Universidade do Minho
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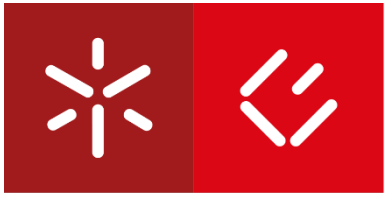

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Corporate governance portability and synergy sharing in cross-border acquisitions

Masters Dissertation

Master in Finance

Trabalho realizado sob orientação do
Professor Doutor Gilberto Loureiro

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Statement of integrity

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration.

I further declare that I have fully acknowledged the Code of Ethical Conduct of the University of Minho.

Resumo

Frequentemente, as fusões e aquisições (M&A) desempenham um papel relevante na estratégia de algumas empresas. A atividade tem vindo a ser estudada por académicos e profissionais de negócio para avaliar os efeitos na valorização de mercado do adquirente, da empresa alvo e da combinação das duas. Os benefícios não são claros especificamente para o adquirente e para a empresa combinada.

Num ambiente de negócios global, as M&As além-fronteiras surgem naturalmente e, como consequência, surgem novos assuntos para serem estudados. Isto acontece porque as M&As além-fronteiras estão sujeitas a novos fatores que não estão presentes nas aquisições dentro das fronteiras, como questões legais, económicas e culturais ao nível do país.

Este estudo pretende analisar o impacto das diferenças da governança corporativa entre o adquirente e o alvo na valorização das empresas. Quando uma empresa alvo é adquirida fica sujeita à governança corporativa da empresa adquirente, que tipicamente apresenta melhores níveis.

O presente estudo foca-se especificamente na dimensão da governança corporativa da proteção do investidor. É analisada a presença do "efeito de portabilidade" (Ellis et al., 2017) da governança corporativa e a criação de sinergias nas M&As.

O trabalho engloba aquisições além-fronteiras mundiais, desde o início de 2009 até ao fim de 2015, o que resulta numa amostra com 878 eventos. Através da metodologia de estudo do evento (MacKinlay, 1997), foram calculadas as rentabilidades anormais cumulativas (CAR) que permitem avaliar o valor das empresas adquirente, alvo e combinada após a alteração de governança corporativa causada pelas M&As.

Encontra-se ligeira evidência de que a diferença na governança corporativa entre a empresa adquirente e a empresa alvo tem um impacto positivo nas rentabilidades do aquirente e da empresa alvo. O aumento do valor das empresas alvo mostra que existe o "efeito de portabilidade". Adicionalmente, é detetado um efeito moderador provocado pelo facto do adquirente ter um nível de governança corporativa superior à mediana dos adquirentes no ano da aquisição. Este efeito é positivo e influencia as rentabilidades do adquirente.

Os resultados mostram que as empresas adquirentes não perdem nem ganham, as empresas alvo ganham e as empresas combinadas também ganham em M&As além-fronteiras. Assim, este estudo mostra que existe criação de valor para os agentes das empresas nas M&A além-fronteiras ainda que não haja forte evidência da influência positiva da diferença da governança corporativa.

Palavras-chave: Fusões e Aquisições além-fonteiras, Governança corporativa, Proteção do investidor, Rentabilidades anormais cumulativas

Abstract

Mergers and Acquisitions (M&A) often play a relevant role in some firms' strategy. The activity has been studied by academics and business professionals to assess the effects on the market value of the acquirer, the target, and the resulting combined firm. The benefits are not specifically clear to the acquirer and the combined firm.

In a global business environment, cross-border M&As naturally arise bringing new topics to be studied. This happens because cross-border M&As are subject to new factors that are not present in domestic acquisitions, such as legal, economic, and cultural differences.

Therefore, this study aims to analyze the impact of corporate governance differences between the acquirer and the target on the firms' valuation. When a firm is acquired by another, it stays under the acquiring firm's corporate governance, which is typically better.

This work focuses on the investor protection dimension of corporate governance. It analyzes the presence of the "portability-effect "(Ellis et al., 2017) and synergy creation in M&A.

The work covers worldwide cross-border acquisitions, from the beginning of 2009 until the end of 2015 which results in a sample of 878 events. I use the event study methodology (MacKinlay, 1997) to compute the cumulative abnormal returns (CAR). The CARs enable us to assess the value created by the acquisition to the acquirer, target, and the resulting combining firm after the change of corporate governance.

There is weak evidence that the corporate governance gap between acquirer and target has a positive impact on acquirer and target returns. The value increase of target firms supports the existence of the "portability-effect". Additionally, a moderating effect is detected caused by the acquirer firm having a higher level of corporate governance than the sample median in a given acquisition year. The effect is positive, and it influences the acquirer returns.

The results show that acquirers neither gain nor lose, target companies do gain, and the resulting combined firm also gains with cross-border acquisitions. Thus, there is creation of shareholder gains in cross-border M&As even though there is no strong evidence of the positive influence of the corporate governance gap.

Key words: Corporate governance, Cross-border M&A, Cumulative abnormal returns, Investor protection

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1. Introduction

The M&A activity is part of the firm's strategy. Whether the firm has an active acquisition behavior, or just engages in a single acquisition, the activity has an important role in investment decisions and, consequently, on a firms' value. However, M&As are costly and risky ventures and can lead to big losses if the deals are poorly designed (Ferreira et al., 2014).

Mergers combining firms from two different countries, i.e., cross-border mergers, represent approximately one-third of the worldwide mergers and, both its number and importance will increase (Erel et al., 2012). As happens with domestic mergers, cross-border mergers are justified by the creation of synergies. However, there is a set of international factors affecting exclusively the value created in cross-border deals such as geographic differences, country-level governance differences, currency movements, bilateral trade, and stock market performance (Erel et al. 2012).

Doidge et al. (2007), consider country characteristics - the investor protection granted by the state, the economic development, financial development, and the openness of the firm's home country - the most important determinant of a firm's governance. Besides that, the quality of corporate governance at the country level has an impact on firm value (La Porta et al., 2000; Moeller et al.,2004; Starks & Wei, 2013). Considering the traditional law and finance view, countries with less protective regimes will end up with less valuable firms (La Porta et al., 2000; Bris & Cabolis, 2008). However, firms that improve their level of corporate governance see a positive valuation by the market (Bris et al., 2008).

During the process of choosing a target, its corporate governance is considered (Bris & Cabolis, 2008). Especially, when a potential acquirer is from a country with higher governance standards than the country of the target, there is an opportunity to generate additional synergy gains (Rossi & Volpin, 2004; Erel et al., 2012). Some authors such as Wang & Xie (2009) detect a sharing of the gains by acquiring shareholders and target shareholders. The explanation is the impossibility of either the acquirer returns, or the target returns be able to fully capture the synergy effects. Therefore, corporate governance influences M&A activity.

Assets control is a strong concern since assets should have the best possible allocation and the best possible uses in order to maximize firm value. Mergers and acquisitions are a way to accomplish the reallocation of the assets' control between companies (Rossi & Volpin, 2004). The M&A activity causes a change in control of the target assets because they end up being controlled by a new management. The new management is subject to the acquirer's corporate governance levels including shareholder rights protection which are typically greater than the targets' (Rossi & Volpin, 2004). Thus, when the target

faces better management, it will experience value creation. Also, Wang & Xie (2009) detect a positive and increasing relation between the difference in the quality of the country-level corporate governance between the acquirer and the target, and the total value created.

In the same way, Ellis et al. (2017) developed a theory called "portability theory" about the synergy creation and corporate governance differences at the country-level. In this theory, the main proposition states that acquirers from countries with better corporate governance than their targets are able to create more wealth for their shareholders. An important explanation derives from the improvement of the target's management caused by the transfer of the effective benefits of the acquirer's better governance.

Based on the above statements, the purpose of this dissertation is to analyze the value created in acquisitions where the acquirer is from a country with better corporate governance than the target, especially the transfer of better governance practices from the acquirer to the target – the so-called "portability effect" (Ellis et al., 2017). In addition, there will be analysis of how the synergies created are shared between the acquirer and the target.

The hypotheses are tested using a sample of 878 cross-border acquisitions from the beginning of 2009 until the end of 2015. Firstly, this study evaluates the differences of country corporate governance levels between the acquirer and the target in cross-border acquisition - focusing on the investor protection dimension of corporate governance. Second, it measures the value creation for the acquirer, target, and combined firm through the event study methodology (MacKinlay, 1997). The value creation measures are the cumulative abnormal returns (CAR) to the acquirer, target, and the resulting combining firm after the change of corporate governance.

This work is organized into 7 sections: section 2 presents the literature review; section 3 exhibits the tested hypothesis; section 4 describes the methodology; section 5 provides information about the collected data and the main descriptive analysis; section 6 reports the regression tables with their respective analysis; section 7 asserts the conclusions.

2. Literature Review

2.1. M&As general overview

Previous years of research show that mergers occur in waves and within these waves, they cluster by industry and time. The neoclassical explanations argue the firms' engagement in M&A activity is a reaction to some unexpected shock in its industry's structure in the economic, regulatory, or technological dimensions (Gort, 1969; Mitchell & Mulherin, 1996; Andrade et al., 2001; Harford, 2005). Regarding time clustering, industries with high levels of merger activity in one decade are no more likely to do it in other decades (Andrade et al.,2001). Harford (2005) appoints macro-level liquidity factors such as higher capital liquidity - lower transaction costs – as a cause of industry merger waves to cluster in time.

With M&A activity, acquirers can look for a growth strategy, economies of scale, better assets management, and even synergies (Andrade et al., 2001). However, Berkovitch & Narayanan (1993) conclude that synergy is the primary motive behind takeovers with positive total gains.

From the view of the acquiring firm's manager, the combination of two firms is value increasing either is a cross-border or domestic merger (Erel et al., 2012). The shareholders' gains reflect the improved expectations of future cash flow due to the efficiency improvement caused by the merger (Andrade et al., 2001). But for this to happen, firms must consider the post-merger integration namely the determinants of value-creation such as focus, relatedness, and adherence to strategy (Bruner, 2002). For example, combinations of high-tech firms are examples of possible mergers that generate lower synergies due to difficulties in integrating human capital and intellectual property (Masulis et al., 2007).

Despite the high number of mergers, researchers still haven't been able to explain exactly how value is created. Stiebale & Trax (2011), when they were studying the effects of cross-border M&As on the acquirer's domestic performance, concluded that this activity yields higher growth rates of domestic sales, employment, and capital for the acquirer, which sometimes also brings higher productivity growth. In the literature, there is no strong consensus about the acquirer returns however, there is evidence that in some cases acquirers do have returns (Kuipers et al., 2009; Wang & Xie, 2009).

After analyzing 16 studies, Jensen & Ruback (1983) conclude that target firm shareholders benefit from M&A and acquiring firm shareholders do not lose. Andrade et al. (2001) observe that all the gains from mergers seem to belong to the target firm shareholders and do not seem to improve acquirers' value. Bruner (2002) agrees with the fact that targets certainly increase their value. Concerning acquirers, they don't experience value creation as they observe non-significant abnormal returns. However, the majority have a financial performance that compensates the M&A's opportunity cost (Bruner, 2002). Bris

et al. (2008) find that acquirers, by merging with targets with weaker investor protection and poorer accounting standards, neither gain nor lose value.

Some explanations for the acquirer's lower benefit can be found in the literature. Bradley et al. (1988), in a study about synergistic gains from successful tender offers, conclude that competition among acquirers increases the returns to targets and decreases the returns to acquirers. Diversification increases the premium paid by acquirers and destroys value (Berger and Ofek, 1995; Bruner, 2002; Flanagan & O' Shaughnessy, 2003). Fuller et al. (2002) reveal gains for public acquirer firms' shareholders when a private firm or a subsidiary firm is bought and, in contrast, losses when a public firm is bought. Concerning corporate governance, acquirers with more antitakeover provisions experience lower abnormal returns around the acquisition's announcements (Masulis et al., 2007).

Regarding the target, a merged entity experiences a considerable increase in post-acquisition innovation (Stiebale, 2016). More importantly, Stiebale (2016) identifies a causal effect of the cross-border M&A on innovation. As is well known, innovation is a key fundamental in wealth creation.

2.2. Cross-border M&A

Cross-border M&As have been growing worldwide. While in 1998 cross-border M&A accounted for 23% of total merger volume, in 2007 the activity represented 45% (Erel et al., 2012).

Despite being mergers, cross-border M&As differ from the domestic ones. Regarding time clustering, domestic mergers that happen earlier in the wave perform better than those that happen later (Carow et al., 2004) due to the theory of first-mover advantage (Lieberman & Montgomery, 1988). In cross-border M&A, the deals undertaken later in waves have a superior performance than those earlier. Moreover, the late performance is stronger as the difference between the acquirer and the target in terms of culture, financial development, and legal systems is bigger (Xu, 2017). Nevertheless, the main issue in cross-border mergers is that, unlike in domestic mergers, firms can face some factors such as geographic differences, cultural differences, country-level governance differences, and international tax effects.

Regarding cultural differences, the greater the distance between the acquirer and the target, the lower the acquirer announcement returns (Datta & Puia, 1995) and the combined announcement returns (Ahern et al., 2015). The volume of cross-border mergers is smaller as the cross-country differences between the key dimensions of national culture are greater (Ahern et al., 2015). From a long-term perspective, some authors observe that cultural distance damages cross-border merger performance

(Jemison & Sitkin, 1986; Datta & Puia, 1995; Zhao et al., 2004), while others suggest that cultural distance can be favorable (Morosini et al., 1998; Chakrabarti et al., 2009).

Additionally, institutional laws can influence the number of inward acquisitions and consequently the frequency of cross-border acquisitions: the better the host country's institutional laws regarding financial markets, taxation, and corporate governance, the higher the number of inward acquisitions (Xie et al., 2017).

Excluding contractual arrangements between involved parties, acquisitions of 100% interest in a company by a foreign firm result in a change of the law applicable to the target firm and its nationality (Bris & Cabolis, 2008). Targets usually adopt the accounting standards, disclosure practices, and governance structures from the country of the acquiring firm. Therefore, the acquired firm and its stakeholders, namely shareholders, are subject to a new corporate governance system (Bris & Cabolis, 2008). Therefore, the activity is considered a way for firms to change their corporate governance.

2.3. Portability effect

Regarding differences in corporate governance at the country-level and M&A, Ellis et al. (2017) document the existence of a "portability effect". Their theoretical proposition is motivated by two main theories: the agency theory and the theory of law and finance.

The agency theory (Jensen & Meckling, 1976) is focused on the specific agency relationship between stockholders and managers. But, because in some cases both parties of the relationship are utility maximizers, shareholders incur agency costs. Regarding this topic, countries with emerging economies face weak governance and more agency conflicts (Hoskisson et al., 2000; Young et al., 2008).

On the other hand, the theory of law and finance (La Porta et al., 1998) defends that laws and their enforcement is different around the world. In addition, La Porta et al. (1998) find that legal rights themselves do not improve with the income of the country-level. However, the quality of law enforcement does improve. Based on the character of legal rules and the quality of law enforcement to measure investor protection, countries with poorer investor protection show smaller and narrower capital markets (La Porta et al., 1997). Also, countries with better law enforcement have better-developed banks (Levine, 1998). Banking development positively predicts growth, capital accumulation, and productivity improvement (Levine & Zervos, 1998). Beck et al. (2000) confirm that financial intermediaries have a large and positive impact on economic growth.

Back to the concept of "portability effect" (Ellis et al., 2017), it consists of good country governance being portable through cross-border acquisitions. Frequently, acquirers have more effective

management than targets and the acquirer´s superior management applied to the target creates more wealth for its shareholders. Due to the influence of the theory of law and finance, the authors defend that those acquirers who have a more financially developed context have less financing costs and fewer financial constraints. The result of the two theories combined is firms with better country-level corporate governance are those more capable of buying another firm (i.e. to be acquiring). Likewise, the authors state that the acquired firms (i.e. targets) are those firms who face weaker country-level governance. The same study confirms the existence of the "portability effect", and that acquirers gain more when they buy targets with worse country governance than their own. The greater the country's governance distance between the acquirer and the target, the greater the gain.

The "portability effect" is consistent with its predecessor studies. When the acquirer has better corporate governance than the target, the degree of the target investor protection improves (Rossi & Volpin 2004). Martynova & Renneboog (2008), note that when the bidder is from a country with a stronger shareholder orientation than the target, part of the total synergy value of the takeover may result from the improvement in the governance of the target assets. The improvement in corporate governance caused by changes in control is a source of synergetic gain from mergers and acquisitions (Wang & Xie, 2009). Furthermore, the better the corporate governance of the acquirer relative to the target, the greater the premium in cross-border mergers (Bris & Cabolis, 2008; Wang & Xie, 2009).

2.4. Corporate governance at country-level

Kaufmann et al. (2010) define governance as the set of traditions and institutions in a country by which authority is exercised. In their definition, the authors include the process by which governments are selected, monitored, and replaced; the capacity of the government to effectively formulate and implement sound policies; the respect of citizens and the state for the institutions that govern economic and social interactions among them. Because this study is about investor protection, it focuses on dimensions such as government effectiveness, regulatory quality, and rule of law.

Shareholders' rights protection (i.e. investor protection) is an important domain of corporate governance. It is defined as the protection provided to the shareholders of a company by corporate law or the commercial code (Bris & Cabolis, 2008). Shareholder's rights do not depend only on the securities' intrinsic rights, but also on the legal rules of jurisdictions where securities are issued (La Portal et. al., 1998).

Differences in laws and regulations across countries are one of the cross-country determinants of M&A. In fact, many M&A activities are in countries with better accounting standards and better

shareholder protection (Rossi & Volpin, 2004). The same authors also find evidence that the probability that a given deal is cross-border rather than domestic, decreases with the investor protections of the target's country. Notably, cross-border M&A acquirers, typically, have higher investor protection than targets (Rossi & Volpin, 2004).

La Porta et al. (1998) suggest legal origin as a broad indicator of investor protection. Additionally, the legal approach is considered a more fruitful way to understand corporate governance and its reforms than the conventional distinction between bank-centered and market-centered financial systems (La Porta et al., 2000). According to this approach, investors' protection comes through the legal systems, which involve laws and their enforcement. Investor protection is very important because, in many countries, issues such as expropriation of minority shareholders and creditors by the controlling shareholders are extensive (La Porta et al., 2000). Moreover, Rossi & Volpin (2004) consider the law origins a good instrument because it is correlated with other proxies of investor protection and is exogenous.

There are two broad traditions to explain commercial laws origins: common law - which has an English origin- and civil law - which comes from Roman law. In the common law system, legal rules are typically made by judges, based on precedents, and guided by general principles as fiduciary duty or fairness. In civil law systems, legal rules are made by legislatures, and unlike the common law system, judges are not required to go beyond their statutes and apply fairness opinions. Civil law systems can be divided into three families: French, German, and Scandinavian.

La Portal et al. (1998) not only show that law and its enforcement vary across countries, but also that countries under common law legal regimes better protect firms' minority shareholders than countries with civil law. Independent of the level of per capita income, investors under civil laws have weaker legal rights than investors under common laws (La Portal et al.,1998).

Empirically, strong investor protection is associated with effective corporate governance (La Porta et al., 2000). The effectiveness is reflected in financial markets, dispersed ownership of shares, and efficient capital allocation across firms (La Porta et al., 2000). At the firm level, firms with stronger shareholders protection verify higher firm value and end up making fewer corporate acquisitions (Gompers et al., 2003).

Still, La Porta et al. (2000) draw attention to the fact that not just law enforcement is relevant to explain investor protection. It is also important to consider political and historical differences when analyzing a countries' law sistem.

Meanwhile, studies about M&A and corporate governance observe that differences in the legal environment between the two countries involved in the M&A have valuation consequences. The acquirer

and combined abnormal returns can be explained by the rule of law and the degree of shareholder rights protections for foreign acquirer firms. The better the protection of an acquiring firm's shareholder rights, the greater the gains for the acquirer and the value of combined firms (Kuipers et al., 2009).

Considering at the same time cross-border M&A, domestic M&A, and investor protection, Bris & Cabolis (2008) observe that when the foreign acquirer comes from a country with better investor protection, the merger premium of cross-border deals is bigger than in domestic acquisitions. Furthermore, the authors argue that cross-border mergers are an ideal setting to conduct an analysis of the valuation effects of changes in legal protection.

3. Hypotheses

This study applies to cross-border acquisitions scenario and its principal goal is to check the existence of a portability effect.

As previously explained in the literature review, there is a country governance gap between the acquirer and the target. Since the acquirer firm typically has better levels of corporate governance than the target, the cross-border acquisition creates synergy due to the target management's improvement. However, even though in most cases the corporate governance difference at the country-level between acquirer and target is positive, sometimes the target has higher levels of country-governance than the acquirer i.e., the difference is negative. In this case, instead of the acquirer gaining from the improved target management, it can benefit from its own improvements due to target influence.

Regardless of whether the governance gap is positive or negative, the final return of the acquirer is positive. But according to the literature, the stronger the rights of the acquirer shareholders in comparison to the target's, the higher the acquisition synergy. So, a positive relation between the synergy created and country governance distance is also expected

Considering the literature review, the following hypotheses are defined:

- H1: The relation between acquirer-target country governance gap and M&A synergy is positive.
- H2: The synergy created by M&A deals where the acquirer has better governance than the target is amplified by the acquirer being from a country with high corporate governance.

4. Methodology

4.1. Event Study

Assuming stock markets are informationally efficient, stock prices change to quickly reflect new information (Fama et al., 1969). MacKinlay (1997), based on the marketplace rationality claims that security price immediately reflects the effects of an event.

This study applies the methodology of an event study which is a technique of empirical financial research. Using financial market data, the event study measures the impact of a specific event on the firm's market value (MacKinlay, 1997). So, through this methodology, I can assess the impact of a cross-border acquisition the firm's stock price and measure its impact on shareholders' wealth.

The process starts by computing the daily discrete return (R_{it}) adjusted for dividends. For each firm *i* and each day *t*, the R_{it} is:

$$R_{it} = \frac{P_t - P_{t-1} + Div_t}{P_{t-1}},$$

where P_t represents the firm's stock price on day *t*, P_{t-1} is the firm's stock price before day *t*, and Div_t is distributed dividend on day t.

Then, the abnormal return (*AR*) is calculated as the difference between actual and predicted returns. Predicted returns are estimated by the market model with an additional factor that captures the world market index.

For each firm *i* in event window τ, the *AR* is:

$$AR_{i\tau} = R_{i\tau} - \hat{\alpha}_i - \hat{\beta}_{1_i} R_{m_c\tau} - \hat{\beta}_{2_i} R_{m_w\tau},$$

where $R_{i\tau}$ represents the realized stock return at day *t*, $\hat{\alpha}_i - \hat{\beta}_i R_{m_c\tau} - \hat{\beta}_i R_{m_w\tau}$ is the expected return if the event hadn't occurred, and τ is the day from the event window: 0 at the event day, -1 at the day before the event, +1 at the day after the event and so on.

Following Ellis et al. (2017), two indices are used as a proxy for market return: a proxy for the specific country market portfolio (R_{m_c}) and a proxy for the world market portfolio (R_{m_w}). Using a proxy for the world market portfolio avoids the acquirer's abnormal return to be pulled toward zero because of the firm's weight in the country market portfolio (Ellis et al., 2017). Market model parameters are estimated over the period from 255 days before the event to day 25 before the event.

The process finishes with the computation of the cumulative abnormal return (*CAR*) for each event. The *CAR* between τ_1 and τ_2 is obtained by:

$$CAR_{i(\tau_1,\tau_2)} = \sum_{\tau=\tau_1}^{\tau_2} AR_{i\tau},$$

where I use three different event windows: ± 1 ($\tau_1 = -1$ and $\tau_2 = +1$), ± 2 $\tau_1 = -2$ and $\tau_2 = +2$) and, ± 5 $\tau_1 = -5$ and $\tau_2 = +5$).

4.2. Regression model

Regressions for H1 with control variables:

$$CAR(\tau_1, \tau_2) = \alpha + \beta_1 dif\_governance + \beta_2 Leverage + \beta_3 Market - to - book + \beta_4 Relative\ Size + \beta_5 Firm\ Size + \beta_6 Diversification + \beta_7 Pure\ Cash + \varepsilon$$

Regressions for H2 with control variables:

$$CAR(\tau_1, \tau_2) = \alpha + \beta_1 dif\_governance + \beta_2 High\_governance + \beta_3 HighDif\_governance + \beta_4 Leverage + \beta_5 Market - to - book + \beta_6 Relative\ Size + \beta_7 Firm\ Size + \beta_8 Diversification + \beta_9 Pure\ Cash + \varepsilon$$

Regressions for H1 -Dummy approach- with control variables:

$$CAR(\tau_1, \tau_2) = \alpha + \beta_1 Ddif\_governance + \beta_2 Leverage + \beta_3 Market - to - book + \beta_4 Relative\ Size + \beta_5 Firm\ Size + \beta_6 Diversification + \beta_7 Pure\ Cash + \varepsilon$$

Regressions for H2 -Dummy approach- with control variables:

$$CAR(\tau_1, \tau_2) = \alpha + \beta_1 Ddif\_governance + \beta_2 High\_governance + \beta_3 DHighDif\_governance + \beta_4 Leverage + \beta_5 Market - to - book + \beta_6 Relative\ Size + \beta_7 Firm\ Size + \beta_8 Diversification + \beta_9 Pure\ Cash + \varepsilon$$

4.3. Variables

A resume table with all of the following variables is in Appendix 1.

4.3.1. Dependent variables

I am interested in studying not only the M&A impact on combined returns (i.e., acquisition synergy) but also on acquirers and targets separately because neither acquirer nor target can fully capture the value creation. So, I'm using 3 dependent variables: combined's cumulative abnormal returns (*CARC*), the acquirer's cumulative abnormal returns (*CARA*), and target's cumulative abnormal returns (*CART*). The combined's cumulative abnormal return is a weighted average of the acquirer's cumulative abnormal returns and, the target's cumulative abnormal returns. The weights are based on the acquirer's and target's market capitalizations on the sixth trading day before the initial announcement of the acquisition adjusted for the toe hold, following Wang & Xie (2009).

The cumulative abnormal returns are measured over 3 event windows: 3-day (-1,1) event window, 5-day (-2,2) event window and, 11-day (-5,5) event window to check if there are significant differences. The longest windows give enough time to take into account the announcement effect spread over several days thus, they allow to incorporate all the announcement information (Ellis et al., 2017).

4.3.2. Independent variables

The explanatory variable of interest is the country-level corporate governance difference (*dif_governance*) between the acquirer's and the target's countries. The corporate governance difference between the countries is computed as the index of the acquirer´s country minus the index of the target's country. In addition, I use a dummy approach instead of the gap (*Ddif_governance*).The dummy equals to 1 if the acquirer's corporate governance level is higher than the target, or 0 otherwise.

Although corporate governance could be evaluated through shareholder's rights protection and accounting standards, shareholder's rights do not change during the acquisitions, and they will apply to the combined company (Wang & Xie, 2009). For that reason, I focus on the corporate governance dimensions which are more related to shareholder protection.

For each firms' country, this study uses 3 indexes. These are: the mean of the three attributes selected from World Governance Indicators (*WGI*) such as government effectiveness, regulatory quality, and the rule of law; Anti-self-dealing index (*Antiselfdealing*) from Djankov et al. (2008); Revised Anti-director index (*Revisedantidirector*) from La Porta et al. (1998);

In addition, I introduce a variable (*HighDif_governance*) to capture the interaction between the corporate governance difference (*dif_governance*) and a dummy variable (*High_governance*) that equals 1 if the acquirer's index is higher than the median of acquirers' index of that year, or 0 otherwise. This allows to test hypothesis 2.

4.3.3. Control variables

Some control variables are added to the regressions, namely firm specific controls - acquirer size, leverage, and market-to-book – and deal-specific controls - method of payment, relative size of the target to the acquirer, and industry relatedness.

Regarding firm size, Moeller et al. (2004) show that smaller firms gain more when they announce acquisitions. The reverse happens only when the target firm is public and the acquisition is paid with equity (Moeller et al.,2004). Additionally, large firms face shareholder wealth losses when announcing acquisitions of public firms. These losses happen independently of how the acquisition is paid (Moeller et al.,2004). In addition, large firms offer higher levels of acquisition premiums than small firms and make acquisitions with negative synergy gains (Moeller et al.,2004). In this study firm size (*Firm Size(log)*) corresponds to the log of total assets[1] at the end of the year prior to the announcement date.

The two financial ratios used are leverage (*Leverage*) – calculated as total debt/total assets - and market-to-book (*Market-to-Book*) computed as market value equity/book value equity. The measures used in both ratios refer to the end of the year prior to the announcement date.

Regarding the method of payment, early studies such as Travlos (1987) conclude that stockholders of bidding firms suffer significant losses when a pure stock takeover is announced. In addition, other studies detect significantly higher abnormal returns in cash offers (Huang & Walkling, 1987; Andrade et al., 2001), while stock-financed mergers do not increase overall shareholder value while mergers financed with any stock get positive abnormal returns. More recently, Wang & Xie (2009), found that purely cash-financed acquisitions generate significantly higher synergy. To capture the method of payment influence, I include the dummy variable *Pure Cash* which is equal to 1 if the acquisition is purely cash financed or 0 otherwise.

Eckbo et al. (1990) stated that an acquisition of a relatively large target is likely to be a more important economic event for the acquirer than it is for a relatively small target. In the same way, Dutta & Kumar (2009) notice the relative size has a positive impact on cumulative abnormal returns. In the present study, the variable (*Relative Size*) is defined as the ratio between the value of the acquisition and the book value of acquirer assets.

Concerning industry relatedness, an acquisition is diversifying if the acquirer and target do not share a two-digit SIC industry. Some authors argue that diversification destroys shareholders' value (Berger & Ofek, 1995; Bruner, 2002; Flanagan & O' Shaughnessy, 2003) and consequently causes a lower synergy. But others argue that diversification does not necessarily lead to lower firm value and sometimes is associated with a higher firm value (Villalonga, 2004a; Villalonga, 2004b; Campa & Kedia,

[1] Adjusted for year's respective Consumer Price index

2002). Thus, the expected effect of diversification is not clear. Industry relatedness is captured by a dummy variable (*Diversification*) that equals 1 for diversifying acquisitions, i.e., different two-digit SIC code, and 0 otherwise

5. Data

The present study covers 15 years, from the beginning of 2009 until the end of 2015.

The data on M&A announcements were extracted from Securities Data Corporation's (SDC) according to the following criteria:

1. Both acquirer and target are public firms.
2. The acquisition is complete.
3. The deal value disclosed in SDC is more than $1 million following Moeller et. al (2004) and Wang & Xie (2009).
4. The acquirer firm acquires 100% of the target firm (Wang & Xie, 2009).
5. The acquirer controls less than 50% of the shares of the target prior to the announcement. This filter allows to ensure that the acquisitions in our sample result in changes in control (Wang & Xie, 2009)

The preliminary sample contained 5428 events and after removing the domestic events, I ended up with 1130 events. After excluding the events in which acquirers/targets are from countries without specific country market portfolio available, acquirers/targets without the necessary stock price data, and acquirers from countries involved in less than 10 acquisitions, the sample totalled 878 events.

Looking at Table1, we see that 2007 is the year with the highest frequency of events (10.25%) and 2013 the year with the lowest frequency (4.56%).

In Table 2 we notice that the United States, Canada, and the United Kingdom are the countries with more acquirers, representing 25.97%, 16.74%, and 12.64%, respectively. On the other hand, countries with fewer acquirers are Belgium, Finland, and India, each of them representing 1.14% of the sample.

Analyzing Table 3, we see that the United States, Canada, and the United Kingdom represent 38.15%, 21.18%, and 11.96% of the sample, respectively. Countries such as Austria, Brazil, Estonia, Greece, Luxembourg, Malta, Peru, Portugal, United Arab Emirates represent only 0.11% each of the sample.

Table 1: Frequency of events per year

The table shows the number of events per year after the last filter applied and cleaning.

year	*Frequency*	*Percentage*	*Cum. Percent.*
2005	67	7.63	7.63
2006	76	8.66	16.29
2007	90	10.25	26.54
2008	56	6.38	32.92
2009	49	5.58	38.50
2010	69	7.86	46.36
2011	43	4.90	51.25
2012	56	6.38	57.63
2013	40	4.56	62.19
2014	47	5.35	67.54
2015	65	7.40	74.94
2016	59	6.72	81.66
2017	62	7.06	88.72
2018	54	6.15	94.87
2019	45	5.13	100.00
Total	878	100.00	

Table 2: Acquirer country

The table shows the 20 different acquirers' countries after the last filter applied and cleaning.

Acquirer's country	*Frequency*	*Percentage*	*Cum. Percent.*
United States	228	25.97	25.97
Canada	147	16.74	42.71
United Kingdom	111	12.64	55.35
France	57	6.49	61.85
Japan	57	6.49	68.34
Australia	38	4.33	72.67
Switzerland	33	3.76	76.42
Netherlands	27	3.08	79.50
Sweden	27	3.08	82.57
Germany	26	2.96	85.54
Ireland	18	2.05	87.59
Spain	15	1.71	89.29
Hong Kong	14	1.59	90.89
Italy	14	1.59	92.48
Israel	13	1.48	93.96
South Africa	12	1.37	95.33
China	11	1.25	96.58
Belgium	10	1.14	97.72
Finland	10	1.14	98.86
India	10	1.14	100.00
Total	878	100.00	

Table 3: Target country

The table shows the 34 different targets' countries after the last filter applied and cleaning.

Target country	*Frequency.*	*Percentage*	*Cum. Percent.*
United States	335	38.15	38.15
Canada	186	21.18	59.34
United Kingdom	105	11.96	71.30
Australia	92	10.48	81.78
Israel	23	2.62	84.40
Netherlands	15	1.71	86.10
Sweden	14	1.59	87.70
South Africa	13	1.48	89.18
Norway	10	1.14	90.32
Belgium	9	1.03	91.34
France	8	0.91	92.26
Singapore	8	0.91	93.17
Ireland	7	0.80	93.96
China	5	0.57	94.53
New Zeland	5	0.57	95.10
Spain	5	0.57	95.67
Switzerland	5	0.57	96.24
Denmark	4	0.46	96.70
Finland	4	0.46	97.15
Hong Kong	4	0.46	97.61
Malaysia	4	0.46	98.06
Cyprus	2	0.23	98.29
Germany	2	0.23	98.52
Italy	2	0.23	98.75
Taiwan	2	0.23	98.97
Austria	1	0.11	99.09
Brazil	1	0.11	99.20
Estonia	1	0.11	99.32
Greece	1	0.11	99.43
Luxembourg	1	0.11	99.54
Malta	1	0.11	99.66
Peru	1	0.11	99.77
Portugal	1	0.11	99.89
United Arab Emirates	1	0.11	100.00
Total	878	100.00	

To compute the variable of interest, i.e., cumulative abnormal returns, I downloaded the daily stock total return index of both acquirers and targets from Refinitiv Datastream. From the same source, I downloaded the daily total return index of each specific country's market portfolio and for the world market portfolio.

In Table 4, we noticed that on average CARs are close to zero but positive in all event windows. As we expand the event window, the mean decreases and reaches approximately 0.04%. The standard deviation is higher as we raise the number of days of the event windows. Looking at the median, the value decreases as the event window is expanded.

If we look at Table 5, we see positive means for all event windows and the highest values for the biggest event windows. Standard deviations are also higher as the event window is increased and register the maximum of 0.34, approximately. Considering the median, it has increasing values as the event windows increase and the highest value equal to 22.62%.

The means of combined CARs for different event windows (Table 6) are slightly below 3% for the smallest event window and slightly above 3% for the longest event window. The standard deviation and the median increase as we move to larger event windows. Namely, standard deviation reaches the maximum of 0.09, approximately, and median 2.20%.

Table 4: Descriptive statistics Acquirers' CAR

The table shows the results for the acquirer through the event study methodology, considering the event windows (-1,1), (-2,2), and (-5,5).

	N	*mean*	*sd*	*median*
CARA(-1,1)	878	0.0010	0.0674	0.0008
CARA(-2,2)	878	0.0006	0.0758	0.0007
CARA(-5,5)	878	0.0004	0.0904	0.0001

Table 5: Descriptive statistics Targets' CAR

The table shows the results for the target through the event study methodology, considering the event windows (-1,1), (-2,2), and (-5,5).

	N	*mean*	*sd*	*median*
CART(-1,1)	878	0.2785	0.3166	0.2089
CART(-2,2)	878	0.2881	0.3303	0.2162
CART(-5,5)	878	0.2997	0.3404	0.2262

Table 6: Descriptive statistics Combined CAR

The table shows the combined results through the event study methodology, considering the event windows (-1,1), (-2,2), and (-5,5).

	N	*mean*	*sd*	*median*
CARC(-1,1)	673	0.0284	0.0684	0.0172
CARC(-2,2)	673	0.0297	0.0785	0.0192
CARC(-5,5)	673	0.0312	0.0903	0.0220

Comparing the results of Table 4, Table 5, and Table 6, we conclude that acquirers show the lowest mean gains and targets the highest mean returns, which is consistent with the literature. Regarding standard deviation, acquirers also have lower values than targets. The same happens with medians.

In Table 7, we notice that world governance indicators related to investor protection(*dif_WGI*) and Anti-self-dealing index (*dif_Antiselfdealing*) have a negative and very close to zero mean. So on average, acquirers have similar or slightly lower corporate governance levels than targets. The same applies to the median. Standard deviations are both lower than 1, namely around 0.46 for WGI, and 0.25 for Anti-self-dealing.

On the other hand, the Revised Anti-director index has a positive and close to zero means. It can be concluded that on average, acquirers have slightly greater levels of corporate governance than targets, i.e., better investor protection. The median equal to zero highlights the similar levels of corporate governance for both acquirers and targets. The standard deviation is approximately 1.21, showing some values discrepancy.

Table 7: Descriptive statistics corporate governance difference

The table shows statistics for the corporate governance difference, considering the 3 alternative indexes.

	N	*mean*	*sd*	*median*
dif_WGI	878	-0.0383	0.4632	-0.0250
dif_Antiselfdealing	873	-0.0670	0.2459	-0.0125
dif_Revisedantidirector	873	0.0538	1.2061	0.0000

Considering Table 8, acquirers are larger than targets. The means are equal to approximately 34.3 million USD and 2.7 million USD, for acquirers and targets respectively. Despite the mean values, the median of the firm size is approximately 4.1 million USD and 0.3 million USD for acquirers and targets, respectively. In addition, the standard deviation is higher for acquirers than for targets. The comments regarding firm size in the log form are the same as the previous thus, acquirers are bigger than targets.

On average, acquirers and targets are similarly levered since they show that 20.22% and 19.53% of their assets are financed through debt, respectively. Regarding the median, 17.81% of the acquirers' assets and 12.61% of targets' assets are debt-financed. As for values discrepancy, targets register the highest standard deviation which is equal to 0.23 approximately.

Looking at the Market-to-book ratio, the means are approximately 2.62 and 2.73 for acquirers and targets, respectively. The acquirers' and targets' mean values are identical and greater than 1. Thus, both acquirers and targets have their stock overvalued by the market. At the same time, medians are slightly higher for acquirers than targets, around 2.00 and 1.84, respectively. Next, the standard deviation is much higher for targets than acquirers, 5.94 and 2.29 respectively.

The mean relative size is equal to 53.33% and the median equal to 13.37%. The ratio below 100% shows that acquirers pay less for their targets than the value of their assets at the book value. However, the standard deviation higher than 1 shows a great discrepancy of values.

To finish this section let's analyze Table 9. Regarding diversification, 306 out of the 878 acquisitions are diversifying, which represents 34.85% of the events. As for the method of payment, 498 out of 878 of the acquisitions were paid 100% in cash, representing in this way 56.72% of the events.

Table 8: Descriptive statistics control variables (continuous)

The table shows statistics for the continuous control variables, sometimes for acquirers and targets, separately

	N	*mean*	*sd*	*median*
Firm Size_A	854	34,309,585.99	99,148,500.85	4,132,177.38
Firm Size_T	795	2,659,068.56	8,704,114.16	256,273.84
Firm Size(log)_A	854	14.96	2.64	15.23
Firm Size(log)_T	795	12.61	2.10	12.45
Leverage_A	853	0.2022	0.1721	0.1781
Leverage_T	788	0.1953	0.2319	0.1261
Market-to-Book_A	824	2.62	2.29	2.00
Market-to-Book_T	753	2.73	5.94	1.84
Relative Size	854	0.5333	1.2698	0.1337

Table 9: Descriptive statistics control variables (dummy)

The table shows statistics for the dummy control variables.

	Frequency		*Percentage*	
	0	1	0	1
Diversification	572	306	65.15	34.85
Pure Cash	380	498	43.28	56.72
Total	878	878	100.00	100.00

6. Empirical Results

6.1. Results for H1

The empirical tests for H1 show some evidence that acquirers do gain when acquiring targets from countries with poor corporate governance (Table 10). The corporate governance gap given by the WGI index is the only measure statistically significant and its impact on the acquirer gains is positive. For each additional unit of corporate governance difference, the acquirer return increases 1.53 p.p.. However, the corporate governance gap has no impact either on target returns or combined returns since there is no statistical significance in the results (Table 11, Table 12). So, the results do not clearly support H1.

Despite relative size not changing acquirer returns, it negatively affects the target returns and positively the combined returns. The bigger the acquisition value concerning acquirer book assets, the lower the target returns and the higher the combined returns. Target returns decrease by approximately 3.5 p.p. and the combined returns increase by around 0.7 p.p., with 99% and 90% of confidence, respectively.

Firm size has no effect on acquirer returns but, it affects negatively both target returns and combined returns with 99% and 95% of confidence. For each additional size unit of target size, its returns decrease by around 0.027 p.p.. For each additional unit of acquirer size, the combined returns decrease 0.004 p.p..

Regarding the method of payment, we notice that an acquisition paid 100% in cash enables the acquirer gains to increase by approximately 2 p.p.. The same happens for target returns, which increase on average 9.7 p.p., approximately. For both acquirer and target, the results are statistically significant with 99% of confidence. But for combined returns, the method of payment has no importance.

Leverage, market-to-book and diversification do not influence on acquirer, target, and combined results.

For acquirers, there is no intercept values with statistical significance which means they neither gain nor lose in cross-border acquisitions. On the other hand, intercept values in target regressions are positive and statistically significant at 90% of confidence. So, targets do gain in acquisitions. In combined returns regressions, the intercept values are all positive and statistically significant with 99% of confidence. Therefore, synergy exists in cross-border acquisitions even if it is not explained by corporate governance gap.

Table 10: Regressions of acquirer CARs

The table shows regression estimates of the acquirer CARs, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CARA(-2,2)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H1 considering event window (-1,1) and event window (-5,5) are in Table 22 and Table 25 of the Appendix 2, respectively.

VARIABLES	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*
dif_WGI	0.0131*			0.0153**		
	(1.86)			(2.22)		
dif_Antiselfdealing		0.0065			0.0067	
		(0.64)			(0.65)	
dif_Revisedantidirector			-0.0003			-0.0007
			(-0.13)			(-0.31)
Leverage_A				0.0244	0.0171	0.0167
				(1.30)	(0.92)	(0.90)
Market-to-Book_A				0.0017	0.0015	0.0017
				(1.02)	(0.88)	(0.98)
Relative Size				0.0046	0.0054	0.0054
				(0.94)	(1.09)	(1.08)
Firm Size(log)_A				-0.0014	-0.0010	-0.0010
				(-0.85)	(-0.60)	(-0.61)
Diversification				0.0059	0.0059	0.0056
				(0.99)	(0.98)	(0.91)
Pure Cash				0.0218***	0.0210***	0.0209***
				(3.36)	(3.18)	(3.19)
Constant	-0.0027	-0.0029	-0.0026	-0.0102	-0.0148	-0.0142
	(-0.04)	(-0.04)	(-0.04)	(-0.14)	(-0.21)	(-0.20)
Observations	878	873	873	824	819	819
R-squared	0.110	0.103	0.103	0.131	0.121	0.121

Table 11: Regression of target CARs

The table shows regression estimates of the target CARs,, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CART(-2,2)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H1 considering event window (-1,1) and event window (-5,5) are in Table 23 and Table 26 of the Appendix 2, respectively.

VARIABLES	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*
dif_WGI	-0.0183			-0.0061		
	(-0.74)			(-0.26)		
dif_Antiselfdealing		0.0435			0.0468	
		(0.96)			(1.01)	
dif_Revisedantidirector			0.0145			0.0043
			(1.47)			(0.44)
Leverage_T				0.0131	0.0145	0.0156
				(0.23)	(0.24)	(0.26)
Market-to-Book_T				0.0019	0.0019	0.0018
				(0.84)	(0.85)	(0.81)
Relative Size				-0.0346***	-0.0353***	-0.0351***
				(-3.72)	(-3.86)	(-3.80)
Firm Size(log)_T				-0.0270***	-0.0267***	-0.0273***
				(-4.25)	(-4.16)	(-4.26)
Diversification				-0.0117	-0.0110	-0.0114
				(-0.46)	(-0.43)	(-0.44)
Pure Cash				0.0974***	0.0975***	0.0948***
				(3.91)	(3.82)	(3.84)
Constant	0.0341	0.0452	0.0449	0.3644*	0.3709*	0.3738*
	(0.20)	(0.28)	(0.27)	(1.80)	(1.87)	(1.86)
Observations	878	873	873	725	721	721
R-squared	0.128	0.128	0.130	0.198	0.199	0.198

Table 12: Regressions of combined CARs

The table shows regression estimates of the combined CARs, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CARC(-2,2)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H1 considering event window (-1,1) and event window (-5,5) are in Table 24 and Table 27 of the Appendix 2, respectively.

VARIABLES	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*
dif_WGI	0.0119			0.0100		
	(1.60)			(1.35)		
dif_Antiselfdealing		-0.0043			-0.0031	
		(-0.33)			(-0.25)	
dif_Revisedantidirector			-0.0003			-0.0003
			(-0.11)			(-0.11)
Leverage_A				0.0320	0.0272	0.0270
				(1.48)	(1.27)	(1.24)
Market-to-Book_A				-0.0009	-0.0009	-0.0010
				(-0.55)	(-0.56)	(-0.59)
Relative Size				0.0069*	0.0072*	0.0073*
				(1.73)	(1.81)	(1.82)
Firm Size(log)_A				-0.0043**	-0.0043**	-0.0043**
				(-2.16)	(-2.16)	(-2.13)
Diversification				0.0084	0.0084	0.0084
				(1.14)	(1.13)	(1.13)
PureCash				0.0116	0.0109	0.0110
				(1.52)	(1.42)	(1.44)
Constant	0.0773***	0.0775***	0.0777***	0.1146***	0.1157***	0.1155***
	(2.67)	(2.67)	(2.69)	(2.78)	(2.79)	(2.79)
Observations	673	669	669	628	624	624
R-squared	0.131	0.126	0.125	0.160	0.156	0.156

Alternatively, H1 was tested using a dummy approach and the results are in Table 13, Table 14, and Table 15.

Table 14 illustrates target returns benefit when the targets are from countries with poor corporate governance according to the Anti-self-dealing index. For each additional unit of corporate governance gap, target returns increase approximately 5 p.p. with 95% of confidence. But the corporate governance gap has no impact either on acquirer returns or combined returns since there is no statistical significance in the results (Table 13, Table 15). Thus, none of the approaches clearly supports H1.

Regarding control variables, the dummy approach shows that relative size causes a decrease of around 3.5 p.p. on target returns with 99% of confidence. On the other hand, relative size increases combined returns by less than 1 p.p. (90% of confidence) and does not affect acquirer returns. Firm size negatively affects target returns and combined returns. Each additional unit of target size reduces target returns by approximately 2.7 p.p. (99% of confidence), and each additional unit of acquirer size reduces combined returns by less than 1 p.p. (95% of confidence). Acquirer returns are not affected by firm size. As for the method of payment, pure cash acquisitions increase acquirer returns by approximately 2.1 p.p. and 10 p.p. of target returns, both with 99% of confidence. However, the method of payment does not affect combined returns.

Table 13: Regressions of acquirer CARs - Dummy approach

The table shows regression estimates of the acquirer CARs – dummy approach -, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CARA(-2,2)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H1 considering event window (-1,1) and event window (-5,5) are in Table 28 and Table 31 of the Appendix 3, respectively.

VARIABLES	*CARA(-2,2)*	*CARA(-2,2)*	*CAR(-2,2)*	*CAR(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*
Ddif_WGI	0.0040			0.0051		
	(0.72)			(0.93)		
Ddif_Antiselfdealing		0.0063			0.0084	
		(1.10)			(1.43)	
Ddif_Revisedantidirector			0.0000			-0.0030
			(0.00)			(-0.54)
Leverage_A				0.0196	0.0170	0.0167
				(1.05)	(0.92)	(0.90)
Market-to-Book_A				0.0016	0.0016	0.0017
				(0.96)	(0.90)	(0.99)
Relative Size				0.0052	0.0056	0.0054
				(1.06)	(1.13)	(1.09)
Firm Size(log)_A				-0.0012	-0.0010	-0.0011
				(-0.69)	(-0.60)	(-0.63)
Diversification				0.0060	0.0060	0.0056
				(0.99)	(1.01)	(0.93)
Pure Cash				0.0210***	0.0212***	0.0211***
				(3.22)	(3.27)	(3.25)
Constant	-0.0069	-0.0065	-0.0029	-0.0187	-0.0202	-0.0131
	(-0.10)	(-0.09)	(-0.04)	(-0.26)	(-0.29)	(-0.18)
Observations	878	878	878	824	824	824
R-squared	0.105	0.106	0.104	0.124	0.126	0.123

Table 14: Regression of target CARs - Dummy approach

The table shows regression estimates of the target CARs – dummy approach -, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CART(-2,2)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H1 considering event window (-1,1) and event window (-5,5) are in Table 29 and Table 32 of the Appendix 3, respectively.

VARIABLES	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*
Ddif_WGI	-0.0233			-0.0212		
	(-0.96)			(-0.90)		
Ddif_Antiselfdealing		0.0456*			0.0501**	
		(1.92)			(2.04)	
Ddif_Revisedantidirector			0.0140			-0.0086
			(0.58)			(-0.36)
Leverage_T				0.0130	0.0075	0.0153
				(0.22)	(0.13)	(0.26)
Market-to-Book_T				0.0019	0.0021	0.0019
				(0.83)	(0.97)	(0.87)
Relative Size				-0.0345***	-0.0343***	-0.0349***
				(-3.76)	(-3.84)	(-3.78)
Firm Size(log)_T				-0.0270***	-0.0260***	-0.0269***
				(-4.27)	(-4.11)	(-4.25)
Diversification				-0.0122	-0.0092	-0.0123
				(-0.48)	(-0.36)	(-0.48)
Pure Cash				0.0975***	0.1006***	0.0984***
				(3.91)	(4.01)	(4.02)
Constant	0.0567	0.0291	0.0354	0.3868*	0.3388*	0.3607*
	(0.34)	(0.18)	(0.21)	(1.92)	(1.69)	(1.79)
Observations	878	878	878	725	725	725
R-squared	0.128	0.131	0.128	0.199	0.203	0.198

Table 15: Regressions of combined CARs - Dummy approach

The table shows regression estimates of the combined CARs – dummy approach -, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CARC(-2,2)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H1 considering event window (-1,1) and event window (-5,5) are in Table 30 and Table 33 of the Appendix 3, respectively.

VARIABLES	*CARC(-2,2)*	*CARC(-2,2)*	*CAR(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*
Ddif_WGI	-0.0006			-0.0019		
	(-0.10)			(-0.30)		
Ddif_Antiselfdealing		0.0003			0.0027	
		(0.05)			(0.39)	
Ddif_Revisedantidirector			0.0000			-0.0008
			(0.00)			(-0.12)
Leverage_A				0.0261	0.0268	0.0270
				(1.20)	(1.25)	(1.25)
Market-to-Book_A				-0.0009	-0.0010	-0.0009
				(-0.57)	(-0.58)	(-0.58)
Relative Size				0.0074*	0.0074*	0.0074*
				(1.85)	(1.86)	(1.84)
Firm Size(log)_A				-0.0042**	-0.0041**	-0.0042**
				(-2.11)	(-2.07)	(-2.08)
Diversification				0.0084	0.0085	0.0084
				(1.14)	(1.15)	(1.14)
Pure Cash				0.0107	0.0108	0.0109
				(1.40)	(1.43)	(1.43)
Constant	0.0781***	0.0772***	0.0774***	0.1158***	0.1115***	0.1139***
	(2.64)	(2.67)	(2.68)	(2.84)	(2.69)	(2.77)
Observations	673	673	673	628	628	628
R-squared	0.127	0.127	0.127	0.157	0.157	0.157

6.2. Results for H2

H2 aims to analyze if the effect of the corporate governance gap on the synergy created is moderated by the acquirer's corporate governance level. The regression estimates to test H2 are in Table 16, Table 17, and Table 18.

When the acquirer has better corporate governance than the median of the other acquirers in the acquisition year, the positive effect of the governance difference on the acquirer's cumulative abnormal returns is increased by approximately 6.6 p.p.. Despite the isolated effect of the acquirer with higher corporate governance than the median having a negative impact on its returns, the positive effect of the interaction variable has 99% of confidence when the WGI index is used. In addition, we detect a negative interaction effect when the Revised Anti-Director index is used with 90% of confidence however, there is no effect detected regarding the acquirer being superior to the median of acquirers for the acquisition year. For targets, the interaction effect reduces its cumulative abnormal returns by approximately 17.6 p.p.. The influence has 95% of confidence although there is no isolated effect due to the acquirer's corporate governance being higher than the median of acquirers at the acquisition year. Concerning combined cumulative abnormal returns, the interaction effect has no impact on it since there are no statistically significant values. The same happens with the isolated effect of having an acquirer with a greater corporate governance level than the median at the acquisition year. Thus, the results do not clearly support H2.

As in H1, leverage, market-to-book, and diversification do not have an effect on cumulative abnormal returns.

Relative size has a negative impact on target returns. Each additional unit reduces returns by approximately 3.5 p.p., with 99% of confidence. On the other hand, relative size increases combined returns by less than 1 p.p. with 90% of confidence and it has no impact on acquirer returns. Target firm size decreases target cumulative abnormal returns by around 2.7 p.p. with 99% of confidence. Acquirer firm size decreases combined cumulative abnormal returns by less than 1 p.p. with 95% of confidence and does not impact acquirer returns. Pure cash acquisitions improve both acquirer and target returns by approximately 2 p.p. and 10 p.p., respectively, with 99% of confidence. The method of payment has no effect on combined cumulative abnormal returns.

Table 16: Regressions of acquirer CARs

The table shows regression estimates of the acquirer CARs, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CARA(-2,2)*, *Leverage_A*, *Market-to-book_A*, *Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H2 considering event window (-1,1) and event window (-5,5) are in Table 34 and Table 37 of the Appendix 4, respectively.

VARIABLES	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*
dif_WGI	0.0043			0.0069		
	(0.64)			(1.02)		
High_WGI	-0.0189***			-0.0179***		
	(-2.81)			(-2.59)		
HighDif_WGI	0.0665***			0.0661***		
	(3.50)			(3.57)		
dif_Antiselfdealing		0.0162			0.0153	
		(0.99)			(0.98)	
High_Antiselfdealing		0.0000			0.0029	
		(0.00)			(0.34)	
HighDif_Antiselfdealing		-0.0201			-0.0241	
		(-1.08)			(-1.34)	
dif_Revisedantidirector			0.0019			0.0023
			(0.55)			(0.69)
High_Revisedantidirector			-0.0006			-0.0006
			(-0.08)			(-0.08)
HighDif_Revisedantidirector			-0.0063			-0.0092*
			(-1.29)			(-1.87)
Leverage_A				0.0251	0.0189	0.0190
				(1.36)	(1.01)	(1.01)
Market-to-Book_A				0.0017	0.0015	0.0018
				(1.07)	(0.86)	(1.05)
Relative Size				0.0031	0.0055	0.0053
				(0.66)	(1.10)	(1.08)
Firm Size(log)_A				-0.0018	-0.0011	-0.0011
				(-1.06)	(-0.62)	(-0.67)
Diversification				0.0051	0.0061	0.0057
				(0.89)	(1.00)	(0.94)
PureCash				0.0233***	0.0212***	0.0213***
				(3.58)	(3.22)	(3.25)
Constant	0.0073	-0.0011	-0.0004	0.0053	-0.0129	-0.0109
	(0.09)	(-0.02)	(-0.01)	(0.07)	(-0.18)	(-0.15)
Observations	878	873	873	824	819	819
R-squared	0.134	0.104	0.104	0.155	0.123	0.125

Table 17: Regressions of target CARs

The table shows regression estimates of target CARs, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CART(-2,2)*, *Leverage_T Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H2 considering event window (-1,1) and event window (-5,5) are in Table 35 and Table 38 of the Appendix 4, respectively.

VARIABLES	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*
dif_WGI	-0.0402			-0.0167		
	(-1.51)			(-0.59)		
High_WGI	0.0185			0.0117		
	(0.64)			(0.42)		
HighDif_WGI	0.0490			0.0178		
	(0.58)			(0.30)		
dif_Antiselfdealing		0.1255*			0.1548**	
		(1.88)			(2.31)	
High_Antiselfdealing		-0.0300			-0.0267	
		(-1.05)			(-0.92)	
HighDif_Antiselfdealing		-0.1034			-0.1755**	
		(-1.21)			(-2.01)	
dif_Revisedantidirector			0.0088			0.0094
			(0.64)			(0.72)
High_Revisedantidirector			-0.0059			-0.0325
			(-0.19)			(-1.14)
HighDif_Revisedantidirector			0.0222			0.0081
			(1.00)			(0.35)
Leverage_T				0.0124	0.0166	0.0162
				(0.21)	(0.28)	(0.27)
Market-to-Book_T				0.0018	0.0019	0.0017
				(0.83)	(0.87)	(0.77)
Relative Size				-0.0347***	-0.0351***	-0.0355***
				(-3.69)	(-3.76)	(-3.85)
Firm Size(log)_T				-0.0268***	-0.0275***	-0.0270***
				(-4.23)	(-4.24)	(-4.23)
Diversification				-0.0108	-0.0106	-0.0119
				(-0.42)	(-0.41)	(-0.46)
PureCash				0.0965***	0.0983***	0.0945***
				(3.81)	(3.89)	(3.80)
Constant	0.0095	0.0445	0.0513	0.3470*	0.3740*	0.3809*
	(0.05)	(0.27)	(0.32)	(1.70)	(1.85)	(1.92)
Observations	878	873	873	725	721	721
R-squared	0.129	0.131	0.131	0.198	0.206	0.200

Table 18: Regressions of combined CARs

The table shows regression estimates of the combined CARs, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CARC(-2,2)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H2 considering event window (-1,1) and event window (-5,5) are in Table 36 and Table 39 of the Appendix 4, respectively.

VARIABLES	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*
dif_WGI	0.0108			0.0126		
	(1.16)			(1.36)		
High_WGI	-0.0121			-0.0137		
	(-1.44)			(-1.62)		
HighDif_WGI	0.0240			0.0141		
	(1.10)			(0.61)		
dif_Antiselfdealing		-0.0114			-0.0120	
		(-0.56)			(-0.61)	
High_Antiselfdealing		0.0025			0.0057	
		(0.28)			(0.61)	
HighDif_Antiselfdealing		0.0096			0.0068	
		(0.41)			(0.31)	
dif_Revisedantidirector			0.0015			0.0018
			(0.36)			(0.44)
High_Revisedantidirector			-0.0002			0.0012
			(-0.02)			(0.13)
HighDif_Revisedantidirector			-0.0055			-0.0075
			(-0.93)			(-1.33)
Leverage_A				0.0316	0.0264	0.0286
				(1.47)	(1.22)	(1.31)
Market-to-Book_A				-0.0010	-0.0010	-0.0009
				(-0.57)	(-0.58)	(-0.57)
Relative Size				0.0064	0.0074*	0.0072*
				(1.62)	(1.85)	(1.82)
Firm Size(log)_A				-0.0045**	-0.0042**	-0.0043**
				(-2.29)	(-2.07)	(-2.12)
Diversification				0.0079	0.0084	0.0085
				(1.08)	(1.13)	(1.15)
Pure Cash				0.0121	0.0107	0.0111
				(1.59)	(1.39)	(1.44)
Constant	0.0840***	0.0769***	0.0793***	0.1280***	0.1134***	0.1170***
	(2.64)	(2.60)	(2.68)	(2.99)	(2.67)	(2.77)
Observations	673	669	669	628	624	624
R-squared	0.136	0.126	0.127	0.165	0.156	0.158

As with H1, H2 was tested using a dummy approach. The results are in Table 19, Table 20, and Table 21.

For acquirers, there is no statistical significance regarding the variable that reflects the interaction effect between the presence of an acquirer with better corporate governance than the median and the difference of corporate governance. Also, the isolated effect of having an acquirer with a higher corporate governance level than the median in the acquisition year is not detected. In the target's regressions using WGI index, statistical significance is found regarding the interaction effect variable. Each additional unit of difference, it causes an increase of the target returns by 14.3 p.p. with 99% of confidence. Nevertheless, there is no isolated effect of having an acquirer with a higher corporate governance level. Regarding interaction effect on combined cumulative abnormal returns, results show no effect. In sum, the results with the dummy approach do not clearly support H2.

Leverage, market-to-book, and diversification do not show influence on cumulative abnormal returns.

The relative size and firm size have no influence on acquirers returns but they do have on targets returns and combined returns. Targets' returns decrease around 3.4 p.p. with each additional unit of relative size and 2.7 p.p. with each additional unit of target size, both with 99% of confidence. Combined returns increase less than 1 p.p. with each additional unit of relative size (90% of confidence) and decrease less than 1 p.p. with each additional unit of acquirer size (95% of confidence).

Pure Cash is the unique control variable affecting acquirer returns. If the acquisition is 100% financed with cash, acquirer returns increase approximately 2.1 p.p., with 99% of confidence. The variable also increases target returns namely, it cause an increase of approximately 10 p.p., with 99% of confidence. On the other hand, pure cash acquisitions neither causes an increase nor a decrease in combined returns.

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Table 19: Regressions of acquirer CARs - Dummy approach

The table shows regression estimates of the acquirer CARs – dummy approach -, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CARA(-2,2)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H2 considering event window (-1,1) and event window (-5,5) are in Table 40 and Table 43 of the Appendix 5, respectively.

VARIABLES	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*	*CARA(-2,2)*
Ddif_WGI	0.0081			0.0078		
	(0.97)			(0.93)		
High_WGI	-0.0169			-0.0144		
	(-1.23)			(-1.01)		
DHighDif_WGI	0.0088			0.0089		
	(0.55)			(0.54)		
Ddif_Antiselfdealing		0.0168*			0.0157	
		(1.68)			(1.58)	
High_Antiselfdealing		0.0088			0.0053	
		(0.75)			(0.45)	
DHighDif_Antiselfdealing		-0.0221			-0.0149	
		(-1.37)			(-0.92)	
Ddif_Revisedantidirector			0.0013			-0.0018
			(0.18)			(-0.24)
High_Revisedantidirector			0.0022			0.0040
			(0.18)			(0.33)
DHighDif_Revisedantidirector			-0.0040			-0.0052
			(-0.27)			(-0.35)
Leverage_A				0.0202	0.0163	0.0176
				(1.09)	(0.88)	(0.95)
Market-to-Book_A				0.0016	0.0016	0.0017
				(0.95)	(0.93)	(0.99)
Relative Size				0.0051	0.0055	0.0054
				(1.04)	(1.11)	(1.09)
Firm Size(log)_A				-0.0013	-0.0010	-0.0010
				(-0.77)	(-0.59)	(-0.61)
Diversification				0.0057	0.0059	0.0057
				(0.95)	(0.98)	(0.94)
Pure Cash				0.0217***	0.0214***	0.0212***
				(3.32)	(3.29)	(3.25)
Constant	-0.0051	-0.0106	-0.0032	-0.0146	-0.0232	-0.0140
	(-0.07)	(-0.16)	(-0.05)	(-0.20)	(-0.35)	(-0.19)
Observations	878	878	878	824	824	824
R-squared	0.108	0.109	0.104	0.126	0.127	0.124

Table 20: Regressions of target CARs - Dummy approach

The table shows regressions estimates of the target CARs – dummy approach -, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CART(-2,2)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H2 considering event window (-1,1) and event window (-5,5) are in Table 41 and Table 44 of the Appendix 5, respectively.

VARIABLES	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*	*CART(-2,2)*
Ddif_WGI	-0.1137***			-0.0953***		
	(-3.34)			(-2.82)		
High_WGI	-0.0494			-0.0509		
	(-1.16)			(-1.24)		
DHighDif_WGI	0.1609***			0.1427***		
	(3.00)			(2.72)		
Ddif_Antiselfdealing		0.0673*			0.0878**	
		(1.67)			(2.27)	
High_Antiselfdealing		-0.0790**			-0.0613	
		(-2.13)			(-1.53)	
DHighDif_Antiselfdealing		0.0330			-0.0042	
		(0.58)			(-0.07)	
Ddif_Revisedantidirector			0.0104			0.0097
			(0.33)			(0.33)
High_Revisedantidirector			0.0199			0.0161
			(0.42)			(0.37)
DHighDif_Revisedantidirector			-0.0089			-0.0452
			(-0.15)			(-0.82)
Leverage_T				0.0124	0.0072	0.0153
				(0.21)	(0.12)	(0.26)
Market-to-Book_T				0.0017	0.0022	0.0019
				(0.75)	(0.98)	(0.87)
Relative Size				-0.0336***	-0.0341***	-0.0355***
				(-3.58)	(-3.67)	(-3.78)
Firm Size(log)_T				-0.0271***	-0.0266***	-0.0270***
				(-4.23)	(-4.18)	(-4.27)
Diversification				-0.0121	-0.0132	-0.0120
				(-0.47)	(-0.52)	(-0.47)
Pure Cash				0.0973***	0.1006***	0.0994***
				(3.87)	(4.02)	(4.07)
Constant	0.0361	0.0256	0.0344	0.3706*	0.3489*	0.3651*
	(0.21)	(0.16)	(0.20)	(1.80)	(1.77)	(1.80)
Observations	878	878	878	725	725	725
R-squared	0.138	0.136	0.128	0.208	0.209	0.199

Table 21: Regressions of combined CARs - Dummy approach

The table shows regression estimates of the combined CARs – dummy approach -, considering the event window (-2,2). All the regressions include control of year and industry fixed effects. *CARC(-2,2)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively. Results for H2 considering event window (-1,1) and event window (-5,5) are in Table 42 and Table 45 of the Appendix 5, respectively.

VARIABLES	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*	*CARC(-2,2)*
Ddif_WGI	0.0079			0.0101		
	(0.73)			(0.93)		
High_WGI	0.0064			0.0066		
	(0.38)			(0.37)		
DHighDif_WGI	-0.0167			-0.0216		
	(-0.83)			(-1.04)		
Ddif_Antiselfdealing		0.0069			0.0060	
		(0.65)			(0.55)	
High_Antiselfdealing		0.0105			0.0085	
		(0.82)			(0.65)	
DHighDif_Antiselfdealing		-0.0179			-0.0116	
		(-1.03)			(-0.66)	
Ddif_Revisedantidirector			0.0028			0.0006
			(0.29)			(0.06)
High_Revisedantidirector			0.0036			0.0043
			(0.27)			(0.32)
DHighDif_Revisedantidirector			-0.0074			-0.0056
			(-0.45)			(-0.34)
Leverage_A				0.0262	0.0263	0.0283
				(1.20)	(1.22)	(1.29)
Market-to-Book_A				-0.0010	-0.0010	-0.0009
				(-0.62)	(-0.59)	(-0.57)
Relative Size				0.0075*	0.0074*	0.0073*
				(1.90)	(1.85)	(1.83)
Firm Size(log)_A				-0.0042**	-0.0041**	-0.0041**
				(-2.14)	(-2.03)	(-2.05)
Diversification				0.0082	0.0085	0.0085
				(1.12)	(1.16)	(1.15)
Pure Cash				0.0109	0.0108	0.0108
				(1.43)	(1.43)	(1.42)
Constant	0.0768**	0.0744***	0.0765***	0.1145***	0.1094***	0.1126***
	(2.41)	(2.76)	(2.73)	(2.69)	(2.65)	(2.76)
Observations	673	673	673	628	628	628
R-squared	0.128	0.128	0.127	0.160	0.158	0.157

7. Conclusion

Worldwide, firms develop strategic plans that involve engaging in M&A activities. However, there is a huge question in both the business and the academic world regarding the benefits of the activity, especially for acquiring firms.

This study applies specifically to cross-border M&A and discusses the gains for the acquirer, the target, and the combined firm that results from the activity. Additionally, it tries to explain the results through specific cross-border M&As' features such as the corporate level differences between the acquirer and the target. Since there are multiple measures of corporate governance, 3 indexes were chosen considering their relevance in the existing literature. Thus, the analysis incorporates world governance indicators indexes, the Anti-self-dealing index (Djankov et al., 2008), and the Revised Anti-director index (La Porta et al., 1998).

Furthermore, this work considers M&A features at the deal level - the method of payment, industry relatedness, and relative size of the acquirer and the target – and at the firm-level - leverage, market-to-book ratio, and firm size.

Although the results do not strongly support the hypothesis tested, there is some evidence in accordance with the literature about the portability effect. Acquirers benefit from corporate governance gap as the results with WGI index show. Per each additional unit of corporate governance gap, acquirer returns increase by approximately 1.5 p.p.. Targets also gain approximately more 5 p.p. per each additional gap unit when corporate governance is measured through the Anti-self-dealing index. Therefore, we detect some evidence of a positive relation between acquirer-target country governance gap and M&A shareholder gains, which confirms H1.

Concerning the amplification effect of the acquirer with better corporate governance gap than the target on synergy (H2), results do not allow to strongly confirm the hypothesis raised. However, acquirers take advantage of the interaction effect between the acquirer with higher corporate governance that the target and the corporate governance gap. The regressions using WGI index, show a positive effect on acquirer returns of approximately 6.6 p.p. For targets, the interaction effect is not clear since the interaction effect causes a decrease of target returns but it causes a decrease according to the dummy approach. So, there is some evidence that the synergy created by M&A activity is amplified by the interaction effect of the acquirer having high level of corporate governance.

Despite the results, the present study has some limitations. The download of M&A announcements from SDC excluded non-public firms and deal values lower than $1 million. So, the

analysis does not consider a high number of frequent acquisitions, which undermines the representativeness of the study. The lack of available data used as control variables in the regressions also decreased the sample. In addition, since the explanatory variable of interest is the corporate governance index, which is not directly measurable, its values cannot be highly objective.

For future research, it would be relevant to include more observations in the sample. Another suggestion is to add more control variables that impact cross-border acquisitions in order to improve the regression's goodness fit.

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Appendix

Appendix 1: Variables definition

Variable	*Definition*
CARA(-1,1)	3-day acquirer cumulative abnormal return (in percentage) calculated using the market model. The market model parameters are estimated using the return data for the period (−255, −25).
CARA(-2,2)	5-day acquirer cumulative abnormal return (in percentage) calculated using the market model. The market model parameters are estimated using the return data for the period (−255, −25).
CARA(-5,5)	11-day acquirer cumulative abnormal return (in percentage) calculated using the market model. The market model parameters are estimated using the return data for the period (−255, −25).
CART(-1,1)	3-day target cumulative abnormal return (in percentage) calculated using the market model. The market model parameters are estimated using the return data for the period (−255, −25).
CART(-2,2)	5-day target cumulative abnormal return (in percentage) calculated using the market model. The market model parameters are estimated using the return data for the period (−255, −25).
CART(-5,5)	11-day target cumulative abnormal return (in percentage) calculated using the market model. The market model parameters are estimated using the return data for the period (−255, −25).
CARC(-1,1)	3-day combined cumulative abnormal return (in percentage, calculated as a weighted average of CARA and CART. The weights correspond to the acquirer and target equity market value at the sixth trading day prior to the announcement. The target's weight is adjusted for the acquirer's toehold.
CARC(-2,2)	5-day combined cumulative abnormal return (in percentage, calculated as a weighted average of CARA and CART. The weights correspond to the acquirer and target equity market value at the sixth trading day prior to the announcement. The target's weight is adjusted for the acquirer's toehold.
CARC(-5,5)	11-day combined cumulative abnormal return (in percentage, calculated as a weighted average of CARA and CART. The weights correspond to the acquirer and target equity market value at the sixth trading day prior to the announcement. The target's weight is adjusted for the acquirer's toehold.
WGI	Taken from World Governance Indicators. Simple mean of 3 attributes: government effectiveness, regulatory quality, and rule of law.
Anti-self-dealing	Taken from Djankov et al. (2008).
Revised anti-director	Taken from La Porta et al. (1998).
dif_WGI	Difference between acquirer's country WGI and target's country WGI.
dif_Antiselfdealing	Difference between acquirer's country anti-self-dealing index and target's country anti-self-dealing index.
dif_Revisedantidirector	Difference between acquirer's country revised anti-director index and target's country revised anti-director index.
Ddif_WGI	Dummy variable: 1 if the difference of WGI is positive, 0 otherwise.
Ddif_Antiselfdealing	Dummy variable: 1 if the difference of anti-self-dealing is positive, 0 otherwise.
Ddif_Revisedantidirector	Dummy variable: 1 if the difference of revised anti-director is positive, 0 otherwise.
High_WGI	Dummy variable: 1 if the acquirer's country WGI is higher than other acquirers' median at the acquisition year, 0 otherwise.
High_Antiselfdealing	Dummy variable: 1 if the acquirer's country anti-self-dealing is higher than other acquirers' median at the acquisition year, 0 otherwise.

High_Revisedantidirector	Dummy variable: 1 if the acquirer's country revised anti-director is higher than other acquirers' median at the acquisition year, 0 otherwise.
HighDif_WGI	The product of High_WGI and dif_WGI
HighDif_Antiselfdealing	The product of High_Antiselfdealing and dif_Antiselfdealing
HighDif_Revisedantidirector	The product of High_Revisedantidirector and dif_Revisedantidirector
DHighDif_WGI	The product of High_WGI and Ddif_WGI
DHighDif_Antiselfdealing	The product of High_Antiselfdealing and Ddif_Antiselfdealing
DHighDif_Revisedantidirector	The product of High_Revisedantidirector and Ddif_Revisedantidirector
Leverage_A	The quotient of acquirer's total debt and acquirer's total assets
Leverage_T	The quotient of target's total debt and target's total assets
Market-to-Book_A	The quotient of acquirer's equity market value and acquirer's equity book value
Market-to-Book_T	The quotient of target's equity market value and target's equity book value
Relative Size	The quotient of acquisition value and acquirer's total assets
Firm Size(log)_A	The logarithm of acquirer's total assets
Firm Size(log)_T	The logarithm of target's total assets
Diversification	Dummy variable: 1 if the acquirer and target are from different industries i.e., have the two digit SIC code different, 0 otherwise.
Pure Cash	Dummy variable: 1 if the acquisition is 100% paid with cash, 0 otherwise.

Appendix 2: Results for H1 using event windows (-1,1) and (-5,5)

Table 22: Regressions of acquirer CARs

The table shows regression estimates of the acquirer CARs, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CARA(-1,1)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*
dif_WGI	0.0084			0.0096		
	(1.27)			(1.50)		
dif_Antiselfdealing		0.0111			0.0098	
		(1.20)			(1.02)	
dif_Revisedantidirector			0.0012			0.0011
			(0.59)			(0.54)
Leverage_A				0.0378**	0.0337**	0.0348**
				(2.26)	(2.03)	(2.09)
Market-to-Book_A				0.0016	0.0014	0.0016
				(1.14)	(0.95)	(1.06)
Relative Size				0.0061	0.0066	0.0065
				(1.41)	(1.49)	(1.47)
Firm Size(log)_A				-0.0028*	-0.0025*	-0.0026*
				(-1.88)	(-1.68)	(-1.78)
Diversification				0.0033	0.0036	0.0037
				(0.65)	(0.69)	(0.71)
Pure Cash				0.0215***	0.0207***	0.0202***
				(3.64)	(3.47)	(3.41)
Constant	-0.0048	-0.0049	-0.0054	0.0069	0.0035	0.0042
	(-0.08)	(-0.09)	(-0.10)	(0.12)	(0.06)	(0.08)
Observations	878	873	873	824	819	819
R-squared	0.107	0.105	0.104	0.129	0.125	0.124

Table 23: Regressions of target CARs

The table shows regression estimates of the target CARs, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CarT(-1,1)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*
dif_WGI	-0.0190			-0.0040		
	(-0.84)			(-0.17)		
dif_Antiselfdealing		0.0310			0.0339	
		(0.73)			(0.75)	
dif_Revisedantidirector			0.0137			0.0053
			(1.45)			(0.56)
Leverage_T				0.0020	0.0049	0.0048
				(0.03)	(0.08)	(0.08)
Market-to-Book_T				0.0016	0.0016	0.0015
				(0.71)	(0.70)	(0.67)
Relative Size				-0.0308***	-0.0314***	-0.0312***
				(-3.56)	(-3.69)	(-3.65)
Firm Size(log)_T				-0.0260***	-0.0259***	-0.0263***
				(-4.00)	(-3.94)	(-4.00)
Diversification				-0.0092	-0.0089	-0.0085
				(-0.36)	(-0.35)	(-0.33)
Pure Cash				0.0900***	0.0897***	0.0873***
				(3.65)	(3.57)	(3.58)
Constant	0.0226	0.0306	0.0327	0.3494*	0.3556*	0.3592*
	(0.14)	(0.20)	(0.21)	(1.75)	(1.81)	(1.81)
Observations	878	873	873	725	721	721
R-squared	0.135	0.135	0.137	0.195	0.197	0.196

Table 24: Regressions of combined CARs

The table shows regression estimates of the combined CARs, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CARC(-1,1)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*
dif_WGI	0.0060			0.0033		
	(1.00)			(0.60)		
dif_Antiselfdealing		-0.0027			-0.0008	
		(-0.24)			(-0.07)	
dif_Revisedantidirector			0.0005			0.0004
			(0.22)			(0.19)
Leverage_A				0.0496**	0.0490**	0.0494**
				(2.54)	(2.54)	(2.55)
Market-to-Book_A				-0.0014	-0.0015	-0.0015
				(-1.03)	(-1.06)	(-1.07)
Relative Size				0.0106***	0.0106***	0.0106***
				(3.41)	(3.37)	(3.37)
Firm Size(log)_A				-0.0034**	-0.0034**	-0.0035**
				(-2.03)	(-2.06)	(-2.06)
Diversification				0.0032	0.0034	0.0036
				(0.49)	(0.53)	(0.55)
Pure Cash				0.0122*	0.0114*	0.0114*
				(1.83)	(1.71)	(1.70)
Constant	0.0710***	0.0712***	0.0709***	0.0980***	0.0990***	0.0987***
	(3.74)	(3.74)	(3.75)	(3.07)	(3.08)	(3.08)
Observations	673	669	669	628	624	624
R-squared	0.133	0.132	0.132	0.177	0.177	0.177

Table 25: Regressions of acquirer CARs

The table shows regression estimates of the acquirer CARs, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CARA(-5,5)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*
dif_WGI	0.0081			0.0108		
	(1.04)			(1.33)		
dif_Antiselfdealing		0.0111			0.0097	
		(0.85)			(0.73)	
dif_Revisedantidirector			-0.0005			-0.0019
			(-0.17)			(-0.68)
Leverage_A				0.0234	0.0180	0.0167
				(0.96)	(0.75)	(0.70)
Market-to-Book_A				0.0023	0.0021	0.0023
				(1.25)	(1.10)	(1.24)
Relative Size				0.0056	0.0064	0.0063
				(1.10)	(1.24)	(1.24)
Firm Size(log)_A				0.0001	0.0006	0.0006
				(0.07)	(0.27)	(0.28)
Diversification				0.0061	0.0056	0.0048
				(0.83)	(0.76)	(0.65)
Pure Cash				0.0259***	0.0254***	0.0254***
				(3.30)	(3.21)	(3.19)
Constant	-0.0605	-0.0607	-0.0603	-0.0893	-0.0937	-0.0926
	(-0.84)	(-0.85)	(-0.83)	(-1.21)	(-1.28)	(-1.25)
Observations	878	873	873	824	819	819
R-squared	0.085	0.083	0.083	0.102	0.099	0.099

Table 26: Regressions of target CARs

The table shows regression estimates of the target CARs, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CART(-1,1)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*
dif_WGI	-0.0263			0.0033		
	(-1.07)			(0.13)		
dif_Antiselfdealing		0.0201			0.0352	
		(0.44)			(0.73)	
dif_Revisedantidirector			0.0152			0.0067
			(1.47)			(0.65)
Leverage_T				0.0095	0.0114	0.0108
				(0.16)	(0.19)	(0.18)
Market-to-Book_T				0.0048	0.0048	0.0047
				(1.44)	(1.43)	(1.41)
Relative Size				-0.0211	-0.0214	-0.0212
				(-1.51)	(-1.54)	(-1.52)
Firm Size(log)_T				-0.0331***	-0.0330***	-0.0334***
				(-4.61)	(-4.58)	(-4.64)
Diversification				-0.0061	-0.0061	-0.0053
				(-0.23)	(-0.22)	(-0.19)
Pure Cash				0.0949***	0.0944***	0.0917***
				(3.53)	(3.43)	(3.43)
Constant	0.0687	0.0743	0.0801	0.5310***	0.5387***	0.5433***
	(0.51)	(0.56)	(0.61)	(2.89)	(2.98)	(2.98)
Observations	878	873	873	725	721	721
R-squared	0.134	0.133	0.136	0.196	0.196	0.196

Table 27: Regression of combined CARs

The table shows regression estimates of the combined CARs, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CARC(-5,5)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CAR(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*
dif_WGI	-0.0002			-0.0007		
	(-0.03)			(-0.08)		
dif_Antiselfdealing		0.0002			0.0006	
		(0.01)			(0.04)	
dif_Revisedantidirector			0.0011			0.0008
			(0.36)			(0.27)
Leverage_A				0.0512*	0.0513*	0.0520*
				(1.84)	(1.86)	(1.88)
Market-to-Book_A				0.0007	0.0007	0.0007
				(0.39)	(0.38)	(0.38)
Relative Size				0.0068	0.0068	0.0067
				(1.37)	(1.34)	(1.34)
Firm Size(log)_A				-0.0015	-0.0016	-0.0016
				(-0.66)	(-0.69)	(-0.70)
Diversification				0.0071	0.0065	0.0067
				(0.78)	(0.71)	(0.72)
Pure Cash				0.0144	0.0147	0.0145
				(1.58)	(1.61)	(1.57)
Constant	0.0069	0.0068	0.0062	-0.0030	-0.0014	-0.0016
	(0.20)	(0.20)	(0.19)	(-0.07)	(-0.03)	(-0.03)
Observations	673	669	669	628	624	624
R-squared	0.106	0.106	0.106	0.117	0.117	0.117

Appendix 3: Results for H1 using event windows (-1,1) and (-5,5) – Dummy approach

Table 28: Regressions of acquirer CARs - Dummy approach

The table shows regression estimates of the acquirer CARs – dummy approach -, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CARA(-1,1)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*
Ddif_WGI	0.0058			0.0063		
	(1.19)			(1.29)		
Ddif_Antiselfdealing		0.0047			0.0058	
		(0.92)			(1.13)	
Ddif_Revisedantidirector			0.0035			0.0022
			(0.72)			(0.44)
Leverage_A				0.0363**	0.0332**	0.0336**
				(2.18)	(2.00)	(2.03)
Market-to-Book_A				0.0016	0.0015	0.0016
				(1.08)	(1.04)	(1.11)
Relative Size				0.0064	0.0067	0.0065
				(1.46)	(1.52)	(1.47)
Firm Size(log)_A				-0.0026*	-0.0025*	-0.0026*
				(-1.79)	(-1.70)	(-1.81)
Diversification				0.0034	0.0034	0.0034
				(0.66)	(0.66)	(0.66)
Pure Cash				0.0210***	0.0211***	0.0207***
				(3.56)	(3.60)	(3.54)
Constant	-0.0108	-0.0076	-0.0065	-0.0016	0.0001	0.0046
	(-0.19)	(-0.14)	(-0.12)	(-0.03)	(0.00)	(0.08)
Observations	878	878	878	824	824	824
R-squared	0.105	0.105	0.104	0.127	0.127	0.125

Table 29: Regressions of target CARs– Dummy approach

The table shows regression estimates of the target CARs – dummy approach -, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CART(-1,1)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*
Ddif_WGI	-0.0247			-0.0235		
	(-1.08)			(-1.01)		
Ddif_Antiselfdealing		0.0378*			0.0419*	
		(1.65)			(1.72)	
Ddif_Revisedantidirector			0.0098			-0.0061
			(0.42)			(-0.26)
Leverage_T				0.0019	-0.0027	0.0035
				(0.03)	(-0.05)	(0.06)
Market-to-Book_T				0.0016	0.0018	0.0016
				(0.70)	(0.81)	(0.73)
Relative Size				-0.0306***	-0.0305***	-0.0310***
				(-3.60)	(-3.68)	(-3.62)
Firm Size(log)_T				-0.0261***	-0.0253***	-0.0260***
				(-4.02)	(-3.89)	(-4.00)
Diversification				-0.0098	-0.0071	-0.0096
				(-0.39)	(-0.28)	(-0.38)
Pure Cash				0.0901***	0.0927***	0.0907***
				(3.66)	(3.74)	(3.75)
Constant	0.0466	0.0185	0.0236	0.3742*	0.3280*	0.3468*
	(0.29)	(0.12)	(0.15)	(1.87)	(1.65)	(1.74)
Observations	878	878	878	725	725	725
R-squared	0.136	0.137	0.134	0.196	0.199	0.195

Table 30: Regressions of combined CARs– Dummy approach

The table shows regression estimates of the combined CARs– dummy approach -, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CARC(-1,1)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*
Ddif_WGI	-0.0006			-0.0021		
	(-0.11)			(-0.37)		
Ddif_Antiselfdealing		-0.0008			0.0018	
		(-0.14)			(0.30)	
Ddif_Revisedantidirector			0.0016			0.0009
			(0.27)			(0.16)
Leverage_A				0.0469**	0.0478**	0.0482**
				(2.40)	(2.47)	(2.51)
MarketBook_A				-0.0014	-0.0014	-0.0014
				(-1.03)	(-1.04)	(-1.04)
Relative Size				0.0108***	0.0108***	0.0107***
				(3.45)	(3.45)	(3.42)
Firm Size(log)_A				-0.0033**	-0.0033**	-0.0034**
				(-2.02)	(-1.99)	(-2.02)
Diversification				0.0032	0.0032	0.0032
				(0.49)	(0.50)	(0.50)
Pure Cash				0.0118*	0.0120*	0.0119*
				(1.77)	(1.81)	(1.80)
Constant	0.0716***	0.0715***	0.0703***	0.0999***	0.0962***	0.0975***
	(3.60)	(3.69)	(3.74)	(3.13)	(3.00)	(3.06)
Observations	673	673	673	628	628	628
R-squared	0.132	0.132	0.132	0.177	0.177	0.177

Table 31: Regressions of acquirer CARs– Dummy approach

The table shows regression estimates of the acquirer CARs – dummy approach -, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CARA(-5,5)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*
Ddif_WGI	-0.0029			-0.0012		
	(-0.42)			(-0.17)		
Ddif_Antiselfdealing		0.0117*			0.0126*	
		(1.65)			(1.74)	
Ddif_Revisedantidirector			-0.0029			-0.0092
			(-0.45)			(-1.39)
Leverage_A				0.0177	0.0180	0.0168
				(0.74)	(0.75)	(0.70)
Market-to-Book_A				0.0023	0.0021	0.0023
				(1.23)	(1.11)	(1.23)
Relative Size				0.0062	0.0065	0.0064
				(1.21)	(1.28)	(1.26)
Firm Size(log)_A				0.0003	0.0005	0.0006
				(0.16)	(0.26)	(0.29)
Diversification				0.0060	0.0063	0.0053
				(0.82)	(0.86)	(0.73)
Pure Cash				0.0252***	0.0257***	0.0260***
				(3.22)	(3.31)	(3.30)
Constant	-0.0578	-0.0674	-0.0593	-0.0903	-0.1018	-0.0905
	(-0.80)	(-0.99)	(-0.81)	(-1.23)	(-1.45)	(-1.18)
Observations	878	878	878	824	824	824
R-squared	0.083	0.087	0.083	0.099	0.104	0.102

Table 32: Regression of target CARs– Dummy approach

The table shows regression estimates of the target CARs – dummy approach -, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CART(-5,5)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*
Ddif_WGI	-0.0180			-0.0062		
	(-0.74)			(-0.25)		
Ddif_Antiselfdealing		0.0236			0.0361	
		(0.96)			(1.41)	
Ddif_Revisedantidirector			0.0234			0.0041
			(0.94)			(0.16)
Leverage_T				0.0095	0.0056	0.0085
				(0.17)	(0.10)	(0.14)
Market-to-Book_T				0.0048	0.0050	0.0048
				(1.43)	(1.49)	(1.44)
Relative Size				-0.0209	-0.0206	-0.0210
				(-1.50)	(-1.49)	(-1.51)
Firm Size(log)_T				-0.0331***	-0.0324***	-0.0331***
				(-4.63)	(-4.51)	(-4.61)
Diversification				-0.0064	-0.0045	-0.0059
				(-0.24)	(-0.17)	(-0.21)
Pure Cash				0.0949***	0.0971***	0.0944***
				(3.52)	(3.57)	(3.54)
Constant	0.0863	0.0662	0.0709	0.5377***	0.5128***	0.5328***
	(0.62)	(0.49)	(0.52)	(2.95)	(2.79)	(2.89)
Observations	878	878	878	725	725	725
R-squared	0.134	0.134	0.134	0.196	0.198	0.196

Table 33: Regression of combined CARs– Dummy approach

The table shows regression estimates of the combined CARs – dummy approach -, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CARC(-5,5)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*
Ddif_WGI	-0.0094			-0.0095		
	(-1.23)			(-1.24)		
Ddif_Antiselfdealing		0.0006			0.0022	
		(0.08)			(0.27)	
Ddif_Revisedantidirector			0.0030			0.0008
			(0.39)			(0.10)
Leverage_A				0.0464*	0.0514*	0.0517*
				(1.68)	(1.87)	(1.88)
Market-to-Book_A				0.0007	0.0007	0.0007
				(0.42)	(0.39)	(0.39)
Relative Size				0.0069	0.0068	0.0068
				(1.39)	(1.35)	(1.35)
Firm Size(log)_A				-0.0015	-0.0015	-0.0015
				(-0.67)	(-0.65)	(-0.67)
Diversification				0.0070	0.0072	0.0072
				(0.76)	(0.78)	(0.78)
Pure Cash				0.0140	0.0145	0.0144
				(1.54)	(1.60)	(1.58)
Constant	0.0162	0.0065	0.0054	0.0072	-0.0048	-0.0032
	(0.46)	(0.19)	(0.17)	(0.15)	(-0.10)	(-0.07)
Observations	673	673	673	628	628	628
R-squared	0.108	0.106	0.106	0.120	0.117	0.117

Appendix 4: Results for H2 using event windows (-1,1) and (-5,5)

Table 34: Regressions of acquirer CARs

The table shows regression estimates of the acquirer CARs, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CARA(-1,1)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*
dif_WGI	-0.0040			-0.0022		
	(-0.64)			(-0.33)		
High_WGI	-0.0113*			-0.0114*		
	(-1.83)			(-1.82)		
HighDif_WGI	0.0659***			0.0665***		
	(3.45)			(3.68)		
dif_Antiselfdealing		0.0216			0.0199	
		(1.46)			(1.37)	
High_Antiselfdealing		-0.0028			-0.0007	
		(-0.39)			(-0.10)	
HighDif_Antiselfdealing		-0.0154			-0.0197	
		(-0.92)			(-1.20)	
dif_Revisedantidirector			0.0030			0.0035
			(0.95)			(1.10)
High_Revisedantidirector			-0.0050			-0.0043
			(-0.70)			(-0.61)
HighDif_Revisedantidirector			-0.0020			-0.0043
			(-0.45)			(-0.95)
Leverage_A				0.0386**	0.0352**	0.0356**
				(2.33)	(2.11)	(2.13)
Market-to-Book_A				0.0016	0.0014	0.0016
				(1.20)	(0.95)	(1.08)
Relative Size				0.0047	0.0066	0.0064
				(1.15)	(1.48)	(1.44)
Firm Size(log)_A				-0.0030**	-0.0025*	-0.0027*
				(-2.07)	(-1.74)	(-1.85)
Diversification				0.0027	0.0036	0.0037
				(0.54)	(0.69)	(0.71)
Pure Cash				0.0225***	0.0210***	0.0205***
				(3.81)	(3.52)	(3.46)
Constant	-0.0002	-0.0035	-0.0044	0.0158	0.0060	0.0072
	(-0.00)	(-0.06)	(-0.08)	(0.27)	(0.11)	(0.13)
Observations	878	873	873	824	819	819
R-squared	0.132	0.106	0.105	0.155	0.126	0.126

Table 35: Regressions of target CARs

The table shows regression estimates of the target CARs, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CART(-1,1)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*
dif_WGI	-0.0313			-0.0064		
	(-1.21)			(-0.23)		
High_WGI	0.0147			0.0089		
	(0.55)			(0.33)		
HighDif_WGI	0.0196			-0.0079		
	(0.28)			(-0.13)		
dif_Antiselfdealing		0.1233*			0.1460**	
		(1.87)			(2.18)	
High_Antiselfdealing		-0.0347			-0.0296	
		(-1.25)			(-1.01)	
HighDif_Antiselfdealing		-0.1144			-0.1779**	
		(-1.41)			(-2.10)	
dif_Revisedantidirector			0.0136			0.0132
			(1.04)			(1.01)
High_Revisedantidirector			-0.0205			-0.0330
			(-0.70)			(-1.16)
HighDif_Revisedantidirector			0.0153			-0.0007
			(0.74)			(-0.03)
Leverage_T				0.0015	0.0071	0.0051
				(0.03)	(0.12)	(0.09)
Market-to-Book_T				0.0016	0.0016	0.0014
				(0.71)	(0.72)	(0.62)
Relative Size				-0.0307***	-0.0312***	-0.0316***
				(-3.53)	(-3.59)	(-3.68)
Firm Size(log)_T				-0.0260***	-0.0268***	-0.0263***
				(-3.99)	(-4.02)	(-4.00)
Diversification				-0.0091	-0.0086	-0.0090
				(-0.35)	(-0.34)	(-0.35)
Pure Cash				0.0893***	0.0906***	0.0875***
				(3.56)	(3.64)	(3.56)
Constant	0.0049	0.0302	0.0407	0.3399*	0.3599*	0.3663*
	(0.03)	(0.20)	(0.27)	(1.69)	(1.79)	(1.85)
Observations	878	873	873	725	721	721
R-squared	0.135	0.139	0.138	0.195	0.203	0.198

Table 36: Regressions of combined CARs

The table shows regression estimates of the combined CARs, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CARC(-1,1)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*
dif_WGI	0.0020			0.0033		
	(0.27)			(0.43)		
High_WGI	-0.0076			-0.0102		
	(-1.05)			(-1.47)		
HighDif_WGI	0.0268			0.0176		
	(1.49)			(1.20)		
dif_Antiselfdealing		-0.0034			-0.0039	
		(-0.19)			(-0.22)	
High_Antiselfdealing		-0.0015			0.0024	
		(-0.20)			(0.31)	
HighDif_Antiselfdealing		0.0045			0.0016	
		(0.22)			(0.08)	
dif_Revisedantidirector			0.0028			0.0026
			(0.76)			(0.71)
High_Revisedantidirector			-0.0058			-0.0035
			(-0.74)			(-0.46)
HighDif_Revisedantidirector			-0.0030			-0.0043
			(-0.60)			(-0.87)
Leverage_A				0.0494**	0.0487**	0.0500**
				(2.54)	(2.53)	(2.57)
Market-to-Book_A				-0.0014	-0.0015	-0.0015
				(-1.05)	(-1.06)	(-1.08)
Relative Size				0.0101***	0.0107***	0.0105***
				(3.30)	(3.39)	(3.35)
Firm Size(log)_A				-0.0035**	-0.0034**	-0.0035**
				(-2.13)	(-2.03)	(-2.10)
Diversification				0.0028	0.0035	0.0037
				(0.44)	(0.54)	(0.57)
Pure Cash				0.0126*	0.0113*	0.0116*
				(1.88)	(1.70)	(1.72)
Constant	0.0745***	0.0708***	0.0720***	0.1073***	0.0981***	0.1009***
	(3.56)	(3.77)	(3.88)	(3.25)	(3.02)	(3.14)
Observations	673	669	669	628	624	624
R-squared	0.138	0.132	0.133	0.181	0.177	0.178

Table 37: Regressions of acquirer CARs

The table shows regression estimates of the acquirer CARs, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CARA(-5,5)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*
dif_WGI	0.0009			0.0040		
	(0.10)			(0.43)		
High_WGI	-0.0134*			-0.0116		
	(-1.65)			(-1.38)		
HighDif_WGI	0.0508**			0.0481**		
	(2.27)			(2.01)		
dif_Antiselfdealing		0.0117			0.0040	
		(0.58)			(0.21)	
High_Antiselfdealing		0.0036			0.0077	
		(0.39)			(0.80)	
HighDif_Antiselfdealing		-0.0090			-0.0049	
		(-0.38)			(-0.20)	
dif_Revisedantidirector			0.0007			-0.0003
			(0.16)			(-0.08)
High_Revisedantidirector			-0.0002			0.0008
			(-0.02)			(0.09)
HighDif_Revisedantidirector			-0.0035			-0.0056
			(-0.56)			(-0.87)
Leverage_A				0.0239	0.0184	0.0182
				(0.99)	(0.76)	(0.76)
MktBook_A				0.0023	0.0020	0.0024
				(1.29)	(1.06)	(1.27)
Relative Size				0.0046	0.0065	0.0063
				(0.89)	(1.27)	(1.24)
Firm Size(log)_A				-0.0001	0.0007	0.0006
				(-0.04)	(0.33)	(0.26)
Diversification				0.0055	0.0059	0.0049
				(0.76)	(0.80)	(0.67)
Pure Cash				0.0269***	0.0252***	0.0256***
				(3.42)	(3.20)	(3.22)
Constant	-0.0537	-0.0600	-0.0590	-0.0795	-0.0957	-0.0910
	(-0.70)	(-0.83)	(-0.81)	(-1.03)	(-1.27)	(-1.21)
Observations	878	873	873	824	819	819
R-squared	0.094	0.084	0.083	0.110	0.100	0.100

Table 38: Regressions of target CARs

The table shows regression estimates of the target CARs, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CART(-5,5)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*
dif_WGI	-0.0432			-0.0141		
	(-1.43)			(-0.44)		
High_WGI	0.0323			0.0231		
	(1.14)			(0.80)		
HighDif_WGI	0.0030			0.0218		
	(0.05)			(0.33)		
dif_Antiselfdealing		0.1462**			0.1720**	
		(2.10)			(2.46)	
High_Antiselfdealing		-0.0661**			-0.0500*	
		(-2.21)			(-1.66)	
HighDif_Antiselfdealing		-0.1159			-0.1847**	
		(-1.34)			(-2.07)	
dif_Revisedantidirector			0.0171			0.0128
			(1.19)			(0.91)
High_Revisedantidirector			-0.0402			-0.0403
			(-1.28)			(-1.40)
HighDif_Revisedantidirector			0.0230			0.0110
			(1.00)			(0.46)
Leverage_T				0.0081	0.0133	0.0115
				(0.14)	(0.23)	(0.19)
Market-to-Book_T				0.0048	0.0048	0.0046
				(1.44)	(1.45)	(1.39)
Relative Size				-0.0211	-0.0214	-0.0217
				(-1.51)	(-1.54)	(-1.57)
Firm Size(log)_T				-0.0327***	-0.0340***	-0.0331***
				(-4.58)	(-4.68)	(-4.60)
Diversification				-0.0047	-0.0069	-0.0060
				(-0.17)	(-0.25)	(-0.22)
Pure Cash				0.0931***	0.0954***	0.0912***
				(3.41)	(3.51)	(3.38)
Constant	0.0334	0.0817	0.0942	0.4990***	0.5514***	0.5521***
	(0.24)	(0.63)	(0.76)	(2.69)	(3.02)	(3.07)
Observations	878	873	873	725	721	721
R-squared	0.136	0.140	0.138	0.197	0.205	0.199

Table 39: Regressions of combined CARs

The table shows regression estimates of the combined CARs, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CARC(-5,5)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*
dif_WGI	0.0065			0.0091		
	(0.57)			(0.78)		
High_WGI	-0.0069			-0.0070		
	(-0.70)			(-0.67)		
HighDif_WGI	-0.0118			-0.0224		
	(-0.43)			(-0.70)		
dif_Antiselfdealing		0.0016			-0.0048	
		(0.07)			(-0.21)	
High_Antiselfdealing		-0.0056			-0.0014	
		(-0.52)			(-0.12)	
HighDif_Antiselfdealing		0.0083			0.0141	
		(0.30)			(0.50)	
dif_Revisedantidirector			0.0058			0.0047
			(1.13)			(0.94)
High_Revisedantidirector			-0.0122			-0.0081
			(-1.08)			(-0.71)
HighDif_Revisedantidirector			-0.0057			-0.0065
			(-0.80)			(-0.93)
Leverage_A				0.0507*	0.0505*	0.0527*
				(1.82)	(1.83)	(1.90)
Market-to-Book_A				0.0007	0.0007	0.0007
				(0.39)	(0.40)	(0.38)
Relative Size				0.0071	0.0067	0.0066
				(1.45)	(1.32)	(1.32)
Firm Size(log)_A				-0.0017	-0.0016	-0.0018
				(-0.74)	(-0.69)	(-0.77)
Diversification				0.0067	0.0063	0.0069
				(0.74)	(0.68)	(0.75)
Pure Cash				0.0150	0.0146	0.0149
				(1.65)	(1.59)	(1.61)
Constant	0.0122	0.0061	0.0083	0.0062	-0.0021	0.0025
	(0.35)	(0.19)	(0.26)	(0.13)	(-0.04)	(0.05)
Observations	673	669	669	628	624	624
R-squared	0.107	0.106	0.109	0.121	0.117	0.119

Appendix 5: Results for H2 using event windows (-1,1) and (-5,5) – Dummy approach

Table 40: Regressions of acquirer CARs – Dummy approach

The table shows regression estimates of the acquirer CARs – dummy approach -, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CARA(-1,1)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*	*CARA(-1,1)*
Ddif_WGI	0.0068			0.0064		
	(0.87)			(0.83)		
High_WGI	-0.0127			-0.0122		
	(-1.06)			(-0.95)		
DHighDif_WGI	0.0094			0.0102		
	(0.66)			(0.68)		
Ddif_Antiselfdealing		0.0078			0.0058	
		(0.85)			(0.63)	
High_Antiselfdealing		-0.0008			-0.0061	
		(-0.08)			(-0.57)	
DHighDif_Antiselfdealing		-0.0039			0.0051	
		(-0.27)			(0.34)	
Ddif_Revisedantidirector			0.0049			0.0031
			(0.74)			(0.47)
High_Revisedantidirector			-0.0040			-0.0032
			(-0.33)			(-0.27)
DHighDif_Revisedantidirector			0.0004			0.0007
			(0.03)			(0.05)
Leverage_A				0.0367**	0.0334**	0.0330**
				(2.19)	(2.01)	(2.00)
Market-to-Book_A				0.0016	0.0016	0.0016
				(1.08)	(1.07)	(1.12)
Relative Size				0.0063	0.0067	0.0065
				(1.44)	(1.51)	(1.45)
Firm Size(log)_A				-0.0027*	-0.0026*	-0.0027*
				(-1.87)	(-1.77)	(-1.85)
Diversification				0.0032	0.0032	0.0033
				(0.61)	(0.63)	(0.64)
Pure Cash				0.0216***	0.0212***	0.0208***
				(3.63)	(3.61)	(3.54)
Constant	-0.0092	-0.0090	-0.0065	0.0020	0.0011	0.0058
	(-0.16)	(-0.17)	(-0.12)	(0.04)	(0.02)	(0.11)
Observations	878	878	878	824	824	824
R-squared	0.107	0.105	0.105	0.129	0.127	0.126

Table 41: Regressions of target CARs – Dummy approach

The table shows regression estimates of the target CARs – dummy approach -, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CART(-1,1)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*	*CART(-1,1)*
Ddif_WGI	-0.1039***			-0.0877**		
	(-3.09)			(-2.58)		
High_WGI	-0.0487			-0.0407		
	(-1.24)			(-1.01)		
DHighDif_WGI	0.1456***			0.1209**		
	(2.87)			(2.31)		
Ddif_Antiselfdealing		0.0644			0.0822**	
		(1.64)			(2.09)	
High_Antiselfdealing		-0.0786**			-0.0590	
		(-2.13)			(-1.44)	
DHighDif_Antiselfdealing		0.0257			-0.0099	
		(0.46)			(-0.17)	
Ddif_Revisedantidirector			0.0101			0.0098
			(0.33)			(0.34)
High_Revisedantidirector			0.0078			0.0111
			(0.18)			(0.25)
DHighDif_Revisedantidirector			-0.0065			-0.0371
			(-0.12)			(-0.67)
Leverage_T				0.0012	-0.0029	0.0035
				(0.02)	(-0.05)	(0.06)
Market-to-Book_T				0.0014	0.0019	0.0016
				(0.63)	(0.82)	(0.72)
Relative Size				-0.0298***	-0.0303***	-0.0315***
				(-3.45)	(-3.54)	(-3.62)
Firm Size(log)_T				-0.0261***	-0.0258***	-0.0261***
				(-3.98)	(-3.95)	(-4.01)
Diversification				-0.0096	-0.0113	-0.0095
				(-0.38)	(-0.44)	(-0.37)
Pure Cash				0.0898***	0.0927***	0.0916***
				(3.61)	(3.76)	(3.79)
Constant	0.0298	0.0145	0.0234	0.3591*	0.3378*	0.3509*
	(0.18)	(0.10)	(0.15)	(1.77)	(1.73)	(1.75)
Observations	878	878	878	725	725	725
R-squared	0.144	0.143	0.135	0.203	0.205	0.196

Table 42: Regressions of combined CARs – Dummy approach

The table shows regression estimates of the combined CARs – dummy approach -, considering the event window (-1,1). All the regressions include control of year and industry fixed effects. *CARC(-1,1)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*	*CARC(-1,1)*
Ddif_WGI	0.0045			0.0080		
	(0.48)			(0.86)		
High_WGI	0.0047			0.0037		
	(0.32)			(0.25)		
DHighDif_WGI	-0.0107			-0.0165		
	(-0.63)			(-0.96)		
Ddif_Antiselfdealing		0.0034			0.0027	
		(0.36)			(0.28)	
High_Antiselfdealing		0.0014			0.0006	
		(0.13)			(0.05)	
DHighDif_Antiselfdealing		-0.0074			-0.0019	
		(-0.49)			(-0.13)	
Ddif_Revisedantidirector			0.0050			0.0028
			(0.60)			(0.34)
High_Revisedantidirector			-0.0034			-0.0025
			(-0.30)			(-0.22)
DHighDif_Revisedantidirector			-0.0032			-0.0015
			(-0.22)			(-0.11)
Leverage_A				0.0471**	0.0477**	0.0478**
				(2.41)	(2.46)	(2.47)
Market-to-Book_A				-0.0015	-0.0014	-0.0014
				(-1.09)	(-1.01)	(-1.03)
Relative Size				0.0109***	0.0108***	0.0107***
				(3.50)	(3.43)	(3.38)
Firm Size(log)_A				-0.0034**	-0.0033**	-0.0034**
				(-2.05)	(-1.99)	(-2.05)
Diversification				0.0030	0.0032	0.0032
				(0.46)	(0.50)	(0.50)
Pure Cash				0.0120*	0.0120*	0.0121*
				(1.81)	(1.81)	(1.81)
Constant	0.0708***	0.0695***	0.0696***	0.0994***	0.0959***	0.0982***
	(3.36)	(3.83)	(3.89)	(3.01)	(2.97)	(3.13)
Observations	673	673	673	628	628	628
R-squared	0.133	0.133	0.133	0.180	0.177	0.177

Table 43: Regressions of acquirer CARs– Dummy approach

The table shows regression estimates of the acquirer CARs – dummy approach -, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CARA(-5,5)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*	*CARA(-5,5)*
Ddif_WGI	-0.0025			0.0003		
	(-0.22)			(0.03)		
High_WGI	-0.0028			0.0056		
	(-0.19)			(0.35)		
DHighDif_WGI	0.0019			-0.0067		
	(0.10)			(-0.35)		
Ddif_Antiselfdealing		0.0190*			0.0164	
		(1.65)			(1.41)	
High_Antiselfdealing		0.0072			0.0068	
		(0.55)			(0.50)	
DHighDif_Antiselfdealing		-0.0163			-0.0110	
		(-0.91)			(-0.58)	
Ddif_Revisedantidirector			-0.0078			-0.0141
			(-0.91)			(-1.62)
High_Revisedantidirector			-0.0061			-0.0029
			(-0.40)			(-0.19)
DHighDif_Revisedantidirector			0.0132			0.0111
			(0.73)			(0.61)
Leverage_A				0.0177	0.0175	0.0159
				(0.73)	(0.73)	(0.66)
Market-to-Book_A				0.0023	0.0021	0.0022
				(1.21)	(1.10)	(1.19)
Relative Size				0.0062	0.0065	0.0066
				(1.21)	(1.27)	(1.29)
Firm Size(log)_A				0.0004	0.0006	0.0007
				(0.18)	(0.30)	(0.33)
Diversification				0.0062	0.0063	0.0055
				(0.84)	(0.86)	(0.75)
Pure Cash				0.0250***	0.0258***	0.0256***
				(3.20)	(3.32)	(3.25)
Constant	-0.0574	-0.0702	-0.0582	-0.0922	-0.1040	-0.0906
	(-0.79)	(-1.09)	(-0.77)	(-1.25)	(-1.51)	(-1.16)
Observations	878	878	878	824	824	824
R-squared	0.083	0.088	0.084	0.099	0.104	0.102

Table 44: Regressions of target CARs – Dummy approach

The table shows regression estimates of the target CARs – dummy approach -, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CART(-5,5)*, *Leverage_T, Market-to-book_T, Relative Size*, and *Firm Size(log)_T* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*	*CART(-5,5)*
Ddif_WGI	-0.1112***			-0.0854**		
	(-3.09)			(-2.34)		
High_WGI	-0.0552			-0.0484		
	(-1.33)			(-1.18)		
DHighDif_WGI	0.1695***			0.1475***		
	(3.18)			(2.73)		
Ddif_Antiselfdealing		0.0602			0.0813*	
		(1.43)			(1.96)	
High_Antiselfdealing		-0.1077***			-0.0817**	
		(-2.66)			(-1.98)	
DHighDif_Antiselfdealing		0.0349			0.0018	
		(0.58)			(0.03)	
Ddif_Revisedantidirector			0.0268			0.0326
			(0.81)			(1.02)
High_Revisedantidirector			-0.0270			0.0185
			(-0.65)			(0.43)
DHighDif_Revisedantidirector			0.0147			-0.0651
			(0.26)			(-1.15)
Leverage_T				0.0086	0.0050	0.0085
				(0.15)	(0.09)	(0.15)
Market-to-Book_T				0.0046	0.0050	0.0047
				(1.39)	(1.51)	(1.44)
Relative Size				-0.0200	-0.0203	-0.0218
				(-1.43)	(-1.45)	(-1.56)
Firm Size(log)_T				-0.0331***	-0.0331***	-0.0334***
				(-4.59)	(-4.59)	(-4.64)
Diversification				-0.0062	-0.0096	-0.0057
				(-0.23)	(-0.35)	(-0.21)
Pure Cash				0.0944***	0.0971***	0.0959***
				(3.48)	(3.58)	(3.62)
Constant	0.0660	0.0607	0.0721	0.5185***	0.5262***	0.5402***
	(0.46)	(0.47)	(0.53)	(2.78)	(2.92)	(2.90)
Observations	878	878	878	725	725	725
R-squared	0.144	0.143	0.135	0.205	0.206	0.198

Table 45: Regressions of combined CARs – Dummy approach

The table shows regressions estimates of the combined CARs – dummy approach -, considering the event window (-5,5). All the regressions include control of year and industry fixed effects. *CARC(-5,5)*, *Leverage_A, Market-to-book_A, Relative Size*, and *Firm Size(log)_A* were winsorized at 1% level of each tail to remove extreme values that might bias the results. *, **, *** stand for statistical significance at 10%, 5%, and 1% levels, respectively.

VARIABLES	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*	*CARC(-5,5)*
Ddif_WGI	-0.0017			0.0031		
	(-0.13)			(0.23)		
High_WGI	0.0130			0.0198		
	(0.70)			(0.99)		
DHighDif_WGI	-0.0212			-0.0337		
	(-0.93)			(-1.41)		
Ddif_Antiselfdealing		0.0090			0.0090	
		(0.75)			(0.72)	
High_Antiselfdealing		0.0014			0.0052	
		(0.10)			(0.36)	
DHighDif_Antiselfdealing		-0.0136			-0.0143	
		(-0.72)			(-0.72)	
Ddif_Revisedantidirector			0.0011			-0.0010
			(0.10)			(-0.09)
High_Revisedantidirector			-0.0190			-0.0118
			(-1.21)			(-0.71)
DHighDif_Revisedantidirector			0.0173			0.0119
			(0.89)			(0.59)
Leverage_A				0.0459*	0.0508*	0.0485*
				(1.65)	(1.85)	(1.75)
Market-to-Book_A				0.0007	0.0007	0.0007
				(0.39)	(0.40)	(0.39)
Relative Size				0.0071	0.0067	0.0068
				(1.45)	(1.32)	(1.37)
Firm Size(log)_A				-0.0014	-0.0015	-0.0016
				(-0.63)	(-0.66)	(-0.71)
Diversification				0.0070	0.0071	0.0069
				(0.77)	(0.77)	(0.75)
Pure Cash				0.0138	0.0145	0.0146
				(1.53)	(1.61)	(1.60)
Constant	0.0143	0.0025	0.0071	0.0021	-0.0074	0.0005
	(0.39)	(0.08)	(0.22)	(0.04)	(-0.16)	(0.01)
Observations	673	673	673	628	628	628
R-squared	0.110	0.107	0.109	0.124	0.118	0.118