# FORMATION OF THE STAKEHOLDERS ACCOUNT MODEL IN CONDITIONS OF SUSTAINABLE DEVELOPMENT

Lidiia M. Karpenko, Odessa Regional Institute for Public Administration Stoyan Radev Koev, University of National and World Economy, Bulgaria Nataliia B. Kashchena, Kharkiv State University of Food Technology and Trade

Victor Grushko, KROK University of Economics and law Andrii Khorosheniuk, KROK University of Economics and law

#### **ABSTRACT**

The world experience regarding the interpenetration of the concept of sustainable development and responsible investing and accounting models is analyzed. The drivers of the appearance of the newest accounting model are determined, taking into account the specifics of the information requests of stakeholders. The stages of transformation of key forms of traditional reporting taking into account social and environmental components are considered. The determinants and principal features of the stakeholders accounting model are investigated in order to increase the validity of investment decisions. As a result of formalization, the hypothesis that the reporting on the sustainable development of accountable investment companies constituents is more transparent than the reporting of traditional financial index companies is disproved, taking into account the sub-periods of the global financial crisis identified and the division of financial markets for developed and developing countries. This has made it possible to confirm that the disclosure of information on ESG criteria is insufficient for decision makers in the financial sector of the economy and, in turn, determine the importance of its standardization.

**Keywords:** Stakeholders, Account Model, Investment, Information Requests, Corporate Social Responsibility.

JEL Classification: M21, O16

#### INTRODUCTION

Implementation of the principles of sustainable development and responsible investment with the expansion of the stake and requests of stakeholders in accounting models necessitate the construction of a convergent staked-keeping accounting model under conditions of sustainable development. Formation of the structure and system connections of the convergent accounting model takes place in the context of two key trends - the development of accounting and analytical support for the concept of sustainable development and integration of professional accounting and reporting standards in order to ensure the transparency of the activities of companies and their full coverage of their value added activities and capital management.

The issue of the convergence of reporting approaches within the national model to the requirements of international standards is systematically highlighted in the work (Singla et al.,

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2017). However, the emergence of new convergent trends in the accounting environment globally in response to the challenges of sustainable development, the importance of increasing the transparency and informativeness of corporate reporting in financial markets, suggests the need to revise the approaches to accounting modeling.

In this context, it should be noted that the views of academics regarding the classification of accounting models of different countries of the world are quite polar.

#### LITERATURE REVIEW

At the same time, these models do not take into account the current trends in the development of accounting models aimed at increasing the comparability, transparency of reporting and taking into account the information needs of stakeholders in the implementation of the concept of accounting, reporting, and audit in a sustainable development.

Thus, the key areas for the development of convergent processes at the global level that form the basis for the new accounting model are not merely the harmonization or standardization of accounting systems, but their convergence at the GGAAP level, taking into account the dimensions, criteria and goals of sustainable development.

The stage of global convergence of financial reporting and the formation of a new reporting paradigm based on a single system of accounting standards is characterized (Schaltegger & Burritt (2017).

The process of recent harmonization and convergence of accounting, reporting and audit models at the global level is primarily aimed at ensuring transparency of reporting and reflecting the real economic situation in companies, which will enable users of accounting to make sound economic decisions based on reliable and high-quality information (Braam & Peeters, 2018). A detailed coverage of the characteristics of the processes of harmonization of accounting at the international and regional levels in the context of globalization and the development of the national accounting system has become available in the work (Evans, S., Vladimirova, D., Holgado et al., 017).

#### **METHODOLOGY**

The methodological basis for analyzing key factors determining the state of the system of reporting on sustainable development in Ukraine and disclosing the main consequences of maintaining such a status quo is proposed to consider the STEEPLE analysis as a marketing tool for macroeconomic analysis (in this case, and the institutional environment for disseminating reporting on sustainable development in Ukraine) in terms of socio-social and cultural factors; Technological innovations in the field of economy, product technology; Economic economy and competition in the market; Environmental environmental factors; Political political factors; Legal legal factors; educational (ethical) factors. This methodology is deepened by constructing specific composite indicators and expert appraisal of their significance for the reporting system ('low', 'medium', 'high' and 'top priority').

#### FINDINGS AND DISCUSSIONS

The adoption of the Directive 2014/95/EC on the disclosure of non-financial and diversified information by certain companies and groups in 2014 has obliged member states to join at the highest legislative level through the mechanisms for the disclosure of information

from sustainable development to the implementation of Target 12.6 and the Europe 2020 Strategy (Geissdoerfer et al., 2017).

Individual EU countries, including Britain, France and Denmark, are among the first who joined these initiatives. For example, the Companies Act in the UK sets a requirement for disclosure of greenhouse gas emissions in an annual report. The Grenelle II Act in France requires large public and listing companies to report corporate social responsibility in an annual management report and obliged to provide disclosure on climate change from 2016. More than 1,100 major Danish companies have to report on corporate social responsibility, particularly in terms of climate change and human rights in annual reporting (Krausmann et al., 2017). The Spanish Sustainability Economy Law (2011) and the Italian policy on investments and mandatory disclosure of ESG criteria (Mandatory Disclosure and Investment Policy (2012)) establish mandatory disclosure requirements for non-financial information by pension funds (Krausmann et al., 2017).

Reporting on sustainable development in Ukraine is at the initial stages of its formation, as well as the national strategy corporate social responsibility of Ukrainian enterprises. The close relationship between these concepts allowed the formation of a matrix of macro-factors that affect this system based on STEEPLE analysis (Table 1).

Table 1			
RESULTS OF STEEPLE - ANALYSIS OF THE FACTORS OF THE INSTITUTIONAL ENVIRONMENT			
FOR THE DISSEMINATION OF ACCOUNTABILITY ON SUSTAINABLE DEVELOPMENT IN			
UKRAINE (AUTHOR RESEARCH)			
Social	Technological	Economic	
Low level of corporate perception	Lack of quality assurance of the	Fears of disclosure of corporate	
of corporate social responsibility	system, in particular operational,	information.	
initiatives in particular and the	technical and informational.		
ideology of sustainable			
development in society;		X 1 6 6 1 6	
Insufficient orientation in the	Low level of implementation of	Lack of funds from companies and	
course of doing business on the	innovations in accounting,	funding initiatives	
values of civil society and	reporting and auditing as the basis		
communication with	for reporting on sustainable		
stakeholders;	development.		
Insufficient orientation in the			
course of doing business on the values of civil society and			
values of civil society and communication with			
stakeholders:			
Enviromental	Political	Legal	
low level of activity of "green"	The failure of a national model of	Deformed structure of the reporting	
organizations in terms of	corporate social responsibility, its	system in general; shifting efforts to	
promotion.	institutional provision at different	disclose company information in the	
promotion.	levels.	direction of financial, primarily tax	
	icveis.	reporting.	
Non-compliance with	The lack of political support of	Low quality of accounting and	
environmental legislation due to	sustainable development initiatives	methodological support for the formation	
the low efficiency of the	and their accounting at the highest	of reporting indicators on the dimensions	
sanctions system.	legislative level.	of sustainable development in Ukraine.	
Underfunding of environmental	The need to take into account the	The importance of developing effective	
activities and measures to prevent	European integration vector in the	verification mechanisms and confirming	
climate change by the state.	formation of a sustainable	the quality of reporting on sustainable	
chimate change by the state.	development strategy and an	development and the strategy of corporate	
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Table 1 RESULTS OF STEEPLE - ANALYSIS OF THE FACTORS OF THE INSTITUTIONAL ENVIRONMENT FOR THE DISSEMINATION OF ACCOUNTABILITY ON SUSTAINABLE DEVELOPMENT IN UKRAINE (AUTHOR RESEARCH)			
	appropriate reporting system.	social responsibility at the national level.	
Educational & Ethical			
The lack of accessible and understandable reporting guidelines on sustainable development.	Low level of ethical codes of doing business, responsible investment and charity.	Insufficient distribution of educational programs, trainings and professional initiatives of sustainable development and accountability of sustainable development.	

It is worth noting that STEEPLE's analysis and graphical representation of its results in the form of a set of factors is used primarily as a tool for analyzing the macro-environment of the operation of TNCs in order to achieve the objectives of strategic management. The interdisciplinary nature of the concept of sustainable development and the CIS as a communication marketing tool for informing stakeholders about the achievement of companies in social, environmental and economic terms require the use of non-traditional analytical tools.

Summarizing the list and qualitative assessment of the factors that determine the state of reporting on sustainable development in Ukraine is the first step in assessing the level of development of the institutional environment for the dissemination of accountability on sustainable development.

A detailed consideration of social factors, which includes linguistic, cultural, behavioral features, mentality, allowed us to establish that the dissemination of accountability of sustainable development in Ukraine in the context of the formation of a convergent stakeholder model, as well as corporate social responsibility in general, is carried out against the backdrop of insufficient understanding in society the transition to sustainable development and the need to ensure accountability to future generations for the capital used.

In this regard, the working hypothesis of the study can be presented as follows:

#### **Accounting aspect**

H1: Do companies that are included in the responsible investment indices provide more transparent reporting on sustainable development, which enables stakeholders to make more reasoned and informed decisions?

# Efficiency aspect of traditional financial markets and responsible investment markets

H2: Is there continuity in the time series that characterizes the traditional financial indices and the corresponding indexes of responsible investing, that is, are they effective in terms of the hypothesis of effective markets?

## **Technical aspects**

H3: Will the financial markets (responsible investment and traditional ones) of developed countries be more informative than the markets of developing countries, considering the details of disclosure according to the ESG criteria?

H4: Does the level of information efficiency of responsible investment indices and traditional financial indices in the crisis period change, as opposed to pre-crisis and post-crisis periods in the context of developed

markets and emerging markets, given the detailed elaboration of information on sustainable development according to ESG criteria?

In the context of developed hypotheses, these findings can be grouped as follows: Regarding the accounting aspect and confirmation of the hypothesis

"H1: Does the companies that are included in the responsible investment indexes provide broader and more transparent information about corporate social responsibility in corporate reporting on sustainable development, which enables investors to make more informed and well-founded decisions that will be implemented in the greater the effectiveness of the indexes of responsible investment than traditional financial indexes."

It should be noted that it should be rejected due to the lack of effect Equity of indexes of responsible investment in comparison with traditional financial indexes.

It means that the practice of disclosing information on ESG-criteria and reporting on sustainable development is inadequate; reporting itself is vital to substantiating better investment for stakeholders, in particular those that can benefit from greater predictability of responsible investment indexes, given the availability in their dynamics, signs of long-term memory. Another problem aspect that can explain such a result of the hypothesis is the spread among reporting companies, the green camouflage practice», and the disparate and limited disclosure of information about corporate social responsibility and the achievement of the goals of sustainable development.

"Hypothesis H2: Is long-term memory in time series, responsible investment indexes and their corresponding traditional financial indexes, that is, are they effective in terms of the hypothesis of efficient markets?"

It has proven for traditional financial indexes and denied for responsible investment indexes, since for the majority of the traditional financial indexes analyzed mean that the Hurst exponent is close to 0.5, which means that the corresponding indexes are effective.

The level of information asymmetry in responsible investment markets in this regard is higher, while the transparency of reporting companies of the constituent companies of the indexes of responsible investment in terms of the hypothesis of effective markets is lower, since the indexes of responsible investing themselves have signs as anti-persistent, and in most of their persistent rows (depending on the market). In this regard, from the point of view of the impact of reporting on the sustainable development of constituent companies on their financial efficiency (in terms of indexes of responsible investing and traditional financial indexes), it should be noted that the data obtained allows the study to be related to those works that establish a negative connection between these variables. The reasons for the negative impact of disclosure in the reporting on sustainable development on the financial performance of companies, embodied in the effectiveness of the indexes, are seen in the rising costs of collecting, summarizing, disclosing, publishing and verifying information on ESG criteria, compared to traditional constituents of traditional financial indexes, which do not have such additional costs.

Hypotheses on the technical aspects of the research:

"H3: Will the financial markets (responsible investment and traditional) of developed countries be more effective informationally than emerging markets considering the details of disclosure according to ESG criteria?"

And "H4: Does it change? the level of information efficiency of indexes of responsible investment and traditional financial indexes in the crisis period, in contrast to pre-crisis and post-crisis periods in the context of developed markets and emerging markets? Got confirmation during the research".

It allows making two main conclusions: in spite of the higher efficiency of traditional financial indexes in terms of the hypothesis of effective markets, the impact of crisis phenomena on these markets, and not only on the markets of responsible investment indexes, which have a smaller scale, greater volatility, were also tangible. This confirms the need for early forecasting of crises in these markets and coordination of efforts to ensure their greater transparency.

The results of our study are confirmed by the following studies. The practice of disclosing information on ESGs is inadequate (Hilorme et al., 2019; Krausmann et al., 2017), and the prevailing pattern of the investigated relationship between disclosure information in the reporting on the sustainable development of companies-constituents of indexes of responsible investment and traditional financial indexes, their financial efficiency and information efficiency of financial markets is a pattern of insufficient impact reporting on sustainable development - the need for standardization.

#### RECOMMENDATIONS

The conducted analysis of accounting systems and models in modern conditions allows us to recommend the introduction of a convergent stakeholder model of accounting, reporting, and audit as an evolutionary continuation of an international model in enterprises that takes into account the features of the global model of social and environmental reporting, but before a broader stakeholder circle. It is based on both the global standards of financial reporting and the principles of sustainable development and responsible investment.

### **CONCLUSION**

The practical implementation of the research results is to substantiate the need for further development and standardization of reporting on sustainable development within a convergent stakeholder model as the basis for adopting traditional and responsible investment decisions by stakeholders, the areas of regulation of information efficiency of developed financial markets and emerging markets, with a segment of responsible investment indexes on the basis of the hypothesis of the effective markets.

The peculiarity of the research carried out is to identify the impact of disclosure on reporting on the sustainable development of companies constituents of indexes of responsible investment and traditional financial indexes to achieve this financial efficiency and extrapolation of the findings on the information efficiency of financial markets, taking into account their differentiation by level of development (developed markets, developing countries) and with the allocation of pre-crisis, crisis and post-crisis periods. The practical significance of the results of the study is to substantiate the need for further development and standardization of reporting on sustainable development as the basis for adopting traditional and responsible investment decisions of stakeholders.

#### REFERENCES

- Braam, G., & Peeters, R. (2018). Corporate sustainability performance and assurance on sustainability reports: Diffusion of accounting practices in the realm of sustainable development. *Corporate Social Responsibility and Environmental Management*, 25(2), 164-181.
- Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E.A., & Barlow, C.Y. (2017). Business model innovation for sustainability: Towards a unified perspective for creation of sustainable business models. *Business Strategy and the Environment*, 26(5), 597-608.
- Geissdoerfer, M., Savaget, P., & Evans, S. (2017). The Cambridge business model innovation process. *Procedia Manufacturing*, 8, 262-269.
- Hilorme, T., Shurpenkova, R., Kundrya-Vysotska, O., Sarakhman, O., Lyzunova, O. (2019). Model of energy saving forecasting in entrepreneurship. *Journal of Entrepreneurship Education*, 22(1S),1-7.
- Krausmann, F., Schandl, H., Eisenmenger, N., Giljum, S., & Jackson, T. (2017). Material flow accounting: measuring global material use for sustainable development. *Annual Review of Environment and Resources*, 42, 647-675.
- Schaltegger, S., & Burritt, R. (2017). Contemporary environmental accounting: issues, concepts and practice (First Edition). Routledge.
- Singla, A., Ahuja, I.P.S., & Sethi, A.P.S. (2017). The effects of demand pull strategies on sustainable development in manufacturing industries. *International Journal of Innovations in Engineering and Technology*, 8(2), 27-34
- Tetiana, H., Karpenko, L., Fedoruk, O., Shevchenko, I., & Drobyazko, S. (2018). Innovative methods of performance evaluation of energy efficiency project. *Academy of Strategic Management Journal*, 17(2), 112-110.

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