

# Gender Diversity in Internal Auditing: A Catalyst for Sustainability

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**Abstract:** Concepts such as environmental, social, governance, sustainable development, and responsibility towards the environment are not new concepts. They appeared and were defined a long time ago, but more recently their importance has increased significantly. Governments, companies, regulatory institutions, non-profit organizations, and even educational institutions have emphasized the activities carried out from the perspective of the notion of sustainable development. Thus, the number of problems related to sustainability, the risks that may arise in this process, and the need to find the most effective solutions, have also increased. The purpose of this study is to analyze whether the gender of internal auditors influences their involvement in ESG reporting. Our study was carried out by applying a questionnaire to internal auditors and/or coordinators of the internal audit function in Romania. Following the application of the questionnaire the final sample size employed in this analysis is 93 with a gender structure that allows a differentiated analysis (29.18 men, 63.53 women, 7.29 unspecified). Our interest was directed towards internal auditors because the specific activities of insurance and advisory have to work to create a sustainability management system in the first phase and audit the system in the second phase. The analysis of the received results was done by clustering also, we considered it appropriate to statistically test the correlations between the variables using nonparametric correlation analysis (Kendall). The main findings show a strong and directly significant link between the gender of the internal auditor and the way the entity can contribute to achieving sustainable development goals. The limits of the study are found in the size and category of the sample of respondents. The category of respondents is limited to internal auditors from Romania and their number can be expanded.

**Keywords:** Internal Audit, Gender, Barriers, Sustainability

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## 1. Introduction

The involvement of internal auditors in Environmental, Social, and Governance (ESG) reporting is significantly influenced by their gender, particularly in the context of the assurance and advisory services they provide. Gender diversity within audit committees and internal audit functions has been shown to correlate with enhanced ESG disclosures and overall reporting quality. Specifically, studies indicate that female representation on audit committees positively affects the quality and quantity of ESG disclosures, suggesting that gender diversity can lead to more comprehensive oversight and a broader perspective on sustainability issues (Bravo & Alvarado, 2018; Arif et al., 2020). Internal auditors, regardless of gender, play a crucial role in enhancing the credibility of ESG reporting through both assurance and advisory services. Applying ordinary least square and fixed-effect estimators Luh (2024) found that women on the audit committee board enhance the integrity of internal controls and internal audit procedures leading to higher quality of financial reporting, lower audit effort and consequently lower audit fee.

The internal audit function is increasingly recognized for its ability to provide independent assurance on ESG metrics, which is essential for fostering trust among stakeholders (Sabauri, 2024; Rakipi & D'Onza, 2023). Moreover, the advisory role of internal auditors has expanded, allowing them to contribute to the development and implementation of ESG strategies within organizations. This shift towards advisory services is particularly relevant as organizations seek to align their operations with sustainability goals and improve their ESG maturity (Bonrath et al., 2022; Ramadhan et al., 2023). The gender of internal auditors may influence their approach to these roles. Research suggests that women in leadership positions, including internal audit functions, often bring different perspectives and priorities to the table, which can enhance the effectiveness of ESG initiatives (Bravo & Alvarado, 2018; Zalata et al., 2019). For instance, female auditors may be more attuned to social and environmental issues, leading to a more robust engagement with ESG reporting processes. This is supported by

findings that highlight the positive association between female directors and the quality of ESG disclosures, indicating that gender diversity can enhance the effectiveness of governance structures related to sustainability (Bravo & Alvarado, 2018; Arif et al., 2020). Furthermore, the evolving landscape of internal auditing emphasizes the importance of gender diversity in fostering a culture of inclusivity and innovation. As organizations increasingly recognize the value of diverse perspectives in decision-making, the involvement of women in internal audit roles can lead to more effective risk management and governance practices related to ESG (Arena & Jeppesen, 2010; Sabauri, 2024). This is particularly relevant in the context of internal auditors' advisory roles, where diverse teams are better equipped to address complex sustainability challenges and drive organizational change (Soh & Martinov-Bennie, 2015).

In this context, the purpose of this paper is to analyze whether the gender of internal auditors influences their involvement in ESG reporting by providing specific assurance and advisory services. To understand the contribution of Romanian internal auditors to ESG initiatives, we conducted a survey-based analysis to explore their current practices and perceptions. By identifying how the gender of internal auditors influences their contribution to ESG reporting processes, this study advances the field of internal audit research. It responds to the demand for further research on the assurance of ESG practices and provides valuable insights into the extent of corporate involvement in ESG factors.

## **2. Previous Research**

The growing emphasis on ESG factors in corporate governance necessitates a robust internal audit function capable of providing assurance and consulting services related to sustainability reporting. Internal auditors are uniquely positioned to enhance the quality of ESG disclosures through their expertise in risk management, internal controls, and governance processes. Internal audit is part of the organization and has a critical importance not only in detecting and preventing fraud (Khikmah et al., 2023; Eulerich et al., 2021; Mihret et al., 2010; Hazaea et al., 2024) but also in ensuring the implementation of sustainable business development strategies. Internal auditors play a pivotal role in the ESG reporting process by ensuring that organizations adhere to established standards and frameworks. According to Ramadhan et al., internal auditors are increasingly recognized for their advisory capabilities, which are essential in implementing effective social and environmental governance practices (Ramadhan et al., 2023). This advisory role allows internal auditors to contribute significantly to the development and execution of ESG strategies within organizations. Internal audits can contribute to improving ESG reporting by Romanian companies, as highlighted by Gherai et al. (2024), also proving the strong and direct link between the ways of achieving sustainable development goals and the perception of internal auditors on the sustainability management strategy implementation.

Bonrath et al. emphasize that internal auditors possess the necessary expertise to promote ESG maturity, thereby enhancing the quality of ESG reporting (Bonrath et al., 2022). Their involvement extends beyond mere compliance; they actively participate in the assurance processes that validate the accuracy and reliability of ESG disclosures. This dual role of assurance and consulting is critical, as it helps organizations navigate the complexities of ESG reporting and ensures that stakeholders receive credible information. The effectiveness of internal auditors in ESG reporting is closely linked to their ability to assess and improve governance processes. Haryani highlights that internal auditors assist management in enhancing operational efficiency and risk management, which are vital for producing high-quality ESG reports (Haryani, 2023). By providing unbiased feedback and recommendations, internal auditors can help organizations identify areas for improvement in their ESG practices. Moreover, the integration of ESG factors into internal control systems is essential for achieving reliable reporting. Harasheh and Provasi argue that effective internal control systems that incorporate ESG considerations can significantly enhance the quality of ESG disclosures (Harasheh & Provasi, 2022). This integration not only improves compliance with regulatory requirements but also fosters a culture of accountability and transparency within organizations.

The influence of gender on the involvement of internal auditors in Environmental, Social, and Governance (ESG) reporting is an emerging area of research that highlights the intersection of gender diversity, corporate governance, and sustainability practices. This literature review synthesizes findings from various studies to elucidate how the gender of internal auditors and board members affects their engagement in ESG reporting. Research indicates that gender diversity on corporate boards positively influences ESG disclosure practices. For instance, Bhatia and Marwaha found that boards with greater gender diversity tend to have higher ESG disclosure scores, as female directors often bring higher ethical standards and a focus on social and environmental issues (Bhatia & Marwaha, 2022). Similarly, Yadav and Prashar noted that female directors significantly impact the social component of the ESG framework, which necessitates reporting on efforts to serve

both internal and external stakeholders (Yadav & Prashar, 2022). This suggests that the presence of women in leadership roles, including internal auditors, can enhance the quality and transparency of ESG reporting. Moreover, the role of internal auditors is crucial in the implementation of ESG initiatives. Ramadhan et al. highlighted that internal auditors are increasingly involved in ESG efforts, particularly in advisory capacities, which can add substantial value to organizations (Ramadhan et al., 2023). This involvement is further supported by findings from Soh and Martinov-Bennie, who noted that internal auditors are more engaged in ESG assurance activities, indicating a shift towards a more consultative role that emphasizes the importance of ESG governance (Soh & Martinov-Bennie, 2015). The gender of internal auditors may influence how these roles are executed, as diverse teams are often associated with broader perspectives and innovative solutions. Judith Butler's theory of performativity, introduced in her 1990 book *Gender Trouble*, has significantly shaped individual and collective understandings of gender. This essay examines performativity as a framework for critically assessing gender performances in patriarchal workplace environments, including the institutional rules and norms that shape behaviors and interactions.

The impact of gender diversity extends beyond board composition to the internal audit function itself. Some studies (Green and Homroy, 2018; Lee and Thong, 2023) have shown that female members in internal audit departments have a positive influence in ensuring overall performance, not just influencing financial performance. Hashim et al. (2019) analyzed the impact resulting from the interaction between board diversity and internal audit on the quality of profits, but this proved to be insignificant, with a limitation of the moderating variable, although there are more and more studies showing that the internal audit function plays an important role in the company's performance, either from a social, or financial point of view. Thus, Bravo and Alvarado emphasized that gender diversity within audit committees correlates with improved sustainability disclosures, suggesting that female auditors may advocate for more rigorous ESG reporting practices (Bravo & Alvarado, 2018). Furthermore, Dempere and Abdalla found that organizations with greater gender diversity in leadership roles are more likely to exhibit enhanced ESG-related disclosures, reinforcing the notion that gender diversity fosters transparency and accountability (Dempere & Abdalla, 2023). However, the relationship between gender diversity and ESG performance is not universally positive. Some studies, such as those by Nicolò et al., indicate that while female directors positively influence overall ESG scores, their impact on individual components, particularly social disclosures, may be weaker (Nicolò et al., 2021). This complexity suggests that the effectiveness of gender diversity in enhancing ESG reporting may depend on various contextual factors, including the organizational culture and the specific governance structures in place. Mazumder, M.M.M. (2024) investigated the influence of gender diversity on Environmental, Social, and Governance (ESG) disclosures within Chinese listed energy companies, specifically examining the moderating role of the audit committee. The study utilized data from 2012 to 2022 sourced from the Chinese Stock Market and Accounting Research database. Gender diversity was quantified using the Blau and Shannon indices, which measure the percentage of female representation on the board. His results demonstrated a significant positive relationship between board gender diversity and ESG disclosure, encompassing both overall and individual dimensions, and the audit committee was found to moderate this relationship.

Migration studies is a dynamic and often contentious field, reflecting the complexities of global movement and social and economic change. While migration research draws from numerous disciplines, accounting scholars have been relatively uninvolved, despite the field's use of concepts like cost, benefit, risk, and control, which are central to accounting. The paper of Ruth D. Hines (1992) explores how accounting researchers can contribute to migration studies, particularly focusing on the potential of critical accounting perspectives to reshape the conversation.

In conclusion, the literature suggests a nuanced relationship between the gender of internal auditors and their involvement in ESG reporting. Gender diversity on boards and within audit functions appears to enhance the quality of ESG disclosures, driven by the unique perspectives and ethical considerations that female leaders bring to the table. However, the extent of this influence can vary, necessitating further research to explore the mechanisms through which gender diversity impacts ESG reporting practices. In this context, we tested the following hypotheses:

*H1: There is a positive relationship between ESG and the number of females in a firm.*

*H2: Gender significantly influences internal auditors' engagement with ESG issues.*

### 3. Research Methodology and Sample Selection Process

Our study was based on the results of earlier research (Gherai et al., 2024) that aimed to test the impact of internal auditor’s activities in Romania, through their specific activities, on ESG reporting and sustainable development goals (SDGs). To facilitate this investigation, a questionnaire comprising 24 questions was developed and distributed to professional accountants, including internal auditors and those overseeing the internal audit function within Romania. The sample population consisted of members of the Association of Internal Auditors from Romania (AAIR) and the Chamber of Financial Auditors from Romania (CAFR). A total of 93 valid responses were collected for analysis. Based on the questionnaire applied, the first published article analyzed the impact of an internal auditor's activities in Romania, through their specific activities, on ESG reporting and sustainable development goals (SDGs).

The primary aim of this study is to examine the extent to which the gender of internal auditors affects their participation in ESG reporting, particularly in the context of providing specialized assurance and advisory services. The analysis of survey data is crucial for understanding the relationships between different variables, particularly in studies involving human behavior and professional practices. In this study, the primary aim is to investigate how gender influences the involvement of internal auditors in ESG reporting. Given the nature of the data collected through the questionnaire, a nonparametric correlation analysis was deemed appropriate to assess the strength and direction of the relationships between variables (Conover, 1999).

Kendall tau-b is a nonparametric measure of correlation that assesses the strength and direction of association between two variables. It is particularly effective in situations where the data may not be normally distributed or when dealing with ordinal scales. The Kendall tau-b (Kendall, 1938) coefficient ranges from -1 to +1, where: a coefficient of +1 indicates a perfect positive correlation, meaning that as one variable increases, the other variable also increases. - A coefficient of -1 indicates a perfect negative correlation, meaning that as one variable increases, the other variable decreases. - A coefficient of 0 indicates no correlation between the variables. The results of the Kendall tau-b correlation analysis will provide insights into the relationships between gender and various aspects of ESG reporting participation, such as the frequency of involvement in assurance activities, the perceived effectiveness of contributions, and the level of training received in ESG matters. The analysis will help identify whether gender plays a significant role in shaping the experiences and perceptions of internal auditors regarding their involvement in ESG reporting.

### 4. Results and Discussion

The analysis of the collected data will focus on the correlation between the gender of internal auditors and their reported levels of participation in ESG reporting activities. The findings will be categorized based on the frequency of involvement in ESG assurance and advisory services, as well as the perceived effectiveness of their contributions. The majority of respondents, approximately 45%, identify as internal auditors, while around 28% hold the position of internal audit function coordinator, and 27% are members of the executive board. In terms of sectoral representation, as illustrated in the frequency table below, a significant portion, approximately 83%, is employed in various other areas and services.

**Table 1: Distribution of respondents by sector of activity**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Credit institution and non-financial services	13	14.0	14.0	14.0
	Insurance/Reinsurance	3	3.2	3.2	17.2
	Other areas and services	77	82.8	82.8	100.0
	Total	93	100.0	100.0	

The distribution of respondents across various sectors of activity reveals the following breakdown: 13 individuals are affiliated with credit institutions and non-financial services, 3 are involved in insurance and reinsurance, while a substantial majority, totaling 77, belong to other areas and services. This distribution indicates a significant representation from sectors outside of traditional financial services, suggesting that the findings of the study may reflect a broader perspective on internal auditing practices and ESG reporting across diverse industries.

**Table 2: Gender structure of the surveyed internal auditors**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	F	59	63.43	63.43	63.43
	M	27	29.05	29.05	92.48
	N	7	7.52	7.52	100.0
	Total	93	100.0	100.0	

The gender structure of the surveyed internal auditors reveals a composition of 59 females, 27 males, and 7 individuals identifying as non-binary. This distribution indicates a significant female representation, comprising approximately 63% of the total respondents. The predominance of female auditors may influence the dynamics of ESG reporting, as research suggests that gender diversity within audit teams can enhance the quality and comprehensiveness of sustainability disclosures. To confirm this result and for the validation of the first hypothesis H2: *There is a positive relationship between ESG and the number of females in a firm*, we used the Kendall T (tau) rank correlation coefficient. The crosstab data reveals the following distribution of responses among internal auditors regarding their ESG reporting experiences:

**Table 3: The gender distribution of internal auditors who have reported on ESG issues**

			Gender of Internal Auditors			
			F	M	N	Total
Have you ever reported on ESG so far?	Not	Count	8	4	0	12
		% of Total	8.6%	4.3%	0.0%	12.9%
	Rarely	Count	5	1	0	6
		% of Total	5.37%	1.07%	0.0%	6.44%
	Sometimes	Count	9	8	5	22
		% of Total	9.67%	8.6%	5.4%	23.67%
	Often	Count	20	7	1	28
		% of Total	21.5%	7.52%	1.07%	30.09%
	Very often	Count	17	7	1	25
		% of Total	18.3%	7.52%	1.07%	26.89%
	Total	Count	59	27	7	93
		% of Total	63.44%	29.03%	7.52%	100.0%

**Table 4: Symmetric Measures**

		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Ordinal by Ordinal	Kendall's tau-b	.171	.088	1.940	.052
N of Valid Cases		93			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

The findings reveal significant insights into the participation of auditors by gender in ESG reporting, highlighting both the frequency of reporting and the overall representation of different gender identities within this professional context. The analysis of the crosstab data reveals important insights into the gender dynamics of internal auditors engaged in ESG reporting. The predominance of female auditors in the categories of "Often" and "Very often" suggests that women are taking a leading role in this area, which may reflect broader trends in the profession where female auditors are increasingly recognized for their contributions to sustainability and governance issues. Conversely, the lower representation of males in the "Rarely" and "Not" categories indicates a potential shift in engagement levels, with females more likely to participate in ESG reporting activities. The absence of non-binary auditors in the "Not" category raises questions about inclusivity and the barriers that may exist for this gender identity within the internal audit profession.

Studies have shown that organizations with a higher proportion of female board members tend to exhibit improved ESG performance and reporting practices. For instance, Monteiro (2024) highlights that gender diversity within the workforce, coupled with sustainability reporting, can lead to superior ESG performance due to the unique perspectives that diverse teams bring to decision-making processes (Monteiro, 2024). Similarly, Manita et al. (2018) discuss the "critical mass" effect, suggesting that a significant presence of women on boards positively correlates with enhanced transparency and ethical compliance in ESG disclosures (Manita et al., 2018). This implies that the high percentage of female internal auditors in this study could contribute to more robust ESG reporting practices. Furthermore, the findings from Nguyen et al. (2023) suggest that board gender diversity mediates the relationship between ESG performance and firm value, indicating that female auditors may play a crucial role in shaping the ESG narrative of their organizations (Nguyen et al., 2023). The presence of women in internal audit functions can foster a culture of accountability and transparency, which is essential for effective ESG reporting.

In conclusion, the gender structure of the internal auditors surveyed, with a notable majority of females, may significantly influence their involvement in ESG reporting. This aligns with existing literature that emphasizes the positive impact of gender diversity on corporate governance and sustainability practices. For the validation of the second hypothesis *H2: Gender significantly influences internal auditors' engagement with ESG issues* we used the Kendall T (tau) rank correlation coefficient.

**Table 4: The Influence of Gender on Internal Auditors' Engagement with ESG Issues**

			Gender of Internal Auditors			Total
			F	M	N	
Does internal audit provide objective assurance and advice on ESG reporting?	No	Count	7	4	1	12
		% of Total	7.52%	4.30%	1.07%	12.89%
	Rarely	Count	17	4	3	24
		% of Total	18.27%	4.30%	3.22%	25.8%
	Sometimes	Count	23	6	0	29
		% of Total	24.73%	6.45%	0.00%	31.18%
	Often	Count	10	6	2	18
		% of Total	10.75%	6.45%	2.15%	19.35%
	Very often	Count	1	4	1	6
		% of Total	1.07%	4.30%	1.07%	6.44%
	Always	Count	1	3	0	4
		% of Total	1.07%	3.22%	0.00%	4.34%
	Total	Count	59	27	7	93
		% of Total	63.44%	29.03%	7.52%	100.0%

**Table 5: Symmetric Measures**

		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Ordinal by Ordinal	Kendall's tau-b	.271	.083	2.982	.003
N of Valid Cases		93			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

The Crosstab data indicate a varied perception among internal auditors regarding their effectiveness in providing objective assurance and advice on ESG reporting. The responses indicate that a significant number of auditors believe they do not provide such assurance (7 females, 4 males, 1 non-binary), while a notable portion feels they do so rarely (17 females, 4 males, 3 non-binary). In contrast, a more positive outlook is reflected in the "sometimes" category (23 females, 6 males, 0 non-binary), with fewer respondents indicating they provide assurance "often" (10 females, 6 males, 2 non-binary) or "very often" (1 female, 4 males, 1 non-binary). Only a

small number of auditors claim to provide assurance "always" (1 female, 3 males, 0 non-binary).

Results proved a lack of consensus among internal auditors about the effectiveness of their role in ESG assurance, with a notable proportion expressing skepticism about the objectivity of the assurance provided. The findings imply that there may be significant room for improvement in internal audit practices related to ESG reporting. Gao & Chen (2024) supports this interpretation by highlighting the importance of ESG assurance in shaping investor perceptions and preferences. The research indicates that the presence of ESG assurance can enhance investor confidence, suggesting that if internal auditors are perceived as providing objective assurance, it could positively influence stakeholder trust and investment decisions. However, the lack of standardization in ESG assurance practices, as noted in the reference, may contribute to the mixed perceptions observed in the crosstab data. This underscores the need for clearer guidelines and improved practices within internal audit functions to enhance the credibility and effectiveness of ESG reporting assurance.

## 5. Conclusion, Limits, and Further Research

The role of internal auditors in ESG reporting has gained prominence in recent years, as stakeholders increasingly demand transparency and accountability in corporate governance. This study seeks to contribute to the understanding of gender dynamics in the internal audit profession, particularly concerning ESG reporting. By examining the participation of internal auditors based on gender, the research aims to highlight areas for improvement and encourage organizations to foster an inclusive environment that values diverse perspectives in sustainability practices.

This study analyzes the gender distribution of internal auditors who have reported on ESG, utilizing crosstab data to explore the frequency of reporting across different gender identities. Understanding these dynamics is essential for fostering inclusivity and enhancing the effectiveness of internal audit functions in ESG contexts. The crosstab analysis of gender distribution among internal auditors reporting on ESG issues highlights significant trends in participation and engagement. The findings suggest that female auditors are more actively involved in ESG reporting compared to their male counterparts, while non-binary representation remains limited. These insights underscore the need for organizations to foster an inclusive environment that encourages participation from all gender identities in ESG reporting, ultimately enhancing the effectiveness and credibility of internal audit functions in this critical area. In conclusion, the gender of internal auditors plays a significant role in shaping their involvement in ESG reporting through assurance and advisory services. Gender diversity within internal audit functions not only enhances the quality of ESG disclosures but also contributes to a more comprehensive understanding of sustainability issues, ultimately leading to improved organizational performance in this critical area. Despite the positive implications of gender diversity, challenges remain in fully realizing the potential benefits.

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