The Cushion-Effect of ESG

Evidence from domestic and cross-border deals between 2008 and 2020

Authors:

Bolling, Filip

Wasik, Tim

Supervisor:

Reda Moursli

Summary

Seminar date: June 1st, 2022

Course: BUSN79 Degree Project in Accounting and Finance

Authors: Filip Bolling and Tim Wasik

Advisor/Examiner: Reda Moursli

Key words: Mergers and Acquisitions, ESG, CSR, Cross-border, Cumulative abnormal return.

Purpose: This study investigates the short-term return around the announcement of domestic and cross-border M&A deals, completed by US firms between 2008 and 2020 and how they are affected by the acquiring firm's CSR performance.

Methodology: An event study is conducted to establish the short-term return, using the market model to calculate the cumulative abnormal return (CAR) in relation to a market index. CAR is used as the dependent variable in our ordinary least squares (OLS) multivariate analysis where the ESG score of the acquirer is used as the explanatory variable.

Theoretical perspectives: The analysis is conducted using previous empirical literature and theoretical perspectives based on information asymmetry and stakeholder theory.

Empirical foundation: An increase in acquirer CSR performance decreases the announcement returns generated by the acquiring firm when analyzing all deals. However, it is found that the CSR performance of the acquirer has a negative impact on announcement returns when the acquirer generates a positive return, and a positive impact when generating a negative return. The results are consistent across domestic and cross-border deals.

Conclusions: This study provides evidence that CSRs impact depends on whether the acquirer generates positive or negative returns. The risk-mitigating perspective of CSR performance in this study shed new light on explaining what creates and destroys value in M&A deals. Supported by theoretical perspectives, the acquirer's CSR performance is beneficial to minimize negative reactions to the deal from stakeholders. Additionally, our findings also suggest that this benefit is achieved at the expense of shareholder value maximization when the acquirer generates a positive return.

Acknowledgements

We would like to sincerely thank our supervisor Reda Moursli for his commitment and guidance throughout the process of writing this thesis. Your feedback and dedication have improved the thesis and facilitated the process.

Filip Bolling   Tim Wasik

1. Introduction

1.1 Background

In 2006 when environmental, social and governance (ESG) scores were included by the United Nations in their Principles for Responsible Investment, it led to an increase in interest from the investor community (Amel-Zadeh & Serafeim, 2017; United Nations, 2006). From the perspective of investors, ESG relates to the rise of socially responsible investing (SRI) and how evaluations of companies are made based on criteria other than its financial performance (Eccles & Viviers, 2011). While experts have not been able to unite behind a precise definition of SRI, the broadest explanation is that companies CSR performance is accounted for by investors in the investment process (Berry & Junkus, 2013). When investors began paying more attention to ESG, companies' incentives to focus resources in these areas increased in order to secure capital and attract investors (Napoletano & Curry, 2022). Between 2016 and 2017, State Street Global Advisors[1] (2017) conducted a survey among 475 institutional investors situated in Europe, Asia, Australia and the US, to find out more about their attitude towards ESG related issues. They found that 68% of the respondents believed that implementing ESG had led to improved return on investments and 77% of the respondents answered that they invested in ESG due to its impact on financial performance.

Apart from its function when attracting investors and capital, Fombrun et al. (2000) emphasizes that companies CSR performance has a positive impact on corporate reputation. Furthermore, their findings provide evidence that corporate reputation has a positive impact on profitability and corporate culture. Related to the findings on the relationship between firms CSR performance and corporate culture is how CSR influences stakeholder relationships, as found by Godfrey et al. (2009). Their findings support the notion that firms CSR performance generates a relational capital that helps build long term relationships with their stakeholders, as well as minimizing the risk of being affected by negative sanctions. The multifaceted perspective on CSR is relevant to investigate in several contexts, where mergers and acquisitions (M&A) is one example, which has been done previously for instance by Chatterjee et al. (1992). An important consequence of M&A deals, claims Harrison and Freeman (1999), is the expansion and diversification of the acquiring

---

[1]State Street Global Advisors is the investment management division within the US financial services company State Street Corporation. It is the fourth largest asset manager in the world (SSGA, n.d).

firm's stakeholder base. Considering previous findings, one reason why its relevant to investigate the impact of CSR performance in the context of M&A deals is since both M&A deals and firms CSR performance have an impact on stakeholder relationships.

M&A deals represent important events for both parties of the transaction, where the acquiring firm secures title to the outstanding shares of the target (Dodd, 1980). From the perspective of the acquiring firm, a main motive behind completing M&A deals is that it is believed to generate shareholder value (Trautwein, 1990). However, the conclusion drawn by most previous research is that M&A deals are value-destroying more often than they are value-creating (Martynova & Renneboog, 2008). Within the M&A literature, there is often made a distinction between cross-border deals and domestic deals. While cross-border deals generally occur for the same reason as domestic deals, the acquirer's belief that the target firm is value-adding, there are key distinctions to be made. The acquiring firm is exposed to new factors of risk, mainly due to an increased impact of geographical and cultural differences between the acquirer and target (Ahern et al. 2012; Rose, 2000).

Since the mid-1990s, there has been a rapid increase in cross-border M&A deals, both in terms of deal value and in the number of deals (Xu, 2017). In a survey conducted by Deloitte (2017), they studied the purposes of engaging in cross-border M&A activity among their clients. Asking a population of 500 executives in multiple industries spread out across all continents, they found that the most common motives behind acquiring firms abroad were to enter a favorable regulatory environment, achieve cost synergies and diversify their portfolios. Across all cross-border deals, Erel et al. (2012) found that the target tends to be located in weaker-performing economies while the acquirer tends to be located in countries with a recent increase in value on the stock market, a recent appreciation of the country's currency and high market-to-book values.

1.2 Problematization and Research Questions

Previous research has found that M&A deals on average do not generate value for the acquiring firm (Andrade et al. 2001; Moeller et al. 2004). From the perspective of the acquiring firm, the difficulty in generating positive returns from M&As lies in factors such as cultural frictions, behavioral biases, and unanticipated changes in the economy, resulting in overestimations of

synergies and difficulties in the post-merger integration process (Aybar & Ficici, 2009; Conn et al. 2005). The proven difficulty in creating value from M&As in general and cross-border deals in specific raises the question of determinants of success. Previous literature has found several determinants of success related to both company and deal characteristics, such that cash-paid deals perform better than stock paid deals and that related acquisitions perform better than diversifying acquisitions (Bhagat et al. 2005; Fan & Goyal, 2006). In recent years, more attention has been directed toward the role of CSR in the context of M&A deals. In the papers by Deng et al. (2013) and Zhang et al. (2022), a positive impact of the acquirers' CSR performance on deal returns generated by the acquirer, minimizing negative reactions from the market. Firstly, this paper conducts a similar study as previous research, testing for how the CSR performance of the acquirer impacts generated returns from M&A deals. This leads up to the following research question:

- *Does the acquiring firm's CSR performance impact the market reaction around the announcement of an M&A deal?*

In previous literature, for instance by Deng et al. (2013), Zheng et al. (2022) and Lins et al. (2017), an insurance-like quality of the acquiring firms CSR performance has been found. While the general finding is that M&A deals on average destroy shareholder value for the acquiring firm, firms with a stronger CSR performance have been less affected by negative market reactions. To further elaborate on these findings, attention will be paid on if the impact of CSR performance changes depending on if the deal generates positive or negative acquirer returns. This leads up to the second research question:

- *Does the impact of the acquirers' CSR performance differ depending on if the announcement return is positive or negative?*

Compared to domestic deals, further difficulties have been found when acquirers make acquisitions outside of their domestic market, partly due to an even more complicated integration process, having to consider cultural, regulatory, and institutional differences (Steigner & Sutton, 2011). In the paper by Datta and Puia (1995) they research the cultural impact on cross-border M&A, finding that cultural distance has a negative impact on returns generated by acquiring firms in the US. Similar findings but on the area of geographical distance were found by Uysal et al. (2008), that acquirer returns around the announcement date were higher when the acquirer and

target were located closer to each other. By studying cross-border deals in specific, a more nuanced perspective on the role of CSR performance in the M&A context is taken. The purpose is to further elaborate on CSR's role in minimizing negative market reactions since cross-border deals arguably involve increased elements of risk compared to domestic deals. This leads up to the third research question:

- *Does the acquiring firm's CSR performance positively impact the market reaction around the announcement of a cross-border M&A deal?*

1.3 Methodology and Main Findings

This paper investigates short-term returns around the announcement of domestic and cross-border M&A deals completed by US firms between 2008 and 2020, investigating if it is affected by the acquiring firms' CSR performance. To establish the short-term returns an event study is conducted, using the market model to calculate the cumulative abnormal return (CAR) in relation to a market index. The CAR is then used as the dependent variable in our ordinary least squares (OLS) multivariate analyses where the ESG score of the acquirer is the explanatory variable used as a proxy for CSR performance. The analysis is conducted using previous empirical literature and theoretical perspectives based on information asymmetry and the stakeholder theory, to explain the results from the OLS regression. To check the robustness of our findings several robustness tests are conducted, controlling the effect of both our dependent and explanatory variables.

The empirical findings presented in this paper conclude that an increase in CSR performance decreases the return of the acquiring firm and thus, do not provide evidence that having a better CSR performance would lead to higher M&A deal returns. However, when further elaborating on these results, our results indicate that the impact of CSR depends on the return generated by the acquirer. Precisely, it is found that CSR performance has a negative impact on acquirer return when the acquirer generates a positive return from the deal, but when the acquirer generates a negative return the impact of CSR is positive. This result supports the notion that CSR performance has an insurance-like effect on acquirer returns. While a high ESG score is achieved at the expense of shareholder value maximization, it does also provide insurance against negative reactions from stakeholders. After controlling for other event windows as well as deal and firm characteristics of

the acquirer, the results remain in favor of CSR performance having a mitigating effect on some of the risks in M&A transactions.

1.4 Contribution

Our study adds to the relatively sparse literature on the role of the acquirers' CSR performance in the context of M&A deals. By further building on the findings by Deng et al. (2013) and Zhang et al. (2022), CSRs impact in the context of cross-border deals and how it compares with domestic deals are investigated. In addition, this study provides evidence that CSR's impact depends on whether the acquirer generates positive or negative returns. The risk-mitigating perspective of CSR performance in this study shed new light on explaining what creates and destroys value in M&A deals. Based on a theoretical perspective from the stakeholder theory, we find evidence supporting that the acquirer's CSR performance is beneficial in minimizing negative reactions to the deal. Additionally, our findings also suggest that this benefit is achieved at the expense of shareholder value maximization when the acquirer generates a positive return.

1.5 Outline

The remaining paper will be structured as follows. In section 2 a short introduction to mergers and acquisitions will be presented along with empirical and theoretical literature. In section 3 the data and methodology will be presented, leading up to section 4 where the univariate analysis and the pre-regression diagnostics will be presented. In section 5 the empirical results of the multivariate analysis will be presented and analyzed using the previously mentioned empirical and theoretical literature. Section 6 defines and presents the performed robustness tests to strengthen our results. Lastly, section 7 will conclude the paper with a summary of the results, theoretical and managerial implications, along with limitations and thoughts on future research.

2. Literature Review

2.1 Introduction to Mergers & Acquisitions

The concept of M&A involves two different components, "mergers" and "acquisitions", which have a slight fundamental difference but will be used interchangeably in the abbreviation "M&A" in this study. Gaughan (2018) defines a merger as a unity of two separate entities, where one of the entities ceases to exist after the merger. He further states that in mergers, it is often the company being bought that ceases to exist and all assets and liabilities are transferred to the remaining entity. An acquisition, on the other hand, he defines as when the acquirer gains control of the target company, normally through cash or stock payment, but the target does not cease to exist.

M&A deals lead to a transfer of ownership from the owners of the target firm to the owners of the acquiring firm. Over time, owners that once made sense as in control of the firm may no longer do so, where M&As can be used to reallocate resources and improve the utilization (Koller et al. 2020). This reasoning is related to the best owner principle, meaning that no firm has an inherent value and that the value is based on how the firm is managed (Dobbs et al. 2010). In practice, divestitures are the best option when the best owner criterion is not fulfilled. In general, M&As are intended to be value-creating, which they in most cases are, but the value tends to go to the shareholders of the target firm rather than the acquirer (Maksimovic et al. 2011; Netter et al. 2011).

2.2 Theoretical Literature

2.2.1 Information Asymmetry

Luypaert and van Cagenhem (2017) examined the impact of information asymmetry on a broad range of deals between 1994 and 2011, including both private and public targets. Their findings provide evidence that information asymmetry is a crucial aspect to consider when analyzing M&A deals, both between the acquirer and target and between the acquirer and its investors, arising when a party is uncertain about the value of the counterpart. From the perspective of the acquiring firm, they further state that the realized return from the deal is dependent on accurately assessing synergies and the value of the target, which is dependent on the quantity and quality of information

available to make a qualified assessment. Chemmanur et al. (2009) studied the impact of information asymmetry on the choice between paying with stock and cash, finding that the amount of information asymmetry for both parties of the deal will have a significant impact on generated returns. Their findings include that acquirers facing more information asymmetry are more likely to use cash offers, intended to signal a high private valuation of the target to outcompete rival bidders with difficulties evaluating the target. They also found that acquirer overvaluation is negatively related to returns generated around the deal announcement. McNichols et al. (2015) investigated how the uncertainty of the valuation of the target is related to acquirer returns by analyzing the quality of accounting information available, finding that acquirers generate higher returns when targets have higher accounting quality. Information asymmetry also has an impact on acquisition premiums, as found by Dionne et al. (2015). Their results indicate that informed bidders tend to pay a lower premium than uninformed bidders, partly explained by uninformed bidders tending to suffer from the winner's curse (winning by overpaying).

In the context of cross-border deals, Reddy, and Fabian (2021) found evidence that the implications of information asymmetry are different compared to domestic deals. They found that cross-border deals were more vulnerable to the risk of transaction-level hazards and opportunistic behavior from the counterpart, having an impact on the outcome of the deal. Furthermore, acquiring firms are impacted by information asymmetry when it comes to accurately evaluating targets, partly due to comprehensiveness issues (Hitt et al. 2006). More information asymmetry leads to both an increased risk of agency conflicts as well as higher transaction costs (Dahlquist & Robertsson, 2001). Considering that M&A deals are terminal transactions, Ragozzino and Reuer (2007) state that the managers of the target firm have no incentives to disclose private information and a tendency to exaggerate the value of the firm. They further claim that to maximize the value generated from the deal, it is in the interest of the acquirer to minimize the information asymmetry. Several papers have found that poor due diligence and inaccurate evaluations of targets partly are consequences of information asymmetry, which then has a negative impact on the post-acquisition financial performance of the acquirer (Hitt et al. 1994; McIntyre, 2004).

2.2.2 Stakeholder Theory

Historically it was sufficient for companies to strive for shareholder wealth maximization, often leading to negative externalities when firms refused to take full responsibility for all costs related to their business (McWilliams et al. 2006). Recently, as new demands from stakeholders put pressure on companies to take more responsibility for a broader range of issues, Jones (1995) observe how increased CSR engagement has been adopted by many companies to satisfy these new demands. He states that firms adopting CSR practices have lower costs for managing their stakeholder relationships, increasing the potential of financial returns compared to firms with weaker CSR practices. From the perspective of shareholder wealth maximization, corporate executives' only mission is to pursue a shareholder value agenda, where all costs related to CSR activities are considered a residual loss better spent on value-adding projects or paid out as dividends to shareholders (Jensen & Meckling, 1976). However, Fatemi and Fooladi (2013) argue that it has become more complicated to strive for shareholder value maximization in practice. They state that new requirements from stakeholders have led to companies having to deal with increasingly common issues such as legal suits, product boycotts, and activist actions, influencing the pursuit of shareholder value maximization.

Several attempts have been made to analyze firms' M&A activities from a stakeholder perspective. Harrison and Freeman (1999) argue that an important effect of M&A deals is the expansion and diversification of the acquiring firm's base of stakeholders, leading to new demands for the acquiring firm to handle. Cording et al. (2014) studied how stakeholder relations have an important impact on generated returns from the deal. They focus specifically on CSR and organizational authenticity, finding evidence that both firms underperforming and overperforming relative to firm values receive lower long-term returns after M&A deals. Furthermore, they also find support for the often-negative return for acquirers around the announcement of M&A deals being partly explained by the impact it has on the acquiring firm's stakeholders.

From the perspective of the acquiring firms' existing stakeholders, the deal can be seen as a threat to their current position as they usually are forced into negotiations with the new stakeholders (Jo & Harjoto, 2011). Bekier et al. (2001) also emphasizes the importance of avoiding losing valuable relationships in the post-merger integration process. To successfully handle all key stakeholders

in the M&A process, they claim that an important part of the solution lies in creating long-term relationships and faithfully enforcing implied contracts. Based on the findings by Godfrey et al. (2009), firms with better CSR performance have an advantage when building relational assets and moral capital. They found that CSR helps generate protection and a reciprocal relationship with their stakeholders, decreasing the risk of negative sanctions.

2.3 Empirical Literature

2.3.1 The Short-Term Performance of M&As

Observing previous research on short-term acquirer returns around the deal announcement, the general finding is that it does not generate positive returns. Several studies have found slightly negative acquirer returns around the announcement date over the last decades, such as Chang's (1998) study on acquisitions of private targets between 1981 and 1992 and of public targets between 1981 and 1988. Chemmanur et al. (2009) also found negative acquirer returns from deals announced between 1978 and 2004, using a sample of public acquirers and targets. Borochin et al. (2019) found similar results between 1990 and 2014 on a sample of US firms. However, there are also examples of papers where positive returns are found, such as in Asquith's (1983) paper on deals completed between 1962 and 1976 by acquirers on the New York Stock Exchange. Positive acquirer returns were also found by Kang et al. (2000) in their study on mergers in Japan between 1977 and 1993. In a recent study by Alexandridis et al. (2017), they found that M&A deals had created more value for shareholders of the acquiring firm than ever before, studying mergers completed by US acquirers during the period between 2010 and 2015.

A large part of the literature on short-term returns have been focused on deal and company characteristics that determines acquirer returns. While the findings differ over time and depending on the population, there are a few characteristics that have had an impact in several studies over a longer period. In general, all-cash bids are associated with higher returns than all-equity bids, explained by cash being used when the stock is believed to be undervalued and equity being used when the stock is believed to be overvalued (Bhagat et al. 2005; Loughran and Vijh, 1997; Savor and Lu, 2009). A second factor that has proven to be important over time is if the acquirer is a serial acquirer or not. Several papers on serial acquirers have found that serial acquirers have

negative returns around the announcement and that they tend to perform gradually worse over time (Aktas et al. 2009; Antoniou et al. 2007; Fuller et al. 2002). Thirdly, focused acquisitions do in general achieve higher returns than diversifying acquisitions, explained by the fact that it facilitates the post-merger integration process, making it easier to utilize the firm's existing strengths and resources (Fan & Goyal, 2006; Rhodes-Kropf & Robinson, 2008).

2.3.2 Cross-Border M&As

Cross-border M&As need specific attention as they compared with domestic deals have unique difficulties and opportunities. The results from research on cross-border deals are mixed, showing that it can lead to both lower and higher returns compared to domestic M&As. The difficulties are mainly centered around cross-country differences such as cultures, values, and norms, leading to significant risk elements in the post-merger integration and in the achievement of synergies (Aybar and Ficici, 2009). Similar arguments are made by Al Rahahleh and Wei (2013), that a longer cultural distance between the acquirer and target leads to lower returns for the acquirer as it implies higher risks of conflicts and a more complex post-merger integration process. In their study on 1079 cross-border deals, they find that deals with larger cultural differences generate lower returns than cross-border deals with smaller cultural differences. Datta and Puia (1995) found similar results when examining the effect of cultural distance on acquirer returns. In their study on cross-border deals completed by US acquirers between 1978 and 1990, they found that they on average generate acquirer returns insignificant from zero. Furthermore, generated returns were negatively influenced by a larger cultural difference between the acquirer and target.

On the other hand, Morosini et al. (1998) and Sarala and Vaara (2010) argue that larger differences on company and country-level enable a greater exchange of knowledge and utilization of new practices and techniques. This argument is strengthened by the findings by Chakrabarti et al. (2008), suggesting that cultural differences instead are associated with higher acquirer returns. By observing 800 cross-border deals between 1991 and 2004, they found that cultural differences have a positive impact on long-run acquirer performance. Steigner and Sutton (2011) found a similar impact of the cultural distance between the acquirer and target, focusing specifically on internalization benefits. Their study provides evidence that cultural differences between the acquirer and target increase the benefits of technological knowledge and the internalization of

intangible assets, having a positive impact on long-run financial performance. In the paper by Reus and Lamont (2009), they found evidence that cultural distance can have both a positive and negative influence on cross-border deal performance, described as a double-edged sword. On the one hand, they found that cultural differences relate to communication constraints and difficulty in achieving a mutual understanding of knowledge that needs to be transferred. On the other hand, they found that cultural differences imply learning opportunities to exploit and generate value from.

Further studies on the dynamics of cross-border deals were executed by Landier et al. (2009), with an emphasis on the geographical distance between the acquirer and target. Their findings include that a firm's decision-making is influenced by the degree of geographic spread between its divisions and that geographic dispersion is related to firms being less employee friendly. They also studied the impact of geographical distance on returns generated by divestitures, where longer geographical distance on average generated lower returns. In the context of M&A deals and acquirer returns, Uysal et al. (2008) found that acquirer returns are negatively impacted by longer geographical distance. In their study on deals completed by US companies between 1990 and 2003, acquirers buying targets located within 100 km generated more than twice as high returns than when the distance was longer than 100 km. On the other hand, contrasting results were found by Grote and Umber (2007). In their study, they found results indicating that geographical proximity is related to psychological illusions of control and overconfidence, which tend to result in overpayments and lower acquirer returns.

2.3.3 CSR and M&As

Observing previous research, various measures of CSR have been used. Several papers conducted on CSR have used measures based on the KLD database, covering seven different aspects of CSR and split into 124 specific indicators (Jiao, 2010; Bereskin et al. 2018; Deng et al. 2013). In the paper by Fiordelisi and Ricci (2013) they use the definition of corporate culture by Cameron et al. (2006), split up into four subcategories: control, competition, collaboration, and creation and how it influences CEO turnover and firm performance. Finally, there are examples of papers using ESG scores as a proxy for CSR performance, such as the paper by Aouadi & Marsat (2018).

A company's CSR engagement can be understood from several perspectives, where the stakeholder perspective described previously being one. Another perspective is presented by Chatterjee et al. (1992), as an expression of the corporate culture. In their study on the impact of differences in culture and management policies on shareholder value created from mergers, they found that differences between the acquirer and target have a negative impact on the acquiring firm's generated returns. Olie (1994) also studied the impact of corporate culture in the context of M&A deals, focusing specifically on the degree of compatibility of the acquirer and target and its impact on the post-merger integration process. His findings provide evidence that the cultural compatibility of the two firms and to which extent they can retain their organizational integrity is crucial for the post-merger integration process. Bereskin et al. (2018) found similar results when analyzing cultural compatibility and the CSR similarity between the target and acquirer, finding that higher similarity leads to higher abnormal returns around the announcement of the deal. They argue that cultural similarity reduces the risk of frictions in the post-merger integration process, increasing the probability of success.

In the paper by Deng et al. (2013) focus is solely on the CSR score of the acquirer and its impact on generated acquirer returns, including a large sample of mergers by acquirers in the US completed between 1992 and 2007. Their main finding is that acquiring firms with higher CSR scores generate both higher abnormal returns and long-term profitability after the deal, providing evidence in line with the stakeholder value maximization theory and contrasting with the shareholder expense theory's arguments about CSR. The explanation lies in CSR firms' integration of stakeholders in their business operations, leading to higher incentives to contribute more effort and resources to the firm. Liang et al. (2018) also studied CSR and its impact on the success rate of M&A deals, focusing specifically on the employment policies of the acquiring firm. They found that generous employment policies have a positive impact on the abnormal returns generated by the acquirer around the deal announcement, but the results for cross-border deals were reversed. Their findings complicate which conclusions to draw considering the tradeoff between labor-related frictions due to more restrictive labor policies, and value-enhancing effects due to more generous labor policies and incentives to contribute with more effort.

Zhang et al. (2022) investigated the impact of the acquiring firms' CSR engagement on returns generated from M&A deals, finding support that it provides insurance-like benefits during events that often are perceived negatively by stakeholders. These findings relate to those by Fombrun et al. (2000), suggesting that CSR has an impact on firm reputation, leading to benefits such as more beneficial contract terms with stakeholders and room for setting prices less aggressively. Focusing specifically on the insurance aspect of CSR, Lins et al. (2017) found evidence in favor of that argument, focusing on its impact on preserving financial performance during the financial crisis between 2008 and 2009. Their results were that the stocks of strong CSR companies outperformed weak CSR companies by 4 to 7 percentage points, which they partly attributed to strong CSR companies' reputation for honoring contracts with stakeholders, mitigating the risk of negative reactions. Additional findings on CSR's insurance-like effect were found by Shiu and Yang (2015). Observing stock and bond performance, they found evidence suggesting that CSR has an insurance-like effect during risky or negative events. However, they found that this insurance functions one time only, losing its effect if a second, subsequent event occurs.

In the paper by Capelle-Blancard and Monjon (2012) they conducted a literature review of previous research on SRI between 1982 and 2009, finding no evidence that firms with stronger CSR performance generate better financial performance. Similar results were found in the study by Jones et al. (2008) on the investment performance of SRI funds in Australia, finding that they underperformed relative to the market between 1985 and 2005. While their study does not focus on M&A performance, it does provide an argument against the claim often made by ESG-focused funds that firms' CSR engagement is beneficial from a financial performance perspective. Humphrey and Tan (2014) also found similar results in their study on SRI over the period between 1996 and 2010, concluding that neither positive nor negative screening has an impact on portfolio risk and performance.

2.4 Hypotheses Development

Over time, acquiring firms on average have not been able to generate positive returns from M&A deals (Borochin et al. 2019; Chang, 1998; Chemmanur et al. 2009). Meanwhile, previous research has found several firm and deal-specific characteristics that have a positive effect on acquirer returns. Recently, increased attention in the literature has been directed towards the role of CSR in

M&A deal performance. From the theoretical perspective of shareholder wealth maximization, Jensen and Meckling (1976) state that CSR investments are made at the expense of shareholder value and for this reason, a negative market reaction to firms with a stronger CSR performance is expected. There is still uncertainty about whether strong CSR performance has a positive impact on financial performance, which is indicated in the findings by Capelle-Blancard and Monjon (2012), Humphrey and Tan (2014), and Jones et al. (2008) on SRI performance. However, empirical evidence in favor of a negative impact on M&A performance is sparse. A contrasting theoretical perspective is provided by the stakeholder perspective, suggesting that firms with stronger CSR performance strive toward meeting demands from various stakeholders, not only the shareholders. By emphasizing stakeholder relationships through CSR engagement, firms are able to generate a relational capital that protects firms from negative reactions to risky events, as evident in the findings by Godfrey et al. (2009) and Lins et al. (2013). Further evidence in favor of the stakeholder perspective on CSR performance was found in studies on M&A deals by Deng et al. (2013) and Zhang et al. (2022). Their papers found that the CSR performance of the acquiring firm has a positive impact on short-term returns generated by the acquirer. To test for the impact of the acquirers CSR performance on deal returns, similarly to previous studies, the following hypothesis is formulated:

H₁: The CSR performance of the acquirer has no impact on acquirer returns generated around the deal announcement

Hₐ₁: The CSR performance of the acquirer has an impact on acquirer returns generated around the deal announcement

Observing previous research, there are papers finding examples of firms generating both positive and negative abnormal returns around the deal announcement (Alexandridis et al. 2017; Chemmanur et al. 2009). When analyzing the impact of CSR on deal performance, several papers have found a mitigating function on risk, such as the paper by Zhang et al. (2017). Based on the stakeholder theory, CSR's function when building relational capital minimizes the risk of negative sanctions and reactions, which has support by the findings of Godfrey et al. (2009). In the paper by Deng et al. (2013), the acquirers generated negative abnormal returns from the deals on average. Their results provided evidence that acquirers with a better CSR performance generated higher

returns from deals than acquirers with a weaker CSR performance. However, based on the arguments provided by the stakeholder theory and previous literature, the focus tends to be on CSR's function in minimizing the downside of risky events rather than providing an upside of increased returns overall. Considering the theoretical perspective of shareholder wealth maximization as defined by Jensen and Meckling (1976), arguments against CSR as a driver for deal performance are provided. Acquirers with a strong CSR performance undertake investments that satisfy the interest of various stakeholders other than the firms' shareholders, which leads to the prediction of a negative market reaction to the deal. Yet, evidence in favor of a negative impact of the acquirers' CSR performance on acquirer returns is sparse in previous M&A literature. To add more nuance to the impact of acquirers' CSR performance in the M&A context, the following hypothesis is formulated:

H_2: The CSR performance of the acquirer has similar impact on acquirer announcement returns across value destroying and value creating deals
H_{a2}: The CSR performance of the acquirer has a different impact on acquirer announcement returns across value-destroying and value-creating deals

The distinction between domestic and cross-border deals has been made in several papers to investigate similarities and differences, with mixed results. One part of the literature on cross-border deals has found support in favor of a positive impact on deal returns, explained by increased opportunities to exploit learning opportunities, utilizing of knowledge transfers, and achieving internalization benefits (Reus & Lamont, 2009; Steigner & Sutton, 2011). Furthermore, Grote and Umber (2007) found that cross-border deals reduce the risk of managerial overconfidence, which tends to affect deals with geographic proximity between the acquirer and target. In the case that cross-border deals provide additional upside to the deal rather than increased risk, ESG's risk-minimizing function found for instance by Zhang et al. (2022) and Lins et al. (2017), is expected to be lower for cross-border deals than domestic deals.

However, a large part of the literature has also found evidence that cross-border deals face increased risk and generate lower deal returns. Freddy and Fabian (2021) found that information asymmetry is more evident in cross-border deals, leading to more transaction-level hazards and a

more difficult process when evaluating targets. Cross-border deals are also associated with a higher risk of conflicts and more complex post-merger integration processes (Al Rahahleh & Wei, 2013; Datta & Puia, 1995). In that case, cross-border deals involve increased elements of risk rather than an additional upside, leading to the prediction that the risk-mitigating impact of the acquirers' CSR performance is higher for cross-border deals than domestic deals. To investigate the impact of the acquirers CSR performance in the context of cross-border deals, the following hypothesis is formulated:

H_3: *The CSR performance of the acquirer has no positive impact on acquirer returns generated around the announcement of cross-border deals*

H_{a3}: *The CSR performance of the acquirer has a positive impact on acquirer returns generated around the announcement of cross-border deals*

3. Data and Methodology

3.1 Sample Description

Our sample of M&A transactions was collected using the "Scanner" function in Refinitiv Eikon based on previous research by Arouri et al. (2019) and Demers et al. (2021). All transactions were filtered on the following criteria, (I) include only completed M&A transactions resulting in 1 030 564 transactions; (II) include only transactions with disclosed dollar value resulting in 304 118 transactions; (III) include only deals that were announced between the 1st of January 2008 to the 31st of December 2020 resulting in 131 234 transactions; (IV) include only transactions where the acquirer is located in the United States of America resulting in 28 604 transactions; (V) include only public acquirers resulting in 14 752 transactions; (VI) include only acquiring firms with available environmental, social and governance disclosure scores, and available share price resulting in 3 373 transactions; (VII) exclude acquiring firms that are active in the financial industry resulting in 3 345 transactions; (VIII) exclude acquiring firms that have missing ESG scores or other financial information for the specific year the transaction was completed, resulting in 2 263 transactions; (IX) exclude acquiring firms that did not have sufficient share price in order to complete the event study, resulting in 2 234 transactions.

Restricting the sample to M&A transactions that have been completed was done for all the observations to be comparable to each other. The choice of excluding observations that do not have disclosed deal value was done because several control variables are based on the transaction value. The starting date of our period was decided because 2008 was the year when ESG scores for the MSCI world index were included in the Refinitiv Eikon database. The upper limit of the period was set since 2020 was the last year with available data on ESG scores when using Refinitiv Eikons function builder. The US is the most covered market when it comes to ESG scores (Refinitiv, n.d.a). Not only is the US the most covered market when it comes to ESG scores, but it is also the largest market in terms of M&A deals as US deals alone accounted for 39% of all global deals in 2020 (Refinitiv, n.d.b). The choice of only including public acquirers was done since the ESG score is based on publicly available information. The exclusion of the financial industry was

decided based on the study by Fuller et al. (2002), as they deem that the heavy regulations of the industry make it difficult to compare it with other industries.

3.2 Event Study Description

The market model is used to estimate the abnormal return, comparing the return for every security with the return of a diversified market portfolio (Mackinlay, 1997). The return of a diversified market portfolio is in this case estimated by the S&P 500 Index for our dependent variable. As a robustness check, the market portfolio is also estimated using the MSCI World Index. For security i during the time period t, the return is calculated with the following equation:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \ [1]$$

$$E(\varepsilon_{it}) \ var(\varepsilon_{it}) = \sigma^2_{\varepsilon_i} \ [2]$$

In the market model, α_i is the intercept, β_i is the coefficient, R_{mt} is the return of the market portfolio, in this paper estimated by the S&P 500 Index and the MSCI World Index, and ε_{it} is the error term (Mackinlay, 1997). The abnormal return for any specific firm is calculated with the following equation:

$$AR_{it} = R_{it} - \hat{R}_{it} \ [3]$$

AR_{it} is the abnormal return at day t for the firm i, R_{it} is the realized return for firm i on the same day and $\hat{R}_{it}$ is the estimated return from the market model (Mackinlay, 1997). The CAR is calculated for the different event windows with the following equation:

$$CAR_{i(t1,t2)} = \sum_{t=t1}^{t2} AR_{it} \ [4]$$

An estimation window of -250 to -51 and short-term event windows of (-5 to +5), (-3 to +3), and (-1 to +1) are used based on previous research using an event study methodology (Brown & Warner, 1985; Campbell et al. 1997). Short-term event windows are used based on Fama et al. (1969) paper on The Efficient Market Theory where evidence is provided that stocks react immediately to events and new information. Fama (1998) argues against using longer event windows based on the argument that it fully captures the impact of the event and long-term anomalies. His findings provide evidence that overreactions to information were as common as underreactions and that pre-event abnormal returns were as likely to continue as to reverse, which is in line with the efficient market hypothesis that anomalies occur randomly. Furthermore, by observing a short-term event window, the impact of the deal is more isolated, avoiding the diluting

effect when observing a longer period (Dionysiou, 2015). The CAR generated from the event window of (-1 to +1) will be used as our main dependent variable following previous studies by Alexandridis et al. (2017), Eckbo (1983), Jaffe et al. (2013), and Malmendier and Tate (2008). The CAR from the event studies using the event windows of (-5 to +5) and (-3 to +3) will be used as robustness variables.

3.3 OLS Model Description

3.3.1 Model 1 Description

To test the first hypothesis, an OLS regression model is estimated having $CAR_{i(t1,t2)}$ as the dependent variable and *ESG score* as the main explanatory variable, using control variables that relate to deal- and firm-level characteristics.

$$CAR_{i(t1,t2)} = \beta_0 + \beta_1 ESG\ score + \beta_2 Firm\ controls + \beta_3 Deal\ controls\ (1)$$
$$+ \gamma Industry\ control + \lambda Year\ control + \epsilon$$

3.3.2 Dependent Variable

The dependent variable *CAR(-1,+1)*, representing the cumulative abnormal return of the acquiring firm, reflects the abnormal return of the acquirer' in relation to the expected return of the market over the event window (Brown & Warner, 1985). The expected market return is estimated from the S&P 500 index.

3.3.3 Explanatory Variable

Our main explanatory variable is *ESG score,* a proxy variable for the CSR performance of the acquiring firm. *ESG score* represents the average score for each company based on the environmental, social, and governance pillar scores. Using the average of the three separate scores is based on previous studies by Aouadi and Marsat (2018) and Cheng et al. (2014). The choice of using the average score instead of the pre-determined weights by Refinitiv was made to get a larger sample due to less lapse in pre-determined ESG scores. After using the calculated average score, the difference in ESG score was very small in comparison to the already pre-determined ESG scores. The individual environmental, social, and governance pillar scores were included as well as *Environmental pillar score*, *Social pillar score* and *Governance pillar score*. The separate pillar

scores are included to strengthen the results of our main explanatory variable, based on the study by Arouri et al. (2019).

3.3.4 Firm Characteristic Control Variables

Our control variables were selected to represent firm characteristics that previous research found had an impact on acquirer returns around the deal announcement. Firstly, *Market cap* is included as a size measure of the acquirer, presented as the natural logarithm of the market capitalization presented in billion USD. It is included based on research by Humphery-Jenner and Powell (2011) who found that large acquirers generate lower returns than small acquirers. *Current ratio* is included to measure liquidity and it is calculated by dividing the current assets of the acquirer by its current liabilities. Previous research by Hu et al. (2020) found that acquiring firms with a higher trade credit pay lower target premiums and are more likely to use cash offers than stock offers, resulting in higher abnormal returns. The variable *Leverage* is a representation of the total debt to total assets of the acquirer, supported by the research of Uysal et al. (2011) who found that overleveraged acquirers are less likely to take on more debt in order to pay with cash. This result in that they instead tend to use stock payments and therefore have lower returns. *ROA* is included as a representation of the acquiring firm's return on assets which is calculated by dividing net income by total assets, controlling for acquirer profitability. Benson et al. (2015) found that firms with higher profitability pay a higher premium and thus experience a lower return, which is supported in the findings by Louis (2005). As an alternative to Tobin's Q, *Market to book* is included, frequently used in the literature to capture if the acquirer is overvalued, showcasing the relation between market cap and total book value. An acquirer with a high market-to-book ratio implies overvaluation and is therefore more likely to pay with its overvalued stock than cash, resulting in a negative reaction from the market (Lang et al. 1991; Rau & Vermaelen, 1998).

3.3.5 Deal Characteristic Control Variables

Moving on to control variables related to deal characteristic found to have an impact on acquirer return, *Relative deal size* is included as a measure of market cap in relation to the deal value. *Deal value* on its own was also included as a control variable, presented as the natural logarithm of the deal value in billion USD. These variables were included based on the findings by Alexandridis et al. (2013) that the value destruction from the acquiring firm's perspective is more evident when

acquiring larger targets, partly explained by the complexity of large deals. There are also several control variables constructed as dummy variables included in our estimated regressions. *Same macro industry* and *Same mid industry* are dummy variables having the value when the acquirer and target are within the same industry and 0 otherwise. There are 12 different macro industries represented in our sample while there are 67 different mid industries. In previous studies, the results indicate that related acquisitions result in higher acquirer returns than diversifying acquisitions, explained by a simplified post-merger integration process and greater utilization of existing resources (Fan & Goyal, 2006; Rhodes-Kropf & Robinson, 2008). The variable *Cash deal* was included to control for the payment type, capturing if cash or equity is used. The variable is given a value of 1 if the M&A is paid for using only cash and 0 otherwise. Cash-paid deals are associated with higher returns than stock-paid deals as the stock is more likely to be used when it is overvalued (Bhagat et al. 2005; Loughran & Vijh, 1997; Savor & Lu, 2009). *Target public* is a variable given a value of 1 if the target is publicly listed and a 0 otherwise. The general finding here is that acquirer returns are higher for private firms than for public firms (Capron & Shen, 2007; Conn et al. 2005; Fuller et al. 2002).

3.3.6 Model 2 and 3 Description

To test the second hypothesis, an OLS regression model is estimated having $CAR_{i(t1,t2)}$ as the dependent variable and *ESG score* as the main explanatory variable, using control variables that relate to deal- and firm-level characteristics. An additional control variable, as well as an interaction variable, have been included to study the effect of when the acquirer generates positive or negative returns.

$$CAR_{i(t1,t2)} = \beta_0 + \beta_1 ESG\ score + \beta_2 Positive\ CAR + \beta_3 ESG\ score\ positive\ CAR\ (2)$$
$$+\beta_4 Firm\ controls + \beta_5 Deal\ controls + \gamma Industry\ control + \lambda Year\ control + \epsilon$$

To test the final hypothesis, an OLS regression model is estimated having $CAR_{i(t1,t2)}$ as the dependent variable and *ESG score* as the main explanatory variable, using control variables that relate to deal- and firm-level characteristics. An additional control variable, as well as an interaction variable, have been included to study cross-border transactions.

$$CAR_{i(t1,t2)} = \beta_0 + \beta_1 ESG\ score + \beta_2 T\arg e\ t\ corss\ border + \beta_3 ESG\ score\ cross\ border \quad (3)$$
$$+\beta_4 Firm\ controls + \beta_5 Deal\ controls + \gamma Industry\ control + \lambda Year\ control + \epsilon$$

3.3.7 Additional Control Variables

The control variable *Positive CAR* is a dummy variable that is given a value of 1 if *CAR(-1,+1)* is positive and 0 otherwise. *Target cross-border* is given a value of 1 if the target is located outside the US and a 0 otherwise, included to control for the cultural and geographical proximity of the target in relation to the acquirer. Most literature has found that the increased geographic and cultural distance of cross-border deals has a negative effect on acquirer returns (Aybar & Ficici, 2009; Conn et al. 2005).

3.3.8 Interaction Variables

ESG score positive CAR is an interaction variable where *ESG score* has been multiplied by *Positive CAR*. Furthermore, the interaction variable *ESG score target cross-border* has been included to showcase the effect of *ESG score* on cross-border transactions. The variable was created by multiplying *ESG score* with *Target cross-border*.

3.4 Modeling Decisions

All variables used for this study except for the dummy variables and the interaction variables have been winsorized at the 1st and 99th percentiles to minimize the effect of potential outliers. The decision to winsorize at the 1st and 99th percentiles is based on previous studies by Alexandridis et al. (2017) and Conn et al. (2005). The dependent variable *CAR(-1,+1)* has been multiplied by 100 and thus a presented result of 1.000 is equal to 1%. This decision was made to improve the readability of the results. The variables representing the market capitalization and the deal value are being presented in USD billion due to their large size in comparison to all other variables. Furthermore, the natural logarithm of these variables is used to minimize the skewness within the sample, in line with previous studies by Alexandridis et al. (2013) and Humphery-Jenner & Powell (2011). Based on the findings made during our pre-regression diagnostics, all regressions are estimated using clustered robust standard errors. Throughout the paper, we will both cluster based on the acquiring firm or the country of the target. Most regressions will firstly be estimated using the country of the target as our cluster and the acquiring firm as a robustness check. The only

exception is when we look at cross-border transactions, as this would inhibit us from splitting the sample on domestic transactions, having only one country to cluster by and thus no standard deviation will be presented. All regressions are also being controlled for industry effects based on the 12 different macro industries presented in our sample and year effects based on the 13 years between 2008-2020, to further establish the robustness of the findings.

3.5 Summary Statistics

Table 1. Summary Statistics

Variables	N	Mean	SD	Median	Min	Max
Dependent variable						
CAR(-1,+1)[1]	2234	0.422	4.129	0.242	-12.609	15.243
Explanatory variables						
ESG score[1]	2234	47.588	19.989	46.175	8.921	86.702
Environmental pillar score[1]	2234	37.259	28.749	35.919	0.000	90.740
Social pillar score[1]	2234	50.699	22.508	48.296	9.454	94.697
Governance pillar score[1]	2234	54.796	20.803	57.030	8.750	92.119
Firm characteristic control variables						
Market cap[1]	2234	18.645	49.300	3.963	0.103	354.392
Current ratio[1]	2234	1.765	1.064	1.541	0.150	5.803
Leverage[1]	2234	0.321	0.176	0.296	0.000	0.829
ROA[1]	2234	0.055	0.050	0.052	-0.118	0.217
Market to book[1]	2234	3.453	5.239	2.426	-13.318	35.384
Deal characteristic control variables						
Relative deal size[1]	2234	0.568	1.866	0.048	0.000	13.378
Deal value[1]	2234	1.029	2.444	0.230	0.002	17.014
Same macro industry[2]	2234	0.174	0.379	0.000	0.000	1.000
Same mid industry[2]	2234	0.111	0.315	0.000	0.000	1.000
Cash deal[2]	2234	0.452	0.498	0.000	0.000	1.000
Target public[2]	2234	0.164	0.371	0.000	0.000	1.000
Positive CAR[2]	2234	0.539	0.499	1.000	0.000	1.000
Target cross-border[2]	2234	0.252	0.434	0.000	0.000	1.000

Note: Table 1 presents the number of observations, mean value, standard deviation, median value, minimum value, and the maximum value for the included variables. The included variables are CAR(-1,+1), ESG score, Environmental pillar score, Social pillar score, Governance pillar score, Market cap, Current ratio, Leverage, ROA, Market to book, Relative deal size, Deal value, Same macro industry, Same mid industry, Cash deal, Target public. Positive CAR, Target cross-border.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.

Observing the summary statistic presented in table (1), it is noticeable that the number of observations within each variable is 2 234, meaning that no observation is excluded when estimating the regression. The average announcement return is 0,422% and the mean return is 0,242%, showing skewness in the sample with a minimum return of -12,609% and a maximum return of 15,243%. Compared with a previous study by Alexandridis et al. (2017) on US firms between 2010 to 2015, an average announcement returns of 1,05% was found. Their announcement return is more than twice as large as the one found in our study, but this could be explained by our larger sample and time period, possibly lowering the average return.

The explanatory variable *ESG score* presents a mean score of 47,588 and a median of 46,175, indicating low skewness in the sample. These findings are similar to the statistic presented by Cheng et al. (2014), finding an average CSR score of 0,47 out of a maximum of 1, roughly translating to 47,0 using our scale. Observing *Environmental pillar score*, *Social pillar score*, and *Governance pillar score,* we can see that the average score of the mean of each individual pillar score when added up averages out to the *ESG score,* strengthening that it was calculated correctly. It is also noticeable that there is low skewness in the individual pillar scores, explaining the low skewness in the *ESG score*.

Market cap presents an average value of 18,645 USD billion with a median value of 3,963 USD billion, showing signs of skewness in the sample. The skewness is further supported by the fact that the standard deviation of 49,300 USD billion is large in relation to both the mean and the median. The variance tells us that there is a large difference in firm size within the sample, which is expected considering that no restrictions were included based on firm size. The *Current ratio* is showing a high maximum value compared to the mean but despite this, there is not a large difference between the mean at 1,765 and the median value of 1,541. This indicates that despite there being outliers, the bulk of the sample is rather normally distributed. Observing *Leverage*, it is noticeable that the minimum value is 0, indicating that at least one acquirer is fully equity-financed. The maximum value of 0,829 indicates a leverage ratio of 82,9%. Our mean L*everage* is similar to the average leverage of 38,1% presented by Uysal et al. (2011) in their sample over the period between 1990 and 2007. As their sample period ends where ours begin, our average leverage suggests that the average leverage has been rather consistent over time. The average *ROA* of the acquiring firm is 5,5%, close to the median *ROA* of 5,2%. The average *ROA* in our sample is below the ROA presented by Benson et al. (2015) at 15,82% over the period between 1997-2008, while it is above the 2,2% presented by Louis (2005) in their sample of US firms between 1980-2002. The *Market to book* variable is showcasing a rather large spread with a minimum value of -13,318 and a maximum value of 35,384, strengthened by the standard deviation of 5,239. The mean of 3,453 signals that the average company is being valued higher by the stock market in relation to its assets.

Relative deal size is showing great variance within the sample, considering the high standard deviation. The sample consists of transactions with varying *Relative size*, from almost negligible to 13 times the size of the acquiring company. This can be explained by a large variation in both acquirer size and *Deal value*, as indicated when observing the mean and a relatively high standard deviation. Signs of a large variance is found when observing that the minimum and maximum values are far from the mean value. For *Same macro industry,* being a dummy variable, the mean value tells us that 17,4% of the transactions take place between an acquirer and target within the same macro industry. The same goes for the *Same mid industry* describing that 11,1% of the transactions take place between an acquirer and a target within the same mid industry. The fact that more transactions take place between the same macro industry in comparison to the mid industry is to be expected as the macro industry coverers a larger part of the market than mid industry. 141 transactions that take place between the same macro industry fail to satisfy the criteria of taking place between the same mid industries. Looking at the dummy variable *Cash deal*, we notice that almost half of the transactions were paid for using cash only. To be precise 45,2% of the observed transactions were paid for using only cash. Looking at *Target public* we find that the sample consists of only 16,4% transactions where the target is a public company. There is a rather equal split within the sample based on positive and negative returns, *Positive CAR* presents a mean of 0.539 indicating that 53,9% of the transactions generated a positive return. Since there is a difference in terms of percentage between positive and negative returns, it is reasonable to assume that this is one of the explanations as to why the average announcement return is positive in the sample. Looking at *Target cross-border* we find that 25,2% of the transactions in our sample were completed on targets that were located outside of the US.

3.5.1 Summary Statistics Split by High ESG score

Table 2. Summary Statistics Split by High ESG score

Variables	Non-High ESG score acquirer					High ESG score acquirer				
	Mean	SD	Median	Min	Max	Mean	SD	Median	Min	Max
N			1676					558		
Dependent variable										
CAR(-1,+1)[1]	0.608	4.329	0.278	-12.609	15.243	-0.136	0.188	3.401	-12.609	15.243
Explanatory variables										
ESG score[1]	38.786	14.437	39.285	8.921	64.318	74.025	6.455	72.682	64.360	86.702
Environmental pillar score[1]	25.676	22.837	23.496	0.000	87.916	72.049	11.354	73.145	41.774	90.740
Social pillar score[1]	41.595	17.406	40.396	9.454	94.437	78.044	11.017	78.143	33.684	94.697
Governance pillar score[1]	49.089	19.615	50.271	8.750	91.930	71.938	13.619	73.444	30.507	92.119
Firm characteristic control variables										
Market cap[1]	16.355	47.170	3.492	0.103	354.392	25.525	54.678	5.577	0.103	354.392
Current ratio[1]	1.873	1.134	1.667	0.150	5.803	1.441	0.731	1.331	0.150	5.803
Leverage[1]	0.330	0.185	0.306	0.000	0.829	0.294	0.145	0.281	0.006	0.829
ROA[1]	0.051	0.050	0.048	-0.118	0.217	0.068	0.049	0.064	-0.118	0.217
Market to book[1]	3.183	4.937	2.320	-13.318	35.384	4.261	5.988	2.913	-13.318	35.384
Deal characteristic control variables										
Relative deal size[1]	0.446	1.583	0.043	0.000	13.378	0.934	2.500	0.073	0.000	13.378
Deal value[1]	0.739	1.799	0.175	0.002	17.014	1.900	3.634	0.478	0.002	17.014
Same macro industry[2]	0.148	0.355	0.000	0.000	1.000	0.253	0.435	0.000	0.000	1.000
Same mid industry[2]	0.097	0.296	0.000	0.000	1.000	0.154	0.361	0.000	0.000	1.000
Cash deal[2]	0.446	0.497	0.000	0.000	1.000	0.471	0.500	0.000	0.000	1.000
Target public[2]	0.131	0.338	0.000	0.000	1.000	0.263	0.441	0.000	0.000	1.000
Positive CAR[2]	0.546	0.498	1.000	0.000	1.000	0.518	0.500	1.000	0.000	1.000
Target cross-border[2]	0.236	0.425	0.000	0.000	1.000	0.301	0.459	0.000	0.000	1.000

Note: Table 2 presents the number of observations, mean value, standard deviation, median value, minimum value and the maximum value for the included variables split by High ESG score. The included variables are CAR(-1,+1), ESG score, Environmental pillar score, Social pillar score, Governance pillar score, Market cap, Current ratio, Leverage, ROA, Market to book, Relative deal size, Deal value, Same macro industry, Same mid industry, Cash deal, Target public. Positive CAR, Target cross-border.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.

The sample presented in table (2) has been split at the 75th percentile of *ESG score* by using a variable called *High ESG score,* which will be used later in the study as a robustness measure. When the sample is split up by *High ESG score,* there are 558 transactions where the acquiring firm has a high ESG score and 1676 transactions where the acquiring firm does not have a high ESG score. When splitting the summary statistic based on the dummy variable *High ESG score*, it is noticeable that the average announcement returns for high ESG score acquirers is -0,136% and 0,608% for the acquirers that do not have a high ESG score. The difference increases the relevance of investigating whether CSR performance affect announcement return, since by just studying the difference, there seems to be an effect.

The ESG score is 74,025 for acquirers with high ESG scores and 38,786 for acquirers without high ESG scores. It is interesting to notice that despite splitting the sample at the 75th percentile on *ESG score*, the maximum values for environmental, social, and governance scores for non-high ESG

score acquiring firms are still high at around 90 points. As expected, when splitting the sample on *High ESG score,* the variables *Environmental pillar score*, *Social pillar score*, and *Governance pillar score* present average values that are substantially higher when the acquirer has a high ESG score, since the ESG score is built upon these pillar scores.

The average *Market cap* of high ESG score acquirers is roughly 9 USD billion higher at 25,525 compared to acquirers that do not have a high ESG score at 16,354 USD billion. This could be interpreted as CSR activities being performed to a better degree in larger firms, as these have a more mature market position. High ESG score acquirers are experiencing a lower current ratio at 1,441 compared to acquirers that do not have a high ESG score at 1,873. The small difference is reasonable as it is difficult to argue why the current ratio should differ a lot between high ESG score acquirers and non-high ESG score acquirers. The average non-high ESG score acquirer is leveraged to a higher degree at 33% compared to 29,4% for high ESG score acquirers. It can also be noted that all equity financed firms are non-high ESG score acquirers, which, if tied back to the fact that the firms' size of non-high ESG score acquirers is smaller could explain why all equity financed firms are non-high ESG score acquirers. High ESG score acquirers experience a higher average *ROA* at 6,8% compared to non-high ESG score acquirers at 5,1% which also supports the notion that the split has captured the size of the firms. The same thing goes for *Market to book* where high ESG score acquirers have an average value of 4.261 and non-high ESG score acquirers have an average value of 3.183. The standard deviation in relation to the median is very similar between the two groups, indicating a similar variance within the two groups. The fact that high ESG score acquirers are being valued higher in relation to their book value could be interpreted as investors believing that a higher CSR score is valuing adding.

The *Relative deal size* is larger for high ESG score acquirers at 93,4% of the firm size while being 44,6% for acquirers not having a high ESG score. This is explained by the average *Deal value* of a high ESG score acquirer at 1,9 USD billion while being 0,739 for acquirers that do not have a high ESG score. The percentual difference is larger in terms of *Deal value* compared to the average *Market cap* and thus the *Relative deal size* is larger for high ESG score acquirers. High ESG score acquirers also showcase a higher degree of same industry trading when looking at the macro industry at 25,3% and mid-industry at 15,4%, compared to non-high ESG score acquirers who

trade within the same industry in 14,8% and 9,7% of the transactions. This could be interpreted as larger firms to a higher degree are able to acquire targets and perhaps competitors within their industry and that smaller firms to a higher degree acquire to diversify outside of their industry. There are no large differences when looking at the percentage of deals that are paid for using only cash between the two groups. The same does not go for transactions where the target is a public firm. 26,3% of the targets bought by high ESG score acquirers were public targets, while the same number was 13,1% for non-high ESG score acquirers. This result also supports the notion that high ESG score acquirers are larger in size and thus are able to purchase public targets. The presented split in positive return does not differ a lot between non-high ESG score acquirers and high ESG score acquirers. There are more cross-border transactions completed by high ESG score acquirers at 30,1% compared to 23,6% from non-high ESG score acquirers.

3.5.2 Correlation Table

Table 3. Pairwise Correlation Table

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1) CAR(-1,+1)	1.000																	
(2) ESG score	-0.111***	1.000																
(3) Environmental pillar score	-0.100***	0.895***	1.000															
(4) Social pillar score	-0.095***	0.875***	0.732***	1.000														
(5) Governance pillar score	-0.081***	0.703***	0.410***	0.431***	1.000													
(6) Market cap	-0.001	0.079***	0.075***	0.104***	0.015	1.000												
(7) Relative deal size	-0.031	0.098***	0.110***	0.095***	0.025	-0.103***	1.000											
(8) Deal value	-0.123***	0.215***	0.222***	0.183***	0.114***	0.071***	0.605***	1.000										
(9) Current ratio	0.043**	-0.233***	-0.192***	-0.245***	-0.146***	0.029	-0.095***	-0.096***	1.000									
(10) Leverage	0.015	-0.098***	-0.129***	-0.088***	-0.009	-0.123***	-0.007	-0.053**	-0.201***	1.000								
(11) ROA	-0.002	0.163***	0.152***	0.167***	0.080***	0.066***	0.007	0.039*	0.138***	-0.264***	1.000							
(12) Market to book	0.026	0.081***	0.078***	0.098***	0.020	0.036*	-0.017	0.038*	-0.096***	0.059***	0.124***	1.000						
(13) Same macro industry	-0.066***	0.096***	0.069***	0.081***	0.095***	0.003	-0.054**	0.048**	-0.069***	0.023	-0.048**	-0.002	1.000					
(14) Same mid industry	-0.054**	0.066***	0.064***	0.043**	0.056***	-0.012	-0.034*	0.064***	-0.026	-0.002	-0.019	-0.015	0.771***	1.000				
(15) Cash deal	0.047**	0.031	0.046**	0.006	0.019	-0.001	-0.045**	-0.067***	-0.002	-0.033	0.071***	0.002	-0.023	-0.010	1.000			
(16) Target public	-0.115***	0.138***	0.136***	0.127***	0.071***	0.051**	0.249***	0.402***	-0.023	-0.079***	0.062***	0.033	0.023	0.043**	-0.017	1.000		
(17) Positive CAR	0.673***	-0.060***	-0.064***	-0.049**	-0.033	-0.010	-0.031	-0.088***	0.021	0.009	0.001	0.014	-0.042**	-0.035*	0.063***	-0.092***	1.000	
(18) Target cross-border	0.013	0.064***	0.073***	0.052**	0.026	-0.004	-0.037*	-0.089***	0.050**	-0.103***	0.066***	-0.010	-0.011	0.011	-0.003	-0.051**	0.014	1.000

Note: Table 3 presents a pairwise correlation table. The included variables are CAR(-1,+1), ESG score, Environmental pillar score, Social pillar score, Governance pillar score, Market cap, Current ratio, Leverage, ROA, Market to book, Relative deal size, Deal value, Same macro industry, Same mid industry, Cash deal, Target public. Positive CAR, Target cross-border.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.
*** p<0.01, ** p<0.05, * p<0.1

Observing the pairwise correlation presented in table (3), all the explanatory variables *ESG score*, *Environmental pillar score*, *Social pillar score,* and *Governance pillar score* have a highly significant, negative correlation with *CAR(-1,+1)*. In terms of control variables, *Market cap* is the only variable showing a highly significant, positive correlation with the dependent variable while *Same mid industry* is showing a significant positive correlation. On the other hand, the variables *Deal value*, *Same macro industry,* and *Target cross-border* show a highly significant negative correlation with the dependent variable. The rest of the control variables show no significant correlation with the dependent variable. In specific, *Positive CAR*, *Cash deal*, and *Leverage* show a positive non-statistically significant correlation with *CAR(-1,+1)*, while *ROA*, *Market to book*, *Relative deal size*, *Current ratio*, and *Target public* show a negative non-statistically significant correlation.

All explanatory variables are highly significantly, positively correlated with each other. The positive correlation between *ESG score* and the different pillar scores it is built upon further strengthens the notion that the other explanatory variables are good predictors of *ESG score*. The control variables that are highly positively correlated with the main explanatory variable *ESG score* are *Market cap*, *relative deal size*, *Deal value*, *ROA*, *Market to book*, *Same macro industry*, *Same mid industry*, *Target public*, and *Target cross-border*. *Current ratio* and *Leverage* are the only control variables to be highly negatively correlated with the main explanatory variable, and *Cash deal* is the only control having no significant correlation with *ESG score*.

4. Univariate Analysis and Diagnostics

4.1 Event Study Result

The results of our event study lead us to conclude that the average *CAR(-1,+1)* of the acquirer after announcing an M&A during this period is highly significant positive, as presented in appendix (1). These results are contradictory to the findings of Borochin et al. (2019), Chang (1998), and Chemmanur et al. (2009) who all find negative acquirer returns around the deal announcement. However, contrasting results have been found by Alexandridis et al. (2017), Asquith (1983), and Kang et al. (2000), finding positive returns for the acquirer. The study by Alexandridis et al. (2017) is the one with the closest resemblance to ours in terms of the sample period and choice of market, and the similar results found strengthens the results of our event study.

4.2 Difference in Mean

A test between the differences in mean when splitting the sample based on the dummy variable *High ESG score* was conducted and presented in table (4). There is a statistically significant difference in the mean *CAR(-1,+1)*, *ESG score*, *Market cap*, *Relative deal size*, *Deal value*, *Current ratio*, *Leverage*, *ROA*, *Market to book*, *CAR(-1,+1)MSCI*, *Environmental pillar score*, *Social pillar score* and *Governance pillar score* between acquirers with high ESG scores and those that do not have a high ESG score. When further analyzing the difference in means test, we can conclude that acquirers with a high ESG score have a statistically significantly lower mean when looking at *CAR(-1,+1)*, *Current ratio*, *Leverage*, and *CAR(-1,+1)MSCI*. High ESG score acquirers have a statistically significantly higher mean when looking at *ESG score*, *Market cap*, *Relative deal size*, *Deal value*, *ROA*, *Market to book*, *Environmental pillar score*, *Social pillar score*, and *Governance pillar score*.

Furthermore, another test between the differences in mean was performed as presented in Table (5). In this test, the sample was split up based on the dummy variable *Target cross-border*. As presented, there is no significant difference when looking at *CAR(-1,+1)*, *Market cap*, *CAR(-1,+1)MSCI*, and *Governance pillar score*. Domestic deals have a significantly lower mean compared to cross-border deals in terms of *ESG score, Current ratio*, *ROA*, *Market to book*,

Environmental pillar score, and *Social pillar score*. It is also found that Domestic deals have a significantly higher mean in terms of *Relative deal size*, *Deal value*, and *Leverage* in relation to cross-border deals.

4.3 Pre-Regression Diagnostics

As a pre-regression diagnostic, a White test was conducted, and the result is presented in appendix (2). The results are showing that model (1) estimated with conventional standard errors are showing unrestricted heteroskedasticity. The White test is presenting a p-value = 0.000 meaning that we are able to reject the null hypothesis of constant variance at the 1% significance level. As a result of the White test indicating unrestricted heteroskedasticity, the usage of conventional standard errors becomes insufficient, and in return rendering the results of the estimated regression invalid. Because of these findings, all regressions moving forward are conducted using clustered robust standard errors.

5. Empirical Results

5.1 Empirical Results Model 1

Table 6. Estimated Regressions Model 1

VARIABLES	Model 1 (1) All observations CAR(-1,+1)[1]	Model 1 (2) All observations CAR(-1,+1)[1]	Model 1 (3) All observations CAR(-1,+1)[1]	Model 1 (4) All observations CAR(-1,+1)[1]	Model 1 (5) All observations CAR(-1,+1)[1]
ESG score[1]	-0.026***				
	(0.002)				
Environmental pillar score[1]		-0.017***			-0.014***
		(0.001)			(0.002)
Social pillar score[1]			-0.019***		-0.004
			(0.002)		(0.003)
Governance pillar score[1]				-0.014***	-0.006*
				(0.003)	(0.003)
Market cap[1,3]	-0.035	-0.038	-0.043	-0.057	-0.034
	(0.045)	(0.044)	(0.045)	(0.043)	(0.045)
Relative deal size[1]	-0.074**	-0.074**	-0.072**	-0.078**	-0.074**
	(0.031)	(0.030)	(0.031)	(0.031)	(0.030)
Deal value[1,3]	0.152***	0.154***	0.133***	0.109**	0.156***
	(0.047)	(0.048)	(0.046)	(0.047)	(0.047)
Current ratio[1]	-0.039	-0.023	-0.013	0.050	-0.038
	(0.058)	(0.060)	(0.063)	(0.064)	(0.060)
Leverage[1]	0.654**	0.632**	0.676**	0.890***	0.637**
	(0.279)	(0.289)	(0.278)	(0.287)	(0.292)
ROA[1]	-1.141	-1.376*	-1.335*	-1.866**	-1.191
	(0.750)	(0.771)	(0.715)	(0.765)	(0.760)
Market to book[1]	0.017	0.017	0.018	0.014	0.017
	(0.015)	(0.015)	(0.015)	(0.016)	(0.016)
Same macro industry[2]	-0.450***	-0.504***	-0.483***	-0.449***	-0.467***
	(0.114)	(0.114)	(0.121)	(0.116)	(0.112)
Same mid industry[2]	-0.383***	-0.337***	-0.372***	-0.358***	-0.366***
	(0.108)	(0.104)	(0.114)	(0.105)	(0.105)
Cash deal[2]	0.071	0.056	0.058	0.082	0.066
	(0.081)	(0.082)	(0.081)	(0.082)	(0.080)
Target public[2]	-1.302***	-1.318***	-1.307***	-1.319***	-1.309***
	(0.282)	(0.282)	(0.280)	(0.281)	(0.283)
Constant	-0.145	-1.029***	-0.157	-0.707*	-0.489
	(0.326)	(0.343)	(0.352)	(0.368)	(0.366)
Observations	2,234	2,234	2,234	2,234	2,234
Standard error	Clustered robust	Clustered robust	Clustered robust	Clustered robust	Clustered robust
Clustered by	Country	Country	Country	Country	Country
Industry effect	Yes	Yes	Yes	Yes	Yes
Year effect	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.042	0.042	0.038	0.035	0.042

Table 6 presents the results for the estimated model 1, using robust standard errors clustered by the country of the target, controlling for year and industry effect. The dependent variable is CAR(-1,+1). The explanatory variables included are ESG score, Environmental pillar score, Social pillar score and Governance pillar score. The control variables are Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, Sane macro industry, Same mid industry, Cash deal and Target public.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.
[3]Natural logarithm.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Testing the first hypothesis, it is observed in column (1) that *ESG score* has a highly statistically significant negative impact on the returns generated by all deals in the sample. Each 1-point

increase in *ESG score* decreases the return by 0,026 percentage points. Observing the average *ESG score* of our sample at 47,5, our results indicate a decrease in announcement return by 1,235 percentage points on average, a substantial decrease considering that the average return of the sample is 0,422%. In columns (2)-(4), each individual pillar score has a negative effect on the announcement return when included separately, but lower in comparison to the *ESG score.* In column (5) where each pillar score was included in the same regression, *Environmental pillar score* still obtains a highly significant negative impact on announcement returns and *Governance pillar score* has a weak significant negative impact. Interestingly enough, *Social pillar score* is not showing a significant effect on announcement return, indicating that in the context of M&A deals, a focus on social sustainability from the acquiring firm does not affect the announcement return.

Observing the control variables, *Relative deal size* has a highly statistically significant negative effect on generated returns, meaning that an increase in relative deal size by 1 decreases the return by 0,074 percentage points. It is explained by a negative, non-significant, impact of *Market cap* and a positive, highly statistically significant impact of *Deal value,* meaning that a 1% increase in deal value increases the return by 0,152 percentage units. Partly, the results for *Relative deal size* are contrasting with previous findings, since Humphery-Jenner and Powell (2011) found that large acquirers perform worse than small acquirers. However, *Relative deal size* also consist of the *Deal value,* expected to have a negative effect on generated returns based on the findings of Humphery-Jenner and Powell (2011), which can explain our findings. *Leverage* is showing a significant positive effect on announcement return, indicating that an increase in acquirer leverage by 100 percentage units increases the announcement return by 0,654 percentage units. This result is contradictory to the finding of Uysal et al. (2011), as increasing acquirer leveraged increases announcement returns. The two variables controlling if the acquisition is industry-related, *Same macro industry* and *Same mid industry* both have highly statistically significant negative effects on return. These findings are contrasting with the general findings that related acquisitions perform better than diversifying acquisitions, as found by (Fan & Goyal, 2006; Rhodes-Kropf & Robinson, 2008). Acquiring a target in the same macro industry decreases the return by 0,450 percentage points while a target within the same mid industry decreases the return less, by only 0,383 percentage points. This follows the notion presented by Fan and Goyal (2006) and Rhodes-Kropf and Robinson (2008) since mid-industry implies a less diversified acquisition and thus should

perform better than a more diversified acquisition. Finally, *Target public* has a highly statistically significant negative effect, indicating that when the target is a public firm the return decreases by 1,302 percentage points. This is in line with previous research by Capron & Shen (2007), Conn et al. (2005), and Fuller et al. (2002).

Based on our findings we reject hypothesis 1 that the CSR performance of the acquirer has no impact on acquirer returns generated around the deal announcement. From a theoretical perspective, our results are contrasting with the stakeholder theory but in line with the shareholder value maximization theory. A negative impact of the acquiring firms' CSR performance on generated acquirer returns is in line with the notion that CSR activities are made to satisfy stakeholders other than the firms' shareholders, as argued by Jensen and Meckling (1976). The general relationship between CSR performance and financial performance is uncertain, as indicated in the findings by Capelle-Blancard and Monjon (2012), Humphrey and Tan (2014), and Jones et al. (2008) on SRI performance, but their findings are not strong evidence in favor of a negative impact of CSR in the context of M&A deals.

Compared with previous findings on the impact of acquirer CSR performance on M&A deal returns, our findings stand out. The results are reversed to the results found by Deng et al. (2013) and Zhang et al. (2022), where the CSR performance of the acquirer instead had a positive impact on generated acquirer returns. Furthermore, our results do not support the theoretical argument stated by Harrison and Freeman (1999) and Cording et al. (2014), that CSR engagement satisfies the demands of various stakeholders, which in turn is expected to simplify the post-merger integration process and lead to increased deal returns. As suggested in the papers by Bekier et al. (2001) and Godfrey et al. (2009), firms with a stronger CSR performance have built up a relational capital that leads to higher acquirer returns, which is contrasting with our findings. In addition, our findings are not in line with the findings by Fombrun et al. (2000) and Liang et al. (2018), suggesting that CSR has a positive impact on firm reputation and an insurance-like quality during risky events.

5.2 Empirical Results Model 2

Table 7. Estimated Regressions Model 2

VARIABLES	Model 2 (1) All observations CAR(-1,+1)[1]	Model 2 (2) Positive CAR CAR(-1,+1)[1]	Model 2 (3) Negative CAR CAR(-1,+1)[1]
ESG score[1]	0.002	-0.036***	0.013***
	(0.003)	(0.003)	(0.003)
Positive CAR[2]	6.931***		
	(0.163)		
ESG score positive CAR	-0.031***		
	(0.004)		
Market cap[1,3]	0.026	0.006	0.061*
	(0.018)	(0.050)	(0.036)
Relative deal size[1]	-0.007	0.157***	-0.123***
	(0.016)	(0.045)	(0.023)
Deal value[1,3]	0.043	0.389***	-0.303***
	(0.041)	(0.045)	(0.060)
Current ratio[1]	0.001	0.115*	-0.163***
	(0.038)	(0.064)	(0.036)
Leverage[1]	0.567***	-0.586**	1.169***
	(0.165)	(0.239)	(0.334)
ROA[1]	-0.486	-8.060***	7.099***
	(0.520)	(0.857)	(0.990)
Market to book[1]	0.009	0.033**	-0.021*
	(0.011)	(0.015)	(0.011)
Same macro industry[2]	-0.199**	-0.756***	0.174
	(0.096)	(0.158)	(0.209)
Same mid industry[2]	-0.282**	0.426**	-0.746***
	(0.111)	(0.183)	(0.209)
Cash deal[2]	-0.120	-0.627***	0.302**
	(0.102)	(0.124)	(0.112)
Target public[2]	-0.618***	-0.142	-0.500***
	(0.142)	(0.237)	(0.159)
Constant	-3.133***	6.149***	-4.143***
	(0.217)	(0.313)	(0.494)
Observations	2,234	1,204	1,030
Standard error	Clustered robust	Clustered robust	Clustered robust
Clustered by	Country	Country	Country
Industry effect	Yes	Yes	Yes
Year effect	Yes	Yes	Yes
Adjusted R-squared	0.468	0.166	0.150

Table 7 presents the results for the estimated model 2 using robust standard errors clustered by the country of the target, controlling for year and industry effect. The dependent variable for all estimated columns is CAR(-1,+1). The explanatory variables included are ESG score while the control variables are Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, Sane macro industry, Same mid industry, Cash deal and Target public for models. For column (1) the interaction variable ESG score positive CAR was added along with the control variable Positive CAR while column (3) only includes the observations with a negative CAR. Column (2) includes only the observations with a positive CAR while column (3) only includes the observations with a negative CAR.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.
[3]Natural logarithm.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

When testing the second hypothesis, it is observed that CSRs impact shifts depending on if the returns generated are positive or negative. Firstly, when introducing the interaction variable *ESG score positive CAR* in column (1) presented in table (7), it is observable that a 1-point increase in

ESG score significantly lowers the announcement return by 0,029[2] percentage points if the return is positive. When the return is negative, a 1-point increase in *ESG score* non-significantly increases the announcement return by 0,002 percentage points, indicating that there is a difference in the effect of CSR on announcement returns. To further study this effect the sample was split up based on *Positive CAR*. When splitting up the sample based on *Positive CAR*, the impact of CSR changes, as presented in columns (2) and (3). In column (2) including only positive returns, *ESG score* has a significant, negative impact on acquirer returns. Each 1-point increase in *ESG score* decreases the return by 0,029 percentage points. In the regression presented in column (3) including only acquisitions with negative returns, *ESG score* has a highly significant positive effect on acquirer returns. Every 1-point increase in *ESG score* increases the announcement return by 0,013 percentage points. It is noticeable that each additional point increase in *ESG score* has a negative effect on positive returns while it has a significant positive effect on negative returns. Furthermore, the decrease in announcement return for acquirers with a positive return is almost three times as large as the positive effect experienced by acquirers with a negative return.

Column (3) is indicating that a 1% increase in market cap increases the return by 0,061 percentage points, which is contradictory to the results found by Humphery-Jenner and Powell (2011), who state that large acquirers perform worse than small acquirers. The *Current ratio* has different effects on returns depending on if positive or negative return is studied. The results of column (2) are in line with the research by Hu et al. (2020) while the results of column (3) are contrasting to previous literature. Earlier studies by Benson et al. (2015) and Louis (2005) have found *ROA* to have a negative effect on return which is in line with column (2) but contrary to the findings of column (3). The results from *Market to book* in column (3) are in line with the ones found by Lang et al. (1991), Rau, and Vermaelen (1998) while the effect from *Market to book* on return from column (2) contradicts the results. The effect *Cash deals* has on return differs in columns (2) and (3), and only the results from (3) are in line with the ones in previous literature by Bhagat et al. (2005), Loughran and Vijh (1997), and Savor and Lu (2009).

Based on our findings in table (7), that an increase in CSR performance increases a negative return and decreases a positive return, we reject the null hypothesis that the CSR performance of the

---

[2] Calculation explained: (0,002-0,031)

acquirer has a similar impact on acquirer announcement returns across value-destroying and value-creating deals. These findings imply that from the perspective of acquiring firms, having a strong CSR performance can be viewed as a hedge against fluctuations in deal returns and that acquirers with a strong CSR performance generate more stable deal returns than acquirers with a weaker CSR performance. These findings do also bring more nuance to the findings related to hypothesis 1. Considering that this study is conducted over a period where acquirers generate relatively high deal returns, this explains why the overall impact of CSR performance is negative. Compared with the results found by Deng et al. (2013), they instead studied deals during a period where acquirers generated negative returns. This implies that our contrasting findings regarding the impact of the acquirers' CSR performance may be due to differences in returns over the studied period, rather than differences in the impact of the acquirers' CSR performance.

In the context of M&A deals, Harrison and Freeman (1999) argue that an important aspect is the expansion and diversification of the acquiring firm's base of stakeholders, adding a risk of post-merger frictions. Analyzing CSR's positive impact on deals with a negative return specifically, it is in line with the predictions of stakeholder theory that CSR satisfies stakeholder demands and helps acquirers maintain valuable stakeholder relationships after completing the M&A deal (Bekier et al. 2001). The consequence of strong CSR performance, as argued by Godfrey et al. (2009), is a relational capital that protects firms from negative market reactions to risky events. An argument supported further by the findings on CSR's protective function of firms' financial performance during the financial crisis between 2008 and 2009 in the paper by Lins et al. (2017). In M&A studies specifically, a similar function of the acquirer's CSR performance is found by Deng et al. (2013) and Zhang et al. (2022). However, as previously mentioned, they argue for a positive impact of CSR performance across all deals. But based on the hypothesis that CSR has a protective function against risky events, it is also reasonable that it loses that function in deals where it generates positive value to the acquirer.

Interestingly, the impact of CSR is reversed when studying acquirers with a positive announcement return, implying that while CSR functions as insurance against risky events when the acquirer generates a negative return, it does also reduce the upside when the acquirer generates a positive return. From a theoretical perspective, this impact is in line with the predictions of shareholder

value maximization theory as defined by Jensen and Meckling (1976), stating that following a CSR agenda is at the expense of shareholder value. While similar findings are sparse within the M&A literature, an important part of the explanation lies in a lack of similar studies, examining deals with positive and negative returns separately. Furthermore, research finding a positive impact of acquirer CSR on deal returns is conducted over periods of lower acquirer returns. Additionally, arguments provided in favor of a positive impact of CSR relate mostly to its insurance-like function and how it minimizes the risk of negative sanctions rather than having a value-adding function, which is consistent with our findings.

5.3 Empirical Results Model 3

Table 8. Estimated Regressions Model 3

VARIABLES	Model 3 (1) All observations CAR(-1,+1)	Model 3 (2) Cross-border CAR(-1,+1)	Model 3 (3) Domestic CAR(-1,+1)
ESG score	-0.026***	-0.027***	-0.025***
	(0.006)	(0.010)	(0.006)
Target cross-border	-0.078		
	(0.569)		
ESG score target cross-border	0.002		
	(0.010)		
Market cap	-0.035	0.135	-0.086
	(0.058)	(0.111)	(0.068)
Relative deal size	-0.073	0.050	-0.092
	(0.082)	(0.138)	(0.095)
Deal value	0.152**	0.323***	0.105
	(0.065)	(0.119)	(0.081)
Current ratio	-0.038	0.122	-0.094
	(0.098)	(0.210)	(0.110)
Leverage	0.650	0.248	0.732
	(0.661)	(1.218)	(0.791)
ROA	-1.137	-0.604	-1.001
	(2.304)	(3.830)	(2.857)
Market to book	0.017	0.045	0.010
	(0.022)	(0.056)	(0.025)
Same macro industry	-0.448*	-0.056	-0.442
	(0.267)	(0.569)	(0.309)
Same mid industry	-0.388	-0.663	-0.426
	(0.377)	(0.719)	(0.447)
Cash deal	0.072	0.006	0.060
	(0.194)	(0.357)	(0.233)
Target public	-1.300***	-0.075	-1.576***
	(0.285)	(0.615)	(0.325)
Constant	-0.120	0.530	0.514
	(1.230)	(1.994)	(1.334)
Observations	2,234	563	1,671
Standard error	Clustered robust	Clustered robust	Clustered robust
Clustered by	Firm	Firm	Firm
Industry effect	Yes	Yes	Yes
Year effect	Yes	Yes	Yes
Adjusted R-squared	0.042	0.024	0.053

Table 8 presents the results for the estimated model 3using robust standard errors clustered by acquiring firm, controlling for year and industry effect. The dependent variable for all estimated columns is CAR(-1,+1). The explanatory variables included are ESG score while the control variables are Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, Sane macro industry, Same mid industry, Cash deal and Target public. For column (1) the interaction variable ESG score target cross-border was added along with the control variable Target cross-border. Column (2) includes only the observations with a target outside of the US while column (3) only includes the observations with a target within the US.
[1]Variables have been winsorized at the 1 st and 99th percentile.
 [2]Dummy Variable.
3Natural logarithm
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

To test the third hypothesis concerning cross-border deals, the interaction variable *ESG score target cross-border* is introduced in column (1) presented in table (8). Studying the results, it is observable that a 1-point increase in *ESG score* significantly decreases the announcement return

by 0,024[3] percentage points if the transaction is a cross-border deal. Observing domestic acquisitions, a 1-point increase in *ESG score* significantly decreases the announcement return by 0,027 percentage points. Judging by these results, the impact of the acquirers' CSR performance is similar across domestic and cross-border deals. To further elaborate on the findings, the sample was split based on *Target cross-border*. When splitting the sample based on *Target cross-border* in columns (2) and (3), similar, significant results can be observed as in column (1), that the impact of *ESG score* does not differ across domestic and cross-border deals. There is a slight difference in the degree of impact, as a 1-point increase in *ESG score* significantly decreases the return by 0,027 percentage points in cross-border deals and by 0,025 percentage points in domestic deals.

Based on the presented results in table (8) we reject the null hypothesis that the CSR performance of the acquirer has no positive impact on acquirer returns generated around the announcement of cross-border deals. However, neither a significantly higher nor lower impact by the acquirers' CSR performance is found when compared with model 1. While several papers have focused on the differences between domestic and cross-border deals, it is still uncertain whether cross-border deals mostly imply an upside and increased opportunities for higher returns or a downside with increased risk of lower returns. Evidence in favor of a significant upside to cross-border deals has been found for instance by Grote and Umber (2007), Reus and Lamont (2009), and Steigner and Sutton (2011), explained by reduced risk of managerial overconfidence and increased opportunities of knowledge transfers and internalization benefits. On the other hand, Al Rahahleh and Wei (2013), Freddy and Fabian (2021), and Datta & Puia (1995) found evidence suggesting that cross-border deals relate to increased difficulties. They found that cross-border deals involve more information asymmetry that complicates the target evaluation process, higher risk of conflicts, and more complex post-merger integration processes.

To test for the influence of previously mentioned aspects of cross-border deals, the acquirer's announcement returns from cross-border deals are analyzed separately in table (5). Furthermore, considering that the impact of the acquirers' CSR performance, as found in the results of hypothesis 2 of this paper, depends on the returns generated by the acquirer, it is relevant to compare the returns generated by acquirers in cross-border deals with domestic deals. Based on the deals

---

[3] Calculation explained: (0,002-0,026)

included in our sample, cross-border deals did not generate returns significantly different from domestic deals, as seen in table (5). For this reason, neither arguments for more or fewer complications from cross-border deals is provided when compared with domestic deals. Based on these findings, the role of the acquirers' CSR performance on acquirer returns is expected to be rather similar across all domestic and cross-border deals. Observing the results in models 1 and 3, evidence is provided in favor of a similar impact of the acquirers' CSR performance on generated announcement returns across both domestic and cross-border deals. To further test whether the impact of the acquirers' CSR performance is similar across domestic and cross-border deals, a model similar to model 2 was created but including only cross-border deals, as presented in columns (2) and (3) in table (15). Also here did the results indicate no difference comparing cross-border and domestic deals, finding a significant, positive impact of the acquirers' CSR performance when generating a negative announcement return and a significant, negative impact when generating a positive announcement return.

6. Robustness Tests

6.1 Robustness Variable Definitions

High ESG score is a dummy variable that has the value of 1 if the acquirer is represented in the 75th percentile in terms of *ESG score* within the sample, and a 0 otherwise. The restriction to the 75th percentile is done based on the grading provided by Refinitiv (n.d.c) as they deem a score in the 75th percentile indicates an excellent ESG performance. *High environmental pillar score*, *High social pillar score*, *High governance pillar score* are dummy variables constructed in the same way as *High ESG score*, where the variable has a value of 1 if the acquirer is represented in the 75th percentile in terms of the pillar score in question within the sample, and a 0 otherwise.

As previously mentioned, the return of the acquiring firm based on the event windows (-3 to +3) and (-5 to +5) have been included as robustness variables named *CAR(-3,+3)* and *CAR(-5,+5)*. Just as for our dependent variable the market return was estimated from the S&P 500 index for these two variables. The return was also estimated for all of the event windows using the MSCI World Index resulting in the robustness variables *CAR(-1+1)MSCI*, *CAR(-3+3)MSCI,* and *CAR(-5+5)MSCI*. MSCI world index was chosen for robustness as it represents a larger variance of companies in comparison to the S&P 500 index, which matches our sample of firms as we experience a large variance in firm size.

6.2 Summary Statistics Robustness Variables

Table 9. Summary Statistics Robustness Variables

Variables	N	Mean	SD	Median	Min	Max
Robustness variables						
High ESG score[2]	2234	0.250	0.433	0.000	0.000	1.000
High environmental pillar score[2]	2234	0.250	0.433	0.000	0.000	1.000
High social pillar score[2]	2234	0.250	0.433	0.000	0.000	1.000
High governance pillar score[2]	2234	0.249	0.433	0.000	0.000	1.000
CAR(-5,+5)[1]	2234	0.292	6.035	0.239	-18.431	20.169
CAR(-3,+3)[1]	2234	0.398	5.176	0.248	-15.336	18.224
CAR(-5,+5)MSCI[1]	2234	0.190	6.791	0.196	-21.276	20.206
CAR(-3,+3)MSCI[1]	2234	0.288	5.808	0.320	-17.749	19.436
CAR(-1,+1)MSCI[1]	2234	0.411	4.514	0.292	-13.056	16.640

Note: Table 9 presents the number of observations, mean value, standard deviation, median value, minimum value and the maximum value for the included variables. The included variables are High ESG score, High environmental pillar score, High social pillar score, High governance pillar score, CAR(-5,+5), CAR(-3,+3), CAR(-5,+5)MSCI, CAR(-3,+3)MSCI and CAR(-1,+1)MSCI.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.

High ESG score being the robustness variable for the explanatory variable, shows a mean of 0,250 which is the result of only the observations in the 75th percentile receiving a value of 1. Similar to *High ESG score*, *High environmental pillar score*, *High social pillar score*, *High governance pillar score* shows a mean of 0,250. There is not a large difference in the return between the three different event windows. The event window of (-5,+5) shows a mean return of 0,292% while the event window of (-3,+3) shows a mean return of 0,398%. It is also noticeable that when the event window gets smaller, the variance within the variables decreases, as presented by a lower standard deviation. A pattern can be noticed in *CAR(-5,+5)MSCI*, *CAR(-3,+3)MSCI*, and *CAR(-1,+1)MSCI* where the highest return is noticed in the shortest event window, decreasing for every extension of the event window. There is a notable increase in variance within the announcement returns estimated using the MSCI world index, which might be a result of the larger variance in firm size compared to the S&P 500 index.

6.2.1 Summary Statistic Robustness Variables Split by High ESG Score

Table 10. Summary Statistic Robustness Variables Split by High ESG Score

	Non-High ESG score acquirer					High ESG score acquirer				
Variables	Mean	SD	Median	Min	Max	Mean	SD	Median	Min	Max
N			1676					558		
Robustness variables										
High environmental pillar score	0.080	0.271	0.000	0.000	1.000	0.762	0.426	1.000	0.000	1.000
High social pillar score	0.064	0.246	0.000	0.000	1.000	0.806	0.395	1.000	0.000	1.000
High governance pillar score	0.146	0.353	0.000	0.000	1.000	0.559	0.497	1.000	0.000	1.000
CAR(-5,+5)	0.487	6.225	0.433	-18.431	20.169	-0.292	5.386	-0.373	-18.431	20.169
CAR(-3,+3)	0.587	5.367	0.485	-15.336	18.224	-0.172	4.513	-0.155	-15.336	18.224
CAR(-5,+5)MSCI	0.461	6.941	0.516	-21.276	20.206	-0.624	6.252	-0.305	-21.276	20.206
CAR(-3,+3)MSCI	0.523	5.984	0.548	-17.749	19.436	-0.417	5.187	-0.287	-17.749	19.436
CAR(-1,+1)MSCI	0.582	4.729	0.397	-13.056	16.640	-0.103	3.753	0.117	-13.056	16.640

Note: Table 10 presents the number of observations, mean value, standard deviation, median value, minimum value and the maximum value for the included variables split by High ESG score. The included variables are High ESG score, High environmental pillar score, High social pillar score, High governance pillar score, CAR(-5,+5), CAR(-3,+3), CAR(-5,+5)MSCI, CAR(-3,+3)MSCI and CAR(-1,+1)MSCI.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.

Observing the *High environmental pillar score*, *High social pillar score*, and *High governance pillar score* for high ESG score acquirers, it is noted that only 76,2% of the transactions have a high Environmental pillar score, 80,6% have a high social pillar score, and only 55,9% have high governance pillar score. This means that even when the *ESG score* as a whole is in the 75th percentile, that does not guarantee that individual pillar scores of the firm are in the 75th percentile. Just as in the summary statistics for the entire sample, *CAR(-5,+5)* and *CAR(-3,+3)* follows the same pattern as *CAR(-1,+1),* where non-high ESG score acquirers experience positive returns while high ESG score acquirers suffer negative return. The same goes for the variables *CAR(-*

5,+5)MSCI, *CAR(-3,+3)MSCI,* and *CAR(-1,+1)MSCI* despite being calculated using a different market index.

6.2.2 Robustness Variables Correlation Table

The Pairwise correlation table for the robustness variables is presented in table (11). All the robustness variables controlling for return, whether it is with another event window or another index for the market return, show a highly positive significant correlation with our dependent variable *CAR(-1,+1)*. This is to be expected since they all are measuring the same phenomenon, and it is favorable when being used to test the robustness of our results. The robustness variables used to test the robustness of our explanatory variables all show a highly negative significant correlation with *CAR(-1,+1),* which is the same relationship as our explanatory variables. Furthermore, *High ESG score, High environmental pillar score*, *High social pillar score*, and *High governance pillar score* are all highly positively correlated with our main explanatory variable, *ESG score*. This further strengthens the notion that they are suitable to use as robustness variables.

6.3 Robustness Test Model 1

The results presented in table (12) are robustness checks for the dependent variable in model 1, clustering by the acquiring firm as well as checking if different event windows or market indexes showcase different results compared to those found in table (6). Observing the results presented in columns (1)-(6), they indicate that a 1-point increase in *ESG score* decreases the return by 0,024-0,035 percentage points depending on the event window and market index. This further increases the robustness of the results presented in table (6) as it shows that the results were not only a result of a favorable choice of the event window, clustering, or market index.

Table (13) presents a robustness check for the explanatory variables used in model 1, substituting them with dummy variables that represent the top 25% of the sample. When the variables *High ESG*, *High environmental pillar score*, *High social pillar score*, and *High governance pillar score* are included separately, they showcase that firms presented in the top 25% suffer a highly significant negative effect on returns. The negative effect is very substantial as the negative effect differs between -0,532 to -0,736 percentage points. This supports the findings in table (6) as it showcases that a strong CSR performance decreases the return upon announcement. When

including all individual pillar scores as presented in column (5), it is noticeable that the negative effect of *High social pillar score* loses its significance. This is similar to the finding presented in column (5) in table 6, which strengthens the notion that in the context of announcement returns, the social sustainability does not have a significant effect when the other pillar scores are considered.

6.4 Robustness Test Model 2

As a robustness check for model 2 presented in table (7), the robustness tests presented in table (14) were conducted. Columns (1)-(3) control the robustness of the findings by using the dummy variable *High ESG score* as well as the interaction variable *High ESG positive CAR* in column (1). The interaction variable is constructed in a similar way as *High ESG positive CAR* but uses *High ESG score* instead of *ESG score*. The results found further strengthen the finding that CSR performance mitigates fluctuation return presented in table (7).

When clustering by the acquiring firm presented in columns (4)-(6) we observe the same results as presented in table (7) where we clustered by the country of the acquirer. This indicates that despite clustering the standard errors by both the country of the target as well as by the acquirer the effect of CSR performance on announcement return remains significant and robust.

6.5 Robustness Test Model 3

To control for the effect of the explanatory variable *ESG score* in table (8) column (1)-(3) we substituted it for the dummy variable *High ESG score*. The results presented in table (15) showcase that when interacting *High ESG score* with *Target cross-border* there is no significant effect on announcement returns in terms of indicating that there is no difference between cross-border and domestic transactions. This finding is in line with the one presented in table (8) column (1) which also showcases that there is no difference in return between cross-border and domestic deals. When separating the sample by cross-border and domestic deals and substituting *ESG score* for *High ESG score*, it can be noted that CSR loses its significant impact on announcement return for cross-border deals. These results could be explained by the fact that there are fewer high ESG score acquirers in cross-border transactions and thus the effect of them is mellowed. Even if that is the

case, the results do weaken the robustness of CSRs effect on announcement returns in the context of cross-border deals.

Clustering the standard errors by the country of the target firm was used in column (4) presented in table (15) in order to control the robustness of the results presented in table (8). The results show that *ESG score* remains to have a highly statistically significant negative effect on acquirer return despite controlling for the country of the target firm. No significance was found concerning CSR performance having a positive effect on cross-border M&A leading us to trust the robustness of the results presented in table (8). The usage of the country of the target as our cluster in model (3) would have been our preferred choice but, for the results of columns (2) and (3) to be comparable to column (1) we had to cluster by the acquiring firm column (3) cannot use the country of the target as a cluster since it only contains observations from the US and would thus not show any standard errors rendering the results unusable.

To further check the robustness found in table (7) by studying cross-border transactions, columns (5) and (6) were constructed and presented in table (15). The results presented are in line with the ones presented in column (1) in table (7). *ESG score positive CAR* is still showing a highly significant effect on returns. This suggests that the conclusion on the effect of the acquirers CSRs performance on positive and negative returns, as presented in table (7), remains for cross-border transactions. Although the results are not completely comparable, as the results in table (7) are presented using standard errors clustered by the country of the target while columns (5) and (6) in table (15) are clustered using the acquiring firm, they indicate that the results found are not results of favorable clustering choices.

7. Conclusion

This study finds that the CSR performance of the acquirer has a statistically significant, negative impact on acquirer returns, which is consistent across domestic and cross-border deals. Further, we find evidence for a reversed impact of the acquirer's CSR performance when comparing deals generating a positive acquirer return with those generating a negative return. Our findings suggest that the acquirer's CRS performance has a positive impact on acquirer returns when the acquirer generates a negative return around the deal announcement while having a negative impact when the acquirer generates a positive return. When conducting a similar analysis for cross-border deals, similar results were found. Considering the contradicting findings in previous research on cross-border deals, a possibility is that the aspects with a negative impact on acquirer return in cross-border deals are close to equal to the aspects having a positive impact. Either way, this study provides no evidence in favor of more, or fewer complications in cross-border deals, which explains the similarities in results across all deals in this study.

These findings add to the existing literature on the role of the acquirers' CSR performance on generated deal returns by Deng et al. (2013) and Zhang et al. (2022), providing evidence that the impact is inconsistent across deals generating positive or negative returns. Furthermore, it adds to the existing literature on CSRs insurance-like qualities found by Lins et al. (2017), providing evidence that the CSR performance of the acquirer minimizes the downside of value-destroying deals. Interestingly, the theoretical implications of our findings are in favor of both the stakeholder theory's perspective on CSR and the perspective of shareholder value maximization. CSR's function in minimizing the downside from value-destroying deals is in line with the stakeholder theory, while CSR's function when decreasing returns from value-creating deals is in line with the predictions by shareholder value maximization.

The findings of this paper also provide implications for managers and decision-makers of a company. First of all, our findings add nuance to previous findings that pursuing CSR is positive from the perspective of acquiring firms generating higher deal returns. Based on our study, the results imply that while CSR has a positive impact on value-destroying deals, there is no evidence suggesting that companies pursuing CSR have higher deal returns overall. For this reason, managers willing to improve CSR should be aware that strong CSR firms generate more stable

deal returns rather than higher deal returns in general, which is consistent across both domestic and cross-border deals. This study does also provide evidence for more similarities than differences between domestic and cross-border deals, observing both acquirers' returns overall and the impact of the acquirers' CSR performance. From the perspective of managers and decision-makers, this would imply that deal decisions can be based on similar fundamentals, rather than whether the deal is domestic or cross-border.

A limitation of this study relates to the cross-border part of the paper. To accurately assess cross-border deals and how CSR influences the implications of cultural and geographical differences, further splitting up the sample based on the location of the target is necessary for a more nuanced analysis. In this paper, a distinction was made simply between domestic and cross-border deals, assuming that the cultural and geographical distance is shorter for domestic deals than for cross-border deals. However, most likely, the conditions impacting US acquirers when acquiring a target in an emerging market in Asia are vastly different from acquiring targets in developed markets in Europe. The difficulty in conducting a more detailed analysis of cross-border deals, in this case, was due to data limitations. Out of the total sample, 4,5% of the transactions included targets in an emerging market, generating a sample too small to base a relevant analysis on. By studying US acquirers exclusively, the influence of having acquirers in different markets is avoided, but it sets limitations to the number of transactions included. For future research, including a broader sample of acquirers in similar markets and collecting a larger number of transactions would increase the number of observations, making it possible to conduct a more accurate and nuanced analysis.

References

Ahern, K., Daminelli, D., & Fracassi, C. (2015). Lost in Translation? Cultural values on mergers around the world, *Journal of Finance,* vol. 117, no 1, pp. 165-189

Aktas, N., de Bodt, E., & Roll, R. (2009). Learning, hubris and corporate serial acquisitions, *Journal of Corporate Finance,* vol. 15, no 5, pp. 543-561

Al Rahahleh, N., & Wei, P.P. (2013). Frequent cross-border acquirers from emerging countries and cultural distance: does the cultural difference of the initial deal matter?, *Journal of Multinational Financial Management*, vol. 23, no 4, pp. 356-373

Alexandridis, G., Antypas, N., & Travlos, N. (2017). Value creation from M&As: new evidence. *Journal of Corporate Finance*, vol. 45, pp. 632-650

Alexandridis, G., Fuller, K.P., Terhaar, L. & Travlos, N.G. (2013). Deal size, acquisition premia and shareholder gains, *Journal of Corporate Finance*, vol. 20, no 1, pp. 1-13

Amel-Zadeh, A., & Serafeim, G. (2017). Why and How Investors Use ESG Information: Evidence from a Global Survey, *Financial Analysts Journal,* vol. 74, no 3, pp. 87-103

Andrade, G., Mitchell, M., & Stafford, E. (2001). New Evidence and Perspectives on Mergers, *Journal of Economic Perspectives*, vol. 15, no 2, pp. 103-120

Antoniou, A., Petmezas, D., & Zhao, H. (2007). Bidder gains and losses of firms involved in many acquisitions, *Journal of Business Finance,* vol. 34, no 7-8, pp. 1221-1244

Aouadi, A., & Marsat, S. (2018). Do ESG controversies matter for firm value? Evidence from international data, *Journal of Business Ethics*, vol. 151, no 4, pp. 1027-1047

Arouri, M., Gomes, M., & Pukthuanthong, K. (2019). Corporate social responsibility and M&A uncertainty, *Journal of Corporate Finance*, vol. 56, pp. 176-198

Asquith, P. (1983). Merger bids, uncertainty, and stockholder returns, *Journal of Financial Economics*, vol. 11, no 1-4, pp. 51-83

Aybar, B., & Ficici, A. (2009). Cross-border acquisitions and firm value: an analysis of emerging-market multinationals, *Journal of International Business Studies*, vol. 40, no 8, pp. 1317-1338

Bekier, M.M., Bogardus, A. J., & Oldham, T. (2001). Why mergers fail. *McKinsey Quarterly*, vol. 4, no 6-9

Benson, B.W., Davidson, W.N., Davidson, T.R. & Wang, H. (2015). Do busy directors and CEOs shirk their responsibilities? Evidence from mergers and acquisitions, *The Quarterly Review of Economics and Finance*, vol. 55, pp. 1-19

Bereskin, F., Byun, S.K., Officer, M.S., & Oh, J.M. (2018). The effect of cultural similarity on mergers and acquisitions: evidence from corporate social responsibility, *Journal of Financial and Quantitative Analysis,* vol. 53, no 5, pp. 1995-2039

Berry, T. C., & Junkus, J. C. (2013). Socially responsible investing: An investor perspective, *Journal of Business Ethics*, no 112, pp. 707-720

Bhagat, S., Dong, M., Hirshleifer, D., & Noah, R. (2005). Do tender offers create value? New methods and evidence, *Journal of Financial Economics*, vol. 76, no 1, pp. 3-60

Borochin, P., Ghosh, C., & Huang, D. (2019). Target information asymmetry and takeover strategy: Insights from a new perspective, *European Financial Management*, vol. 25, no 1, pp. 38-79

Brown, S.J., & Warner, J.B. (1985). Using daily stock returns. The case of event studies. *Journal of Financial* Economics, vol. 14, pp. 3-31.

Cameron, K.S., De Graff, J., Quinn, R.E., & Thakor, A. (2006). Competing Values Leadership: Creating Value in Organisations, Cheltenham: Edward Elgar Publishing

Campbell, Y., Lo, W., & MacKinlay, C. (1997). The econometrics of financial markets, Princeton: Princeton University press

Capelle-Blancard, G., & Monjon, S. (2012). Trends in the literature on socially responsible investment: Looking for the keys under the lamppost, *Business Ethics: A European Review*, vol. 21, pp. 239-250

Capron, L., Shen, J.C., 2007. Acquisitions of private vs public firms: private information, target selection, and acquirer returns. Strateg. Manag. J. 28 (9), 891–911.

Chakrabarti, R., Gupta-Mukherjee, S., & Jayaraman, N. (2008). Mars-Venus marriages: culture and cross-border M&A, *Journal of International Business Studies,* vol. 40, no 2, pp. 216-236

Chang, S. (1998). Takeovers of privately held targets, methods of payment, and bidder returns, *The Journal of Finance*. vol. 53, no 2, pp. 773-784

Chatterjee, S., Lubatkin, M.H., Schweiger, D.M., & Weber, Y. (1992). Cultural differences and shareholder value in related mergers: linking equity and human capital, *Strategic Management Journal*, vol. 13, no 5, pp. 319-334

Chemmanur, T.J., Paeglis, I., & Simonyan, K. (2009). The medium of exchange in acquisitions: Does the private information of both acquirer and target matter?, *Journal of Corporate Finance*, vol. 15, no 5, pp. 523-542

Cheng, B., Ioannou, I. & Serafeim, G. (2014). Corporate social responsibility and access to finance, *Strategic Management Journal*, vol. 35, no. 1, pp. 1-23

Conn, R.L., Cosh, A., Guest, P.M., & Hughes, A. (2005). The impact on UK acquirers of domestic, cross-border, public and private acquisitions, *Journal of Business Finance & Accounting*, vol. 32, no 5-6, pp. 815-870

Cording, M., Harrison, J.S., Hoskisson, R.E., & Jonsen, K. (2014). Walking the talk: A multistakeholder exploration of organizational authenticity, employee productivity, and post-merger performance, *Academy of Management Perspectives*, vol. 28, no 1, pp. 38-56

Dahlquist, M., & Robertsson, G. (2001). Direct foreign ownership, institutional investors, and firm characteristics, *Journal of Financial Economics*, vol. 59, no 3, pp. 413–440

Datta, D.K., & Puia, G. (1995). Cross-border acquisitions: an examination of the influence of relatedness and cultural fit on shareholder value, *Management International Review*, vol. 35, no 4, pp. 337-359

Deloitte. (2017). Cross-border M&A. Springboard to global growth. M&A Institute.

Demers, E., Hendrikse, J., Joos, P & Lev, B. (2021). ESG Didn't Immunize Stocks During the COVID-19 Crisis, But Investments in Intangible Assets Did, *Journal of Business Finance & Accounting*, vol. 48, pp. 433-462

Deng, X., Kang, J., & Low, B.S. (2013). Corporate social responsibility and stakeholder value maximization: evidence from mergers, *Journal of Financial Economics*, vol. 110, no 1, pp 87-109

Dionne, G., La Haye, M., & Bergeres, A. (2015). Does asymmetric information affect the premium in mergers and acquisitions?, *Canadian Journal of Economics*, vol. 48, pp. 819-852

Dionysiou, D. (2015). Choosing among alternative long-run event-study techniques, *Journal of Economic Surveys*, vol. 29, no 1, pp 158-198

Dobbs, R., Huyett, B., & Koller, T. (2010). The CEO's guide to corporate finance. Available online:
https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-ceos-guide-to-corporate-finance [Accessed 8 May 2022]

Dodd, P. (1980). Merger Proposals, Management Discretion and Stockholder Wealth, *Journal of Financial Economics*, vol. 8, pp. 105-137

Eccles, N. S., & Viviers, S. (2011). The origins and meanings of names describing investment practices that integrate a consideration of ESG issues in the academic literature, *Journal of Business Ethics*, vol. 104, pp. 389-402

Eckbo, B.E. (1983). Horizontal mergers, collusion, and stockholder wealth, *Journal of Financial Economics*, vol. 11, no 1-4, pp. 241-274

Erel, I., Liao, R.C., & Weisbach, M.S. (2012). Determinants of cross-border mergers and acquisitions, *The Journal of Finance*, vol. 67, no 3, pp. 1045-1082

Fama, E.F. (1998). Market efficiency, long-term returns, and behavioural finance, *Journal of Financial Economics*, vol. 49, no. 3, pp. 283-306

Fama, E.F., Fisher, L., Jensen, M.C., & Roll, R. (1969). The adjustment of stock prices to new information, *International Economic Review*, vol. 10, no 1, pp. 1-21

Fan, J.P.H., & Goyal, V.K. (2006). On the patterns and wealth effects of vertical mergers, *The Journal of Business*, vol. 79, no 2, pp. 877-902

Fatemi, A.M., & Fooladi, I.J. (2013). Sustainable finance: A new paradigm, *Global Finance Journal*, vol. 24, pp. 101-113

Fiordelisi, F., & Ricci, O. (2013). Corporate culture and CEO turnover, *Journal of Corporate Finance*, vol. 28, pp. 66-82

Fombrun, C., Gardberg, N. & Server, J. (2000). The Reputation Quotient: A multi-stakeholder measure of corporate reputation, *The Journal of Brand Management*, vol. 7, pp. 241-255

Fuller, K., Netter, J., & Stegemoller, M. (2002). What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions, *The Journal of Finance*, vol. 57, no 4, pp. 1763-1793

Gaughan, P.A. (2017). Mergers, Acquisitions, and Corporate Restructurings, 7th edition, Hoboken: Wiley

Godfrey, P., Merrill, C., & Hansen, J.M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis, *Strategic Management Journal*, vol. 30, no 4, pp. 425-445

Grote, M.H. & Umber, M.P. (2007). Proximity Preference in M&A Transactions.

Harrison, J.S., & Freeman, R.E. (1999). Stakeholders, social responsibility, and performance: Empirical evidence and theoretical perspectives, *Academy of Management Journal*, vol. 42, no 5, pp. 479-485

Hitt, M.A., Franklin, V., & Zhu, H. (2006). Culture, institutions and international strategy, *Journal of International Management*, vol. 12, no 2, pp. 222-234

Hitt, M., Harrison, J., Ireland, R. D., & Best, A. (1998). Attributes of successful and unsuccessful acquisitions of US firms, *British Journal of Management*, vol. 9, no 2, pp. 91–114

Hu, M., Mou, J. & Tuilautala, M. (2020). How trade credit affects mergers and acquisitions, *International Review of Economics & Finance*, vol. 67, pp. 1-12

Humphrey, J.E., & Tan, D.T. (2014). Does it really hurt to be responsible?, *Journal of Business Ethics*, vol. 122, no. 375-386

Humphery-Jenner, M.L., & Powell, R.G. (2011). Firm size, takeover profitability, and the effectiveness of the market for corporate control: does the absence of antitakeover provisions make a difference?, *Journal of Corporate Finance,* vol. 17, no 3, pp. 418-437

Jaffe, J., Pedersen, D., & Voetmann, T. (2013). Skill differences in corporate acquisitions, *Journal of Corporate Finance*, vol. 23, pp. 166-181

Jensen, M.C. & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics,* vol. 3, no 4, pp. 305-360

Jiao, Y. (2010). Stakeholder welfare and firm value. *Journal of Banking and Finance*, vol. 34, no. 10, pp. 2549-2561

Jo, H., & Harjoto, M.A. (2011). Corporate governance and firm value: The impact of corporate social responsibility, *Journal of Business Ethics*, vol. 103, no. 3, pp. 351-383

Jones, S., van der Laan, S., Frost, G., & Loftus, J. (2008). The Investment Performance of Socially Responsible Investment Funds in Australia, *Journal of Business Ethics*, vol. 80, pp. 181-203

Jones, T.M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics, *Academy of Management Review*, vol. 20, no. 2, pp. 404-437

Kang, J.K., Shivdasani. A., & Yamada. T. (2000). The effect of bank relations on investment decisions: an investigation of Japanese takeover bid, *Journal of Finance*, vol. 55, no. 5, pp. 2197-2218

Koller, T., Goedhart, M., & Wessels, D. (2020). Valuation: *Measuring and Managing the Value of Companies*, McKinsey & Company, 7th edition, Hoboken: John Wiley & Sons Inc

Landier, A., Nair, V.B., & Wulf, J. (2009). Trade-offs in staying close: corporate decision making and geographic dispersion, *Review of Financial Studies*, vol. 22, no. 3, pp. 1119-1148

Lang, L.H.P., Stulz, R.M., & Walkling, R.A. (1991). A test of the free cash flow hypothesis - the case of bidder returns, *Journal of Financial Economics*, vol. 29, no. 2, pp. 315-335

Liang, H., Renneboog, L., & Vansteenkiste, C. (2017). Cross-Border Acquisitions and Employee-Engagement, *Center for Economic Research*, Vol. 2017-038

Lins, K.V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis, *Journal of Finance*, vol. 72, no. 4, pp. 1785-1824

Loughran, T., & Vijh, A.M. (1997). Do long-term shareholders benefit from corporate acquisitions? *Journal of Finance*, vol. 52, no. 5, pp. 1765-1790

Louis, H. (2005). Acquirers' abnormal returns and the non-big 4 auditor clientele effect, *Journal of Accounting and Economics*, vol. 40, no.1-3, pp. 75-99

Luypaert, M., & van Cagenhem, T. (2017). Exploring the Double-Sided Effect of Information Asymmetry and Uncertainty in Mergers and Acquisitions, *Financial Management*, vol. 46, no. 4, pp. 873-917

Mackinlay, A.C. (1997). Event studies in economics and finance, *Journal of Economic Literature, v*ol. 35, no. 1, pp. 13-39

Maksimovic, V., Phillips, G., & Prabhala, N.R. (2011). Post-merger restructuring and the boundaries of the firm, *Journal of Financial Economics*, vol. 102, no. 2, pp. 317-343

McIntyre, T. L. (2004). A model of levels of involvement and strategic roles of human resource development (HRD) professionals as facilitators of due diligence and the integration process, *Human Resource Development Review*, vol. 3, no 2, pp. 173–182

Malmendier, U., & Tate, G. (2008). Who makes acquisitions? CEO overconfidence and the market's reaction, *Journal of Financial Economics*, vol. 88, no. 1, pp. 20-43

Martynova, M., & Renneboog, L. (2008). A Century of Corporate Takeovers: What Have we Learned and Where do we Stand?, *Journal of Banking & Finance*, vol. 32, no 10, pp. 2148-2177

McNichols, M.F., & Stubben, R.S. (2015). The effect of target-firm accounting quality on valuation in acquisitions, *Review of Accounting Studies*, vol. 20, no. 1, pp. 110-140

McWilliams, A., Siegel, D.S. & Wright, P.M. (2006). Corporate social responsibility: Strategic implications, *Journal of Management Studies*, vol. 43, no. 1, pp. 1-18

Moeller, S.B., Schlingemann, F.P., & Stulz, R. (2004). Firm size and gains from acquisitions. *Journal of Financial Economics*, vol. 73, no. 2, pp. 201-228

Morosini, P., Shane, S., & Singh, H. (1998). National cultural distance and cross-border acquisition performance, *Journal of Financial Business Studies*, vol. 29, no. 1, pp. 137-158

Napoletano, E., & Curry, B. (2022). Environmental, Social and Governance: What is ESG Investing? Available online: https://www.forbes.com/advisor/investing/ESG-investing/ [Accessed 5 May 2022]

Netter, J., Stegemoller, M., & Wintoki, M.B. (2011). Implications of data screens on merger and acquisition analysis: a large sample study of mergers and acquisitions from 1992 to 2009, *The Review of Financial Studies*, vol. 24, no 7, pp. 2317-2357

Olie, R. (1994). Shades of culture and institutions in international mergers, *Organization Studies*, vol. 15, no. 3, pp. 381-405

Ragozzino, R., & Reuer, J.J. (2007). Mind the information gap: Putting new selection critera and deal structures to work in M&A, *Journal of Applied Corporate Finance*, vol. 19, no 3, pp. 82-89

Rau, P.R., & Vermaelen, T. (1998). Glamour, value and the post-acquisition performance of acquiring firms, *Journal of Financial Economics*, vol. 49, no. 2, pp. 223-253

Reddy, R.K., Fabian, F. (2021). Information Asymmetry and Host Country Institutions in Cross-Border Acquisitions, Management International Review, vol. 60, pp. 909-938

Refinitiv. (n.d.a). An overview of Mergers and Acquisitions (M&A) Data, Available online: https://www.refinitiv.com/en/financial-data/deals-data/mergers-and-acquisitions-deals-database [Accessed 7 May 2022]

Refinitiv. (n.d.b). Global Mergers & Acquisitions Review Full Year 2021 Financial Advisors

Refinitiv. (n.d.c). Refinitiv ESG company scores, Available online: https://www.refinitiv.com/en/sustainable-finance/ESG-scores [Accessed 25 April 2022]

Reus, T.H., & Lamont, B.T. (2009). The double-edged sword of cultural distance in international acquisitions, *Journal of International Business Studies*, vol. 40, no. 8, pp. 1298-1316

Rhodes-Kropf, M., & Robinson, D. (2008). The market for mergers and the boundaries of the firm, *Journal of Finance*, vol. 63, no. 3, pp. 1169-1211

Rose, A.K. (2000) One money, one market: Estimating the effect of c trade. *Economic Policy*, vol. 15, no. 30, pp 7-45

Sarala, R.M., & Vaara, E. (2010). Cultural differences, convergence, and crossvergence as explanations of knowledge transfer in international acquisitions, *Journal of International Business Studies*, vol. 41, no. 8, pp. 1365-1390

Savor, P.G., & Lu, Q. (2009). Do stock mergers create value for acquirers? *Journal of Finance*, vol. 64, no. 3, pp. 1061-1097

Siegel, J.I., Licht, A.N., & Schwartz, S.H. (2011). Egalitarianism and international investment, *Journal of Financial Economics*, vol. 102, no. 3, pp. 621-642

Shiu, Y.-M., & Yang, S. (2017). Does engagement in corporate social responsibility provide strategic insurance-like effects?, *Strategic Management Journal*, vo. 38, no 2, pp. 455–470

State Street Global Advisors. (2017). ESG Institutional Investor Survey. Performing for the future: ESG's place in investment portfolios. Today and tomorrow.

Steigner, T., & Sutton, N.K. (2011). How does national culture impact internalization benefits in cross-border mergers and acquisitions?, *The Financial Review*, vol. 46, no. 1, pp. 103-125

SSGA. (n.d). State Street Global Advisors. Available online: https://www.ssga.com/international/en/institutional/ [Accessed 27 May 2022]

Trautwein, F. (1990). Merger Motives and Merger Prescriptions, *Strategic Management Journal*, vol. 11, pp. 283-295

United Nations. (2006). Secretary-General launches 'principles for responsible investment' Backed by world's largest investors, Available online: https://www.un.org/press/en/2006/sg2111.doc.htm [Accessed 4 May 2022]

Uysal, V.B. (2011). Deviation from the target capital structure and acquisition choices, *Journal of Financial Economics*, vol. 102, no 3, pp. 602–620

Uysal, V.B., Kedia, S., & Panchapagesan, V. (2008). Geography and acquirer returns, *Journal of Finance*, vol. 17, no. 2, pp. 256-275

Xu, E.Q. (2017). Cross-border merger waves, *Journal of Corporate Finance*, vol. 46, pp. 207-231

Zhang, T., Zhang, Z., & Yang, J. (2022). When Does Corporate Social Responsibility Backfire in Acquisitions? Signal Incongruence and Acquirer Returns, *Journal of Business Ethics*, vol. 175, no. 1, pp. 45-58

Tables

Table 4. Difference in Mean by High ESG Score

	Mean of acquirers with non-high ESG score	Mean of acquirers with high ESG score	Difference in mean
CAR(-1,+1)	0.6082289	-0.1357267	0.7439556***
ESG score	38.7858	74.0253	-35.2395***
Market cap	16.35455	25.52511	-9.170561***
Relative deal size	0.4460855	0.9344803	-0.4883948***
Deal value	0.7391293	1.899971	-1.160842***
Current ratio	1.873268	1.440522	0.4327456***
Leverage	.3298635	0.2942661	0.0355975***
ROA	0.0508531	0.0684381	-0.017585***
Market to book	3.183476	4.260809	-1.077333***
CAR(-1,+1)MSCI	0.5823585	-0.1033697	0.6857282***
Environmental pillar score	25.67622	72.0487	-46.37248***
Social pillar score	41.59525	78.04391	-36.44866***
Governance pillar score	49.08888	71.93793	-22.84905***

Note: Table 4 presents the difference in mean between observations with non-high ESG score and acquirers with high ESG scores. The included variables are CAR(-1,+1), ESG score, Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, CAR(-1,+1)MSCI, Environmental pillar score, Social pillar score and Governance pillar score.
[1]Variables have been winsorized at the 1st and 99th percentile.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 5. Difference in Mean by Target Cross-Border

	Domestic deals	Cross-border deals	Difference in mean
CAR(-1,+1)	0.3921352	0.5122527	-0.1201175
ESG score	46.84748	49.78506	-2.937579***
Market cap	18.75641	18.31486	0.4415503
Relative deal size	0.6079064	0.4498539	0.1580525**
Deal value	1.155231	0.6546587	0.5005726***
Current ratio	1.734394	1.856547	-0.1221536***
Leverage	0.3315641	0.2895348	0.0420293***
ROA	0.0533187	0.0609639	-0.0076452***
Market to book	3.183476	4.260809	-1.077333***
CAR(-1,+1)MSCI	0.3978162	0.4504473	-0.0526312
Environmental pillar score	36.04142	40.87265	-4.831227***
Social pillar score	50.02429	52.70258	-2.678291***
Governance pillar score	54.48431	55.72119	-1.236879

Note: Table 5 presents the difference in mean between observations where the target is located in the US and observations where the target is located outside of the US. The included variables are CAR(-1,+1), ESG score, Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, CAR(-1,+1)MSCI, Environmental pillar score, Social pillar score and Governance pillar score.
[1]Variables have been winsorized at the 1st and 99th percentile.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 11. Pairwise Correlation Table Robustness Variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) CAR(-1,+1)	1.000										
(2) ESG score	-0.111***	1.000									
(3) High ESG score	-0.078***	0.763***	1.000								
(4) High environmental pillar score	-0.082***	0.678***	0.681***	1.000							
(5) High social pillar score	-0.061***	0.682***	0.742***	0.560***	1.000						
(6) High governance pillar score	-0.077***	0.496***	0.413***	0.228***	0.251***	1.000					
(7) CAR(-5,+5)	0.674***	-0.086***	-0.056***	-0.064***	-0.055***	-0.034*	1.000				
(8) CAR(-3,+3)	0.776***	-0.096***	-0.064***	-0.072***	-0.054**	-0.041*	0.864***	1.000			
(9) CAR(-5,+5)MSCI	0.593***	-0.084***	-0.069***	-0.062***	-0.064***	-0.030	0.874***	0.754***	1.000		
(10) CAR(-3,+3)MSCI	0.697***	-0.088***	-0.070***	-0.073***	-0.056***	-0.019	0.766***	0.882***	0.838***	1.000	
(11) CAR(-1,+1)MSCI	0.911***	-0.095***	-0.066***	-0.072***	-0.051**	-0.062***	0.618***	0.711***	0.621***	0.754***	1.000

Note: Table 11 presents a pairwise correlation table. The included variables are CAR(-1,+1), ESG score, High ESG score, High environmental pillar score, High social pillar score, High governance pillar score CAR(-5,+5), CAR(-3,+3), CAR(-5,+5)MSCI, CAR(-3,+3)MSCI and CAR(-1,+1)MSCI.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.
*** p<0.01, ** p<0.05, * p<0.1

Table 12. Estimated Robustness Regressions 1 Model 1

	Model 1	Model 1	Model 1	Model 1	Model 1	Model 1
	(1) All observations	(2) All observations	(3) All observations	(4) All observations	(5) All observations	(6) All observations
VARIABLES	CAR(-1,+1)[1]	CAR(-3,+3)[1]	CAR(-5,+5)[1]	CAR(-1,+1)MSCI[1]	CAR(-3,+3)MSCI[1]	CAR(-5,+5)MSCI[1]
ESG score[1]	-0.026***	-0.029***	-0.030***	-0.024***	-0.030***	-0.035***
	(0.005)	(0.004)	(0.008)	(0.006)	(0.006)	(0.005)
Constant	-0.145	1.026**	1.117	-0.609	0.641	0.087
	(1.223)	(0.467)	(2.512)	(1.159)	(0.578)	(0.771)
Observations	2,234	2,234	2,234	2,234	2,234	2,234
Standard error	Clustered robust	Clustered robust	Clustered robust	Clustered robust	Clustered robust	Clustered robust
Clustered by	Firm	Country	Country	Country	Country	Country
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry effect	Yes	Yes	Yes	Yes	Yes	Yes
Year effect	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.043	0.040	0.036	0.034	0.036	0.041

Note: Table 12 presents the robustness results for the estimated models 1, using robust standard errors clustered by the country of the target or the acquiring firm, controlling for year and industry effect. The dependent variable is CAR(-1,+1) for column (1), CAR(-3,+3) for column (2), CAR(-5,+5) for column (3), CAR(-1,+1)MSCI for column (4), CAR(-3,+3)MSCI for column (5) and CAR(-5,+5)MSCI for column (6). The explanatory variable included is ESG score while the control variables are Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, Sane macro industry, Same mid industry, Cash deal and Target public.
[1]Variables have been winsorized at the 1st and 99th percentile.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 13. Estimated Robustness Regressions 2 Model 1

	Model 1	Model 1	Model 1	Model 1	Model 1
	(1) All observations	(2) All observations	(3) All observations	(4) All observations	(5) All observations
VARIABLES	CAR(-1,+1)[1]	CAR(-1,+1)[1]	CAR(-1,+1)[1]	CAR(-1,+1)1	CAR(-1,+1)[1]
High ESG score[2]	-0.689***				
	(0.103)				
High environmental pillar score[2]		-0.736***			-0.585***
		(0.123)			(0.148)
High social pillar score[2]			-0.532***		-0.122
			(0.102)		(0.121)
High governance pillar score[2]				-0.651***	-0.535***
				(0.099)	(0.102)
Constant	-1.443***	-1.401***	-1.439***	-1.298***	-1.232***
	(0.353)	(0.349)	(0.364)	(0.364)	(0.344)
Observations	2,234	2,234	2,234	2,234	2,234
Standard error	Clustered robust	Clustered robust	Clustered robust	Clustered robust	Clustered robust
Clustered by	Country	Country	Country	Country	Country
Control variables	Yes	Yes	Yes	Yes	Yes
Industry effect	Yes	Yes	Yes	Yes	Yes
Year effect	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.035	0.036	0.033	0.035	0.038

Note: Table 13 presents the robustness results for the estimated model 1, using robust standard errors clustered by the country of the target, controlling for year and industry effect. The dependent variable is CAR(-1,+1) for all columns. The explanatory variable included in column (1) is High ESG score, in column (2) it is High environmental pillar score, in column (3) it is High social pillar score, in column (4) High governance pillar score, and column (5) all of the individual variables are included. The control variables are Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, Sane macro industry, Same mid industry, Cash deal and Target public.
[1]Variables have been winsorized at the 1st and 99th percentile.
[2]Dummy Variable.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 14. Estimated Robustness Regressions Model 2

VARIABLES	Model 2 (1) All observations CAR(-1,+1)[1]	Model 2 (2) Positive CAR CAR(-1,+1)[1]	Model 2 (3) Negative CAR CAR(-1,+1)[1]	Model 2 (4) All observations CAR(-1,+1)[1]	Model 2 (5) Positive CAR CAR(-1,+1)[1]	Model 2 (6) Negative CAR CAR(-1,+1)[1]
ESG score[1]				0.002	-0.036***	0.013**
				(0.005)	(0.005)	(0.005)
High ESG score[2]	0.228**	-1.411***	0.629***			
	(0.100)	(0.137)	(0.098)			
Positive CAR[2]	5.809***			6.931***		
	(0.090)			(0.344)		
ESG score positive CAR				-0.031***		
				(0.006)		
High ESG positive CAR	-1.409***					
	(0.122)					
Constant	-3.141***	4.712***	-3.499***	-3.133***	6.149***	-4.143***
	(0.209)	(0.303)	(0.538)	(0.877)	(1.144)	(1.035)
Observations	2,234	1,204	1,030	2,234	1,204	1,030
Standard error	Clustered robust	Clustered robust	Clustered robust	Clustered robust	Clustered robust	Clustered robust
Clustered by	Country	Country	Country	Firm	Firm	Firm
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry effect	Yes	Yes	Yes	Yes	Yes	Yes
Year effect	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.467	0.157	0.152	0.468	0.166	0.150

Note: Table 14 presents the robustness results for the estimated model 2 using robust standard errors clustered by the country of the target or the acquiring firm, controlling for year and industry effect. The dependent variable for all estimated columns are CAR(-1,+1). The explanatory variables included are ESG score and High ESG score while the control variables are Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, Sane macro industry, Same mid industry, Cash deal and Target public. For column (1) the interaction variable High ESG positive CAR was added along with the control variable Positive CAR. Column (2) includes only the observations with a positive CAR while Column (3) only includes the observations with a negative CAR. For column (4) the interaction variable ESG score positive CAR was added along with the control variable Positive CAR. Column (5) includes only the observations with a positive CAR while Column (6) only includes the observations with a negative CAR.

[1]Variables have been winsorized at the 1 st and 99th percentile.

[2]Dummy Variable.

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 15. Estimated Robustness Regressions Model 3

	Model 3	Model 3	Model 3	Model 3	Model 3	Model 3
	(1) All observations	**(2)** Cross-border	**(3)** Domestic	**(4)** All observations	**(5)** Cross-border	**(6)** Domestic
VARIABLES	**CAR(-1,+1)[1]**	**CAR(-1,+1)[1]**	**CAR(-1,+1)[1]**	**CAR(-1,+1)[1]**	**CAR(-1,+1)[1]**	**CAR(-1,+1)[1]**
ESG score[1]				-0.026***	0.007	-0.001
				(0.002)	(0.010)	(0.006)
High ESG score[2]	-0.706***	-0.580	-0.624**			
	(0.256)	(0.389)	(0.270)			
Target cross-border[2]	-0.043			-0.078		
	(0.253)			(0.393)		
ESG score target cross-border				0.002		
				(0.007)		
High ESG target cross-border	0.065					
	(0.402)					
Positive CAR[2]					6.728***	6.869***
					(0.722)	(0.395)
ESG score positive CAR					-0.032**	-0.029***
					(0.013)	(0.007)
Constant	-1.443	-0.856	-0.716	-0.120	-4.768***	-3.149***
	(1.244)	(1.897)	(1.330)	(0.332)	(1.558)	(0.969)
Observations	2,234	563	1,671	2,234	563	1,671
Standard error	Clustered robust	Clustered robust	Clustered robust	Clustered robust	Clustered robust	Clustered robust
Clustered by	Firm	Firm	Firm	Country	Firm	Firm
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry effect	Yes	Yes	Yes	Yes	Yes	Yes
Year effect	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.034	0.014	0.047	0.042	0.452	0.471

Note: Table 15 presents the robustness results for the estimated model 3 using robust standard errors clustered by the country of the target or the acquiring firm, controlling for year and industry effect. The dependent variable for all columns are CAR(-1,+1). The explanatory variables included are ESG score and High ESG score while the control variables are Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, Sane macro industry, Same mid industry, Cash deal. For model (1) the interaction variable High ESG target cross-border was added along with the control variable Target cross-border. Column (2) includes only the cross-border transactions while Column (3) only includes the domestic transactions. For model column (4) the interaction variable ESG score target cross-border was added along with the control variable Target cross-border. For column (5) and (6) the interaction variable ESG score positive CAR was added along with the control variable Column (5) includes only the cross-border transactions while Column (6) only includes the domestic transactions.
[1]Variables have been winsorized at the 1 st and 99th percentile.
[2]Dummy Variable.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1*

Appendix

Appendix 1. Results of The Event Study

VARIABLE	CAR(-1,+1)
Constant	0.0045847***
	(0.0010216)
Observations	2,234
Standard error	Robust

Note: Appendix 1 presents the results of the estimated linear regression, estimating the CAR in our event study.

Appendix 2. White's Test

White's test	H0	Test statistic	p-value	Desicion	Heteroskedasticity
Stata Test (Chi-squared) - regression 5	Homoskedasticity	376.13	0.0000	Reject	Yes

Note: Appendix 2 presents the results of the White´s test performed on the estimated regression 5.

Appendix 3. Variable Definition List

Variable name	Variable definition	Source
Dependent variable		
CAR(-1,+1)[1]	The cumulative abnormal return of the acquiring firm, reflecting the abnormal return of the acquirer' in relation to the expected return of the market over the event window (-1 to +1). The expected market return is estimated from the S&P 500 index.	Refinitiv Eikon
Explanatory variables		
ESG score[1]	The average score for each company based on the environmental, social and governance pillar scores the year of the announcement.	Refinitiv Eikon
High ESG score[2]	A dummy variable that has the value of 1 if the acquirer is represented in the 75th percentile in terms of ESG score within the sample, and a 0 otherwise.	Refinitiv Eikon
Environmental pillar score[1]	The individual environmental pillar score for each company the year of the announcement.	Refinitiv Eikon
Social pillar score[1]	The individual social pillar score for each company the year of the announcement.	Refinitiv Eikon
Governance pillar score[1]	The individual governance pillar score for each company the year of the announcement.	Refinitiv Eikon
Firm characteristic control variables		
Market cap1[1,3]	The natural logarithm of the market capitalization presented in billion USD of the acquiring firm the year before the announcement,	Refinitiv Eikon
Current ratio[1]	Calculated by dividing the current assets of the acquirer by its current liabilities the year before the announcement.	Refinitiv Eikon
Leverage[1]	The total debt to total assets of the acquirer the year before the announcement the year before the announcement.	Refinitiv Eikon
ROA[1]	The acquiring firm's return on assets which is calculated by dividing net income by total assets the year before the announcement.	Refinitiv Eikon
Market to book[1]	The relation between market cap and total book value.	Refinitiv Eikon
Deal characteristic control variables		

Relative deal size[1]	Market cap in relation to the deal value the year before the announcement.	Refinitiv Eikon
Deal value[1,3]	The natural logarithm of the deal value in billion USD.	Refinitiv Eikon
Same macro industry[2]	A dummy variable controlling for when the acquirer and target is within the same macro industry with a value of 1 and 0 otherwise.	Refinitiv Eikon
Same mid industry[2]	A dummy variable controlling for when the acquirer and target is within the same mid industry with a value of 1 and 0 otherwise.	Refinitiv Eikon
Cash deal[2]	The dummy variable is given a value of 1 if the M&A is paid for using only cash and 0 otherwise.	Refinitiv Eikon
Target public[2]	A dummy variable given a value of 1 if the target is publicly listed and a 0 otherwise	Refinitiv Eikon
Positive CAR[2]	A dummy variable that is given a value of 1 if the $CAR(-1,+1)$ is positive and negative respectively and a 0 otherwise.	Refinitiv Eikon
Target cross-border[2]	A dummy variable given a value of 1 if the target is located outside the US and a 0 otherwise	Refinitiv Eikon
Robustness variables		
CAR(-5,+5)[1]	The cumulative abnormal return of the acquiring firm, reflecting the abnormal return of the acquirer' in relation to the expected return of the market over the event window (-5 to +5). The expected market return is estimated from the S&P 500 index.	Refinitiv Eikon
CAR(-3,+3)[1]	The cumulative abnormal return of the acquiring firm, reflecting the abnormal return of the acquirer' in relation to the expected return of the market over the event window (-3 to +3). The expected market return is estimated from the S&P 500 index.	Refinitiv Eikon
CAR(-5,+5)MSCI[1]	The cumulative abnormal return of the acquiring firm, reflecting the abnormal return of the acquirer' in relation to the expected return of the market over the event window (-5 to +5). The expected market return is estimated from the MSCI World Index.	Refinitiv Eikon
CAR(-3,+3)MSCI[1]	The cumulative abnormal return of the acquiring firm, reflecting the abnormal return of the acquirer' in relation to the expected return of the market over the event window (-3 to +3). The expected market return is estimated from the MSCI World Index.	Refinitiv Eikon
CAR(-1,+1)MSCI[1]	The cumulative abnormal return of the acquiring firm, reflecting the abnormal return of the acquirer' in relation to the expected return of the market over the event window (-1 to +1). The expected market return is estimated from the MSCI World Index.	Refinitiv Eikon
High environmental pillar score[2]	A dummy variable that has the value of 1 if the acquirer is represented in the 75th percentile in terms of *Environmental pillar score* within the sample, and a 0 otherwise.	Refinitiv Eikon
High social pillar score[2]	A dummy variable that has the value of 1 if the acquirer is represented in the 75th percentile in terms of *Social pillar score* within the sample, and a 0 otherwise.	Refinitiv Eikon
High governance pillar score[2]	A dummy variable that has the value of 1 if the acquirer is represented in the 75th percentile in terms of *Governance pillar score* within the sample, and a 0 otherwise.	Refinitiv Eikon

Note: Appendix presents the definition and the source for all variables. The included variables are CAR(-1,+1), ESG score, High ESG score, Market cap, Relative deal size, Deal value, Current ratio, Leverage, ROA, Market to book, Same macro industry, Same mid industry, Cash deal, Target public. Positive CAR, Target cross-border, High ESG positive CAR, High ESG target cross-border, CAR(-5,+5), CAR(-3,+3), CAR(-5,+5)MSCI, CAR(-3,+3)MSCI, CAR(-1,+1)MSCI, Environmental pillar score, Social pillar score, Governance pillar score, High environmental pillar score, High social pillar score and High governance pillar score.
[1] Variables have been winsorized at the 1 st and 99th percentile.
[2] Dummy Variable.
[3] Natural logarithm.

Appendix 4. Sample Description Table

Nr	Criteria	Transactions
1	Include only completed M&A transactions.	1 030 564
2	Include only transactions with disclosed dollar value.	304 118
3	Include only deals that were announced between the 1st of January 2008 to the 31st of December 2020.	131 234
4	Include only transactions where the acquirer is located in the United States of America.	28 604
5	Include only public acquirers.	14 752
6	Include only acquiring firms with available environmental, social, governance disclosure scores, and available share price.	3 373
7	Exclude acquiring firms that are active in the financial industry.	3 345
8	Exclude acquiring firms that has missing ESG score or financial information for the year the transaction was completed.	2 263
9	Exclude acquiring firms that did not have sufficient share price in order to complete the event study.	2 234
	Final Sample	*2 234*

Note: Appendix 4 presents the final sample and the criteria that shaped it.