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Motivations and Effects of Mergers and Acquisitions on the Warsaw Stock Exchange, Considering ESG Factors

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Abstract

The main purpose of this article is to determine the impact of Environmental, Social, and Governance (ESG) factors on corporate mergers and acquisitions (M&A). The study was conducted on companies listed on the Warsaw Stock Exchange (WSE), which plays a significant role in European capital markets, particularly in the Central and Eastern European (CEE) region. It is the largest stock exchange in the region by both market capitalisation and the number of listed companies. Data for the study were collected in 2024 using CATI (Computer-Assisted Telephone Interviewing) and CAWI (Computer-Assisted Web Interviewing) methods from companies that had conducted M&A in the previous five years. Data analysis was performed using descriptive statistics and several tests, including ANOVA, Kolmogorov-Smirnov, Shapiro–Wilk, Levene, Welch and Kruskal-Wallis. The study investigated the motives for companies to consider ESG factors when conducting M&A transactions. The results show that WSE companies consider managerial awareness to have the greatest influence on the inclusion of these factors

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in M&A. Detailed information was obtained on the different motivations of listed companies to include ESG factors in M&A transactions and the subsequent impact of these transactions on their financial performance. Additionally, the study investigated the impact of company size and capital ownership on decisions to include ESG factors in M&A. The results offer an important contribution to existing research on M&A in the CEE region.

Keywords: mergers and acquisitions (M&A), motivations, ESG factors, Warsaw Stock Exchange

JEL: G30, G34, L20

Introduction

The concept of Environmental, Social, and Governance (ESG) considers how factors related to environmental protection, social responsibility, and corporate governance influence companies' activities. Responsible investment, which promotes the integration of ESG, is expected to accelerate in the coming years. This means that investment streams, including investors' access to capital, will increasingly depend on companies considering ESG factors.

A common strategic activity during corporate growth is mergers and acquisitions (M&A). Companies' M&A decisions are motivated by efforts to strengthen market position, diversifying geographically, technologically, or across product lines, or to increase company value. The reasons for merging can vary between different transactions, and disagreements may arise on either side. Typically, the acquiring company pursues a growth strategy, while the target company may be pursuing a divestment strategy (Rozwadowska 2012, p. 25).

Scale effects are also important, which may vary depending on the size of the companies. M&A transactions are beneficial to the profitability of merged companies when companies are of different sizes; however, no significant benefits are noted when the companies are similar in size (Korpus 2014, p. 89). Despite these variations, investors almost always expect these transactions to increase company value through synergy and a better valuation following a successful merger (DePamphilis 2014, pp. 5–9). For sellers, common motivations include a lack of independent development opportunities or a defence against a hostile takeover (Grobelny, Stradomski, and Stobiecki 2018, p. 43).

The ESG concept specifically dictates that environmental protection, social responsibility, and corporate governance factors will be incorporated into a company's activities. The concept was first defined in 2004 in the report "Who Cares Wins: transforming finance and economics through ESG" (UN Global Compact 2020). This was followed in 2006 by the Principles for Responsible Investment (PRI) to accelerate the integration of ESG. Since the late 2010s, the ESG investment concept has begun to be included in European Union (EU) policies under the European Green Deal (2019). This is evident in current and planned EU regulations that integrate ESG into *acquis communautaire*. In addition, the *Action Plan: Financing Sustainable Growth,* adopted by the European Commission in 2018, established an EU taxonomy for sustainable economic activity. It introduced guidelines for investors concerning ESG risk in decision-making and created benchmarks for investors.

The Corporate Sustainability Due Diligence Directive (CSDDD; Directive (EU) 2024/1760), which came into effect on 25 July 2024, represents the next set of EU regulations aimed at promoting responsible business activity by imposing obligations on large firms. It is of particular importance when analysing and assessing aspects related to social and environmental responsibility, as well as the quality of management in companies being merged or acquired through M&A transactions.

In recent years, the M&A market has seen exceptional variability, from a sharp drop in 2020 caused by the COVID-19 pandemic to a record recovery in 2021 (McKinsey & Company 2024). A key emerging trend in M&A strategies in 2024 was the increasing importance of sustainable development. Firms are increasingly prioritising aspects like decarbonisation and investment in renewable energy as key factors in their decision-making related to M&A.

The growing importance of sustainable development in M&A is closely linked to the new ESG regulatory framework, especially in the EU. Deloitte (2024) highlights the role of regulation as a key reason for the growing importance of ESG in M&A. The Taxonomy Regulation (Regulation (EU) 2020/852) requires firms to disclose the sustainable nature of their activity, while the Corporate Sustainability Reporting Directive (CSRD 2022) broadens compulsory ESG reporting from 2024. In addition, the CSDDD will enforce more stringent due diligence obligations, compelling firms to account for their impact on the environment and human rights, which directly influences the inclusion of ESG in M&A strategies. As a result, analysing both the motivations and results of M&A transactions through an ESG lens is critical for ensuring compliance and long-term value creation.

A recent report by KPMG (2023) shows that firms and investors are increasingly incorporating ESG issues into their M&A strategies due to the impact of ESG on company value. Investors are inclined to pay more for a sustainable goal that indicates a high level of ESG maturity in areas that are in accordance with their ESG priorities.

External factors suggest that, in the coming years, investment streams – including access to capital for investors – will increasingly depend on its consideration of ESG factors. Given the growing importance of ESG criteria in determining and implementing a firm's corporate strategies, fulfilling these criteria is increasingly considered not only a matter of compliance and good company management but also an integral component of a firm's corporate strategy.

For companies conducting due diligence on potential acquisitions, reliable target indicators are essential for decision-making. As the KPMG report shows, ESG criteria impact a growing number of M&A transactions, and investors are inclined to pay a premium for goals with a strong history of sustainable development. As a result, M&A teams increasingly conduct due diligence of ESG aspects at an early stage.

Recent years have brought considerable changes to ESG regulations, such as the European Green Deal (2019), CSRD (2022), Taxonomy regulations (Regulation (EU) 2020/852) and the Carbon Border Adjustment Mechanism (CBAM; Regulation (EU) 2023/956). This shift has placed ESG at the top of corporate agendas. At the same time, society as a whole has begun to change, with noticeable changes in the behaviour of clients, employees, and investors. They are increasingly favouring sustainable products, employers, and investments. These changes constitute a critical force in the strategic environment of many firms, which impacts M&A activity.

Research has even indicated situations where buyers are prepared to cancel a transaction if critical ESG information is not provided or is unavailable. This also drives increased M&A activity. A tendency has been observed where firms use M&A to obtain quick successes while implementing a sustainable development strategy. This trend is set to continue and may even grow in the coming years. On the seller's side, firms focus on reducing the ESG risk profile by selling all potentially unnecessary and mismatched assets and strengthening management by strategically withdrawing from geographical markets that cannot ensure sufficient compliance with CSDDD requirements. On the buyer's side, meanwhile, the goal is the rapid implementation and further expansion of the sustainable business model (Norton Rose Fulbright 2024).

Investors who are aware of this situation place ESG factors at the top of assessment criteria when making investment decisions in both the capital market and the M&A market. Furthermore, the growing number of ESG-focused investments means that advanced ESG due diligence has become an increasing part of M&A negotiations. The M&A market now treats ESG as a key dynamic in financial and legal due diligence reports. As a result, companies are compelled to include new provisions relating to their ESG profile in M&A agreements. The tendency towards ESG compliance is gradually becoming a legal obligation and not only a business and investment model for firms (Huang et al. 2023).

Our research combines two related areas: M&A transactions on the WSE, which influence the function of the economy as a whole, and ESG factors, which have been extensively analysed both in the subject literature and national and international regulations. This underlines the validity of the research topic, which to date has been under-addressed by researchers, especially in the countries of Central and Eastern Europe, including Poland.

This research aims to assess the impact of ESG factors on M&A. The research uses data from a survey conducted among companies listed on the WSE. Data analysis uses descriptive statistics and one-way analysis of variance (ANOVA).

Literature review and main research goals

In the context described above, the question of what compels companies to consider ESG factors in M&A and how these factors actually impact M&A is becoming increasingly important. There is a limited body of research on this issue, and the results described in the literature are inconclusive, especially regarding the specific conditions of the WSE.

Impact of ESG regulations on M&A

The differences in the degree to which an acquiring company and its target company incorporate ESG issues often prolong the transaction period. Such delays in an M&A transaction freeze the economic and financial resources of both firms. Conversely, aligning the sustainable development profiles of the two companies accelerates the completion of the transaction and its associated cost (Cardillo and Harasheh 2023). This was confirmed by Ma (2023), who underlines that M&A transactions involving a target firm with a high ESG rating have a shorter negotiation time, thereby increasing the likelihood of successful finalisation.

The increasing number of regulations requiring greater transparency and ESG responsibility – such as ESG risk disclosures and covering organisational practices, products and services – is increasing pressure to comply. Banks, for example, are increasingly basing their clients' investment loan approvals on sector-specific risk weights (Markiewicz 2021, pp. 28–29). They tend to work with clients with a similar (high) ESG assessment verified through due diligence. The literature also shows that banks may halt the lending process in response to reputational damaged experienced by the borrower related to ESG issues (Houston and Shan 2022).

On the other hand, regulatory pressure acts as a catalyst for creating a more responsible business environment. However, complying with ESG obligations during M&A incurs costs that can divert resources from integration efforts and impact the results of the transaction as a whole, potentially reducing value (Xin, Zhang, and Xiang 2024). While the growing number of regulations places a heavy burden on companies entering into M&A, these regulations also help raise standards are reduce the risk of reputational damage. Research across multiple sources suggests that regulations should be developed in accordance with the principle of proportionality, so that requirements are tailored to the size of companies and the specific characteristics of individual sectors.

Impact of ESG on M&A results

The literature on the impact of ESG on M&A results is diverse and ambiguous. The decision to incorporate ESG principles into M&A decisions should undoubtedly benefit investors. Authors often analyse the conditions under which these benefits materialise, emphasising the importance of investor patience. Hence, there is a growing consensus that integrating ESG factors in M&A can improve the long-term performance of investors' portfolios. One way to achieve this is by investing in companies that have the strongest environmental, social, and governance practices in their industry. Including these factors in M&A strategies exerts a positive impact on investments, allowing investors to combine financial profit with environmental and social progress (Lu 2021).

Beyond market and competitive effects, the literature also highlights the positive influence of M&A on sustainable development indicators measured by ESG assessments. ESG scores can be used to reduce the possible negative impact of such consequences on market concentration. Firms that develop through M&A may be more open to sharing information, which is beneficial for other stakeholders, especially shareholders and society as a whole (Barros et al. 2022).

Some authors consider that ESG ratings contribute to increased firm value after M&A transactions (Ma, Pan, and Suardi 2023). Engagement in M&A activity may lead to improvements in the ESG ratings of the companies involved, as evidenced by several studies examining acquirers and targets in different regions (Tampakoudis and Anagnostopoulou 2020; Barros et al. 2022; Bax, Bonaccolto, and Paterlini 2023; Rahman and Wu 2024). One motivation for entering into an M&A transaction is to improve sustainable development results. Firms often manage ESG challenges more effectively after M&A, although this improvement is not achieved immediately. Barros et al. (2022) suggest that changes in ESG scores influence M&A activity and should be considered in future research. The growing pressure for firms to achieve sustainable development goals forces managers to be more involved in improving their ESG results.

Many authors claim that ESG can have a positive impact on the results of M&A transactions, but that this is conditioned by various factors (Feng 2021; Mihaiu et al. 2021; Ma, Pan, and Suardi 2023). Acquiring firms benefit when they acquire targets with higher ESG scores (Teti, Dell'Acqua, and Bonsi 2022). Ozdemir, Binesh, and Erkmen (2022) conclude that if positive ESG ratings of target firms closely correlate with value creation for shareholders, shorter negotiating times, and increased shareholder benefits on the stock market, which potentially generate synergistic results after M&A. Similar positive correlations between ESG scores and financial results after M&A were noted by Mihaiu et al. (2021) and Sihombing and Gandakusuma (2023). Meanwhile, Zheng et al. (2023) observed that ESG ratings are positively correlated with both post-M&A results and the probability of transactions being finalised. Sihombing and Gandakusuma (2023) also underline that high ESG scores can attract the support of stakeholders for creating synergy and financial results following M&A, and their research reveals a positive correlation between ESG scores and financial results after the transactions. Given these positive correlations, it is essential to conduct a comprehensive review of ESG practices during the M&A process. Huang et al. (2023) propose conducting due diligence with regard to agreements between the transaction parties. This comprehensive review should accompany the assessment of investment and an analysis of "real value", which explicitly considers environmental, social and governance risks (KPMG 2023).

One way to improve a firm's ESG assessment is to adopt a goal with a relatively higher ESG rating. Empirical evidence shows a positive relationship between changes in the buyer's ESG assessment and the target's relative ESG assessment after M&A announcements (Tampakoudis and Anagnostopoulou 2020). However, Teti, Dell'Acqua, and Bonsi (2022) argue that higher social engagement and a higher environmental result are not important for creating M&A value, whereas higher corporate governance standards do have a positive effect.

Our analysis reveals that environmental and social aspects affect takeover premiums while governance results are unrelated. The target firm's ESG score has a considerable negative impact on the change in the return on equity (ROE) of the acquiring firm after an M&A transaction (Zrigui, Khanchel, and Lassoued 2024). Most buyers experience a drop in return on assets (ROA) one year after the transaction, with this decline more pronounced for buyers with a low ESG score and less severe for those with a higher ESG score (Feng 2021).

When analysing the results of post-M&A outcomes, researchers use different indicators over different periods of time. The use of different measurement methods – such as ROA and ROE alongside ESG ratings – makes it difficult to compare results. In addition, there is a temporal asymmetry: while integrating ESG may increase costs in the short term, financial benefits or premiums typically materialise only in the long term. This discrepancy can be ascribed to the temporary costs of integration, which are higher for buyers with a low ESG than for those with a high ESG, especially if the target's ESG level is increasing.

It is generally accepted that acquiring a firm with strong ESG performance helps improve the buyer's public image and reduces compliance risk. However, the simplistic view that "the higher the target's ESG, the better" is not advisable and can even be detrimental to buyers. When acquiring a high-ESG target, the buyer should assess and balance both the benefits from good ESG performance in the target firm against the potential costs of integration resulting from differences in corporate systems and strategic goals. Firms with a low ESG level have different corporate policies, strategic goals, and organisational culture and structure compared to their high-ESG counterparts (Feng 2021).

The latest research (Huang et al. 2023) shows that the impact of ESG on financial results following M&A differs across the Environment, Social, and Governance pillars. Both Social and Environmental responsibility are important for long-term M&A success. The Social pillar, in particular, through improved working conditions and career development, fosters a sense of identity with the firm, reducing friction related to M&A. The Environmental pillar is the second most important, enabling companies to reduce operational costs and improve production efficiency by following green practices. It is the most important dimension of sustainable development for improving the long-term results of M&A. Meanwhile, the governance pillar, through effective management systems such as the remuneration system, helps mitigate conflicts of interest between the board and shareholders.

Nguyen et al. (2024) also highlighted the changing and even increasing value of individual ESG components. They found that the buyer's Environmental assessment has the greatest impact on growth, followed by the Social and Governance scores, though these effects weaken in cross-border or cross-industry transactions. Kim, Jung, and Cho (2022) similarly emphasise ESG's positive impact on the business results of cross-border M&A. They suggest that firms with better corporate governance adopt a more aggressive approach to implementing environmental programmes, and more effectively honour implicit agreements with a wide range of stakeholders resulting from cross-border M&A.

The arguments presented, based on the analysed literature, highlight the need to comprehensively embed ESG in the M&A process. However, the reasons for considering ESG factors in M&A transactions differ, just as the results achieved after a finalised M&A transaction are also different. The impact of foreign capital on these results remains underexplored, and further research is needed on how motivations, outcomes, and company size interact in the context of M&A.

Based on the literature review, the research aims to assess the impact of ESG factors on M&A using companies listed on the WSE. The study uses data obtained from a research survey. To achieve the aim, two main research questions were used:

- Q1: What are the most important motivations for considering ESG factors in M&A on the WSE?
- Q2: To what degree do M&A transactions impact financial results on the WSE when considering ESG factors?

Two sub-questions further support the analysis:

- Do motivations for considering ESG in M&A vary by company size (Q1.A) and share of foreign capital (Q1.B)?
- Do the financial impacts of M&A differ based on company size (Q2.A) and share of foreign capital (Q2.B)?

Figure 1. presents a visual overview of the research questions and research.

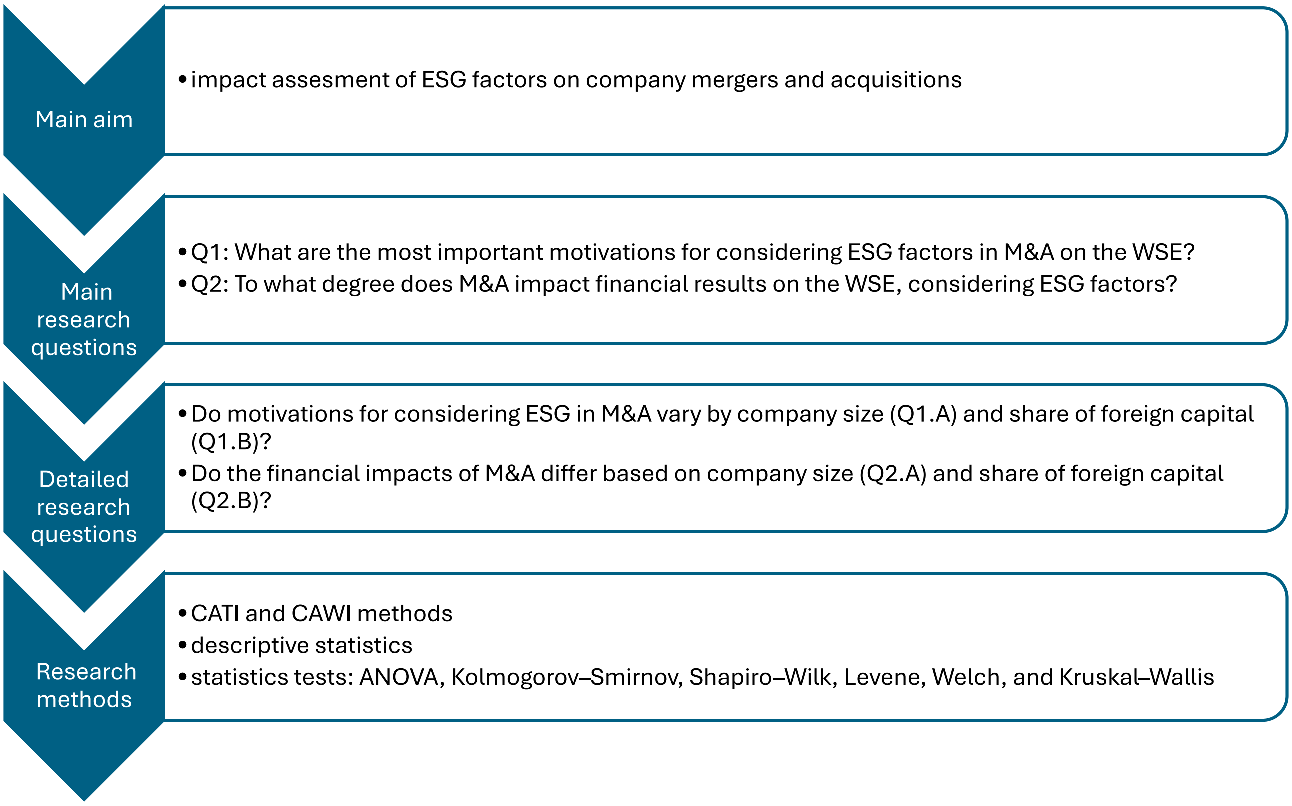

Figure 1. Schematic diagram of the research design

Source: own elaboration.

The research methods, descriptive statistics, and statistical tests will be presented in Section 3.

Research design and methodology

Subjective scope of the study

The starting point for our planned research was a review of the subject literature. The empirical verification of the research plan was conducted on companies listed on the WSE. The decision to focus on WSE-listed companies as the subjective scope of the research was made for several reasons.

First, the importance of ESG factors is increasingly recognised by public companies. In 2019, the WSE replaced the existing RESPECT index with the WIG-ESG index. Furthermore, in 2021, a guide for stock exchange companies was developed under the title "WSE guidelines for ESG reporting". The number of companies covered by ESG ratings is also growing rapidly.

Second, according to data from March 2022, ESG ratings were available for around 100 of the largest companies listed on the WSE. This situation has meant that companies (including those listed on the WSE) are increasingly considering sustainable development issues in their operational strategies, including their investment strategies.

Third, existing research into the impact of ESG on investment decisions on the WSE shows an increase in the importance of non-financial data in making investment decisions, including M&A. The research also shows that implementing ESG practices is conducive to reducing risk. Consequently, it is anticipated that the importance of considering ESG factors in the strategies of WSE-listed companies will continue to grow.

What is more, WSE-listed companies represent all sectors of the economy, including construction, chemicals, energy, mining, media, financial services, transport and logistics. These vary in size from medium to very large companies (measured by number of employees) and operate nationwide. Basic aggregated data on these companies is presented in Table 1. The significant capitalisation of these companies also testifies to their strength and importance. Data regarding capitalisation are presented for both the main market and the parallel market, including a breakdown into Polish and foreign companies (*Podmioty rynku kapitałowego* n.d.).

Table 1. Characteristics of companies listed on the WSE (as of October 2024)

Total number of companies	Capitalisation (PLN billion)
410:	1,577.97:
368 Polish	797.12 Polish
42 foreign	780.85 foreign
Main market	
308:	1,545.77:
271 Polish	766.14 Polish
37 foreign	779.63 foreign
Parallel market	
102:	32.20:
97 Polish	30.98 Polish
5 foreign	1.22 foreign

Source: GPW 2024.

Data collection

The data for the research were collected between February and May 2024 using the CATI and CAWI methods. The study targeted companies from the WSE that had been actively involved in M&A in the previous five years, verified through a control question. In total, 410 companies were contacted, of which 211 (51.46%) voluntarily agreed to participate (n). With a population size of N = 413 (the number of companies listed on the WSE in the research period), and a confidence level of 95%, the estimation error is 4.72%. Given that the selection of one company did not determine the selection of another, and with no dependencies between respondents, the collected data can be treated as a random sample. Except for the control question and the respondent descriptors, responses were made using a 5-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Description of statistical analysis method

Descriptive statistics were used to analyse responses concerning the importance of motivations for considering ESG factors in M&A, and the perceived impact of M&A on financial results, considering ESG factors. Recognising the bias associated with applying the arithmetic mean-based tests and the sums for data measured on an ordinal scale, the calculated means serve only as reference points to compare across groups, rather than as values subject to direct interpretation (Napiórkowski 2022, pp. 37–39).

Detailed questions were used to identify differences in motivations for considering ESG factors in M&A among the studied companies, as presented in Table 2.

Table 2. What motivations influenced the consideration of ESG factors in M&A?

Statement	Code
Regulations related to ESG factors (e.g. the Green Deal, EU Taxonomy, the CSRD – Corporate Sustainability Reporting Directive, SFDR – Sustainable Finance Disclosure Regulation)	1a
Image effects	1b
Awareness among managerial staff	1c
The company’s compliance with codes of corporate governance	1d
Expected financial effects	1e
Perceiving at least one of the parties (the buyer, seller or both) as an ESG leader (e.g. participation in the ESG index)	1f
Pressure from investors and regulatory bodies to disclose ESG performance and set goals, in particular, regarding emissions	1g
Assessment of ESG risk	1h

Source: own elaboration.

The detailed statements presented in Table 3 were used to assess the perceived impact of M&A on financial results among the studied companies.

Table 3. How do M&A impact financial results on the WSE, taking into account ESG factors?

Statement	Code
There is concern that M&A will cause a drop in buyers’ ROA one year after transactions	2a
The drop in ROA after M&A was greater for buyers with a low ESG score	2b
The drop in ROA after M&A will be greater for buyers with a low ESG score	2c
The M&A was conducted to obtain a competitive advantage in sustainable development	2d
M&A is conducted to obtain a competitive advantage in sustainable development	2e

Statement	Code
The drop in ROA for buyers with a low ESG after M&A score is mitigated by the ROA of sellers with a high ESG score	2f
The drop in ROA for sellers with a low ESG after M&A score is mitigated by the ROA of buyers with a high ESG score	2g
A company with low ESG values lowers the financial results of a company with higher ESG values after M&A	2h
Companies with lower ESG scores usually perform worse on basic financial indicators	2i
High ESG scores are ambiguous regarding the benefits of achieving short-term higher financial results after M&A	2j
Despite the significant risk of high costs and uncertain success, M&A is an important strategy for achieving a competitive advantage in sustainable development	2k
The ESG score, as a measure of sustainable development, has a positive direct impact on company results, including M&A contexts	2l

Source: own elaboration.

For both groups of statements, differences between companies were analysed based on size (measured by the number of employees) and the share of foreign capital (within percentage ranges: 0, 1–25, …, 76–100) using one-way analysis of variance (ANOVA)[1].

In the first step, the requirements of ANOVA as a parametric test – normal distribution in every group (tested using the Kołmogorow-Smirnow and Shapiro–Wilk tests) and homogeneity of variance (using the Levene test) were verified (Van Hecke 2012, p. 242). The survey design and the data collection method ensured suitable measurement scales for the test variable and the randomness of the sample.

While ANOVA demonstrates robustness to violations of normality assumptions, particularly when group sizes are balanced (Field 2013, p. 359), the non-parametric Kruskal-Wallis test was employed as a complementary analytical approach when the dependent variable exhibited non-normal distribution (Van Hecke 2012, pp. 241–247; Lantz 2013, pp. 224–244). In cases where the homogeneity of variance was violated, the Welch test was utilised as a robust alternative for testing equality of means (Mooi and Sarstedt 2011, p. 139). Statistical significance was evaluated at the 10% level, with many outcomes also significant at the 5% and 1% levels.

Findings and results

Descriptive statistics were used to analyse the relative importance of motivations for considering ESG factors in M&A, as well as to assess the perceived influence of M&A on financial results while considering ESG factors. The results are presented in Tables 4 and 5.

1 The ANOVA null hypothesis states that the average values of the test variable are equal across all groups, while the alternative hypothesis states that at least one group mean is statistically significant different from the others.

Table 4. Descriptive statistics for answers regarding motivations for considering ESG factors in M&A

Statistic	1a	1b	1c	1d	1e	1f	1g	1h
Mean	2.83	3.25	3.96	3.33	3.12	3.8	3.53	3.35
Total	598	685	835	702	658	802	745	707
Median	4.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00
Dominant	4.00	2.00	4.00	4.00	4.00	5.00	4.00	4.00
Standard deviation	1.02	1.13	1.05	1.04	1.08	1.21	1.11	1.03
25th percentile	3.00	2.00	3.00	3.00	3.00	3.00	2.00	3.00
75th percentile	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00
Coefficient of variation	26.49%	37.06%	26.88%	27.01%	32.14%	31.93%	34.94%	27.66%
5% trimmed mean	3.91	3.07	3.99	3.90	3.40	3.87	3.20	3.76

N = 211.

Source: own elaboration.

The results show that the most important motivator for considering ESG factors in M&A is managerial awareness (1c), followed by ESG regulations (1a), whose enforcement in business activities is becoming increasingly rigorous. Pressure from investors and regulatory bodies to disclose ESG performance has the smallest impact on considering ESG factors in M&A.

The results show that respondents considered the most important statement to be that high ESG assessments are ambiguous as a short-term benefit for achieving higher financial results following M&A transactions. They also agreed that the drop in ROA is greater for buyers with low ESG scores as a result of M&A. The statements with the least agreement were that there is a drop in buyers' ROA a year after conducting an M&A transaction, and that M&A is conducted to gain a competitive advantage in sustainable development. Table 5 presents the remaining descriptive statistics for the responses.

Table 5. Descriptive statistics for responses relating to the impact of M&A on financial results

Statistic	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l
Mean	2.83	3.25	3.96	3.33	3.12	3.8	3.53	3.35	3.66	4.01	3.27	3.48
Total	598	685	835	702	658	802	745	707	772	846	690	735
Median	3.00	3.00	4.00	4,00	3.00	4.00	4.00	3,00	4.00	4.00	4.00	4.00
Dominant	2.00	3.00	4.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00
Standard deviation	0.95	0.97	0.76	1.13	1.01	0.86	0.92	0.76	0.98	0.67	1.10	0.95
25th centile	2.00	3.00	4.00	2.00	2.00	3.00	3.00	3.00	3.00	4.00	2.00	3.00
75th percentile	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00

Statistic	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l
Coefficient of variation	33.71%	29.97%	19.14%	33.81%	32.37%	22.50%	26.12%	22.75%	26.75%	16.68%	33.49%	27.39%
5% trimmed mean	2.82	3.25	3.99	3.34	3.12	3.84	3.54	3.36	3.68	4.04	3.26	3.50

N = 211.

Source: own elaboration.

Tables 6 and 7 present the ANOVA results examining differences in the motivations for considering ESG factors in M&A across firms, based on their size and share of foreign capital.

Table 6. ANOVA results regarding differences in motivations for considering ESG factors in M&A between firms based on their size

Statement	p-test values					
	Kołmogorow--Smirnow	Shapiro–Wilk	Levene test	ANOVA	Welch	Kruskal-Wallis
1a	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1b	<0.001	<0.001	0.803	0.158	–	0.182
1c	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1d	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1e	<0.001	<0.001	0.011	<0.001	0.002	0.001
1f	<0.001	<0.001	0.007	<0.001	<0.001	<0.001
1g	<0.001	<0.001	0.091	<0.001	<0.001	<0.001
1h	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Note: The "-" in the Welch column indicates that, based on results of the Levene test, robust tests for equality of means were not required.

Source: own elaboration.

Table 7. ANOVA results regarding differences in the motivations for considering ESG factors in M&A between firms based on the share of foreign capital

Statement	p-test values					
	Kołmogorow--Smirnow	Shapiro–Wilk	Levene test	ANOVA	Welch	Kruskal-Wallis
1a	<0.001	<0.001	0.139	0.276	–	0.297
1b	<0.001	<0.001	0.777	0.867	–	0.779
1c	<0.001	<0.001	0.154	0.314	–	0.250
1d	<0.001	<0.001	0.136	0.366	–	0.393
1e	<0.001	<0.001	0.019	0.050	0.001	0.034
1f	<0.001	<0.001	0.034	0.347	0.069	0.463

Statement	p-test values					
	Kołmogorow--Smirnow	Shapiro–Wilk	Levene test	ANOVA	Welch	Kruskal-Wallis
1g	<0.001	<0.001	0.692	0.460	–	0.490
1h	<0.001	<0.001	0.137	0.059	–	0.042

Note 1: The "-" in the Welch column indicates that, based on results of the Levene test, robust tests for equality of means were not required.

Note 2: For question 1f, there is a discrepancy in the conclusion of the null hypothesis test between the Welch test (significance = 0.069) and the Kruskal-Wallis test (significance = 0.463). In this case, the result of the non-parametric test was considered more reliable and was therefore accepted.

Source: own elaboration.

Tables 8 and 9 present the ANOVA results examining differences in the impact of M&A on financial results across firms, based on their size and share of foreign capital.

Table 8. ANOVA results regarding differences in the impact of M&A on financial results among firms, based on their size

Statement	p-test values					
	Kołmogorow--Smirnow	Shapiro–Wilk	Levene test	ANOVA	Welch	Kruskal-Wallis
2a	<0.001	<0.001	0.033	<0.001	<0.001	<0.001
2b	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2c	<0.001	<0.001	0.026	0.010	0.013	0.031
2d	<0.001	<0.001	0.649	0.008	–	0.005
2e	<0.001	<0.001	0.054	0.014	0.062	0,007
2f	<0.001	<0.001	<0.001	<0.001	0.001	0.002
2g	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2h	<0.001	<0.001	0.709	0.001	–	0.003
2i	<0.001	<0.001	0.028	0.021	0.028	0.019
2j	<0.001	<0.001	0.908	0.238	–	0.159
2k	<0.001	<0.001	0.103	0.003	–	0.004
2l	<0.001	<0.001	0.214	0.003	–	0.003

Note 1: The "-" in the Welch column indicates that, based on the results of the Levene test, robust tests for equality of means were not required.

Source: own elaboration.

Table 9. ANOVA results regarding differences in the impact of M&A on financial results between companies, based on their share of foreign capital

Statement	p-test values					
	Kołmogorow--Smirnow	Shapiro–Wilk	Levene test	ANOVA	Welch	Kruskal-Wallis
2a	<0.001	<0.001	0.125	0.283	–	0.335
2b	<0.001	<0.001	0.142	0.654	–	0.643
2c	<0.001	<0.001	0.961	0.831	–	0.689
2d	<0.001	<0.001	0.007	0.719	0.371	0.744
2e	<0.001	<0.001	0.546	0.183	–	0.155
2f	<0.001	<0.001	0.018	0.785	0.820	0.814
2g	<0.001	<0.001	0.338	0.432	–	0.359
2h	<0.001	<0.001	0.129	0.506	–	0.521
2i	<0.001	<0.001	0.888	0.796	–	0.668
2j	<0.001	<0.001	0.452	0.554	–	0.699
2k	<0.001	<0.001	0.009	0.395	0.349	0.421
2l	<0.001	<0.001	0.059	0.588	0.503	0.690

Note: The "-" in the Welch column indicates that, based on results of the Levene test, robust tests for equality of means were not required.

Source: own elaboration.

Based on the research and the results presented in Tables 6–9, collective summaries are given in Tables 10–17. These tables indicate, for each question, whether there is a statistically significant difference:

- in the motivations for considering ESG factors in M&A between firms, based on their size and share of foreign capital (Tables 10–13),
- in the impact of M&A on the financial results between companies, based on their size and share of foreign capital (Tables 14–17).

Table 10. Simplified ANOVA results: Differences in motivations for considering ESG factors in M&A between companies, based on size

Question	1a	1b	1c	1d	1e	1f	1g	1h
Is there a difference (1 = YES, 0 = NO)	1	0	1	1	1	1	1	1

Source: own elaboration.

The research revealed that for questions 1a and 1c–1h, there is a statistically significant difference in motivations for considering ESG factors in M&A between firms based on their size. As shown in Table 11, motivations are greater in large and very large companies, which may suggest that larger companies place greater emphasis on the importance of ESG for the success of M&A. However, for question 1b (the effect of image), no significant difference was found, although larger companies rated image expected after M&A as more important.

Table 11. Impact of firm size on responses to the question: What is the importance of ESG factors in motivations for considering ESG factors in M&A? (mean value)

Firm size	Small (0–49)	Medium (50–249)	Large (250–999)	Very large (1000+)
n	27	85	69	30
Statement	Mean	Mean	Mean	Mean
1a	3.11	3.67	4.19	4.27
1b	2.78	3.00	3.09	3.43
1c	3.19	3.76	4.19	4.30
1d	3.19	3.71	4.04	4.37
1e	2.70	3.26	3.68	3.53
1f	3.04	3.64	4.04	4.30
1g	2.41	3.07	3.51	3.43
1h	3.04	3.49	4.07	4.17

Source: own elaboration.

Share of foreign capital impacts motivations for considering ESG factors only for two items: expected financial effects (1e), and ESG risk assessment (1h).

Table 12. Simplified ANOVA results: Differences in motivations for considering ESG factors in M&A between companies, based on the share of foreign capital

Question	1a	1b	1c	1d	1e	1f	1g	1h
Is there a difference (1 = YES, 0 = NO)	0	0	0	0	1	0	0	1

Source: own elaboration.

In both cases, the highest impact assessments of ESG factors on the success of M&A were from companies with foreign capital participation ranging from 51% to 75%. This suggests that WSE companies with majority – but not full – foreign capital are more aware of ESG regulations and the benefits of complying with them (Table 13).

Table 13. Impact of share of foreign capital on responses to the question: What is the importance of ESG factors in motivations for considering ESG factors in M&A? (mean value)

Share of foreign capital	0%	1–25%	26–50%	51–75%	76–100%
n	74	47	53	11	26
Question	Mean	Mean	Mean	Mean	Mean
1a	3.88	3.72	3.74	4.36	4.04
1b	3.03	3.13	2.98	3.36	3.08
1c	3.92	3.83	3.81	4.55	3.92
1d	3.82	3.81	3.75	4.45	3.88
1e	3.47	3.28	3.25	4.18	3.12
1f	3.76	3.70	3.66	4.36	4.04

Share of foreign capital	0%	1–25%	26–50%	51–75%	76–100%
n	74	47	53	11	26
Question	Mean	Mean	Mean	Mean	Mean
1g	3.24	3.19	2.96	3.55	3.27
1h	3.82	3.62	3.47	4.36	3.85

Source: own elaboration.

No significant differences were found for the remaining motivations by share of foreign capital.

The next stage of analysis (Table 14) shows that for all the questions relating to the impact of M&A on financial results, excluding question 2j, there were significant differences in assessments by firm size.

Table 14. Simplified ANOVA results: Differences in the impact of M&A on financial results between companies, based on size

Question:	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l
Is there a difference (1 = YES, 0 = NO)	1	1	1	1	1	1	1	1	1	0	1	1

Source: own elaboration.

For question 2j ("Are high ESG assessments ambiguous as a short-term benefit for achieving higher financial results after M&A?"), no differences were found by firm size. This suggests that both small and large firms agree that high ESG scores before M&A do not guarantee short-term financial gains.

For question 2a ("There is concern that as a result of M&A there will be a drop in buyers' ROA one year after transactions"), concerns are higher among smaller companies, possibly due to a lack of ESG strategies, and the costs of adapting operations to ESG requirements reducing profitability post-M&A (Table 15).

Table 15. Impact of firm size on responses to the question: How do M&A impact financial results on the WSE, taking into account ESG factors? (mean values)

Firm size	Small (0–49)	Medium (50–249)	Large (250–999)	Very large (1000+)
n	27	85	69	30
Question	Mean	Mean	Mean	Mean
2a	3.56	2.78	2.77	2.50
2b	3.85	2.93	3.28	3.53
2c	4.04	3.75	4.07	4.20
2d	2.96	3.13	3.54	3.73
2e	3.00	3.01	3.06	3.67
2f	4.22	3.54	3.86	4.03

Firm size	Small (0–49)	Medium (50–249)	Large (250–999)	Very large (1000+)
n	27	85	69	30
Question	Mean	Mean	Mean	Mean
2g	3.85	3.28	3.49	4.03
2h	3.74	3.13	3.43	3.43
2i	3.26	3.61	3.91	3.57
2j	3.93	4.00	3.96	4.23
2k	2.81	3.11	3.46	3.70
2l	3.19	3.34	3.55	4.00

Source: own elaboration.

In the next analysis (Table 16), companies largely agreed that the share of foreign capital does not impact the firm's financial results after M&A, considering ESG factors.

Table 16. Simplified ANOVA results: Differences in the impact of M&A on financial results between companies, based on the share of foreign capital

Question	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	2l
Is there a difference (1 = YES, 0 = NO)	0	0	0	0	0	0	0	0	0	0	0	0

Source: own elaboration.

The lack of impact is confirmed by the results presented in Table 17.

Table 17. Impact of share of foreign capital on responses to the question: How do M&A impact financial results on the WSE when considering ESG factors? (mean value)

Share of foreign capital	0%	1–25%	26–50%	51–75%	76–100%
n	74	47	53	11	26
Question	Mean	Mean	Mean	Mean	Mean
2a	2.82	2.89	2.98	2.36	2.65
2b	3.35	3.21	3.25	2.91	3.15
2c	4.01	3.96	3.94	3.73	3.92
2d	3.32	3.38	3.21	3.73	3.31
2e	3.07	3.28	2.92	3.64	3.15
2f	3.86	3.83	3.77	3.82	3.62
2g	3.62	3.45	3.47	3.91	3.38
2h	3.35	3.38	3.43	3.00	3.27
2i	3.76	3.66	3.53	3.64	3.65
2j	3.93	4.0	3.96	4.09	4.12
2k	3.34	3.34	3.04	3.64	3.27
2l	3.36	3.55	3.49	3.82	3.54

Source: own elaboration.

The diversity of responses indicates individual experiences or expectations regarding the impact of ESG on financial results in M&A, regardless of the proportion of foreign capital participation. Overall, the differences in the responses are minor, which suggests that foreign capital alone does not determine how the impact of ESG on financial performance in M&A is assessed.

To summarise, the research has shown that firm size drives differences between companies, both in most motivations for considering ESG factors in M&A and in the perceived impact of ESG in M&A on financial results. Conversely, the share of foreign capital in WSE-listed companies produced no differences for the majority of motivations for considering ESG factors in M&A or for any of the motivations related to the impact of ESG factors in M&A on financial performance.

Conclusions and discussion

The consideration of ESG factors in M&A on stock exchanges is a complex and multi-threaded issue of increasing importance in today's social, economic and regulatory environment. Research in this area should take into consideration a range of aspects.

Despite the growing number of ESG regulations, particularly those focusing on environmental aspects, a review of the subject literature reveals a research gap specifically addressing ESG factors in M&A transactions. Thus, this study aimed to assess the impact of ESG factors on M&A transactions. The aim was achieved by studying companies listed on the WSE using data obtained from a research questionnaire.

We focused on understanding why companies consider ESG factors during M&A transactions. The research provided us with detailed answers to the two main questions (Q1 and Q2) and two related sub-questions (Q1.A, Q1.B, Q2.A, and Q2.B).

The research allowed us to examine the motivations and effects of considering ESG factors in M&A. Respondents identified managerial awareness as the most important motivator, which increased with firm size. The next most important motivations were increasing regulatory requirements – including compliance with ESG regulations and codes of corporate governance. By contrast, the image effect was of least importance, although it was more important for large and very large companies. The respondents generally agreed that factoring in ESG into M&A transactions does not guarantee improved short-term financial results. This assessment varied by firm size, while the share of foreign capital was not significant.

Our findings largely confirm those found in the literature, which suggest that M&A transactions are smoother and less costly when firms have a high ESG rating (Cardillo and Harasheh 2023; Ma 2023). This was confirmed by WSE-listed companies, which ascribed managerial awareness as the greatest importance when considering ESG factors in the M&A transactions (Q1). Regulatory requirements were the second most important motivator. However, unlike previous studies where acquiring a company with strong ESG performance helps build reputation and reduces compliance risk (Barros et al. 2022; Norton Rose Fulbright 2024) our respondents rated this factor as the least important. Nonetheless, it was rated higher by large and very large companies than by small and medium-sized ones, which can be interpreted as a reluctance to admit to purely marketing-related motivations.

Regarding post-M&A financial performance, the literature presents conflicting views. Some studies indicate a positive correlation between high ESG performance and financial results (Mihaiu et al. 2021; Ozdemir, Binesh, and Erkmen 2022; Sihombing and Gandakusuma 2023), while others note the risk of a decline in indicators such as ROE or ROA (Feng, 2021; Zrigui, Khanchel, and Lassoued 2024). Our findings echo this ambiguity – respondents expressed the greatest concerns about whether high ESG ratings translate into immediate financial results. Notably, the significant impact of ESG considerations on financial performance growth was identified as the most uncertain factor across all companies, regardless of size and foreign capital composition. The perceived magnitude of this impact increases both with firm size and the share of foreign capital in the company's structure.

Our research results found no clear differences resulting from foreign capital participation, echoing the existing literature. Partial foreign capital participation (51–75%) was associated with the highest valuation of ESG's strategic importance, while companies with entirely domestic or foreign ownership exhibited more balanced assessments.

Our findings significantly fill the research gap regarding how firm size and share of foreign capital in listed companies affect M&A transactions, considering ESG factors. It also aligns with calls in the literature to deepen research into these factors (Barros et al. 2022; Rahman and Wu 2024).

Recent studies contain a comprehensive analysis of the impact of ESG factors on the financial results of companies involved in M&A, disaggregating the effects of Environmental, Social, and Governance dimensions. Huang et al. (2023) demonstrate the greater role of the Social and Environmental pillars in M&A success, while Teti, Dell'Acqua, and Bonsi (2022) identify Governance as the determining factor. These contradictory findings may result from different research approaches, observation periods, and methods of weighting the pillars, suggesting a need for meta-analyses that focus on ESG pillars with sectoral/industry and geographical differentiation. The present study did not analyse the impact of the individual factors separately; this could be an avenue for future research, especially given that companies on the Polish market prioritise the environmental factor in their ESG strategies, at the expense of the Social and Governance dimensions.

Our data set is limited in terms of the number of companies studied, which is the result of the size of the WSE. While the WSE attracts both domestic and foreign investors, offering a wide range of investment opportunities, it still lags behind the major exchanges in Western Europe in terms of turnover and capitalisation. Nevertheless, it is a leader in the region in terms of the number of listed companies and the dynamic development of the market.

A review of the literature underscores the need to improve the transparency of ESG assessment methods through regulatory standardisation of indicators and alignment with EU requirements such as the CSRD. The introduction of new regulations should be accompanied by cost-benefit analyses, which would have a particularly positive impact on investment decisions involving M&A. Cross-border transactions remain a particular challenge, requiring deeper regulatory harmonisation at both European and global levels to reduce the risk of institutional mismatches.

Our analysis of our findings and the existing literature shows that companies should treat ESG aspects as an integral part of M&A, rather than merely as a reputational factor. At the same time, firms must consider the short-term costs of implementing ESG standards, especially those related to compliance and system integration, which may reduce financial performance in the initial years following a transaction. For this reason, managers should establish "cost buffers" and clearly communicate to investors the long-term perspective of benefits.

From an economic policy perspective, standardising ESG reporting standards would improve data comparability and reduce assessment costs associated with M&A transactions. Rahman and Wu (2024) note another, more general, non-financial benefit of M&A: such activities can also effectively shape companies' performance in environmental and social aspects that are particularly important to society. Therefore, policymakers and governments can treat M&A activities as a mechanism to quickly achieve ultimate sustainability goals.

Caution is advised when generalising these results to stock exchanges in other countries due to differences in characteristics such as market size and regulatory frameworks. Further research on M&A on stock exchanges in other geographical contexts, such as other Central and Eastern European countries, the eurozone, the European Union, and broader regions, would be valuable.

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References

Barros, V., Verga Matos, P., Miranda Sarmento, J., Rino Vieira, P. (2022), *M&A activity as a driver for better ESG performance*, "Technological Forecasting and Social Change", 175, 121338, https://doi.org/10.1016/j.techfore.2021.121338

Bax, K., Bonaccolto, G., Paterlini, S. (2023), *Do lower environmental, social, and governance (ESG) rated companies have higher systemic impact? Empirical evidence from Europe and the United States*, "Corporate Social Responsibility and Environmental Management", 30 (3), pp. 1406–1420, https://doi.org/10.1002/csr.2427

Cardillo, G., Harasheh, M. (2023), *Stay close to me: What do ESG scores tell about the deal timing in M&A transactions?*, "Finance Research Letters", 51, 103498, https://doi.org/10.1016/j.frl.2022.103498

CSRD (2022), Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No. 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022L2464 (accessed: 30.10.2024).

Deloitte (2024), *Wpływ ESG na transakcje M&A (cz. I). Ramy prawne*, https://www.deloitte.com/pl/pl/Industries/financial-services/perspectives/wplyw-ESG-na-transakcje-MA-czesc-I.html (accessed: 30.11.2024).

DePamphilis, D.M. (2014), *An Introduction to Mergers, Acquisitions, and Other Restructuring Activities*, [in:] D.M. DePamphilis, *Mergers, Acquisitions, and Other Restructuring Activities*, Academic Press – Elsevier, Amsterdam–Boston–London–New York–Oxford–Paris–San Diego–San Francisco–Singapore–Sydney–Tokyo, pp. 3–40, https://doi.org/10.1016/B978-0-12-385487-2.00001-5

Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859, https://eur-lex.europa.eu/eli/dir/2024/1760/oj (accessed: 30.10.2024).

European Green Deal, COM/2019/640 final, Communication from the Commission to the European Parliament, the European Council, the Council, The European Economic and Social Committee and the Committee of the Regions. The European Green Deal, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN (accessed: 30.10.2024).

Feng, X. (2021), *The role of ESG in acquirers' performance change after M&A deals*, "Green Finance", 3 (3), pp. 287–318, https://doi.org/10.3934/GF.2021015

Field, A. (2013), *Discovering statistics using IBM SPSS Statistics*, Sage Publications, London.

GPW (2024), *GPW statistics*, https://www.gpw.pl/gpw-statistics (accessed: 3.10.2024).

Grobelny, P., Stradomski, M., Stobiecki, P. (2018), *Determinanty aktywności na rynku fuzji i przejęć w Polsce*, CeDeWu, Warszawa.

Houston, J.F., Shan, H. (2022), *Corporate ESG Profiles and Banking Relationships*, "Review of Financial Studies", 35 (7), pp. 3373–3417, https://doi.org/10.1093/rfs/hhab125

Huang, C.J., Ke, W.C., Chiang, R.P.Y., Jhong, Y.C. (2023), *Which of environmental, social, and governance pillars can improve merger and acquisition performance?*, "Journal of Cleaner Production", 398, 136475, https://doi.org/10.1016/j.jclepro.2023.136475

Kim, B.J., Jung, J.Y., Cho, S.W. (2022), *Can ESG mitigate the diversification discount in cross-border M&A?*, "Borsa Istanbul Review", 22 (3), pp. 607–615, https://doi.org/10.1016/j.bir.2021.09.002

Korpus, J. (2014), *Kluczowe czynniki sukcesu i przyczyny niepowodzeń transakcji*, [in:] J. Korpus (ed.), *Fuzje i przejęcia* Wydawnictwa Profesjonalne PWN, Warszawa, pp. 92–117.

KPMG (2023), *ESG Due Diligence in M&A. Clarity on Mergers & Acquisitions*, https://assets.kpmg.com/content/dam/kpmgsites/ch/pdf/esg-due-diligence-mergers-acquisitions.pdf (accessed: 20.11.2024).

Lantz, B. (2013), *The impact of sample non-normality on ANOVA and alternative methods*, "British Journal of Mathematical and Statistical Psychology", 66 (2), pp. 224–244, https://doi.org/10.1111/j.2044-8317.2012.02047.x

Lu, M. (2021), *ESG Investing: Finding Your Motivation*, https://www.visualcapitalist.com/esg-investing-finding-your-motivation/ (accessed: 30.10.2024).

Ma, R. (2023), *The sustainable development trend in environmental, social, and governance issues and stakeholder engagement: Evidence from mergers and acquisitions in China*, "Corporate Social Responsibility and Environmental Management", 30 (6), pp. 3159–3173, https://doi.org/10.1002/csr.2544

Ma, R., Pan, X., Suardi, S. (2023), *Shareholder value maximization via corporate ESG performance: evidence from mergers and acquisitions in China*, "Applied Economics", 56 (58), pp. 8529–8545, https://doi.org/10.1080/00036846.2023.2291095

Markiewicz, M. (2021), *Fuzje i przejęcia międzynarodowe w sektorze bankowym*, Wydawnictwo Uniwersytetu Gdańskiego, Sopot.

McKinsey & Company (2024), *Top M&A trends in 2024: Blueprint for success in the next wave of deals*, https://www.mckinsey.com/capabilities/m-and-a/our-insights/top-m-and-a-trends-in-2024-blueprint-for-success-in-the-next-wave-of-deals (accessed: 30.11.2024).

Mihaiu, D.M., Șerban, R.A., Opreana, A., Țichindelean, M., Brătian, V., Barbu, L. (2021a), *The Impact of Mergers and Acquisitions and Sustainability on Company Performance in the Pharmaceutical Sector*, "Sustainability", 13 (12), 6525, https://doi.org/10.3390/su13126525

Mooi, E., Sarstedt, M. (2011), *A concise guide to market research: The process, data, and methods using IBM SPSS Statistics*, Springer, Berlin–Heidelberg.

Napiórkowski, T.M. (2022), *Praktyczna analiza danych za pomocą metod ilościowych*, Oficyna Wydawnicza SGH, Warszawa.

Nguyen, D.T., Michayluk, D., Van de Venter, G., Walker, S. (2024), *Improvement in sustainability: Evidence from the mergers and acquisitions market*, "Australian Journal of Management", 50 (2), https://doi.org/10.1177/03128962231222824

Norton Rose Fulbright (2024), *Global M&A trends and risks 2024. Consolidation and digital transformation to propel global M&A despite rising regulatory burden*, https://ionanalytics.com/wp-content/uploads/2024/01/NRF-global_ma_report_2024_v8_JF.pdf (accessed: 15.10.2024).

Ozdemir, O., Binesh, F., Erkmen, E. (2022), *The effect of target's CSR performance on M&A deal premiums: a case for service firms*, "Review of Managerial Science", 16 (4), pp. 1001–1034, https://doi.org/10.1007/s11846-021-00471-y

Podmioty rynku kapitałowego, n.d., https://www.gpw.pl/pub/GPW/files/Podmioty_rynku_kapitalowego.pdf (accessed: 1.10.2024).

Rahman, J., Wu, J. (2024), *M&A activity and ESG performance: evidence from China*, "Managerial Finance", 50 (1), pp. 179–197, https://doi.org/10.1108/MF-02-2023-0103

Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0852 (accessed: 30.10.2024).

Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 establishing a carbon border adjustment mechanism, https://eur-lex.europa.eu/eli/reg/2023/956 (accessed: 30.10.2024).

Rozwadowska, B. (2012), *Fuzje i przejęcia. Dlaczego kończą się (nie)powodzeniem*, Wydawnictwo EMKA, Warszawa.

Sihombing, M., Gandakusuma, I. (2023), *ESG impact on post M&A company value in Southeast Asia*, "Jurnal Aplikasi Akuntansi", 8 (1), pp. 67–74, https://doi.org/10.29303/jaa.v8i1.271

Tampakoudis, I., Anagnostopoulou, E. (2020), *The effect of mergers and acquisitions on environmental, social and governance performance and market value: Evidence from EU acquirers*, "Business Strategy and the Environment", 29 (5), pp. 1865–1875, https://doi.org/10.1002/bse.2475

Teti, E., Dell'Acqua, A., Bonsi, P. (2022), *Detangling the role of environmental, social, and governance factors on M&A performance*, "Corporate Social Responsibility and Environmental Management", 29 (5), pp. 1768–1781, https://doi.org/10.1002/csr.2325

UN Global Compact (2024), *"Who Cares Wins": transforming finance and economics through ESG*, https://www.sustainabilityinbusiness.org/blogs/who-cares-wins-the-report-that-started-esg (accessed: 30.09.2024).

Van Hecke, T. (2012), *Power study of anova versus Kruskal-Wallis test*, "Journal of Statistics and Management System", 15 (2–3), pp. 241–247, https://doi.org/10.1080/09720510.2012.10701623

Xin, Z., Zhang, Z., Xiang, C. (2024), *Do suppliers value clients' ESG profiles? Evidence from Chinese firms*, "International Review of Economics and Finance", 91, pp. 241–258 https://doi.org/10.1016/j.iref.2024.01.052

Zheng, Z., Li, J., Ren, X., Guo, J.M. (2023), *Does corporate ESG create value? New evidence from M&As in China*, "Pacific Basin Finance Journal", 77, 101916, https://doi.org/10.1016/j.pacfin.2022.101916

Zrigui, M., Khanchel, I., Lassoued, N. (2024), *Does environmental, social and governance performance affect acquisition premium?*, "Review of International Business and Strategy", 34 (4), pp. 469–494, https://doi.org/10.1108/RIBS-07-2023-0076

Motywacje i skutki w procesach fuzji i przejęć na GPW przy uwzględnianiu czynników ESG

Głównym celem artykułu jest określenie wpływu czynników ESG na procesy fuzji i przejęć spółek. Badanie zostało przeprowadzone na spółkach notowanych na Giełdzie Papierów Wartościowych w Warszawie, która odgrywa znaczącą rolę na europejskich rynkach kapitałowych, szczególnie w regionie Europy Środkowo-Wschodniej. Jest największą giełdą w tym regionie pod względem kapitalizacji i liczby notowanych spółek. Dane do badania zostały zebrane w 2024 r. przy użyciu metod CATI i CAWI od spółek notowanych na GPW, które uczestniczyły w fuzjach i przejęciach w ciągu ostatnich 5 lat. Analiza danych została przeprowadzona przy użyciu statystyk opisowych i następujących testów: ANOVA, Kołmogorowa-Smirnowa, Shapiro–Wilka, Levene'a, Welcha i Kruskala-Wallisa. W wyniku badania przeanalizowano motywy, jakimi kierują się spółki przeprowadzające transakcje M&A, przy uwzględnieniu czynników ESG. Wyniki wskazują, że spółki z GPW największy wpływ na uwzględnienie czynników ESG w procesie M&A przypisywały świadomości menedżerskiej. Uzyskano szczegółowe informacje na temat różnych motywacji spółek giełdowych przy uwzględnieniu czynników ESG w transakcjach M&A oraz wpływu tych transakcji na wyniki finansowe tych spółek. Zbadano również wpływ wielkości spółki i własności kapitału na decyzje o uwzględnieniu czynników ESG w procesach M&A. Wyniki te stanowią ważny wkład w dotychczasowe badania w obszarze M&A w regionie Europy Środkowo-Wschodniej.

Słowa kluczowe: fuzje i przejęcia, motywacje, ESG, Giełda Papierów Wartościowych w Warszawie