

IMPROVING CSR REPORTING AND AUDIT ASSURANCE IN ARMENIAN COMMERCIAL ORGANIZATIONS: METHODOLOGICAL APPROACHES, DOUBLE MATERIALITY, AND ESG INDICATORS

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Abstract: Corporate Social Responsibility (CSR) has become an integral component of sustainable business development and corporate accountability (United Nations Global Compact, 2023). Modern organizations are increasingly expected to disclose not only financial information but also environmental, social, and governance (ESG) performance indicators to meet the growing expectations of investors, regulators, and other stakeholders (IFRS Foundation, 2023). In this context, the quality, comparability, and reliability of sustainability-related information depend significantly on the existence of effective reporting and assurance mechanisms (GRI, 2021). Furthermore, recent developments in global sustainability regulation, particularly the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS), have strengthened the demand for transparent sustainability disclosures and independent assurance practices (European Commission, 2023; EFRAG, 2023).

Keywords: Corporate Social Responsibility, CSR audit, sustainability reporting, ESG indicators, double materiality, sustainability assurance, commercial organizations, Armenia

JEL codes: M14, M42, Q56

Research aims: To develop methodological approaches for improving CSR reporting and audit assurance in Armenian commercial organizations through the application of double materiality and ESG performance indicators.

Research novelty: The scientific novelty of the research is manifested in the following contributions:

1. The approaches and challenges of CSR implementation in Armenian commercial organizations have been identified, together with the theoretical, methodological, and practical challenges of sustainability reporting.
2. Based on international experience, a structural linkage between CSR reporting and financial reporting in Armenian commercial organizations has been developed, contributing to the improvement of ESG disclosure practices and external audit procedures.
3. A methodological framework for double materiality assessment and audit evaluation has been developed, enabling greater comparability, consistency, and independent assurance of ESG information in commercial organizations.
4. A CSR reporting format incorporating key ESG performance indicators (KPIs) has been proposed, providing measurable, comparable, and objective

sustainability information for audit and stakeholder decision-making.

Introduction

The growing importance of sustainable development has significantly changed the role of corporate reporting. Stakeholders increasingly expect organizations to disclose information regarding their environmental impact, social responsibility, and governance performance alongside traditional financial information (Elkington, 1997). CSR has become one of the essential tools for achieving sustainable business development and strengthening stakeholder confidence. Modern organizations are expected to create value not only for shareholders but also for employees, customers, local communities, and society as a whole (Freeman, 1984).

Internationally, CSR reporting is becoming increasingly regulated through frameworks such as the Global Reporting Initiative (GRI), the International Sustainability Standards Board (ISSB), the European Sustainability Reporting Standards (ESRS), and the Corporate Sustainability Reporting Directive (CSRD) (GRI, 2021; European Commission, 2023). These developments have also increased the demand for independent assurance of sustainability disclosures.

In Armenia, however, CSR reporting remains largely voluntary, and only a limited number of organizations publish sustainability or ESG reports. Consequently, challenges related to transparency, comparability, and external assurance continue to exist.

The objective of this article is to investigate the current state of CSR reporting and auditing in Armenian commercial organizations

and propose mechanisms for improving sustainability accountability and assurance systems.

The study identifies key challenges associated with the absence of unified reporting methodologies, limited application of ESG indicators, insufficient assurance practices, and a lack of standardized sustainability reporting frameworks (GRI, 2021; KPMG, 2022). Based on international practices, an integrated model linking CSR reporting and financial reporting is proposed (Eccles & Krzus, 2018). Furthermore, a methodological framework for double materiality assessment and a KPI-based CSR reporting structure are developed to improve the quality and auditability of sustainability information (European Commission, 2023; IFRS Foundation, 2023).

Theoretical Foundations of the Research

Corporate Social Responsibility (CSR) and Environmental, Social, and Governance (ESG) reporting have become central components of contemporary corporate accountability systems (Adams, C., A. 2022). Recent developments in sustainability regulation and stakeholder expectations have significantly expanded the scope of corporate reporting beyond traditional financial disclosures (GRI, 2021; IFRS Foundation, 2023). Modern organizations are increasingly required to provide transparent, reliable, and comparable information regarding their environmental, social, and governance performance Adams, C. A., Alhamood, A., He, X., Tian, J., Wang, L., & Wang, Y. (2021). Consequently, sustainability reporting has become a strategic instrument for strengthening stakeholder trust, improving

corporate transparency, and supporting long-term value creation (KPMG, 2022).

The introduction of the International Sustainability Standards Board (ISSB) standards, namely IFRS S1 and IFRS S2, represents a significant step toward the harmonization of sustainability-related disclosures. Tshughuryan, A., Khachatryan, N., & Mkrtchyan, A. (2026) These standards emphasize the integration of sustainability information into corporate decision-making processes and encourage organizations to disclose sustainability-related risks and opportunities in a consistent manner (IFRS Foundation, 2023).

At the European level, the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS) have substantially increased reporting requirements for organizations Porter, M. E., & Kramer, M. R. (2006). A key innovation of these frameworks is the principle of double materiality, which requires entities to assess both the financial effects of sustainability issues and the impact of organizational activities on society and the environment (European Commission, 2023).

Another important trend identified in contemporary literature is the increasing role of external assurance in sustainability reporting. Independent assurance improves the credibility, reliability, and comparability of non-financial information and reduces information asymmetry between organizations and stakeholders (IAASB, 2023; KPMG, 2022). Recent studies also emphasize the importance of integrating financial and sustainability reporting systems. Integrated reporting approaches enable organizations to provide a more comprehensive representation of

their performance, risk profile, governance practices, and long-term sustainability objectives (Eccles & Krzus, 2018), WBCSD 1999.

Despite the growing adoption of international sustainability standards, many organizations continue to face challenges related to ESG data collection, measurement methodologies, reporting consistency, KPI selection, and assurance procedures Carroll, A. B. (1991), Tschopp, D., & Huefner, R. J. (2015). These issues are particularly relevant in developing and transition economies, where sustainability reporting systems are still evolving (Tschopp & Huefner, 2015; GRI, 2021).

Therefore, the existing literature highlights the necessity of developing effective ESG reporting frameworks, measurable sustainability indicators, assurance methodologies, and integrated reporting systems to enhance the quality and credibility of corporate sustainability disclosures (European Commission, 2023; IFRS Foundation. 2023, IAASB 2023-2024, IIRC 2021).

The purpose of this study is to investigate the methodological and practical issues of CSR auditing in commercial organizations of the Republic of Armenia and to develop recommendations for improving CSR reporting and assurance practices Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016). The research examines the current state of CSR implementation, sustainability reporting, ESG disclosure practices, and audit assurance mechanisms within Armenian organizations Eccles, R. G., & Krzus, M. P. (2018). Particular attention is paid to the integration of CSR and financial reporting, the application of double materiality principles, and the role of independent assurance in enhancing stakeholder confidence Elkington, J. (1997).

The findings suggest that the implementation of standardized ESG indicators, double materiality assessment procedures, and external assurance mechanisms can significantly increase the transparency, comparability, and credibility of CSR disclosures in Armenian commercial organizations.

Research Methodology

This study employs a qualitative and analytical research methodology to examine and improve CSR reporting and audit assurance practices in commercial organizations in the Republic of Armenia. The research is based on the review and analysis of international CSR, ESG, and sustainability assurance frameworks, including the principles of double materiality.

The methodological approach consists of:

- ✓ Analysis of relevant academic literature, international standards, and regulatory requirements related to CSR reporting, ESG disclosures, and sustainability assurance.
- ✓ Examination of the double materiality concept and its application in sustainability reporting.
- ✓ Identification and evaluation of key ESG performance indicators applicable to Armenian commercial organizations.
- ✓ Development of a methodological framework integrating CSR reporting, ESG metrics, and audit assurance procedures.
- ✓ Formulation of practical recommendations for enhancing the quality, transparency, and reliability of sustainability disclosures in Armenia.

The research applies comparative, descriptive, and synthesis methods to develop an integrated approach that aligns local

reporting practices with international sustainability reporting and assurance requirements (Mkrtchyan, A. 2025).

Research results

CSR implementation in Armenia varies significantly across industries. While some organizations have integrated sustainability initiatives into their strategic objectives, many still perceive CSR primarily as philanthropy, sponsorship, or charitable donations.

The present study examined five major Armenian organizations:

1. Ameriabank CJSC,
2. ACBA Bank OJSC,
3. INGO Armenia ICJSC,
4. Zangezur Copper Molybdenum Combine (ZCMC),
5. Telecom Armenia OJSC.

These organizations were selected due to their active involvement in CSR initiatives and public sustainability disclosures.

Return on Assets (ROA)

ROA measures how effectively an organization generates profit from its assets.

$$ROA = \frac{\text{Net Profit}}{\text{Total Assets}}$$

For example:

Ameriabank

$$ROA = \frac{35}{1500} = 0.023$$

Table 1. Corporate Efficiency and Sustainability Intensity Indicators*Source: Author's own work*

Company	Assets (AMD bn)	Revenue (AMD bn)	Net Profit (AMD bn)	ESG Investmen ts (AMD bn)	CO₂ Emissions (thousand tons)	ROA	ESG/As sets	CO₂/ Re- venue
Ameria-bank	1,500	120	35	250	15	0.023	0.167	0.125
ACBA Bank	900	75	22	180	10	0.024	0.200	0.133
INGO Armenia	60	9	2	3	1	0.047	0.058	0.133
ZCMC	800	300	95	40	220	0.119	0.050	0.733
Telecom Armenia	120	35	6	15	12	0.052	0.125	0.343

ZCMC

$$ROA = \frac{95}{800} = 0.119$$

The findings indicate that industrial enterprises demonstrate higher profitability levels than financial institutions. However, banks maintain relatively stable and sustainable financial performance.

The ESG-to-assets ratio measures the proportion of organizational resources allocated to sustainability-related activities.

$$ESG\ Intensity = \frac{ESG\ Investments}{Total\ Assets}$$

The analysis shows that banking institutions demonstrate higher ESG investment intensity than industrial companies.

Carbon intensity evaluates environmental risk by measuring CO₂ emissions relative to revenue.

$$Carbon\ Intensity = \frac{CO_2\ Emissions}{Revenue}$$

Table 2. Carbon Risk Classification

Source: Author's own work

Risk Level	Companies
Low	Ameriabank, ACBA Bank, INGO Armenia
Medium	Telecom Armenia
High	ZCMC

The results indicate that ZCMC faces considerably higher environmental and climate-related risks compared to the other organizations analyzed.

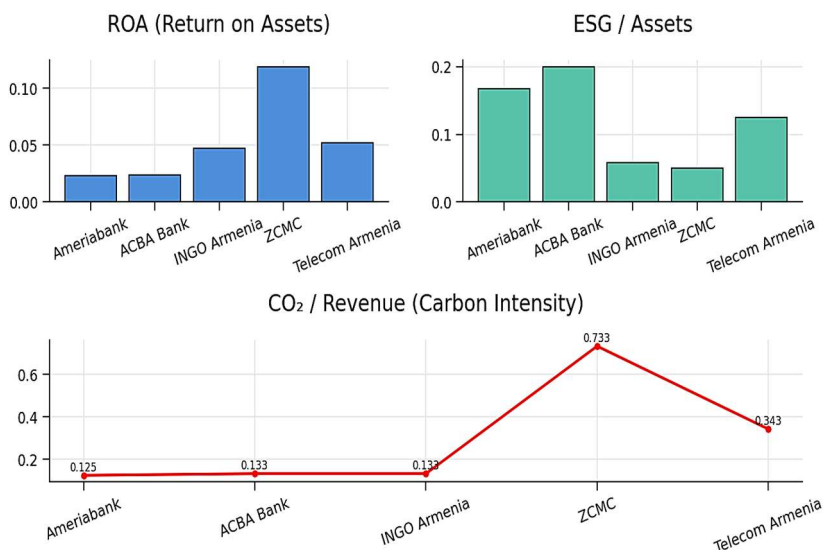


Figure 1. Corporate Efficiency and Sustainability Indicators

Source: Author's own work

The integration of these indicators provides a comprehensive assessment of corporate profitability, sustainability commitment, and environmental risk exposure.

Key Challenges of CSR Implementation in Armenia: Despite the growing importance of sustainability reporting, numerous obstacles continue to hinder CSR development in Armenia.

Table 3. Main CSR Challenges in Armenian Organizations

Source: Author's own work

Challenge	Description
Absence of a unified methodology	Different interpretations of CSR reporting
Limited use of ESG metrics	Incomplete non-financial disclosures
Lack of qualified professionals	Low-quality sustainability reports
Limited regulatory requirements	Predominantly voluntary reporting
Low assurance levels	Reduced stakeholder confidence

The research revealed that many Armenian organizations have not fully adopted international sustainability frameworks such as GRI, ISSB, IFRS Sustainability Standards, and ESRS.

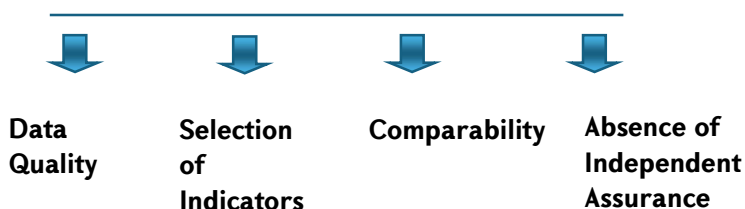


Figure 2. Challenges of Sustainability Reporting

Source: Author's own work

These challenges significantly affect the reliability and decision-usefulness of CSR reports.

International experience demonstrates that financial and sustainability reporting should no longer be viewed as separate information systems. Instead, they should form an integrated reporting framework that reflects the overall value creation process of an organization (Eccles & Krzus, 2018).

Based on the study's findings, an integrated model connecting financial and CSR reporting has been developed.

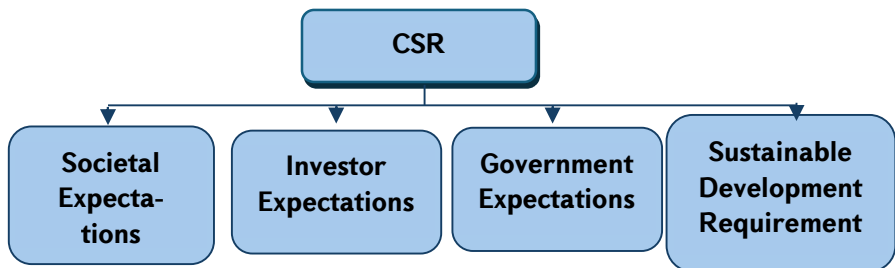


Figure 3. Drivers of CSR Development

Source: Author's own work

Organizations increasingly face expectations regarding:

- ✓ transparent governance,
- ✓ environmental responsibility,
- ✓ fair labor practices,
- ✓ ethical conduct,
- ✓ community engagement.

The proposed model combines:

Financial Reporting → Financial Results → Risk Management
→ Resource Allocation
with

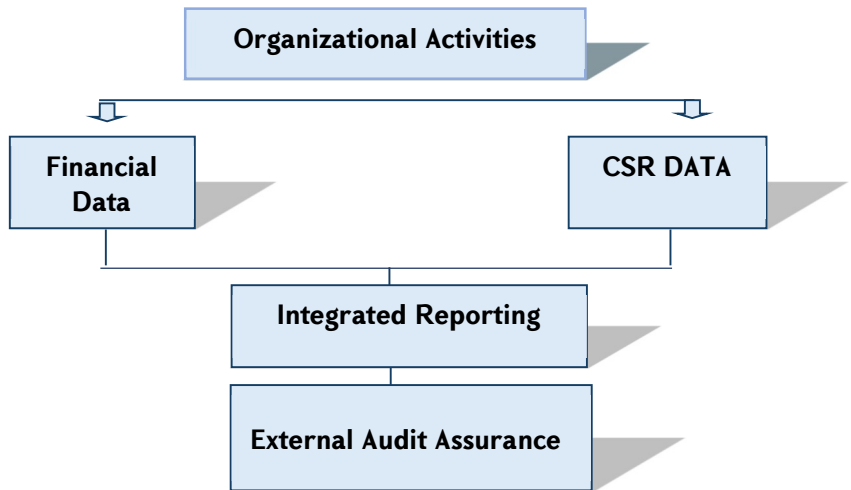


Figure 4. Integrated Model of Financial and CSR Reporting

Source: Author's own work

CSR Reporting → Environmental Performance → Social
Performance → Governance Performance
resulting in:

- ✓ integrated corporate accountability,
- ✓ comprehensive risk assessment,
- ✓ enhanced transparency,
- ✓ improved audit effectiveness.

The integration of financial and non-financial information enables stakeholders to evaluate organizational performance more comprehensively.

Double Materiality Assessment Framework: One of the most significant developments in sustainability reporting is the concept of double materiality introduced by the European sustainability framework (European Commission, 2023).

Table 4. Linkages Between Financial and CSR Reporting

Source: Author's own work

Financial Reporting Area	CSR Reporting Area	Expected Outcome
Employee expenses	Employee welfare	Human capital assessment
Environmental expenditures	Environmental programs	Ecological performance evaluation
Investments	Community projects	Public value creation
Risk disclosures	ESG risks	Sustainability assessment

Traditional materiality focuses on how sustainability issues affect financial performance. Double materiality expands this perspective by also examining how organizational activities affect society and the environment. The research developed a methodological framework for auditing double materiality.

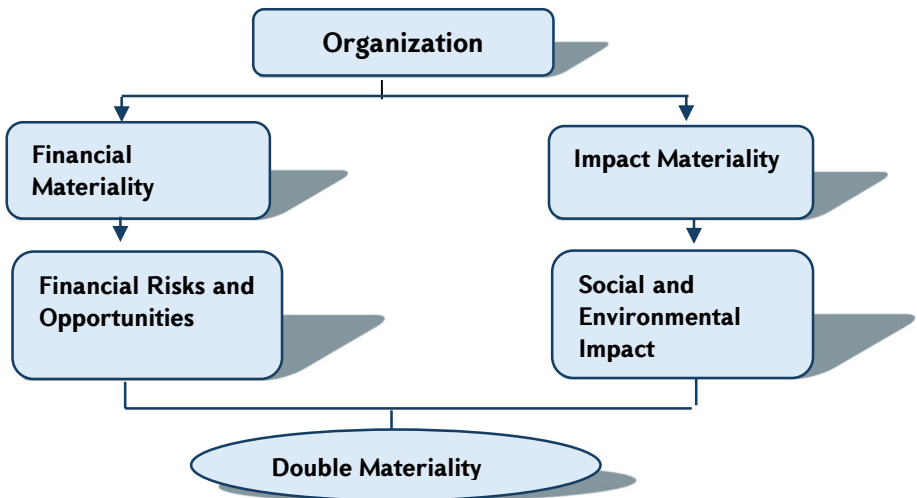


Figure 5. Double Materiality Assessment Model

Source: Author's own work

The framework improves comparability, transparency, and auditability of ESG information.

The study found that many organizations continue to disclose CSR information in narrative form without measurable performance indicators.



Figure 6. Internal CSR Reporting Problems

Source: Author's own work

These shortcomings reduce the usefulness and credibility of sustainability information. To address these problems, a new reporting structure was developed.

As a result of the research, a new structural CSR reporting format was developed based on the application of measurable and assessable key performance indicators (KPIs). The proposed reporting framework consists of three main levels:

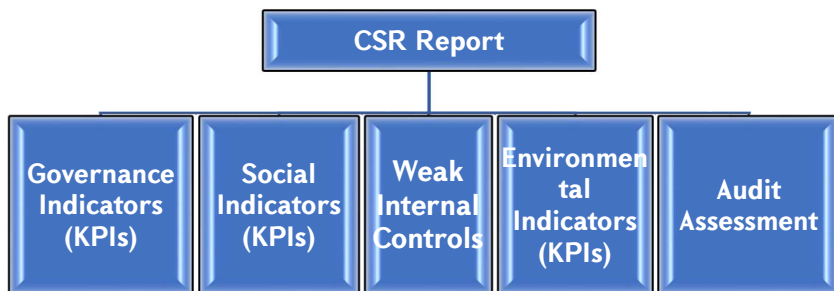


Figure 7. CSR Reporting Framework

Source: Author's own work

The proposed framework aims to make CSR reporting as measurable and analytically useful as financial reporting.

Conclusion and Recommendations

The findings of this study indicate that Corporate Social Responsibility (CSR) reporting and auditing practices in commercial organizations of the Republic of Armenia remain at a developmental stage. Although a growing number of organizations have begun incorporating sustainability initiatives into their business strategies, significant challenges continue to affect the quality, comparability, and reliability of non-financial disclosures.

The research revealed that CSR reporting in Armenia is characterized by the absence of unified methodological approaches, limited use of ESG performance indicators, insufficient integration between financial and non-financial reporting systems, and a relatively low level of independent assurance. As a result, stakeholders often face difficulties in assessing the actual

sustainability performance and long-term value creation capabilities of organizations.

Based on the results of the research, the following conclusions and recommendations are proposed:

1. **The development of unified CSR reporting guidelines is essential for Armenian commercial organizations.** Standardized reporting frameworks would improve the consistency, comparability, and transparency of sustainability disclosures and align local practices with international standards.

2. **Organizations should adopt a standardized system of ESG Key Performance Indicators (KPIs).** The use of measurable and verifiable indicators would enhance the quality of non-financial information and facilitate comparative analysis across industries and organizations.

3. **Financial and non-financial reporting should be integrated into a single reporting framework.** The proposed integrated reporting model would provide stakeholders with a more comprehensive understanding of organizational performance, risks, and value creation processes.

4. **The scope of external assurance for CSR and ESG reports should be expanded.** Independent audit assurance can significantly improve the credibility and reliability of sustainability information and strengthen stakeholder confidence.

5. **The double materiality approach should be incorporated into CSR reporting and auditing practices.** This framework enables organizations to assess both the financial implications of sustainability issues and their impact on society and the environment.

6. Organizations should establish internal ESG data governance and control systems. Effective internal controls would improve data quality, reduce reporting risks, and support the assurance process.

7. Armenian commercial organizations should prepare for the implementation of international sustainability reporting requirements, particularly CSRD and ESRS. The development of a phased ESG maturity framework would facilitate the gradual adoption of international sustainability standards and improve organizational readiness.

8. Capacity building and professional training in CSR reporting and sustainability assurance should be strengthened. Increasing professional competencies among managers, accountants, and auditors would contribute to the effective implementation of sustainability reporting systems.

Overall, the implementation of these recommendations would enhance the transparency, accountability, and credibility of CSR reporting in Armenian commercial organizations. Furthermore, it would contribute to the development of a more sustainable business environment, improve stakeholder trust, and strengthen the

References:

1. **Adams, C., A.** (2022). *The Future of Corporate Sustainability Reporting*. Sustainability Accounting, Management and Policy Journal, 13(3), 507-518.
2. **Adams, C., A., Alhamood, A., He, X., Tian, J., Wang, L., & Wang, Y.** (2021). *The Double-Materiality Concept: Application and Issues*. Global Reporting Initiative (GRI).

3. **Carroll, A., B.** (1991). *The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders*. Business Horizons, 34(4), 39-48. DOI: [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G)
4. **Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P.** (2016). *Integrated Reporting: A Structured Literature Review*. Accounting Forum, 40(3), 166-185. DOI: <https://doi.org/10.1016/j.accfor.2016.06.001>
5. **Eccles, R., G., & Krzus, M., P.** (2018). *The Nordic Model: An Analysis of Leading Practices in ESG Disclosure*. Nordic Council of Ministers.
6. **Elkington, J.** (1997). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Capstone Publishing.
7. European Commission. (2023). *European Sustainability Reporting Standards (ESRS)*. Brussels: European Commission.
8. Global Reporting Initiative (GRI). (2024). *Double Materiality: The Guiding Principle for Sustainability Reporting*.
9. Global Reporting Initiative (GRI). *ESG Double Materiality: Towards a Two-Pillar Corporate Reporting Architecture*.
10. Global Reporting Initiative (GRI). *The Double-Materiality Concept: Application and Issues*.
11. IFRS Foundation. (2023). *IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information*. London: IFRS Foundation.
12. IFRS Foundation. (2023). *IFRS S2 Climate-related Disclosures*. London: IFRS Foundation.
13. International Auditing and Assurance Standards Board (IAASB). (2023). *International Standard on Sustainability Assurance (ISSA) 5000*. New York: International Federation of Accountants.
14. International Auditing and Assurance Standards Board (IAASB). (2024). *International Standard on Sustainability Assurance (ISSA) 5000: General Requirements for Sustainability Assurance Engagements*.

15. International Integrated Reporting Council (IIRC). (2021). *International Framework*. London: International Integrated Reporting Council.
16. **Mkrtchyan, A.** (2025). *Business Transparency and CSR Auditing: A Synergistic Approach to Building Trust*. Economics, Finance and Accounting Scientific Journal, 16, 120-137. DOI: <https://doi.org/10.59503/10.59503/29538009-2025.si-1>
17. **Mkrtchyan, A.** (2025). *CSR Audit in the Context of Improving the Financial Stability of Organizations*. Economics, Finance and Accounting Scientific Journal, 15, 100-109. DOI: <https://doi.org/10.59503/29538009-2025.1.15-100>
18. **Porter, M., E., & Kramer, M., R.** (2006). *Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility*. Harvard Business Review, 84(12), 78-92.
19. **Tshughuryan, A., Khachatryan, N., & Mkrtchyan, A.** (2026). *Challenges of Corporate Social Responsibility Auditing in Business*. Springer Proceedings in Business and Economics. DOI: <https://doi.org/10.1007/978-3-032-19276-9>
20. **Tschopp, D., & Huefner, R., J.** (2015). *Comparing the Evolution of CSR Reporting to That of Financial Reporting*. Journal of Business Ethics, 127(3), 565-577. DOI: <https://doi.org/10.1007/s10551-014-2050-9>
21. United Nations. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: United Nations.
22. World Business Council for Sustainable Development (WBCSD). (1999). *Corporate Social Responsibility: Meeting Changing Expectations*. Geneva: WBCSD.

**ՀԱՅԱՍՏԱՆԻ ԱՌԵՎՏՐԱՅԻՆ ԿԱԶՄԱԿԵՐՊՈՒԹՅՈՒՆ-
ՆԵՐՈՒՄ ԿՍՊ ՀԱՇՎԵՏՎՈՂԱԿԱՆՈՒԹՅԱՆ ԵՎ
ԱՌԻԴԻՏՈՐԱԿԱՆ ՀԱՎԱՍՏՄԱՆ ԲԱՐԵԼԱՎՈՒՄԸ
ՄԵԹՈԴԱԲԱՆԱԿԱՆ ՄՈՏԵՑՈՒՄՆԵՐ, ԿՐԿՆԱԿԻ
ԷԱԿԱՆՈՒԹՅՈՒՆ ԵՎ ESG ՑՈՒՑԱՆԻՇՆԵՐ**

Անի Մկրտչյան

Հյուսիսային համալսարան, ասպիրանտ

Բանալի բառեր - կորպորատիվ սոցիալական պատասխանատվություն, ԿՍՊ աուդիտ, ESG հաշվետվողականություն, ESG ցուցանիշներ, կրկնակի էականություն, կայունության հաշվետվողականություն, աուդիտորական հավաստում, ինտեգրված հաշվետվողականություն, ոչ ֆինանսական տեղեկատվություն, կայուն զարգացում

Հետազոտության հիմնական նպատակը ՀՀ առևտրային կազմակերպություններում կորպորատիվ սոցիալական պատասխանատվության հաշվետվողականության և դրա նկատմամբ աուդիտորական հավաստման տնտեսամեթոդական ու գործնական հիմքերի ուսումնասիրությունն է, ինչպես նաև դրանց կատարելագործման ուղղությունների մշակումը՝ միջազգային չափանիշների պահանջների համատեքստում:

Հետազոտության ընթացքում՝

- ✓ բացահայտվել են ՀՀ առևտրային կազմակերպություններում ԿՍՊ իրականացման մոտեցումները և խնդիրները, ինչպես նաև կայուն զարգացման հաշվետ-

վողականության տեսամեթոդաբանական և գործնական մարտահրավերները,

- ✓ միջազգային փորձի հիմքով մշակվել է ՀՀ առևտրային կազմակերպություններում ԿՍՊ և ֆինանսական հաշվետվությունների միջև կառուցվածքային փոխկապակցվածություն, ինչը նպաստում է ESG հաշվետվողականության և արտաքին աուդիտի ուղիների բարելավման գործընթացին,
- ✓ մշակվել է կրկնակի էականության աուդիտորական գնահատման մեթոդաբանական շրջանակ, որը հնարավորություն է տալիս առևտրային կազմակերպություններում ապահովել ESG տեղեկատվության համադրելիությունը, համակարգվածությունը և անկախ աուդիտորական հավաստիության ներկայացման հնարավորությունը,
- ✓ առաջարկվել է ԿՍՊ հաշվետվությունների ձևավաչափ, նրանում ներառելով ESG ոլորտի առանցքային արդյունավետության ցուցիչներ (KPI-ներ), որոնք ապահովում են կայունության վերաբերյալ աուդիտորական տեղեկատվության չափելիությունը, համադրելիությունը և գնահատման օբյեկտիվությունը:

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