

## CORPORATE GOVERNANCE IN THE CONTEXT OF ESG ISSUES IN ICT COMPANIES IN POLAND – RESULTS OF SURVEYS

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**Purpose:** This study aims to identify and assess the actions taken by ICT (Information and Communications Technology) companies in one area of ESG, namely corporate governance (CG).

**Design/methodology/approach:** A CAWI (Computer-Assisted Web Interview) type survey method was used. The survey involved 39 organisations with Polish capital operating in the ICT sector. Companies from the SME sector predominated among the surveyed entities.

**Findings:** The study revealed areas for improvement in the corporate governance mechanisms of companies in the ICT sector in Poland, which may decrease their ability to identify, assess and mitigate the risks of their operations, fulfil their reporting obligations, and gain the trust of their stakeholders.

**Research limitations/implications:** A purposive selection of entities for the research was used. The research sample did not represent the ICT industry, so the conclusions only relate to the surveyed entities.

**Practical implications:** the article shows what ICT companies should do to operate sustainably. It highlights the relevance and importance of the latest legislation on non-financial reporting.

**Social implications:** Corporate governance activities are part of a company's ESG strategy. They have a significant impact on the environmental and social performance of entities.

**Originality/value:** There needs to be more research in the literature on the corporate governance activities of ICT companies. This article fills that gap.

**Keywords:** sustainable development, corporate governance, ICT sector, ESG.

**Category of the paper:** Research paper.

## 1. Introduction

Increasingly aware shareholders, consumers, business partners and investors are putting pressure on companies to operate sustainably. As a result, leading ICT companies are beginning to demonstrate their environmental and social responsibility. This is manifested, among other things, in formulating ESG strategies, creating positions within the organisational structure to coordinate the implementation of this strategy, and creating policies and procedures to regulate their pro-social and pro-environmental commitment. Companies prioritising ESG take care of organisational governance are better prepared to manage risks, respond to stakeholder expectations and fulfil reporting obligations.

The following part of the study explains the essence of sustainable development, ESG and corporate governance. Then, the approach of ICT companies to implementing the assumptions of the concepts mentioned earlier is described, with particular attention paid to the situation of ICT companies in Poland. The central part of the article is a presentation of the research results devoted to identifying and assessing actions taken by technology companies in Poland in corporate governance.

## 2. Sustainable development, ESG issues and corporate governance

The most widespread definition of sustainable development and the first was published in 1987 in the Report of the World Commission on Environment and Development: *Our Common Future*. It took 17 years from the appearance of this definition until the abbreviation ESG was used for the first time. At that time, the UN Global Compact's *Whom Cares Wins* initiative highlighted the links and interdependencies between environmental, social and governance factors. The abbreviation ESG has been in use since 2004.

Sustainable development is the socio-economic development of modern societies by meeting their needs, not diminishing future generations' ability to meet them (United Nations, 1987). ESG is not the same as sustainability. ESG is the three areas considered by stakeholders, among others, for non-financial assessment of entities: environmental, social, and governance / corporate governance (CG). ESG is the environmental, social and corporate governance issues that stakeholders consider in the context of corporate behaviour. ESG is an approach to selecting companies for investment that assesses environmental and social factors impact on them, verifying the quality of corporate governance mechanisms. The concept of sustainability is much broader and focuses on the role a company plays in society, the creation of value by managing the impact (both positive and negative) of its activities on people and the environment, and the consequences of its actions for a wide range of stakeholders.

A significant development in sustainable development was the adoption in 2015 of the '2030 Agenda for Sustainable Development 17 Sustainable Development Goals (United Nations, 2015). These goals can be considered through the lens of ESG issues (Figure 1).



**Figure 1.** Linking the Sustainable Development Goals to ESG areas.

Source: Berenberg, 2018, after Sætra, 2021.

A milestone in developing the idea of measuring sustainability was developing the Triple Bottom Line (TBL) concept. TBL was first introduced in 1994 (Elkington, 1994; 1997, after Chandler, 2017). The concept is associated with the acronym 3P, i.e. people, planet, and profit. TBL is the concept of the equivalence of the economic (financial), environmental and social spheres. The development of the TBL concept became the starting point for the Quadruple Bottom Line (QBL) or Multiple Bottom Line (MBL), among others. QBL is a concept based on four areas (Woodward, Woodward, Rovira Val, 2004): environmental, social, governance, and economical. The triple bottom line approach can become a quadruple bottom line, maximising economic performance only if the interests of all stakeholders can be met by adopting the best corporate governance practices for the company (Achim, Borlea, 2015). Because of these four areas, the acronym ESGE is worth considering. MBL is based on the five areas of ESGEE (Brockett, Rezaee, 2012, after Rezaee, 2015): environmental, social, governance, ethical, and economical. In extended versions of the TBL concept, the area of governance (corporate governance) will appear.

The concept of corporate governance should be considered broadly, not only related to the exercise of corporate governance by and on behalf of the company's shareholders and referring to boards, their competencies, structure and relationship with management. Corporate governance, as a broader concept, from the point of view of internal and external governance, includes other stakeholders such as employees, creditors, customers, suppliers, the local community or the state in the oversight and running of the company. The contemporary understanding of the term corporate governance is broadened to include aspects of corporate social responsibility and increased ethical standards and specific patterns of behaviour for managers, investors, bank employees and audit firms, popularised in the form of codes of good corporate practice.

According to the OECD, corporate governance is the network of relationships between the management of companies, their governing and supervisory bodies, shareholders and other stakeholders (stakeholders in the company's performance). Corporate governance further includes the structure through which a company's objectives are set, the means of achieving those objectives and the means of tracking company performance (OECD, 2004). In the broadest systemic view, corporate governance is a system, i.e. a set of interdependent and complementary legal and economic institutions designed to ensure the proper and economically efficient functioning of joint-stock companies (especially public companies) and to resolve or at least mitigate conflicts (conflicts) of interest of those involved in the company (Oplustil, 2010). The essence of corporate governance is thus to achieve consensus among different stakeholder groups to enhance the credibility of companies. In the context of the idea of sustainable development, it is crucial for the confidence not only of investors in the organisation's future performance but also of stakeholders concerned with the environmental and social impact of the company. Good corporate governance helps build an environment of trust, transparency and accountability necessary for fostering long-term investment, financial stability and business integrity, thereby supporting more substantial growth and inclusive societies. Firms can employ ESG, CG and firm size as strategies to enhance their performance, especially during financial crises (Nisar, Mobarek, Raid, 2023).

Corporate governance is one of the pillars of the ESG concept and applies to all companies, irrespective of their field of activity. At the same time, social or environmental aspects depend on the specifics of the company in question. Corporate governance covers issues such as corporate governance, the structure of a company's board of directors, respect for disclosure obligations to shareholders, executive remuneration, respect for shareholder rights, tax transparency, data protection and anti-corruption and anti-bribery.

Nowadays, non-financial data providers, such as Bloomberg or Refinitiv, use their methodologies to create ESG ratings<sup>1</sup>, are starting to play a significant role in the ESG assessment of companies. This data's disclosure heavily depends on companies publishing non-financial reports (integrated, sustainability, CSR, ESG, etc.), often based on specific reporting standards. Both non-financial data providers and organisations promoting their non-financial reporting standards present the structure of ESG issues, including CG, differently. According to ESG core data providers, corporate governance issues are presented in Table 1.

**Table 1.***Corporate governance issues by ESG core data providers*

Provider of primary ESG data	Issues	Sub-issues
Bloomberg	Board composition	Director Roles Diversity Independence Refreshment
	Executive compensation	Incentive Structure Pay Governance Pay for Performance
Refinitiv	Management	-
	Shareholders	-
	CSR Strategy	-

Source: own study based on Bloomberg and Refinitiv database.

Harmonisation of non-financial reporting standards is currently a challenge for non-financial lawmakers, particularly in the context of the adoption of the Corporate Sustainability Reporting Directive (CSRD), by the European Parliament in 2022, requiring companies to disclose information on their social and environmental impacts regularly.

**Table 2.***Corporate governance issues according to essential non-financial reporting standards*

Organisations proposing a non-financial reporting standard	Issues	Sub-issues
Global Reporting Initiative (GRI)	Governance structure and composition	-
	Nomination and selection of the highest governance body	-
	Chair of the highest governance body	-
	Role of the highest governance body in overseeing the management of impacts	-
	Delegation of responsibility for managing impacts	-
	Role of the highest governance body in sustainability reporting	-
	Conflicts of interest	-
	Communication of critical concerns	-
	Collective knowledge of the highest governance body	-
	Evaluation of the performance of the highest governance body	-
	Remuneration policies	-
	Process to determine remuneration	-
Annual total compensation ratio	-	
Sustainability Accounting Standards Board (SASB)	Business Model & Innovation	Product Design & Lifecycle Management, Business Model Resilience Supply Chain Management, Materials Sourcing & Efficiency, Physical Impacts of Climate Change
	Leadership & Governance	Business Ethics, Competitive Behavior Management of the Legal & Regulatory Environment, Critical Incident Risk Management, Systemic Risk Management

Source: own study based on GRI and SASB.

The leading standard for reporting non-financial data underpinned by the TBL concept is that developed by the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB). The corporate governance issue structures proposed by these organisations are presented in Table 2.

### 3. Sustainability of the ICT sector

The importance of the ICT sector is overgrowing worldwide. It is seen as a catalyst for the implementation of corporate social responsibility concepts in companies (Hoeltl, 2015), the foundation of the knowledge economy and a critical factor in the competitiveness of national economies (Karahan, 2016; Enowbi Batuo, 2015). The negative impact it has on the environment is also recognised. Studies show that as the sector grows, its contribution to global energy consumption and CO<sub>2</sub> emissions increases (Di Salvo et al., 2017; Paruchuri, 2011). Each phase of the life cycle of ICT products, i.e. design, use and consumption, causes environmental damage. Contributing to the ICT industry's carbon footprint are personal computers, mobile phones, chargers and broadband routers, as well as software (Sissa, 2009; Kern et al., 2018). The current contribution of ICT to global greenhouse gas (GHG) emissions is estimated to be 2.1% to 3.9% (Freitag et al., 2021).

In addition to environmental risks, the sector described generates other risks. For example, encryption technology, on the one hand, provides people with security and privacy and, on the other hand, is difficult to track by law enforcement and intelligence services, making it easier for crime to develop. On the other hand, the use of artificial intelligence systems carries the risk of perpetuating stereotypes and making discriminatory decisions. Accusations have been levelled at ICT companies for colluding with repressive regimes, violating labour rights in supply chains and manipulatively using the data of private social media users (Business & Human Rights Resource Centre, 2018). These companies face workforce diversity, the need for equal pay and equal development opportunities for women and men.

The Global Enabling Sustainability Initiative (GeSI) identifies privacy, social application of ICT products and services, ICT solutions for a low-carbon economy, data security and quality of service as the most critical issues for developing today's technology companies (GeSI, n.d.). Business for Social Responsibility, on the other hand, in defining areas of responsibility for the ICT sector indicates (Cisco, MacAvoy, 2008):

- innovation and software solutions for sustainable development,
- governance, ethics, compliance and transparency,
- global employee management and employee engagement,
- access, privacy and security,
- care for the environment.

It is important to note that research on sustainability in the ICT sector has mainly focused on environmental care and is concerned with Green IT and Green by IT. Green IT means creating sustainable products. Green by IT is a software-based tool that enables organisations to operate sustainably. According to Naumann et al. green and sustainable software is “software whose direct and indirect negative impacts on the economy, society, people and the environment resulting from the development, implementation and use of the software are minimal and which has a positive impact on sustainability” (Naumann et al., 2011). Green by IT are software-based tools that enable organizations to run their business in a sustainable manner.

In 2020, 2468 companies in Poland employed ten people or more in the ICT sector. The number of people working in the ICT sector was 269.0 thousand, with eight out of ten working in ICT services. The value of net sales revenue in the ICT sector in 2020 amounted to PLN 189.1 billion, increasing by 11.0% year-on-year. Services were the most significant contributor to the ICT sector's revenue generation. Their share in the revenues of the entire ICT sector was 80.8%. Enterprises included in the surveyed sector were more innovative than enterprises in the economy as a whole. In 2018-2020, almost half of the ICT sector entities introduced innovations in their company, while the rate for enterprises was 31.1% (Główny Urząd Statystyczny, Urząd Statystyczny w Szczecinie, 2021).

Among the primary benefits associated with the development of the ICT market in Poland, an increase in productivity and labour efficiency, improved social welfare and rationalisation of expenditure in specific sectors of the economy, as well as optimisation of the use of resources are mentioned (Ministerstwo Rozwoju, 2017). That demonstrates the crucial role of this sector in the process of making sustainable development a reality. Previous research dedicated to sustainable development and ESG shows that a significant proportion of technology companies in Poland are at the stage of planning, defining and developing long-term goals and ESG strategies. The main reasons they formulated ESG strategies were: the desire to operate in compliance with laws and regulations, to build a reputation and to maximise new sources of revenue. Entities that implemented this type of strategy placed the most significant emphasis on activities related to the environmental area (35%), followed by corporate governance (29%) and the social area (27%) (ManpowerGroup, 2022).

#### **4. Description of the study**

The research problem formulated for the study is contained in the following question: What importance do ICT companies attribute to the issue of corporate governance? The aim of the research was to identify and assess the actions taken by ICT companies in Poland in the area of corporate governance. Data and information were obtained using the CAWI (Computer-

Assisted Web Interview) survey method. The questionnaire survey involved 66 organisations with Polish capital, operating within the scope of "software & computer services". Ultimately, 39 questionnaires were analysed (it was decided to reject 27 questionnaires due to a high percentage of unanswered questions). The majority of the surveyed entities were companies from the SME sector. The respondents were managers or persons responsible for coordinating activities related to implementing the sustainable development concept or related concepts such as CSR and ESG. The survey was conducted between October and December 2021.

Within the area of governance, issues relevant to the development of ICT companies were identified using the expert method. These included: transparency (reporting of non-financial information), data protection, ethics and anti-corruption, and diversity in the composition of governing bodies.

Reporting non-financial information is an opportunity for entities to improve the transparency of their operations, manage risks effectively and gain the trust of key stakeholders. Reporting non-financial data is gradually losing the character of an administrative obligation and becoming an integral part of business communication with stakeholders (Kacprzak, Anam, 2015). As of 2023, the Corporate Sustainability Reporting Directive (CSRD) is in force in the European Union, extending the mandatory non-financial reporting to all companies meeting a minimum of two of the following criteria - EUR 40 million net turnovers, EUR 20 million in assets, 250 or more employees. The question that arises here is whether technology companies know their obligations under this regulation and whether they can meet them.

A significant aspect of governance is undoubtedly data security and protection. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons concerning the processing of personal data and on the free movement of such data (RODO for short) has forced ICT companies to keep a register of processing activities, report breaches to the relevant supervisory authority, and cooperate with the Data Protection Officer (DPO). A source of security and data protection obligations for the sector under study is the Digital Operational Resilience Act (DORA) regulation, adopted by the Council of the European Union on 28 November 2022. This act aims to increase cyber resilience in the financial sector but will apply to financial institutions and qualified providers of ICT products and services.

The inclusion of ethics in the diagnosis of the ICT sector was dictated by the fact that codes of ethics are an essential regulator of economic relations. They are considered one of the tools to improve the effectiveness of corporate governance (Żabski, 2013). They formulate the core values of a company. These values include professionalism, attention to customer interests, reliability, diligence and honesty. Together with legal regulations, they define the boundaries of socially acceptable behaviour and thus prevent companies from shaping relationships arbitrarily that harm stakeholders.



The final element of governance diagnosed was diversity in the composition of governing bodies. The reason for the interest in diversity was the 2020 S&P Global report (Alison et al., 2020), which noted that although the representation of women on boards and director teams in technology companies has increased globally over the past ten years, there is still much to be done. Women occupy less than one-fifth of board seats in technology companies - fewer than in the financial or industrial sectors. At the same time, it has been noted that companies with more women than men in the IT department tend to be more advanced in their digital transformation efforts. The Institute for the Study of Labor research also points out the benefits of women's participation in top management. They show that the participation of women in top management positions tends to positively impact company performance, albeit that their occurrence depends on the women's level of qualification (Smith et al., 2006).

## 5. Results and findings of the studies

The results of the research carried out were structured according to the four elements of corporate governance examined.

### 5.1. Performance in the area *Transparency (reporting of non-financial information)*

In the context of transparency, the question was asked about having a position in the organisational structure responsible for coordinating sustainability/CSR/ESG activities and the approach to reporting. The survey shows that 26 companies still need to establish such a position. Four surveyed entities report sustainability issues. In 3 cases, this is done according to the United Nations Global Compact. One company reported under an initiative such as the Neutral Data Centre Pact, the European Coalition for Green Digitisation. None of the companies uses GRI (Global Reporting Initiative), a recognised standard for reporting non-financial information. The actions taken by companies in terms of corporate governance most often served to achieve sustainability development goals (SDGs) such as:

- Goal 9: Industry, innovation and infrastructure,
- Goal 5: Gender Equality,
- Goal 8: Decent work and economic growth.

The second group of objectives with a similar number of indications was such:

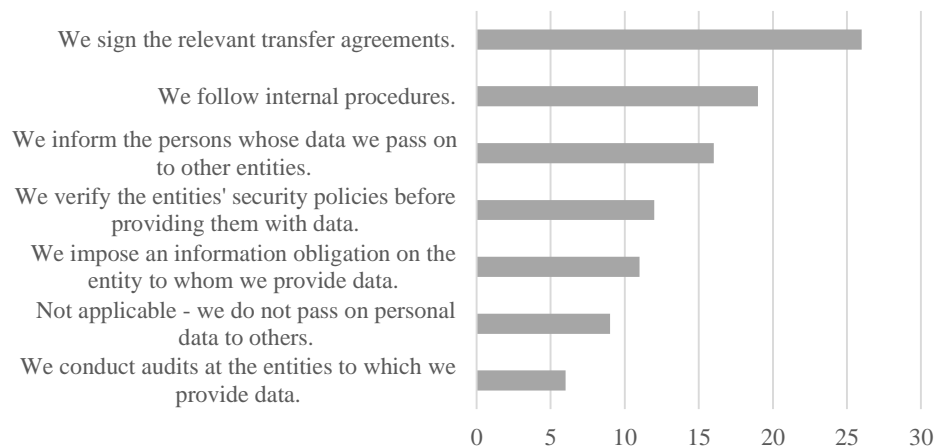
- Goal 13: Climate action,
- Goal 12: Responsible consumption and production,
- Goal 11: Sustainable cities and communities.

The goal that only one respondent indicated was Goal 16: Peace, justice and strong institutions.

## 5.2. Results in the area of *Data protection*

Among the most common solutions for data processing and use, personal data protection (35 indications), customer data security policy (34), and company website privacy policy (33) were mentioned. In 6 entities it was behavioural advertising measures.

The next question addressed the issue of transferring personal data to third parties. The most popular practices for transferring personal data to third parties were (Figure 2): signing appropriate transfer agreements (26), using internal procedures (19), and informing individuals about the transfer of their data to other entities (16). Auditing the entities where data is transferred is the least common practice (6).

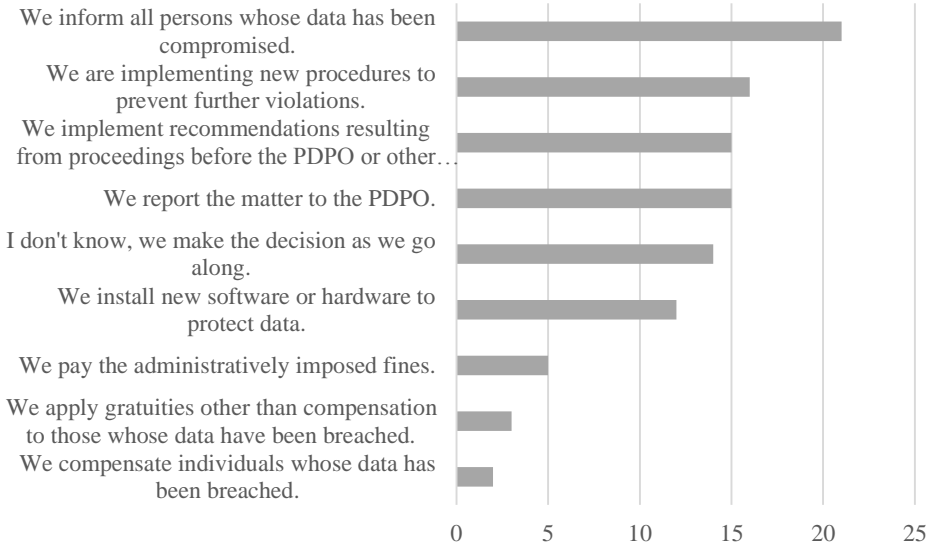


\*Respondents could tick all answers corresponding to their companies' practices (if any).

**Figure 2.** Distribution of responses to the question on how companies regulate the transfer of personal data to third parties\*.

Source: own study.

In the event of a personal data breach and 'leakage' of that data, the most common practices were (Figure 3): informing all persons whose data have been breached (21), implementing new procedures to prevent further breaches (16), reporting the matter to the Personal Data Protection Office (PDPO) (15) and then sensing the recommendations resulting from the proceedings before the PDPO (15). Fourteen companies did not know how to proceed in the event of a personal data breach and 'leakage' of this data. Paying compensation to those whose data had been breached was indicated by the fewest respondents (2).



\*Respondents could tick all answers corresponding to their companies' practices (if any).

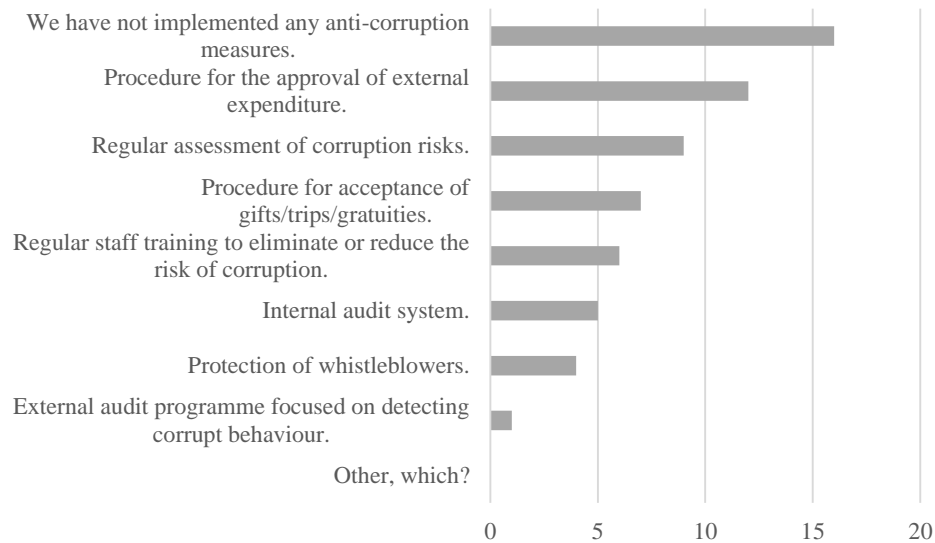
**Figure 3.** Distribution of responses to the question on procedures to be followed in the event of a personal data breach and 'leakage of' this data\*.

Source: own study.

**5.3. Results in the area of Ethics and anti-corruption**

Only one-third of the surveyed entities confirmed having a code of ethics. Respondents of the remaining entities either claimed that their companies did not have such a document or had no knowledge in this regard. Nearly 1/3 of the respondents evaded answering the question on the number of ethics training sessions, and 14 respondents openly admitted that they do not conduct training on the subject. Most companies provide one training course per year. Only two companies registered high training activity in the surveyed area (20 and 30 training per year respectively).

To prevent corruption, the entities surveyed most often used (Figure 4): the procedure for acceptance of external expenses (12), regular assessment of corruption risks (9), and procedure for travel/acceptance of gifts/acceptance of gratuities (7). Nearly 1/3 of the entities still need to implement anti-corruption measures. The lack of institutionalisation of ethics in management does not imply a lack of ethical reflection in the surveyed entities. Half of the respondents stated that their company refrains from commissioning or participating in tenders that raise ethical concerns. Only one respondent indicated the practice of an external audit programme oriented towards detecting corrupt behaviour.



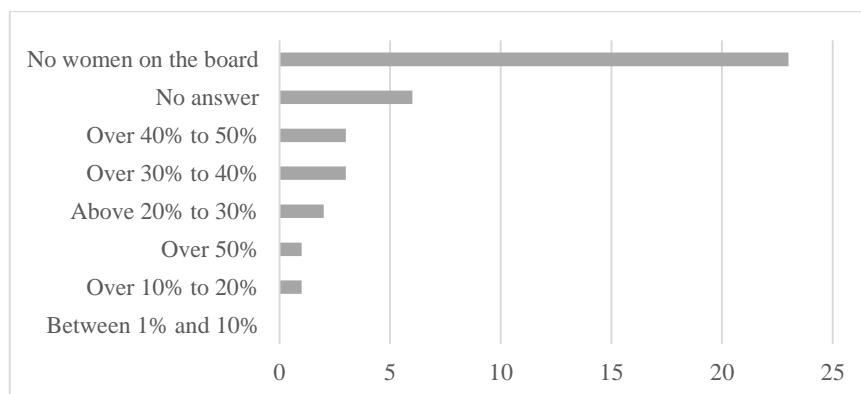
\*Respondents could tick all answers corresponding to their companies' practices (if any).

**Figure 4.** Distribution of responses to the question on the type of anti-corruption measures implemented\*.

Source: own study.

#### 5.4. Results in *Diversity in the composition of authorities*

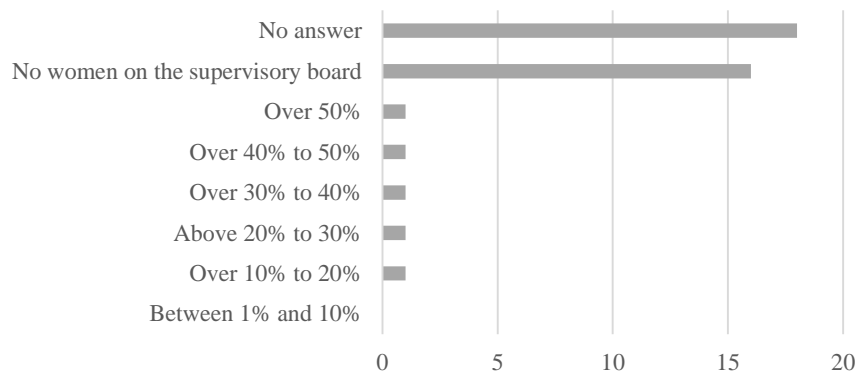
Twenty-three entities did not have a single woman on the board, and six have yet to respond (Figure 5).



**Figure 5.** Percentage of female board members.

Source: own study.

The need for more women on the supervisory board was found in 16 entities, and 18 companies evaded answering this question (Figure 6).



**Figure 6.** Percentage of women on the supervisory board.

Source: own study.

### 5.5. Findings

The research exposed the weakness of the corporate governance mechanisms of ICT companies in Poland. The involvement of the surveyed entities in CG can be described as highly unsatisfactory. Insufficient institutionalisation of ethics in management, lack of due diligence in data protection, evident gender disparities in the staffing of top management bodies, or underestimation of the importance of non-financial reporting are just some of the ills plaguing the surveyed sector. Continued disregard for corporate governance may result in a reduced ability to identify, assess and mitigate business risks, loss of stakeholder trust, and an inability to meet reporting obligations.

## 6. Conclusion

A limitation of the research presented in the study was related to the use of the CAWI technique. A higher return rate for the questionnaires was expected. The high number of non-responses also resulted in a certain number being rejected. Most of the questions in the survey were closed, which prevented the representatives of the enterprises from expressing their opinions in their own words. This construction of the research tool translated into a specific range of information obtained in terms of the topics covered and the scope. At the same time, thanks to this approach, it was not associated with interpretation difficulties.

The research was conducted before adopting the Corporate Sustainability Reporting Directive (CSRD) in 2022. Shortly, following the transposition of this directive into the national legislation of EU member states, including Poland, it can be expected that there will be an increased awareness in companies of the impact of non-financial risks (from ESG areas) on their operations. There will also be an increase in the activities of enterprises aimed at achieving sustainable development goals. Because of the above, repeating the research among small and

medium-sized enterprises, especially those listed on the regulated market, which will be affected by the publication of non-financial reports in 2027 for the financial year beginning 1 January 2026, is a potential direction for future research to assess the impact of the created regulations on changes and the pace of these changes made in enterprises within the framework of sustainable development.

In order to get on the road to sustainability, technology companies should build ESG strategies and define targets and mechanisms to measure and track performance in ESG areas. Creating new structures, teams or positions and implementing new tools to achieve environmental and social goals seems necessary. Corporate governance activities can play a crucial role in the process of change.

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### Footnotes

<sup>1</sup>To better understand the different types of ESG rating providers, we can refer to a three-tiered classification (Li, Polychronopoulos, 2020, after D'Amato, D'Ecclesia, Levantesi, 2021): fundamental, comprehensive, and specialist. In the category of the fundamental are included ESGdata providers that collect and aggregate publicly available data. Refinitiv (formerly, ThomsonReuters) and Bloomberg are examples of fundamental providers. The comprehensive providers' category can include MSCI, Sustainalytics, Vigeo Eiris, ISS, TruValue Labs, and RepRisk. The category called specialist consists of ESG data providers with specific expertise, that "specialize in a specific ESG issue, such as environmental/carbon scores, corporate governance, human rights, or gender diversity". In this category, for instance, we can insert TruCost (now owned by S&P Global), the nonprofit Carbon Disclosure Project (CDP), and Equileap (gender equality data).