this shows that there are interesting differences in terms of interest in sustainability accounting and sustainable reporting according to the standards in each of these countries. Some experts say that almost a quarter of all sustainability accounting research comes from the United States, this is very reasonable considering that sustainable development in that country is already in accordance with many the country's regulatory standards, while only about 15% of reporting research is conducted outside this region. There is certainly less growing interest in sustainability accounting research in America compared to research in Europe, with, in particular, low interest in Italy and Germany. If in America research focuses more on sustainability accounting, on the other hand, in European countries research interest in sustainability reporting is more numerous and large (more than 55%), including most of the research coming from England, Italy, Germany and Spain, while almost 10% comes from from Australia.

The large variety of research interest in the areas analyzed from the two topics, both sustainability accounting and sustainability reporting, may have indicated differences in defining aspects of sustainable accounting and reporting as well as difficulties in distinguishing between what is classified as sustainable reporting and sustainability accounting. Of course, this confirms the existence of problems shown in the literature, according to Gray (2006) that sustainability accounting and sustainability reporting and their various difficulties can be described as having various forms and appear in various labels which are used in general terms to provide convenience in covering all forms of accounts. that goes beyond the development of economic growth, and in all reviews on the different labels that underlie that scholarship – social accounting, environmental accounting, social responsibility accounting, social auditing, corporate social reporting, employee and employment reporting and environmental accounting and reporting (Gray , 2002). For all these different reviews, it is more about the direction of approach due to the fact that there is a relationship between sustainability accounting and sustainability reporting that is still ambiguous and still needs to be broadened as a pragmatic necessity by moving beyond procedural tasks that can be designed as report preparation, verification. and information disclosure as well as being able to lead to changes in behavior within the company, so that environmental performance can be improved in line with economic growth targets (Munda, 2003).

Furthermore, there are differences in interest and desires towards sustainable accounting and reporting which can also be interpreted as an overdraft problem in sustainability accounting research in European countries (Maas et al., 2016). It is hoped that there will also be more interest and desire for future accounting research that follows standards in the United States. Of course, what is more, as revealed in the bibliometric analysis, there is a very wide and growing distribution of authors capable of dealing with the subject matter of both analyzed topics, and publications by one author are predicted to not exceed 2% of the total publications.

This phenomenon is characteristic of research interest in sustainability reporting according to the country or place of publication in question (Schaltegger & Wagner, 2006). In sustainability accounting research, the scope of publications is more widespread or less than 30% of all research published in even the most popular journals. Apart from that, it can also be said that the concept of research on sustainable reporting can appear in journals that are closely related to accounting science.

The first part of the study that includes more bibliometric studies can be completed by examining whether there is an integrated approach to business trends and whether there are efforts to build on the concepts of the sustainability accounting framework that have been adopted in the research so far. Based on this analysis, the author focuses more on the Web of Science data base in a bibliometric study on sustainability accounting (500 publications) which reveals that there are only a few research tests on sustainability accounting theory in the Web of Science data base from 2000-2020. Some experts and writers are more adherent to theoretical, social and political approaches, whether they have been practiced in the public or private sphere. The position of accounting's role in this case can be assessed from the perspective of reporting, strategy, management, communication and fulfilling the information needs of both stakeholders which are often narrowed down to the topic of environmental performance analysis only (such as carbon emotions and biogas-based projects), social or local goals for sustainable development that can be assessed from a macro or micro perspective (Di Vaio & Varriale, 2018). Few studies are able to dedicate an approach that focuses only on the type of company, industry, country or region. However, in particular there is research that only focuses on the social accounting matrix.

The second part of this study is able to reflect various citations to source items infected in the web of science in 2000-2020 and is dedicated to sustainability accounting research only. Due to the fact that the results of the bibliometric study in the first part of this research, namely on sustainability accounting, not much research was published in 2000-2020 – the citation analysis period compared to the publication analysis period does not affect comparability. Article citation statistics in the Web of Science database relating to accounting research from 2000-2020 are presented in table 2 below.

Table 2.Overview of article citation statistics from the Web Of Science database with Sustainability Accounting Research from 2000 – 2020

Citation Statistics	
Results found	435
Number of Times cited Average citations per h-Index Item	4205
	9.67
	35

Table 2 above shows a greater response in terms of research citations. Of course, the test results above can illustrate that there are high citations and although there is a limit for bibliometric studies to 500 publications, the citations are above 4000. So the growing interest in sustainability accounting research is proven by the research citations which are quite significant. According to several study experts, social accounting is considered a major challenge for academics, especially as a challenge in finding a particular focus, subject or orientation (Lamberton, 2005). According to the author, social accounting is considered to have various forms and appears under various labels, and social accounting projects are dissimilar and homogeneous in terms of intention, approach, interest, focus or methodology. In addition, according to social accounting is not part of corporate and/or private accounting practices.

Several study experts have found that there are two main paths related to the development of sustainability accounting, both critical and managerial, where the critical path of accounting comes from sustainability reporting, and was found by the author to be a source of problems that can lead to unsustainable development practices and is the implementation of revival or awareness of this problem which is the main focus of attention. From the managerial side, in turn, viewing sustainability accounting scholarship is considered as providing solutions in facing development problems and directing attention to tools that can support the various policy decisions that must be made in a diverse set of circumstances by various business actors and different types of managers. management, as well as different stakeholders (Orlitzky et al., 2003). The author also views in the research publication that theoretical research on sustainability accounting will require:

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- Creation of meaningful indicators and information using a set of tools;
- Support for meaningful interpretation and relevant use of these indicators and information;
- Reliable and transparent sustainability accounting system.

Only in the above conditions can sustainability accounting provide a credible basis for decision making and accountability. They argue in presenting a description of an integrated accounting framework for mapping global environmental, economic and social impacts (Ivan, 2009). On the other hand, they also represent research from all perspectives and macroeconomics which is ultimately not the subject of this article. The existence of social and environmental accounting from the perspective of legitimacy theory, institutional theory, resource dependency theory and stakeholder theory makes the assumption of sustainability accounting as a tool for managing the company's reputation and image as a profit entity (Joseph & Taplin, 2011), in order to adopt structures, systems, or certain company practices implemented by several similar organizations. Of course, something like this can support all the dynamic interactions or relationships of the two organizations competing to complement each other and unexpected social or environmental activities carried out by the company (Finkbeiner et al., 2010). In the author's opinion, the existence of social and environmental accounting can continue to be developed to measure and verify various effects and impacts such as factory closure costs, carbon and emission levels, waste and pollution.

Table 3.The concept of the Sustainability Accounting Approach in the Web of Science data base publication on sustainability accounting research from 2000 – 2020

Accounting Sustainability	Sustainable Accounting Approach	Accounting Development Objectives Continuity
Social accounting; social and environmental accounting	Social accounting is used as a general term concept to provide convenience that includes all forms of "accounts that go beyond the boundaries of economic activity" and is used in all the different labels and products that underlie the concept - social responsibility accounting, social audit, corporate social reporting. , stakeholder dialogue reporting and environmental accounting and reporting and environmental accounting and reporting	The following objectives: * There are no detailed framework concepts * There are obstacles and challenges in the focus, subject and orientation of the sustainability accounting approach * greater dominant meta-theory for social accounting * focuses not only on the environment but also on employees in finding integration in social and environme ntal issues.
Corporate sustainability accounting	A set of concepts that are able to provide support and support for business managers in making various decisions	There are three concepts of sustainability approaches, which are followed by approaches, namely social, environmental and financial approaches
Economic Environment of Accounting	system in operationalizing the concept of a globally integrated accounting framework in the process of environmental and economic accounting guidelines in achieving an integrated database in the concept of input-output analysis	The aim is to integrate in various dimensions the various aspects of sustainable development in a single accounting framework from a global perspective

Sustainability accounting	is a term used to describe management information systems and various new accounting method approaches that attempt to create and provide relevant and quality information in supporting company development in relation to sustainable development.	The future goal is to develop a set of pragmatic tools and concepts in corporate practice that are combined with activities, methods and concept approaches to report on impacts such as: financial impacts, ecological and social impacts as well as the interaction and interrelationship of issues. social, environmental and economic

Various approaches are presented in topics related to corporate sustainability accounting to allow for the implementation of dual track treatment in accounting and the author defines the concept of this approach (Margolis & Walsh, 2001). So the existence of sustainability accounting in this article can begin to be understood as part of, among other things:

- A financial measurement system from economic, social and environmental aspects that is capable of being integrated, and allows communication about the company's achievements in sustainable development to key stakeholders from both internal and external sides, so that it can support corporate accountability.
- Strategic management tools, which are capable of measuring results, and function in assessing the level of implementation of sustainable development principles as a basic concept in determining the company's social and economic, social and environmental responsibilities, and to communicate the results of its achievement targets, to external stakeholders, and presentation of multi- dimensional implementation results of operational and strategic activities supporting management.

From the above, it can be concluded that the definition of accounting and the objectives adopted therein form the basis for further considerations in this article. Of course, the conclusion is that, due to the significant increase in sustainability reporting and sustainability accounting as well as differences in forms and standards, the question arises as to whether these types of categories can be used interchangeably in accounting definitions, whether at each stage reporting is always presented in a form that is accounting, what is the function and role of accounting in dealing with unethical forms of reporting such as greenwashing or malpractices regarding other information and whether the function and role of accounting can be considered the same in all regions in various parts of the world regarding different corporate sustainability trends. Both in theory and practice, the role of sustainability accounting is neither clearly stated nor standardized.

IV. ENVIRONMENTAL ACCOUNTING ANALYSIS IN THE INTEGRATION OF ACCOUNTING THEORY

The analysis presented regarding the rapidly increasing trends in sustainability accounting can certainly begin to be interpreted and explained based on accounting theorization. Accounting theorization can basically help to formulate new concepts, methods and models, but it can also help to explain solutions that can be used in practice. As a result, accounting theory may be explained both normatively and positively (Young, 2013).

There are scientific studies of sustainability accounting in a positive theory approach included in the induction flow, able to describe and explain with various questions such as "what is that?", "what is the current situation?", "why is that?" (Halog & Manik, 2011). In achieving the goals, these questions can be applied, especially in relation to systems-oriented theories, including especially legitimacy theory, stakeholder theory and institutional theory. In legitimacy theory, it is explained that this theory assumes companies can operate based on a "social contract" which focuses on winning social acceptance, and maintains it in justifying the legality of the company's activities. Stakeholder theory explains why stakeholders' information expectations can imply the presentation of multidimensional explanations of economic, social and environmental potential. Meanwhile, in institutional theory, accounting is considered a sustainable business that can be expected to be able to look into new institutional spaces that will be integrated into the economic, environmental and social performance dimensions of the company's overall performance. In studying this perspective, investigations can be carried out on structures, systems and programs of certain company activities that can generally be implemented by other similar organizations as part of business operating activities (Lamberton, 2005).

So the science of sustainability accounting, based on accounting theorization, can be considered as:

- An instrument for measuring, presenting and communicating the company's sustainability performance that is desired by various groups of company stakeholders as a profit entity.
- Evidence of recognition and disclosure of institutional aspects that can influence the company's operational activities, related to its contribution to sustainable development as well as needs and desires in displaying economic, environmental and social aspects of performance
- "Information signals" sent by managers as company managers to recipients of company reports to eliminate information asymmetry between stakeholders.

From the explanation above, according to the author, this has an impact on positive accounting theorization which treats sustainability reporting as the main communication tool. Thus, it gains the trust of internal stakeholders (e.g. employees/management) and external stakeholders such as investors or clients and is thus able to contribute to increasing the value and reputation of the company.

In line with accounting development opportunities, accounting theorization is able to reveal many accounting risks, which allows identifying the truth in several main gaps, namely theoretical, empirical and methodological. Currently, what is most visible is that there is an empirical gap in the development of sustainability accounting. The increasing interest in sustainability reports, which is characterized by information uncertainty, subjectivity and incomparability, is able to increase the risk of unreliability of the information presented to stakeholders, because some experts stated that "social and environmental disclosures carried out by companies as organizations are being profitable is irrelevant, where the relevance is more because the policy on sustainability strategies is mostly for oneself and does not discuss much wider effects. The existence of this sustainability strategy can occur when companies voluntarily publish sustainability reports to increase legitimate social and environmental values, which may be proven practically or only theoretically. The existence of unethical misinformation practices can be covered by a large umbrella on the reliability of accounting science and financial reports (Bracci et al., 2015). The existence of accounting science certainly does not keep up with very rapid developments, especially in terms of sustainable reporting, including accounting principles which are generally respected in assessing the achievement of sustainable development goals. Although there are many utilitarian premises, little is known about the success of implementing sustainability accounting, and the use of accounting in identifying, measuring and disclosing information in achieving sustainable development goals is almost unknown with certainty.

The existence of gaps in sustainability accounting theory also means there is reduced consensus in determining the role of sustainability accounting (Sisaye, 2013). Although there are many studies, there is no accounting that explicitly reveals the principles that have been indicated for measuring and disclosing the achievement of sustainable development goals. In fact, there is no clear impact of communicating achievements on these results. The existence of a methodical solution proposed in standards for achieving sustainability reporting is actually not the core of accounting, so that accounting principles cannot be fully applied.

Sustainability accounting research in a normative and conceptual approach is considered to be a deductive conclusion by asking the question "what should be". The aim of normative accounting theory is to use it to conduct an analysis of how accounting science can be changed so that it remains a normative point capable of contributing to the company's economic, social and environmental values (Kolk, 2008). Normative accounting solutions are usually found in applicable standards and guidelines, in practice and within the scope of scientific knowledge, but as explained above, sustainability reporting standards are not directly able to determine what determines the role and scope of sustainability accounting. The normative approaches that can be presented in the literature are more general in nature, or are considered to be dedicated to reporting or managerial decisions. However, as a pragmatic challenge in accounting research, this shows the need to prepare a framework and evidence of measurement and reporting that is able to balance the need for integration of diverse information about sustainability, at various levels of company management and in various functions such as development and growth. company strategy and operations.

The existence of solutions that are normative in nature so that they can distinguish accounting scientific research topics based on a unique and distinctive intervention research approach, which can assume a transition from a financial accounting model to a multi-modal accounting model, making the model a normative solution proposed by scientists, including measurement , assessment and disclosure of externalities carry out various efforts and steps in integrating accounting science in the direction of sustainable development. The strategies and efforts based on the above approach include the following:

- Efforts to change the current scientific knowledge of financial accounting models which are currently developing as well as improvements and expansion of knowledge into non-financial aspects.

- Efforts to develop new steps and ways of recognizing the results of follow-up actions in ntegrating sustainable development.

Each approach to normative expectations primarily requires guarantees and commitment to the credibility and reputation of an accounting system, such as selected features such as reliability, verification and stakeholder involvement. Accounting knowledge is expected to be more involved in measuring and managing initiatives for sustainable development programs and able to integrate socially responsible investments into financial disclosures by measuring input and output models, carrying out analytical procedures, measuring cost savings and return on investment, able to issue reports to stakeholders and provide guarantees of capability. However, "a great deal of work is required for practices in the application of sustainability accounting to be capable and capable of achieving the rigor and integrity specified in the list of qualitative attributes". Several areas of main accounting science that still require in-depth normative research are as follows:

a. Sustainable development goals in relation to the development of sustainability accounting and reporting science.
b. There is an influence of integrated reporting initiatives on sustainable reporting and aligns it with the role of accounting and the role of accountants as assessors and reporters.
c. Able to take into account and develop issues related to certain environmental performance, such as carbon, water, waste and biodiversity as well as the implications and impacts on sustainable development.
d. Able to take into account those relating to specific social issues, such as health and safety, product liability, labour, gender, diversity, human rights, equality, slavery and implications for sustainability.

The existence of sustainable changes (Andrianto, 2020) from the above strategy really depends on the extent of "integrated thinking" and "integrated accounting" so that they are able and able to face and carry out challenges. against "unintegrated thinking" and "unintegrated accounting" in dominating contemporary and conventional business continuity. However, in scientific research, there is research that is mainly related to individual aspects of accounting, such as reporting, disclosure, cost accounting, determination of environmental costs or capabilities based on theoretical sustainability that supports holistic perceptions, and steps in actualizing accounting conceptualizations that aim to in applying the principles of sustainable development in the sense of a structured concept, including systemic classification which broadly influences the principles of sustainable development based on a taxonomic approach.

V. CONCEPTUAL INTEGRATION OF ENVIRONMENTAL ACCOUNTING (AUTHOR'S CONCEPT VERSION)

As stated above, the aim of this article is to present the author's concept relating to the conceptual framework in sustainability accounting based on the synthesis of conclusions described in the section above. The conceptual approach proposed from the sustainability accounting conceptual framework is able to complement the space shown in various studies based on the approach to positive accounting theory where sustainability accounting should be a means of communication with various groups of company stakeholders, an appreciation of the "moral maturity of the company", legitimacy of the business sustainable and "information signals" which are able to confirm various eliminations of information asymmetries between stakeholders. This is also a response to norms that are able to show how accounting science must be formed as a concept that is primarily capable of being inspired. The innovative nature of this accounting scientific approach is proven by the bibliometric analysis, which was carried out based on a database of scientific articles available on the web of science with topics that are mostly related to sustainability accounting research from 2000 - 2020 as explained in the section above this article.

The aim of the conceptual approach of sustainability accounting is to be able to propose certain structures, assumptions and objectives to ensure that external and internal stakeholders are considered capable of having reliable information regarding the achievement of sustainable development resulting from the accounting system. It is assumed that the existence of accounting science is considered still not ready to develop new measures and methods in recognizing the results of sustainable development actions (where this concept is in line with the concept of Gray's position that the existence of sustainability accounting is always able to struggle to find its place in accounting science firms, however This is considered to still be "not yet an established concept part of corporate accounting science". So in a sense the concept of a sustainability accounting approach is an attempt to conceptualize sustainability accounting in a structured approach to the financial accounting framework model.

Because in practice a structured approach to the conceptual framework of sustainability accounting is generally overlooked in most sustainability accounting research, the author seeks to promote the conceptual framework structure of international financial reporting standards as a basis and guide in defining the main concepts related to sustainability accounting into accounting science itself. Thus, corporate disclosure, as measured by financial accounting standards, ensures that investors and the public are deemed capable of having a true and fair picture of the performance of the company's financial activities, and managers have a basis for reliable resolution and accountability.

Of course, the reliability of information related to sustainability accounting requires standards or rules for verifying the reliability of information that can be separated into data and reports prepared for stakeholder needs. internal and external interests. However, internal control is the basis for ensuring the basic information characteristics of an accounting system, which can also be verified during an audit of financial reports that can be expanded. In particular, the practice of accounting professionals emphasizes the importance of accountability and verification of environmental and social information in annual reports (Young, 2013). A systematic approach to the integration of sustainability accounting objectives as a basic element of the conceptual framework can be shown in Figure 2.

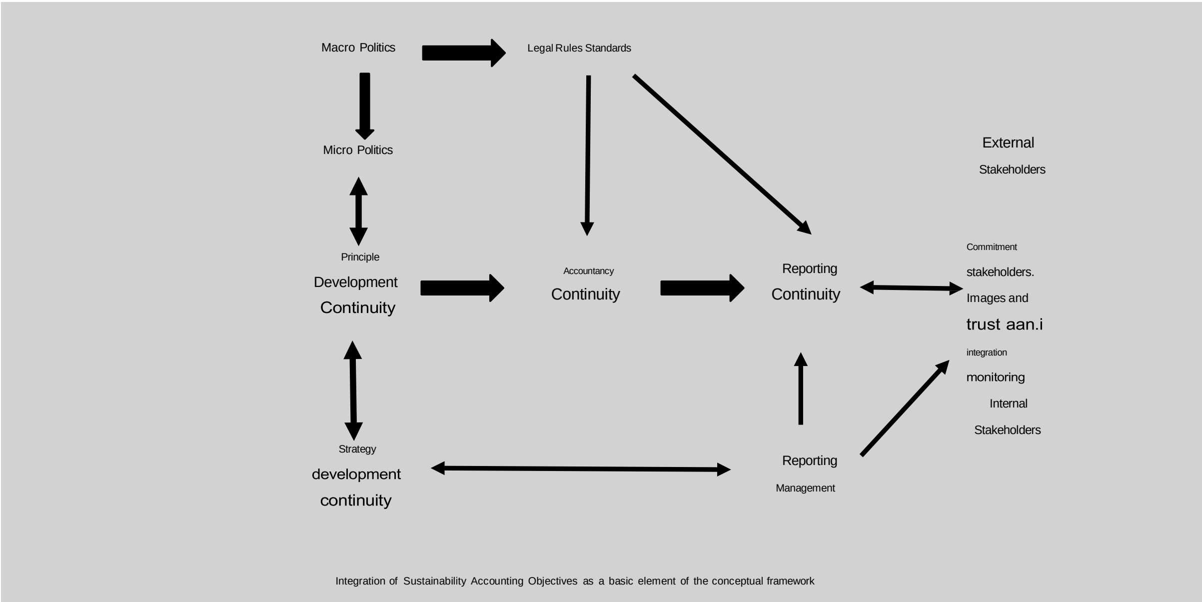

Figure 2.Basic elements of the conceptual framework in the Integration of Sustainability Accounting Objectives. Source: Author

Based on the schematic approach to the above sustainability accounting objectives in the corporate accountability system. The scope of research and teaching on sustainability accounting science is adjusted to the need for external reporting and standardization as well as in order to meet management needs (Maqsood Ahmad Sandhu & Shamsuzzoha, 2018). Therefore, accounting instruments need to be adjusted in order to assess the integrated efficiency of sustainable business. As shown in the figure above, accounting science covers other fields and is a basic part of reporting which has a broad scope for reporting on the performance of achieving sustainable development and its validation which is carried out for external stakeholders. The existence of sustainability accounting is able to create the main driver of company value in the form of stakeholder commitment, improving the company's image and reputation, true legitimacy, more transparency to stakeholders providing information that everything is supported by internal control carried out in an integrated efficient and effective manner. All of them add value to the company's reputation and image through long-term profitability, risk reduction and realistic implementation of sustainable strategy goals. Sustainability performance management is also able to determine the financial success of sustainability expected by shareholders.

The conceptual approach to topics related to sustainability accounting assumes accounting science that aims to apply the principles of sustainable development in its system, and really requires consideration of a number of global factors, both macroeconomic and microeconomic (based on the approach presented in the picture). This determines the principles of sustainable development adopted by the organization and the sustainable development strategy for the company organization. At the same time, the principles and goals of sustainable development are very dependent on policy macro and micro politics, which determine the existence of standardization, harmonization and regulations in sustainable reporting. Where these factors in turn are part of the elements of a corporate accountability system that can be built by a corporate organization and focus on implementing the principles of sustainable development itself. Thus, the existence of sustainability accounting science is expected to be a flexible system, reacting to internal and external changes in a company. At the same time, it must be a normative and reliable basis, capable of reflecting on the company's achievements in sustainable development.

The importance of a conceptual approach to sustainability accounting, it can be assumed that accounting can always provide a normative basis, capable of reflecting socio- economic phenomena and providing practical guidelines for implementation as a model solution, but still proposing a suitable role for the development of accounting in supporting management. organization based on the application of the principles of sustainable development. Where its use can provide valuable support for practitioners, regulators and also scientists who study the science of sustainability accounting. The proposed approach can help in the rapid assignment of business accounting science, including in reporting and management accounting science, being able to define the scope and measurement methods of the application of the principles of sustainable development itself, as well as various assessments of individual properties. and result categories related to environmental aspects and social impact aspects. Reliable and comparable information communication is able to complete the achievement of sustainable development performance. The conceptual approach of sustainability accounting can also help regulators and other organizations in creating standards for reporting sustainable development achievements themselves. For scientists, in turn, the existence of a conceptual framework related to sustainability accounting can become a benchmark in the topography of sustainability accounting research and also provide an incentive to conduct further research regarding the development of sustainability accounting science itself. So that it can become a source of further research in the fields of accounting theory, practice and policy.

VI. CONCLUSION

This article presents the development of sustainability accounting science based on accounting theorization both positively and normatively and attempts to propose concepts from its conceptual framework as a normative solution. This can make trends in practice and normative as the development of sustainability accounting and then assess the development of sustainability accounting as a science from an accounting perspective both positive and normative theory. This article is also a type of conceptual research with a proposed framework from the author for applying sustainability accounting science as a normative solution that is in line with the concept of accountability.

This article is a development of the concept of sustainability accounting as a result of changes that have occurred both in sustainability reporting and sustainability accounting itself. Despite much scientific and utilitarian research, accounting has still not developed uniform principles and rules in an integrated approach that would systematically support sustainability solutions in sustainable business itself. This gap is caused by a lack of consensus in determining the role of accounting in this field. According to Gray (2006), the lack of a universally accepted accounting research methodology in the concept of sustainable development is more due to dynamic changes, including the expansion of the subject, expansion of stakeholder groups and information expectations from them.

As discussed above, in this article there are three main gaps in the development of sustainability accounting itself - both theoretical, practical and methodological, so there is a need to conceptualize accounting. A system-oriented theoretical perspective, including in particular legitimacy theory, stakeholder theory, and institutional theory makes it possible for the author of this article to demonstrate the main role of sustainability accounting.

However, the scientific literature determines the diversity of accounting scientific developments, especially in individual accounting aspects, such as reporting validation of disclosed results, cost accounting, or performance audits based on theories that can be selected. In addition, the literature analysis is very likely to show the risks of sustainable development itself – where these risks are mainly related to unethical mission-normative practices that can be overshadowed by the broad umbrella of accounting and the qualitative characteristics of information from the financial accounting system itself, such as credibility and reliability . Therefore, there are several basic requirements in determining the boundaries of sustainability accounting standards, by indicating the objectives, users, qualitative characteristics, subjects, reports and verification, as well as their place in the corporate accountability system.

The existence of normative solutions in sustainability accounting research results from the need to standardize accounting in aspects that have not been covered, as well as from the need to formulate and postulate methods for measuring and communicating the results of sustainable development activities. The basic condition for the development of sustainability accounting is unification and clear determination in providing credible information for stakeholders and shareholders regarding the achievement of sustainable development. As shown in the article, there is no normative solution that allows accounting practices that are able to follow the guidelines for reporting sustainable development achievements, including allowing the practice of environmental aspects and social impact aspects into the accounting system, nor are there detailed guidelines regarding appropriate accounting instruments. supports business management efforts to apply the principles of sustainable development, and existing guidelines which still have a very general nature.

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