Reform or Friction? ESG disclosure regulations around the world and M&A outcomes

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ABSTRACT

In this paper, we explore the possibility of this unintended effect of ESG disclosure regulations around the world on global M&A outcomes. Our empirical estimation reveals that ESG disclosure regulation deters M&A both in frequency and volume, in support of the view that reform itself could create friction when there is a reason for the market to doubt the rent-seeking- intentions of regulatory agents. The results are robust to the employment of cross-border sub-sample and survive a battery of robustness tests. We further document an increase in transaction cost in the form of higher deal premiums, prolonged deal completion time, and the decreases in likelihood of deal completion following the introduction of ESG disclosure regulation. The country-industry level aggregation suggests this deterrence is driven by industries facing higher ESG-related controversies. Our examination of the moderating role of state opportunism reveals the deterrence effect of ESG disclosure laws on M&A outcomes lowers in both frequency and magnitude by the quality of national institutions. Our study reinvigorates the importance of national governance as an enabling environment to bring positive outcomes of these ESG disclosure reforms.

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Introduction

The effect of regulation on real investments and risk-taking is one of the central issues facing regulatory economics. While these national laws as a mean to lower market frictions could Pareto improve investment environment, there could be unintended consequence where law, could, itself, create friction. In this paper, we explore the possibility of this unintended effects of interventions by examining the effect of ESG disclosure regulations around the world on global M&A outcomes.

From theoretical viewpoint, the disclosure regulations should eliminate information frictions related to ESG performance in the market. These national laws and regulations on ESG could therefore create enabling environment to facilitate sustainable investments and capital formation (La Porta et al, 1996; Glendening et al., 2016). This view is referred to in literature as the *Facilitation Hypothesis* (La Porta et al, 1996; Glendening et al., 2016; Fauver et al, 2017). The *Facilitation* view posits that the state through its regulatory reforms lowers market frictions that facilitate corporate sectors to engage in mutually beneficial contracts and enforces these contracts (Stulz, 2005). This view is in line with "strong monitoring hypothesis" (Godsell, 2022).

There is a contrarian view, hereafter, the *deterrence effect* of regulatory interventions on real investments and risk-taking. The *deterrence effect* postulates legal intervention itself could give rise to a compliance burden and caste doubt in the marketplace thereby deterring risk-taking appetite. This literature is based on the economic argument on the rent-seeking opportunism and exploitation that the state-ruler may engage in increasing the dead-weight cost and compliance burden to keep real investment and risk-taking supressed. (Stulz, 2005) argues that

government (state) as an important opportunistic agent impacting corporate decisions.[1] The resulting effect of such interventions, notwithstanding to intended objective of facilitating capital allocation, would deter investments, prima facia. In this paper, we examine the M&A outcomes of regulatory intervention exploiting ESG disclosure regulations in an international setup.

At the juncture of time that has witnessed ESG reforms and policies implemented across different countries global awareness and pressure towards climate change, resilience and sustainability, the answer of the effect of ESG interventions are policy relevant. We evaluate one such class of regulations i.e. enactment of ESG disclosure regulations across 66 countries and revisit this important old debate of (un)intended outcome of regulatory interventions.

Our empirical study employs diff-in-diff estimation method documents deterrence effect of ESG disclosure regulations on M&A outcomes. Specifically, our empirical estimations reveal that the passage of ESG disclosure law deter both intensity (frequency) and magnitude (dollar volume) of M&A activities. In terms of economic magnitude, introducing ESG disclosure regulation in an enacting country lowers number of M&A deals by 21.5% in our sample countries per year. This translates to a reduction of minimum of 17.45% of dollar volume of M&A per year in these countries. The results survive false experiment tests and are stable over different sensitivity tests. Further, the result is robust to employing interaction weighted diff-in-diff suggested by Baker et al (2021). Taken together, the results show deterring outcome of ESG disclosure regulations on M&A activities highlighting the possibility that (ESG disclosure) law can act as a source of friction. We further show that the passage of ESG disclosure regulation results in delay of deal

[1] Stulz (2005) maintains that… "A firm's country of incorporation is a more important determinant of its financial policies than its industry."

completion time and increases bargaining power of target firms increasing bid premiums in the M&A deals.

Our enquiry on the industry-level heterogeneous effect of ESG disclosure regulation on M&A outcomes based on ESG controversies reveal the deterrence is experienced in industries ranking low in ESG controversies. The results underscores interventions having unintended harm of interventions to industries where law would expect to facilitate.

We next examine the role played by quality of national institutions and country-governance (specifically, regulatory quality, rule of law, and control of corruption) which could limit state expropriation and rent seeking opportunism. Our empirical results reveal quality of national institutions nullify the deterrence effect of ESG disclosure regulations underscoring its merit of developing institutions as these acts as enablers for capital formation and real investment (M&A) in the market. Finally, our results hold in the sub-sample of bilateral M&A activities.

Our paper makes two important contributions to the literature. The debate of on potential cost and benefit of regulatory interventions occupies central space in the regulatory economics. Our paper contributes to the literature by documenting unintended outcomes of ESG disclosure laws and show ESG disclosure deters M&A activities both in intensities and magnitude. It further increases deal completion time and increases cost of acquirer to bid the deal thereby acting as a source of friction, prima facia.

Second, we contribute to the literature in institutional economics and national governance by highlighting the role of national institutions in creating enabling environment which nullifies the deterrence effect of ESG regulation implementation. The role of national institutions as enabling institutions have been well documented in the literature (La Porta et al, 1996; Stulz, 2005; Koirala et al., 2023; Rao et al, 2023). For instance, Koirala et al. (2023) documents how

takeover regulations could trigger short-termism and that the quality of national governance shatters this short-termism to promote long term-oriented investments. Similarly, Rao et al. (2023) argues national institutions could provide a partial hedge to M&A outcomes when geopolitical tension looms. We add to this strand of literature by showing how national governance and quality of institutions that lower state expropriation ex ante acts as an enabler to nullify the deterrence effect of ESG disclosure regulation.

Literature review

While the countries around the world are setting priorities towards their net zero and climate response commitments, regulators are, at the same time, stand at an irresolute juncture regarding policy tools to set forth actions/interventions that effectively deliver climate response actions while promoting capital (re)allocation to towards sustainability. Mandatory ESG disclosure regulation is one such intervention tool.

In theory, the disclosure regulations should eliminate information frictions related to ESG performance in the market. These national laws and regulations on ESG could therefore create facilitate sustainable investments and capital formation (La Porta et al, 1996; Glendening et al., 2016). Many regulators worldwide, increasingly are analysing the government measures put on organisations to ensure that corporate practices are associated with wider environmental and societal interest. Governments and regulators emphasise ESG disclosure in their public objective for balancing private companies' activities with public benefits. According to Chan et al. (2014), and Talbot and Boiral (2015), government policies, as a result of new guidelines for working conditions, environmental security and corporate governance, required new reporting policies and regulations on ESG disclosure. There was also increasing demand from market participants

and pressure from investors for ESG disclosure. Earlier literature shows evidence that stakeholders considered ESG information in their decision-making process (e.g. see Berthelot et al. 2003; Gupta and Goldar 2006; Moneva and Cuellar 2009). Solomon and Solomon (2006) concluded that, from institutional investors and analysts, there was a continuous push to publish sustainability reports from corporations. ESG disclosure could play an important role in an economy, and accessibility of ESG information could serve crucial for all stakeholders to ensure appropriate capital distribution and investment.

Public consciousness of companies in the community has grown, due to social, environmental and ethical issues (Reverte 2009). Climate variations, declining natural resources, deprived working environment and rising corporate scandals have enhanced society's pressure with regard to companies' environmental, social and ethical duties (Money and Schepers 2007, p. 2). The companies are stimulated to initiate socially appropriate actions to develop correspondence between corporate operations and social values (Aerts and Cormier 2009). Therefore, companies face stress in terms of environmental, social, and governance (ESG) disclosure, as these are considered as thoughtful matters (e.g., Ioannou and Serafeim 2012; Palazzo and Scherer 2006).

In the earlier literature on disclosure benefits and costs, some researchers (e.g. see Albarrak et al., 2019; Bui et al., 2019) illustrated that a firm's major carbon disclosure can reduce the cost of equity by equalising its bad carbon performance. Similarly, foreign investment tend to show lower preference of companies with low governance standards and poor disclosure of non-financial (ESG) information (Leuz, Lins, and Warnock, 2009). Serafeim and Grewal (2017) suggests that ESG data could be applied to forecast the financial performance of companies implying ESG disclosures could makes firms more financially informative.

We refer this positive role of ESG as the *Facilitation Hypothesis* (La Porta et al, 1996; Glendening et al., 2016; Fauver et al, 2017). The *Facilitation Hypothesis* posits that the state through its regulatory reforms lowers market frictions that facilitate corporate sectors to engage in mutually beneficial contracts and enforces these contracts (Stulz, 2005). In line with the Facilitation argument, previous study by Krueger et al. (2022) documented positive stock market liquidity consequences in the economies in the aftermath of mandatory ESG disclosure regulations.

The mandatory disclosure interventions are however not without concern (Rajgopal and Tantri, 2023). One concern is these interventions, if not promote capital formation, should least, do no harm to corporate investment that drives global growth. For instance, Rajgopal and Tantri (2023) suggests Our results suggest that regulatory intervention in can both diminish the signaling value and lead to a reduction in voluntary disclosure.

The *Deterrence effect* of regulatory intervention provides some uncertainty on corporate risk taking and effect on risk-taking in the direction towards deterring investment like M&A . It increases compliance burden creating disincentive for managers to pursue risky projects (Bargeron et al, 2010).

The institutional regime in an economy is based on the allocation of rights and obligations among the firm's stakeholders, including shareholders (La Porta, 1999). The protection of different stakeholders is defined and enforced to varying degrees depending on the strengths of institutions of corporate governance in an economy (Capron and Guillén, 2009). Originitaed from distinctive historical episodes and events, national corporate governance institutions differ significantly over the cross-section of countries, with effects for the degree of protection enjoyed

by shareholders and other stakeholders (La Porta, 1999; Schneper and Guillén, 2004; Djankov, et al., 2008).

Our postulation towards national institutions is that these are enabling environment as these institutions enable investors' confidence in the financial market of an economy (Schneper and Guillén, 2004). These institutions protect corporates against state expropriation (Stulz, 2005). These country-level corporate governance rules also improve confidence among the market participants in the rules of society. In particular, this improves the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence which ultimately lowers state expropriation and rent seeking. These institutions also improve the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

In the existence of week national institution, a regulatory intervention itself could give rise to the playing field for opportunistic behaviour from state-rulers/actors increasing the indirect cost of doing business. As M&A is a strategic investment, this corporate risk-taking in the form of M&A may face deterrence when the national governance is weaker. In the existence of seemingly competing hypothesis, we examine the M&A outcomes of ESG disclosure regulations of 66 countries.

Sample composition and data sources

We source ESG disclosure law data from Krueger, Sautner, Tang, Zhong (2021) and verify this with extensive media search. The information of the ESG disclosure regulations of 53 countries in presented in Appendix table A1. We use the Thomson Reuters Securities Data Corporation (SDC) database accessed through ThompsonOne and obtain the M&A deals data of 66 countries

from 2000 to 2022 allowing us at-least 3 years before and after of enacting countries. This results in a total of 785,459 deals with a total volume (value) of USD 66.435 billion in our final sample constituting 53 target nations. We summarize the distribution of M&A deals across sample countries in Table 1. We observe that United States constitutes the maximum number of M&A deals with appx 26% of all deals both as a target and acquirer nation. This is followed by China, United Kingdom, and Japan with 8.4%, 7.31%, 6.14% of total number of deals as target nation and with 7.31%, 6.96% and 6.39% of total number of deals as acquirer nation respectively. In terms of total deal value, United States leads the table with more than USD 31 billion in deal value, followed by United Kingdom (USD 53.12 billion / USD 44 billion), and China (USD 41.3 billion / USD 41.6 billion) as target/acquirer nation respectively. Among the 25 nations with the ESG disclosure laws, we have 44.7% of the total M&A deals valuing USD 22.85 billion as target nation and 40.26% of the total M&A deals valuing USD 22.06 billion as acquirer nation.

[Insert Table 1 about here]

The data on industry characteristics and security prices are obtained from Datastream. Further we source various country specific macro-economic and governance data are from World Bank WDI and WGI database. Details of all the variables used their data source used in this study are described in Table A2.

Measuring M&A activities

Dependent Variables

Our employment of dependent variables are in keeping with literature of M&A (Erel at al., 2015). Our primary dependent variables includes *deal frequency* (*deal volume*) which is computed as a number of deals (US$ volume of deals in millions) aggregated at country level (or country-

industry level) in a in country *c* in a year. We also segregate M&A outcomes into total and cross borders deals.

Enabling Institutions

A country's quality macro-governance is measured by three time-varying indices: capturing the quality of institutions (Regulatory quality, Rule of Law, Control of Corruption)

Control variables

Drawing on the existing literature, we include a number of country specific, bilateral country-pair specific, and deal control variables in all multivariate regressions. Our first set of controls is specific to the target's domicile (Rossi and Volpin, 2004; Erel et al., 2012; Ahern et al., 2015). To capture a country's size and potential economic growth and development, we use the US$ of country GDP (*Country-size*), annual percentage change in gross domestic product (GDP growth) and GDP per capita (GDPCap) respectively. We also control of the inflow and outflow of FDI as these are other sources of capital formation and real investments. We further include the ratio of total stock market capitalization to GDP and Domestic credit as a proportion of GDP as a proxy of capital market development and Domestic credit market respectively. We capture country-specific trade openness (Trade) by including the ratio of the sum of the imports and exports value to GDP. Further, we also control for the effect of varying inflation (Inflation) by incorporating percentage change in the annual consumer price index. Data on all macroeconomic factors and governance factors are retrieved from the WDI open source from the World Bank. For the examination of moderating role of national institutional quality, we employ WGI open source of the World Bank.

We also incorporate commonly used deal-specific variables in the model. These include Deal size measured as the natural logarithm of the dollar value of the M&A deal, Public target dummy that takes the value of one if the target firm is a listed firm and zero otherwise. Similarly, we include Cash deal dummy that takes the value of one if at least 50% is paid in cash and zero otherwise, and Diversifying deal dummy that takes the value of one if the 2-digit SIC codes of the acquirer and target are different and zero otherwise. Data on all deal-specific factors are obtained from the SDC.

Descriptive statistics

In the table 2 we summarize the data of dependent and independent variables used in the study under three panels. First in the Panel A we summarize the aggregated data at target nation-year level. We summarize the bilateral pair-year level aggregated data in the Panel B. Finally in the Panel C, we provide the descriptive statistics of the target-country industry and year level aggregated data.

[Insert Table 2 about here]

Identification Strategy

To isolate causal inferences, we use difference-in-difference estimation that exploits staggered enactment of ESG disclosure regulations in the international set up of 66 countries from 2000 to 2022. We compare the cross-time evolution of the dependent variables (M&A outcomes) in countries that enact ESG disclosure regulations relative to countries that do not enact the restrictions. In the most basic setup, we estimate:

$$y_{ct} = \alpha + \beta(Law_c \times After_t) + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct} \quad (1)$$

where y_{ct} is the dependent variable of interest (deal frequency or deal volume) occurring in country *c* during year t; (Law_c is a categorical dummy variable equal to 1 if a country has enacted ESG regulation, 0 zero otherwise; and $After_t$) is an event dummy variable that equals 1 for period after the enactment of ESG regulation in an enacting country, 0 otherwise. $X_{c,t-1}$ is a vector of control variables, and ε_{ct} is the error term. We double cluster the standard errors at the country and year level. Equation (1) allows us to gauge whether the relationship between the M&A outcomes (e.g. deal frequency) and enactment of ESG disclosure exhibits deterring or facilitating effect.

Underlying assumption of parallel trend.

Our identification strategy depends on the diff-in-diff estimation which works on the assumptions of parallel trend before treatment (Angrist and Pischke, 2008). In other words, the dependent variable should evolve differently before treatment. To test this assumption, we start with a placebo experiment and create false experiment.

$$M\&A_{ct} = \alpha + \beta_1 Placebo_{c[-t1]} + \beta_2 Placebo_{c[-t2]} + \beta_3 Placebo_{c[-t3]} + \beta_4 Placebo_{c[-t4]} + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct} \quad (2)$$

where $Placebo_{c[-tn]}$ is a false experiment gauged by categorical dummy variable that equals 1 if a country c has enacted ESG regulation in year n before the actual year of enactment, 0 otherwise. $X_{c,t-1}$ is a vector of control variables, and ε_{ct} is the error term. A non-significant coefficient of $Placebo_{c[-tn]}$ assures that parallel trend assumption holds. We present the results of Placebo experiment in

Table 3a. Insignificant coefficients all proxies of dependent variables in Table 3a lends credibility to the underlying assumption.

[Insert table 3a over here]

We further run a second set of Placebo experiments by double randomisation by randomly assigning false treatment to the subsample of countries that do not pass ESG disclosure regulation during our study period and run a diff-in-diff around the randomly assigned false events. We then gauge interaction coefficient. The results are reported in Table 3b which shows non-significant interaction coefficients over different percentage of random assignment (40%, 50% and 60%) and across all dependent variables that includes deal frequency and deal volume of total and cross border deals. The two set of placebo experiments taken together lends credibility in implementing diff-in-diff specification for causal impact.

[Insert table 3b over here]

ESG disclosure laws and M&A outcomes:

We begin our empirical estimation by testing the enabling argument vis-à-vis deterrence argument of ESG disclosure regulation by running estimation specification equation (1).

We present the results of the baseline regression in column [1-3] of tables 4a for deal frequency and 4b for deal volume as dependent variables.

In the countries that pass an ESG Disclosure law, we observe that the number of M&A deals decline significantly in the years following the regulation. In column [1] of Table 4 without any control variables, we see a -25.00% ($100 \times (e^{-0.28.77} - 1)$) decline in the total M&A deals at 1% significance level. Even after controlling for macro-economic variables that may influence the demand and supply of M&A deals in model [2], we observe the DiD coefficients are stable. In terms of economic magnitude, this translates into about 21.5% decline in M&A deals per year. Similarly, in table 4 b In models [1] and [2], we measure the impact of ESG disclosure on the size of M&A deals measured in US$ (in millions) and find the impact is consistent with the results in Table 4 a models [1] and [2]. In terms of magnitude, the deterrence effect of ESG disclosure regulations translates to 17.45% of dollar volume of M&A per year. We have allowed for target nation and year fixed effects in all our models. These results support our deterrence hypothesis indicating the law as a source of friction.

Taken together, the results show ESG disclosure regulations cause a deterrence in M&A intensity and volume thereby supporting the law as friction argument creating deadweight cost to deter M&A activities.

[Insert table 4a over here]

[Insert table 4b over here]

We complement the baseline result with visual plot of Average treatment Effect of the treated (ATET) around ESG disclosure regulation event following estimation equation 3.

$$Ln(Deal\ Freq_{c,t}) = \alpha_1 R_{t-1} + \alpha_2 R_{t-2} + \alpha_3 R_{t-3} + \alpha_4 R_{t-4} + \alpha_5 R_t + \alpha_6 R_{t+1} + \alpha_7 R_{t+2} + \alpha_8 R_{t+3} + \alpha_9 R_{t+4} + \delta X_{ct} + \varphi_c + \varphi_t + \varepsilon_{ct}, \quad (3)$$

where n∈{-1,-4}({+1,+4}) is the false (true) experiment upto 4 lag (lead) years. where all variables are defined as in equation (1), in country c during year t, and R_{t-n} (R_{t+n})is a dummy variable equal to 1 in one lag (lead) period of actual ESG regulation enactment in country c.

[Insert Figure 1 over here]

Figure 1 plots the coefficients of this design along with their 95% confidence interval. As shown in the figure 1, none of the DiD estimates ($\alpha_s$are distinguishable from zero in the lag term indicating that there is no systematic difference in the evolution of M&A deals in countries with and without ESG disclosure regulations prior to the passage of regulation holding the parallel trend assumption of DiD specification for assigning causality. On the contrary and in line with our deterrence effect argument, in and following the enactment years, the coefficients are significantly distinguishable from zero and negative.

Sensitivity Analysis

We see in table 1 that 26.17 (48.04) % of the total M&A deals (volume) involve US based targets, it could be argued that the results are driven by US. In order to alleviate this concern as the first set of robustness test, we estimate the causal effect excluding the US and China in Models [3] & [4] of table 4a (for deal frequency) and 4b (for deal volume) and also Models [7] & [8] of table

4a (for cross border deal frequency) and 4b (for cross border deal volume) find that the DiD coefficients are stable after excluding M&A deals where US and China is target nation.

We further conduct robustness checks by allowing different window periods around the intervention events, specifically ±2,±3 and ±4 years around the ESG disclosure regulation. We report the results in table 4c. While models 1-3 report results on deal frequency, models 4-6 present results with deal volume. Our sensitivity results reveal that the impact is stable over different shorter or longer windows suggesting the persistence of impact.

We next run the regression using a scaled dependent variable in model [8]. We do so by scaling the number of deals by the number of listed companies in the target nation in line with common practice in M&A research (Volpin, 2017). Finally in model [9] we control the effect of business cycles affecting our results. The result is consistent with previous estimation both in magnitude and significance.[2] All these additional robustness tests support our main results that indicate a general decline of 20.01% to 23.9% in M&A deals across models [3] to [9]. We have allowed for target nation and year fixed effects in all our models. These results support our deterrence hypothesis indicating the law as a source of friction.

[Insert table 4c over here]

ESG disclosure regulation and transaction cost.

The premise on which deterrence hypothesis on the effect of ESG disclosure regulation is that the intervention could be perceived as friction that discourages the intensity and volume of M&A

[2] As the data on business cycles are missing for a fraction of our data-points this has reduced the number of observations. However, the coefficient is consistent and significant in line with our hypothesized deterrence effect.

activities. In this section, we examine two measures of transaction cost: deal premium and deal completion time.

Deal premium

We gauge the transaction cost impact of ESG disclosure regulation on M&A, we first estimate the effect of ESG disclosure regulation on deal premium. From theoretical standpoint, in the face of the real options channel potential acquirers would delay their acquisitions in regime with friction. The logical extension of this view is the prediction that those acquirers who ultimately decide to bid are selected from among the firms for which deterring is more costly thereby positively affecting deal premium, all else equal (Hao et al., 2020).

To test our prediction, we examine the effects of ESG disclosure regime on offer premium. In particular, if during post friction period (ESG disclosure regulation) target firm's negotiation power increases, we should expect that they should be able to receive a higher offer price from acquirers. We report the test in models ([1]-[3]) of table 5. In line with the higher negotiation power of target firms when acquirer who ultimately decide to bid when facing new disclosure regime, estimation models ([1]-[3]) of table 5 shows an increase in bid-premium. The coefficients are stable using three different variations of bid-premium (bid-premium over target's price 1 day (model 1) , 1 week (model 2) and 1 day (model 3) prior to deal announcement. The results taken together, support the argument that when facing regulatory friction, the target's bargaining power increases as acquirer who ultimately decides to bid having higher cost of delaying or deterring.

Deal Completion time

Our second measure to gauge the transaction cost impact of ESG disclosure regulation on M&A is deal completion time. To the extent M&A participants find the imposition of regulation as a source of friction, this could not only deter M&A activities, but also delay the process of M&A completion. We examine this possibility by examining the impact of ESG disclosure regulation on deal completion time both intensive and extensively. We measure prolonging deal completion time by intensive margin by computing the time between deal announcement and deal completion (effective).

As reported in model 4 of table 5, the deal completion days (in natural logarithm) has increased following the ESG disclosure regulation. In terms of magnitude, this increases the deal completion time on an average by 3.93% to 4.5%. Finally, in model 5 of table 5, we use the prolongation of deal completion by extensive margin by gauging deal completion likelihood where the results reveals the likelihood of deal completion decreases following ESG disclosure regulations. The results yet corroborate to our central postulation that law in itself could be a source of friction stemming from the possibility of state opportunism and rent seeking increasing the dead-weight cost to the M&A deals.

[Insert Table 5 about here]

Industry Heterogeneity

ESG disclosure regulation affect M&A activities differentially across industries. In this section, we examine the industry heterogeneity to the global flow of M&A on the effect of ESG disclosure

regulations. To do so, we gauge industry level ESG controversies and estimate the effect of deterrence across the heterogeneity of industry based on less and high ESG controversy. To classify industry into high and low controversy-industry we sort average ESG controversy-scores of firms from Refinitiv across sic-2 digit codes into 5 quintiles each year. We then classify industry as high (low) controversy if it falls in the highest (lowest) quintile. We create high (low) controversy dummy to capture the industry heterogeneity and interact the variable with the post enactment variable to gauge the heterogenous impact. Specifically, we run estimation equation (4).

$$M\&A_{cit} = \alpha + \beta ESGD_{c,t} + \omega_1\left[ESGD_{c,t} \times Low\_ESG\_controv_{it}\right] + \delta X_{c,t-1} + \varphi_i\varphi_c + \varphi_t + \varepsilon_{cit} \qquad (4)$$

where Low-ESG controv. is a dummy variable that takes the value of one if the industry average of ESG controversies in year *t* is in the first tercile and zero otherwise. All other symbols are as in the baseline equation (1).

We report the results in table 6. Our enquiry on the industry-level heterogeneous effect of ESG disclosure regulation on M&A outcomes based on ESG controversies reveal the deterrence is experienced in industries ranking low in ESG controversies revealing the harm where law in intended to support more or least harm less.

[Insert table 6 over here]

Quality of Institutions [Law as friction and national governance]

The institutional regime in an economy is based on the allocation of rights and obligations among the firm's stakeholders, including shareholders (La Porta, 1999). The protection of different stakeholders is defined and enforced to varying degrees depending on the strengths of institutions of corporate governance in an economy (Capron and Guillén, 2009).

We posit the quality of the institutions as enablers of investors' confidence in the financial market of an economy (Schneper and Guillén, 2004). These institutions protect corporates against state expropriation (Stulz, 2005). These institutions also improve the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

In the existence of week national institution, a regulatory intervention itself could give rise to the playing field for opportunistic behaviour from state-rulers/actors increasing the indirect cost of doing business. As M&A is a strategic investment, this corporate risk-taking in the form of M&A may face deterrence when the national governance is weaker. On the contrary, an economy with strong institutions and state-mechanism to discourage corruption, the opportunistic nature of regulatory interventions weakens. In line with this argument, in this second set of enquiry, we examine whether quality of institutions weakens the deterrence effect of ESG disclosure regulation. To examine this prediction, we employ following regression equation

$$M\&A_{ct} = \alpha + \beta ESGD_{c,t} + \omega[\, ESGD_{c,t} \times Gov_{it}] + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct} \qquad (5)$$

,

While our baseline results support the conjecture that ESG disclosure laws act as friction and thus reduce the number of M&A deals, we investigate whether the results hold when we consider

the quality of institutions of these target nations. We use RQ, RL, CC and the PC1 as an additional control variable and interact our DiD with these continuous variable scores and present the results in Table 5. Supporting our line of argument that higher quality of national institutions lowers the state-opportunism and rent seeking opportunism weakening the deterrence argument we see that quality of institutions of the target nation positively moderates the effects of frictions. The corollary is that, with each unit reduction of RQ, RL or CC, the M&A further reduces by approximately 8.78%, 8.53% and 8.57% respectively.

[Insert Table 7 about here]

Bilateral M&A [The effects of ESG disclosure on M&A: Bilateral Perspective]

We extend our analysis of the impact of ESG disclosure laws on bilateral country-pair settings. While we lose some observations from our original sample due to the restriction that both target and acquirer domicile are required to be from the 66 countries, country-pair analysis provides rich source of variation on the impact of ESG disclosure regulations on M&A outcomes. Specifically, country-pair analysis enables us to isolate the impact of the ESG disclosure laws on their M&A activities originating from the domiciles of targets and acquirers separately. Following specifications similar to Erel, Liao, and Weisbach (2012) we run the following regression:

$$M\&A_{tg-a,t} = \alpha + \beta_1 ESGD_{tg,t1} + \beta_2 ESGD_{a,t2} + \beta_3\left[ESGD_{tg,t1} \times ESGD_{a,t2}\right] + \eta_1\left[ESGD_{tg,t1} \times Gov.dist_{tg-a,t}\right] + \eta_2\left[ESGD_{a,t2} \times Gov.dist_{tg-a,t}\right] + \eta_3\left[ESGD_{tg,t1} \times ESGD_{a,t2} \times Gov.dist_{tg-a,t}\right] + \delta X_{c,t-1} + \varphi_{tg-a} + \varphi_t + \varepsilon_{ct} \quad (6)$$

where $M\&A_{tg-a,t}$ is the M&A-outcome dependent variables aggregated at target-acquiror nation pair each year. $ESGD_{tg,t1}$ ($ESGD_{a,t2}$) is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting target (acquiror) country following the year of enactment, and zero otherwise. $Gov.dist_{tg-a,t}$ is a continuous governance difference index between target-acquiror nation pair where governance is gauged by Regulatory Quality (RQ), Rule of Law (RL), Control of Corruption (CC) and the first principal component from principal component analysis (PC1) of the previous three governance measures. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of target-acquiror nation pair and year fixed effects. Standard errors are clustered at target-acquiror nation pair and year level and respective p-values reported in parenthesis.

The results of the equation (4) are presented in Table 7. While the results are consistent with our baseline results in table 4 the bilateral results have other revelations too. While ESG disclosure regulations of either acquior or target domicile leads to deterrence in M&A outcomes, both in frequency and volume, the deterring effect gets positively moderated when both dealing nation-pair have passed disclosure regulation providing a credible bonding among the transacting pairs. The results could be policy relevant as a way to deal with deterrence.

[Insert Table 8 about here]

Institutional Quality and Disclosure Law: Bilateral M&A

Finally, we extend the analysis of the moderation of quality of institutions on the deterrence effect of ESG disclosure in the bilateral enquiry. To do so, we run diff-in-diff-in-diff regression (5)

We present the results in table 8. The results across different models ([1]-[5]) are consistent with the findings in table 6 and supports the argument that quality of national institutions lowers state-opportunism and weakens the deterrence effect of ESG disclosure regulation.

[Insert Table 8 about here]

Conclusion

While regulations are aimed to eliminate or lower market friction to facilitate efficient resource allocation, in the wake of weak institutions state-opportunism and rent seeking behaviour can lead to regulatory intervention, prima facia, the source of market friction increase dead-weight cost in M&A outcomes. We test this argument exploiting staggered implementation of ESG disclosure regulations of 53 countries from 2000- 2023 and examining the M&A consequences. Using a diff-in-diff estimation design, we document an in support of the deterrence argument of ESG disclosure regulations. We further show that good quality institutions and national governance minimize this risk of state opportunism and rent seeking thereby nullifying the deterrence effect. Our empirical estimation reveals ESG disclosure regulation deters M&A both in frequency and volume, in support of the friction view of law. The results are robust to the employment of cross-border sub-sample and survives a battery of robustness test. We further document increase in transaction cost of in the form of higher deal premium, prolonged deal completion time and the increase in likelihood of deal completion following the introduction of ESG disclosure regulation. The country-industry level aggregation suggests this deterrence is driven by industries facing higher ESG related controversies. Our examination of moderating role of state opportunism reveals the deterrence effect of ESG disclosure laws on M&A outcomes lowers in both frequency and magnitude by the quality of national institutions. Our study reinvigorates the importance of national governance as enabling environment to bring positive outcomes of these ESG reforms.

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Table 1. Distribution of sample across

Target Nation	ESG Disclosure Regulation	Deal Frequency	Deal volume (USD billion)	Target Nation	Deal Frequency	Deal volume (USD billion)
Argentina	2008	2703	111.61	Bahrain	246	12.77
Australia	2003	38004	1575.30	Bermuda	468	99.57
Austria	2016	4112	123.28	Brazil	12796	872.70
Belgium	2009	6165	273.26	Bulgaria	1390	22.84
Canada	2004	49918	2222.68	Colombia	1880	74.73
Chile	2015	2578	121.13	Cyprus	1135	47.05
China	2008	80106	3280.41	Egypt	2078	85.49
Denmark	2016	6955	247.97	Israel	3844	162.40
Finland	2016	6533	194.15	Japan	58456	1636.77
France	2001	38543	1604.71	Jordan	614	9.73
Germany	2016	35281	1468.20	Kazakhstan	870	73.08
Greece	2006	2248	146.40	Kenya	545	9.03
Hong Kong	2015	15216	693.83	Malta	311	6.07
Hungary	2016	2109	51.91	Mauritius	337	8.08
India	2015	26526	531.84	Mexico	4051	328.47
Indonesia	2012	5162	167.83	Morocco	581	27.84
Ireland-Rep	2016	4260	429.99	New Zealand	5552	98.56
Italy	2016	17635	1042.66	Nigeria	784	49.48
Malaysia	2007	13372	251.38	Oman	374	5.95
Netherlands	2016	13822	1055.62	Qatar	209	8.72
Norway	2013	8343	308.06	Russian Fed	29782	758.28
Pakistan	2009	699	16.81	Saudi Arabia	1127	37.37
Peru	2015	1560	51.69	South Korea	25897	798.40
Philippines	2011	2820	70.75	Sri Lanka	696	4.80
Poland	2016	8774	123.53	Switzerland	9265	950.18
Portugal	2010	3179	176.84	Thailand	4887	116.65
Romania	2016	2106	23.49	Tunisia	336	6.86
Singapore	2016	9757	298.16	Ukraine	3638	37.97
Slovenia	2017	862	10.86	United Arab Emirates	2136	94.60
South Africa	2010	6285	299.22	United States	238980	27693.87
Spain	2012	19680	768.87	Vietnam	5365	36.42
Sweden	2016	15305	456.78			
Taiwan	2019	5340	218.27			
Turkey	2014	4366	181.98			
United Kingdom	2013	66507	4302.04			
Total		526831	22901.52		418630	34174.73

Table 2. Summary statistics

	count	mean	p50	min	max	sd
Ln(Deal frequency)	1516	5.099	5.173	0.693	9.678	1.694
Ln(Deal frequency-CB)	1515	4.251	4.382	0.693	7.979	1.402
Ln(Deal vol)	1516	6.986	8.187	0.000	14.690	3.895
Ln(Deal vol- CB)	1516	6.240	7.360	0.000	12.945	3.585
RL	1516	0.507	0.355	-1.513	2.125	0.888
RQ	1516	0.592	0.527	-1.293	2.255	0.789
CC	1516	0.480	0.153	-1.502	2.459	0.982
PC	1516	0.000	-0.366	-3.763	3.095	1.700
Country-size	1516	20.284	26.020	0.000	30.304	11.341
GDP-per-capita	1516	7.243	9.023	0.000	11.519	4.182
GDP-growth	1516	0.026	0.022	-0.056	0.134	0.031
Market-cap	1516	561.389	168.000	0.000	5,295.000	1,049.956
Dom-credit	1516	0.604	0.496	0.000	2.013	0.558
FDI-in	1516	0.034	0.018	-0.056	0.411	0.065
FDI-out	1516	0.026	0.005	-0.053	0.432	0.064
Trade	1516	0.665	0.566	0.000	3.791	0.673
Inflation	1516	0.035	0.018	-0.060	0.376	0.058
Unemployment	1516	0.052	0.043	0.000	0.255	0.050

Tests-univariate

	No law nation	Law nation	Diff	t-stat	p-value
Ln (Deal frequency)	4.3594	5.7527	-1.3933	-17.5273	0.0000
Ln(Deal vol)	6.1866	7.6926	-1.5060	-7.6552	0.0000
Ln(Deal frequency-CB)	3.5886	4.8358	-1.2472	-19.2847	0.0000
Ln(Deal vol- CB)	5.4346	6.9509	-1.5163	-8.4057	0.0000
Obs.	711	805			

Table 3 a Placebo 1

The table reports the results of the regression equation:

$$M\&A_{ct} = \alpha + \beta_1 Placebo_{c[-t1]} + \beta_1 Placebo_{c[-t2]} + \beta_1 Placebo_{c[-t3]} + \beta_1 Placebo_{c[-t4]} + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct}$$

where $M\&A_{ct}$ is the M&A-outcome dependent variables: $Placebo_{c[-tn]}$ is a categorical variable that takes the value of one if a firm belongs to an false shock n years before actual ESG disclosure law enactment after the year of enactment, and zero otherwise. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of firm and year fixed effects. Standard errors are clustered at firm level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	1	2	3	4
$Placebo_{c[-t1]}$	-0.055	-0.064	-0.004	0.126
	(0.57)	(0.28)	(0.98)	(0.59)
$Placebo_{c[-t2]}$	0.023	0.035	0.054	-0.052
	(0.82)	(0.67)	(0.74)	(0.84)
$Placebo_{c[-t3]}$	-0.029	0.005	-0.379	-0.277
	(0.76)	(0.96)	(0.29)	(0.45)
$Placebo_{c[-t4]}$	-0.098	-0.118	0.439	0.538
	(0.37)	(0.20)	(0.31)	(0.20)
Country-size	-0.017	0.020	0.046	0.046
	(0.45)	(0.33)	(0.46)	(0.43)
GDP-per-capita	0.069	-0.038	0.123	0.098
	(0.27)	(0.46)	(0.46)	(0.53)
GDP-growth	0.799	1.326*	-0.703	-1.808
	(0.38)	(0.09)	(0.75)	(0.49)
Market-cap	0.000	-0.000	0.001***	0.000***
	(0.28)	(0.69)	(0.00)	(0.00)
Dom-credit	-0.195	-0.161**	0.451	0.273
	(0.11)	(0.05)	(0.16)	(0.30)
FDI-in	0.478	1.133**	2.914**	5.448***
	(0.45)	(0.03)	(0.03)	(0.00)
FDI-out	-0.337	-1.000**	0.241	-1.727
	(0.53)	(0.02)	(0.84)	(0.17)
Trade	0.019	-0.029	-0.508**	-0.558**
	(0.84)	(0.71)	(0.04)	(0.02)
Inflation	0.128	-0.129	-2.215*	-2.464*
	(0.81)	(0.76)	(0.08)	(0.07)
Unemployment	-1.312*	-0.949	0.567	1.187
	(0.10)	(0.20)	(0.73)	(0.56)
Target nation FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
No. of obs.	1516.000	1515.000	1516.000	1516.000
Adjusted R2	0.935	0.924	0.910	0.874
Within-R2				

Table 3 b. Placebo 2

The table reports the results of the regression equation:

$$M\&A_{ct} = \alpha + \beta Placebo_{c,t} + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct}$$

where $M\&A_{ct}$ is the M&A-outcome dependent variables: $ESGD_{c,t}$ is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting country following the year of enactment, and zero otherwise. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of firm and year fixed effects. Standard errors are clustered at firm level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	40% random assignment				50% random assignment				60% random assignment			
	freq	freq-CB	vol	vol-CB	freq	freq-CB	vol	vol-CB	freq	freq-CB	vol	vol-CB
$Placebo_{c,t}$	-0.019	0.106	-0.248	-0.179	0.104	0.172	0.278	0.249	0.168	0.207	0.347	0.487
	(0.88)	(0.42)	(0.52)	(0.63)	(0.42)	(0.17)	(0.35)	(0.43)	(0.12)	(0.12)	(0.24)	(0.12)
Country-size	-0.012	0.005	0.126	0.146*	-0.013	0.003	0.123	0.143*	-0.012	0.004	0.125	0.144*
	(0.71)	(0.90)	(0.15)	(0.08)	(0.68)	(0.93)	(0.16)	(0.08)	(0.68)	(0.90)	(0.16)	(0.08)
GDP-per-capita	0.041	0.008	-0.111	-0.167	0.043	0.011	-0.104	-0.161	0.042	0.008	-0.109	-0.164
	(0.60)	(0.93)	(0.64)	(0.46)	(0.58)	(0.91)	(0.66)	(0.47)	(0.58)	(0.93)	(0.65)	(0.48)
GDP-growth	-1.058	-0.351	-4.493	-6.539**	-0.973	-0.339	-4.078	-6.209*	-1.034	-0.444	-4.246	-6.353*
	(0.42)	(0.73)	(0.11)	(0.05)	(0.46)	(0.76)	(0.17)	(0.07)	(0.41)	(0.67)	(0.15)	(0.07)
Market-cap	0.000	0.000	0.001**	0.001**	0.000	0.000	0.001**	0.001**	0.000	0.000	0.001***	0.001**
	(0.24)	(0.62)	(0.01)	(0.02)	(0.27)	(0.70)	(0.01)	(0.02)	(0.23)	(0.59)	(0.01)	(0.02)
Dom-credit	-0.264	-0.211	0.300	0.164	-0.244	-0.177	0.353	0.211	-0.250	-0.194	0.328	0.203
	(0.17)	(0.13)	(0.55)	(0.68)	(0.19)	(0.20)	(0.48)	(0.61)	(0.17)	(0.14)	(0.51)	(0.61)
FDI-in	1.827	2.307*	3.907	7.979**	1.869	2.368*	4.028	8.085**	1.825	2.297*	3.910	7.976**
	(0.27)	(0.10)	(0.21)	(0.02)	(0.25)	(0.06)	(0.19)	(0.01)	(0.29)	(0.10)	(0.23)	(0.02)
FDI-out	-0.261	-1.140	5.678	1.321	-0.411	-1.249	5.085	0.833	-0.100	-0.813	5.807	1.667
	(0.84)	(0.32)	(0.27)	(0.72)	(0.74)	(0.28)	(0.31)	(0.81)	(0.93)	(0.44)	(0.25)	(0.63)
Trade	0.154	0.006	-1.392*	-1.516**	0.154	0.001	-1.390*	-1.515**	0.150	-0.003	-1.397**	-1.526**
	(0.47)	(0.97)	(0.05)	(0.02)	(0.47)	(1.00)	(0.05)	(0.02)	(0.48)	(0.99)	(0.05)	(0.02)
Inflation	0.356	0.078	-2.199**	-2.056*	0.401	0.097	-2.005*	-1.899	0.488	0.189	-1.845*	-1.626
	(0.40)	(0.81)	(0.04)	(0.08)	(0.34)	(0.77)	(0.10)	(0.13)	(0.27)	(0.57)	(0.10)	(0.17)
Unemployment	-2.045	-2.601	1.874	-0.269	-1.980	-2.308	1.793	-0.285	-2.053	-2.440	1.586	-0.453
	(0.19)	(0.10)	(0.65)	(0.96)	(0.20)	(0.13)	(0.65)	(0.95)	(0.19)	(0.12)	(0.70)	(0.93)
Target nation FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	711	711	711	711	711	711	711	711	711	711	711	711
Adjusted R2	0.928	0.896	0.862	0.805	0.928	0.897	0.862	0.806	0.929	0.898	0.863	0.807

Table 4a. Law or friction

The table reports the results of the regression equation:

$$M\&A_{ct} = \alpha + \beta ESGD_{c,t} + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct}$$

where $M\&A_{ct}$ is the M&A-outcome dependent variables: $ESGD_{c,t}$ is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting country following the year of enactment, and zero otherwise. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of firm and year fixed effects. Standard errors are clustered at target nation and year level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	1	2	3	4	5	6	7	8
	Total deal	Total deal	without USA and CHN	without USA and CHN	CB	CB	CB excluding USA and CHN	CB excluding USA and CHN
[Law * After]	-0.285***	-0.322***	-0.319***	-0.352***	-0.216***	-0.255***	-0.219***	-0.265***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Country-size		-0.018		-0.003		0.019		0.021
		(0.19)		(0.85)		(0.15)		(0.13)
GDP-per-capita		0.067**		0.028		-0.039		-0.044
		(0.05)		(0.40)		(0.24)		(0.21)
GDP-growth		0.718		0.862		1.259**		1.198**
		(0.28)		(0.20)		(0.03)		(0.04)
Market-cap		0.000**		0.000		-0.000		-0.000
		(0.01)		(0.45)		(0.38)		(0.13)
Dom-credit		-0.197***		-0.164***		-0.165***		-0.165***
		(0.00)		(0.00)		(0.00)		(0.00)
FDI-in		0.413		0.499		1.072***		1.064***
		(0.26)		(0.18)		(0.00)		(0.00)
FDI-out		-0.295		-0.388		-0.958***		-0.951***
		(0.42)		(0.29)		(0.00)		(0.00)
Trade		0.013		0.009		-0.034		-0.033
		(0.80)		(0.86)		(0.48)		(0.50)
Inflation		0.123		0.027		-0.132		-0.162
		(0.70)		(0.93)		(0.63)		(0.55)
Unemployment		-1.366***		-1.583***		-0.995**		-1.002**
		(0.01)		(0.00)		(0.02)		(0.02)
Target nation FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	1516	1516	1470	1470	1516	1516	1470	1470
Adjusted R2	0.934	0.935	0.926	0.927	0.922	0.924	0.913	0.915

Table 4.b Law or friction: Deal Volume

The table reports the results of the regression equation:

$$M\&A_{ct} = \alpha + \beta ESGD_{c,t} + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct}$$

where $M\&A_{ct}$ is the M&A-outcome dependent variables: $ESGD_{c,t}$ is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting country following the year of enactment, and zero otherwise. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of firm and year fixed effects. Standard errors are clustered at target nation and year level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	1	2	3	4	5	6	7	8
	Total deal	Total deal	without USA and CHN	without USA and CHN	CB	CB	CB excluding USA and CHN	CB excluding USA and CHN
[Law * After]	-0.719***	-0.487***	-0.842***	-0.555***	-0.659***	-0.471***	-0.726***	-0.493***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Country-size		0.046		0.037		0.047		0.030
		(0.17)		(0.28)		(0.17)		(0.40)
GDP-per-capita		0.122		0.144		0.099		0.143
		(0.18)		(0.12)		(0.28)		(0.13)
GDP-growth		-0.672		-0.898		-1.668		-1.893
		(0.72)		(0.63)		(0.41)		(0.35)
Market-cap		0.001***		0.000***		0.000***		0.000***
		(0.00)		(0.00)		(0.00)		(0.00)
Dom-credit		0.466***		0.401***		0.291*		0.227
		(0.00)		(0.00)		(0.05)		(0.13)
FDI-in		3.029***		3.006***		5.636***		5.516***
		(0.00)		(0.00)		(0.00)		(0.00)
FDI-out		0.128		0.140		-1.879		-1.754
		(0.91)		(0.90)		(0.15)		(0.18)
Trade		-0.509***		-0.472***		-0.550***		-0.527***
		(0.00)		(0.00)		(0.00)		(0.00)
Inflation		-2.236**		-2.181**		-2.475**		-2.355**
		(0.02)		(0.03)		(0.02)		(0.03)
Unemployment		0.621		0.765		1.314		1.603
		(0.62)		(0.54)		(0.34)		(0.24)
Target nation FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	1516	1516	1470	1470	1516	1516	1470	1470
Adjusted R2	0.894	0.910	0.893	0.906	0.859	0.873	0.855	0.868

Table 4c. Sensitivity Tests

The table reports the results of the regression equation:

$$M\&A_{ct} = \alpha + \beta ESGD_{c,t} + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct}$$

where $M\&A_{ct}$ is the M&A-outcome dependent variables: $ESGD_{c,t}$ is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting country following the year of enactment, and zero otherwise. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of firm and year fixed effects. Standard errors are clustered at target nation and year level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	Deal-frequency			Deal Volume		
	1	2	3	4	5	6
	±2 year	±3	±4	±2 year	±3	±4
[Law * After]	-0.205***	-0.242***	-0.265***	-0.296***	-0.332***	-0.344***
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Country-size	-0.021	-0.017	-0.014	0.063	0.036	0.028
	(0.25)	(0.34)	(0.42)	(0.19)	(0.43)	(0.51)
GDP-per-capita	0.058	0.051	0.042	0.028	0.088	0.107
	(0.22)	(0.27)	(0.35)	(0.82)	(0.46)	(0.34)
GDP-growth	0.507	0.804	0.607	-0.645	-0.318	-0.878
	(0.54)	(0.31)	(0.42)	(0.80)	(0.89)	(0.69)
Market-cap	0.000***	0.000**	0.000**	0.001***	0.001***	0.001***
	(0.01)	(0.05)	(0.04)	(0.00)	(0.00)	(0.00)
Dom-credit	-0.127	-0.134*	-0.148**	0.402*	0.547***	0.612***
	(0.12)	(0.08)	(0.03)	(0.09)	(0.01)	(0.00)
FDI-in	1.220**	1.177**	0.907*	2.722	2.810*	2.109
	(0.02)	(0.02)	(0.06)	(0.11)	(0.08)	(0.16)
FDI-out	-1.117**	-1.150**	-0.959**	0.870	0.869	1.684
	(0.03)	(0.02)	(0.04)	(0.63)	(0.60)	(0.30)
Trade	0.037	-0.008	-0.000	-0.924***	-0.675***	-0.556***
	(0.70)	(0.90)	(1.00)	(0.00)	(0.00)	(0.00)
Inflation	0.487	0.474	0.490	-1.978	-1.969	-1.628
	(0.21)	(0.21)	(0.19)	(0.15)	(0.15)	(0.21)
Unemployment	-1.777*	-1.902**	-1.996***	2.233	2.045	1.825
	(0.05)	(0.02)	(0.01)	(0.37)	(0.37)	(0.38)
Target nation FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	993	1063	1132	993	1063	1132
Adjusted R2	0.941	0.941	0.942	0.885	0.893	0.897

Table 5. ESG disclosure law and Transaction cost: Enquiry of Deal premium and Deal completion

$$Deal\ Friction_{i,t} = \alpha + \beta ESGD_{c,t} + \delta_1 X_{c,t-1} + \delta_2 X_{i,t} + \varphi_{tg-a} + \varphi_t + \varepsilon_{ct}$$

where $Deal\ Friction_{i,t}$ is the deal friction related to deal *i* in time *t*. We gauge deal transaction friction by Deal premium (1), deal completion likelihood (2) and deal completion time (3). $ESGD_{c,t}$ is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting country following the year of enactment, and zero otherwise. Gov_{it} is a country governance index gauged by the first principal component from principal component analysis (PC1) of three governance index including Regulatory Quality (RQ), Rule of Law (RL), Control of Corruption (CC). Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. Deal control includes whether the acquiror (target) is public and the mode of payment being cash or otherwise. **FE** represents vector of target-acquiror nation pair and year fixed effects. Standard errors are clustered at firm level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	1	2	3	4	5
	Deal-premium 1 day prior	Deal-premium 1 wk prior	Deal-premium 4 wk prior	Deal completion time (Ln)	Deal Completion likelihood
[Law * After]	0.033***	0.033***	0.024*	0.086***	-0.016**
	(0.00)	(0.00)	(0.05)	(0.00)	(0.03)
Country-size	-0.109***	-0.109***	-0.112***	0.511***	0.019
	(0.00)	(0.00)	(0.00)	(0.00)	(0.35)
GDP-per-capita	0.254***	0.258***	0.276***	-0.261**	0.054**
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
GDP-growth	-0.006***	-0.006***	-0.005**	-0.012**	-0.006***
	(0.00)	(0.01)	(0.03)	(0.02)	(0.00)
Market-cap	0.000**	0.000***	0.000*	-0.000**	-0.000**
	(0.02)	(0.00)	(0.05)	(0.02)	(0.02)
Dom-credit	-0.001***	-0.001***	-0.001***	0.000	-0.001***
	(0.00)	(0.00)	(0.00)	(0.71)	(0.00)
FDI-in	-0.003**	-0.002*	-0.002*	-0.003	-0.002**
	(0.03)	(0.06)	(0.06)	(0.23)	(0.03)
FDI-out	0.001	0.001	0.002	0.003	0.003***
	(0.55)	(0.35)	(0.17)	(0.32)	(0.00)
Trade	0.001***	0.001***	0.001***	0.002**	0.001***
	(0.00)	(0.00)	(0.00)	(0.04)	(0.00)
Inflation	0.002	0.002*	0.003**	-0.002	0.001
	(0.11)	(0.07)	(0.04)	(0.62)	(0.39)
Unemployment	0.005**	0.006***	0.008***	0.006	-0.010***
	(0.02)	(0.01)	(0.00)	(0.20)	(0.00)
Deal Control	Yes	Yes	Yes	Yes	Yes
Target nation-industry FE	Yes	Yes	Yes	Yes	Yes
Acquiror nation-industry FE	Yes	Yes	Yes	Yes	Yes
Target nation-acquiror nation pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
No. of obs.	62244	62222	62140	600211	765528
Adj. R^2 (Pseudo R^2)	0.097	0.094	0.088	0.212	0.044

Table 6. Industry ESG controversies and M&A outcomes

The table reports the results of the regression equation:

$$M\&A_{cit} = \alpha + \beta ESGD_{c,t} + \omega_1\left[ESGD_{c,t} \times Low\_ESG\_controv_{it}\right] + \delta X_{c,t-1} + \varphi_i\varphi_c + \varphi_t + \varepsilon_{cit}$$

where $M\&A_{ct}$ is the M&A-outcome dependent variables: $ESGD_{c,t}$ is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting country following the year of enactment, and zero otherwise. Low-ESG controv. is a dummy variable that takes the value of one if the industry average of ESG controversies in year *t* is in the first tercile and zero otherwise. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of firm and year fixed effects. Standard errors are clustered at target nation and year level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	1	2	3	4
	Deal Freq.	Deal Freq.-CB	Deal volume	Deal volume-CB
[Law * After]	0.156	0.078	-0.062	-0.002
	(0.21)	(0.24)	(0.23)	(0.94)
[Law * After] × Low-ESG Controv.	-0.177***	-0.183***	-0.100***	-0.092***
	(0.00)	(0.00)	(0.00)	(0.00)
Country-size	-0.006	-0.018	-0.023	0.013*
	(0.87)	(0.50)	(0.27)	(0.06)
GDP-per-capita	0.176*	0.133*	0.062	-0.037**
	(0.08)	(0.06)	(0.27)	(0.03)
GDP-growth	1.886	1.780*	-0.445	0.317
	(0.15)	(0.09)	(0.59)	(0.52)
Market-cap	0.001***	0.000***	0.000	-0.000**
	(0.00)	(0.00)	(0.47)	(0.02)
Dom-credit	0.390**	0.085	-0.108	-0.051
	(0.02)	(0.36)	(0.11)	(0.10)
FDI-in	1.179**	1.923***	-0.085	0.133
	(0.03)	(0.00)	(0.76)	(0.50)
FDI-out	-0.092	-0.678*	0.017	-0.150
	(0.86)	(0.10)	(0.95)	(0.45)
Trade	-0.223	-0.131	0.043	0.001
	(0.12)	(0.19)	(0.48)	(0.97)
Inflation	-0.926*	-0.485	-0.103	-0.159
	(0.07)	(0.17)	(0.76)	(0.26)
Unemployment	-2.518*	-0.251	-0.567	-0.286
	(0.06)	(0.75)	(0.37)	(0.50)
Target nation-industry FE	Yes	Yes	Yes	Yes
Acquiror nation-industry FE	Yes	Yes	Yes	Yes
Target nation-acquiror nation pair FE	Yes	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes	Yes
No. of obs.	57105	57105	57105	43023
Adjusted R2	0.587	0.424	0.830	0.741

Table 7a. ESG disclosure friction and Gov moderation

The table reports the results of the regression equation:

$$M\&A_{ct} = \alpha + \beta ESGD_{c,t} + \omega[\, ESGD_{c,t} \times Gov_{it}] + \delta X_{c,t-1} + \varphi_c + \varphi_t + \varepsilon_{ct}$$

where $M\&A_{ct}$ is the M&A-outcome dependent variables: $ESGD_{c,t}$ is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting country following the year of enactment, and zero otherwise. Gov_{it} is a country governance index gauged by Regulatory Quality (RQ), Rule of Law (RL), Control of Corruption (CC) and the first principal component from principal component analysis (PC1) of the previous three governance measures. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of firm and year fixed effects. Standard errors are clustered at target nation and year level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	Deal Frequency				Deal Volume			
	CB-deals	CB-deals	CB-deals	CB-deals	CB-deals	CB-deals	CB-deals	CB-deals
	1	2	3	4	5	6	7	8
[Law * After]	-0.302***	-0.308***	-0.302***	-0.270***	-0.499***	-0.545***	-0.473***	-0.364***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
[Law * After] * RQ	0.070**				0.209*			
	(0.02)				(0.07)			
RQ	-0.012				0.748***			
	(0.81)				(0.00)			
[Law * After] * RL		0.074***				0.264***		
		(0.01)				(0.01)		
RL		-0.071				0.553***		
		(0.15)				(0.00)		
[Law * After] * CC			0.062***				0.195**	
			(0.01)				(0.02)	
CC			-0.076				0.690***	
			(0.12)				(0.00)	
[Law * After] * PC				0.037***				0.106**
				(0.01)				(0.03)
PC				-0.033				0.417***
				(0.24)				(0.00)
Country-size	0.018	0.009	0.007	0.010	0.158***	0.142***	0.178***	0.184***
	(0.25)	(0.58)	(0.70)	(0.56)	(0.00)	(0.00)	(0.00)	(0.00)
GDP-per-capita	-0.038	-0.011	-0.002	-0.013	-0.231*	-0.185	-0.299**	-0.310**
	(0.35)	(0.80)	(0.96)	(0.77)	(0.05)	(0.13)	(0.02)	(0.02)
GDP-growth	1.247**	1.223**	1.263**	1.239**	-1.521	-1.510	-1.772	-1.559
	(0.03)	(0.03)	(0.03)	(0.03)	(0.44)	(0.45)	(0.37)	(0.43)
Market-cap	-0.000	-0.000	-0.000	-0.000	0.000***	0.000***	0.000***	0.000***
	(0.36)	(0.58)	(0.57)	(0.52)	(0.00)	(0.00)	(0.00)	(0.00)
Dom-credit	-0.166***	-0.154***	-0.153***	-0.156***	0.121	0.168	0.133	0.108
	(0.00)	(0.00)	(0.00)	(0.00)	(0.42)	(0.26)	(0.37)	(0.47)
FDI-in	1.029***	1.047***	1.033***	1.045***	4.937***	5.328***	5.503***	5.194***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

FDI-out	-0.884***	-0.873***	-0.860***	-0.874***	-1.305	-1.555	-1.779	-1.535
	(0.00)	(0.00)	(0.00)	(0.00)	(0.31)	(0.23)	(0.17)	(0.23)
Trade	-0.045	-0.043	-0.038	-0.043	-0.632***	-0.641***	-0.655***	-0.652***
	(0.35)	(0.37)	(0.42)	(0.37)	(0.00)	(0.00)	(0.00)	(0.00)
Inflation	-0.127	-0.167	-0.166	-0.162	-1.932*	-2.080*	-2.155**	-1.957*
	(0.64)	(0.54)	(0.53)	(0.55)	(0.07)	(0.06)	(0.05)	(0.07)
Unemployment	-1.052**	-1.101***	-1.053**	-1.092**	1.977	1.270	1.347	1.640
	(0.01)	(0.01)	(0.01)	(0.01)	(0.14)	(0.34)	(0.31)	(0.22)
Target nation FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	1515	1515	1515	1515	1516	1516	1516	1516
Adjusted R2	0.924	0.924	0.924	0.924	0.876	0.876	0.876	0.877

Table 7b. ESG disclosure friction and Gov moderation on Transaction cost

The table reports the results of the regression equation:

$$Deal\ Friction_{i,t} = \alpha + \beta ESGD_{c,t} + \omega\left[ESGD_{c,t} \times Gov_{it}\right] + \delta_1 X_{c,t-1} + \delta_2 X_{i,t} + \varphi_{tg-a} + \varphi_t + \varepsilon_{ct}$$

where $Deal\ Friction_{i,t}$ is the deal friction related to deal *i* in time *t*. We gauge deal transaction friction by Deal premium (1), deal completion likelihood (2) and deal completion time (3). $ESGD_{c,t}$ is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting country following the year of enactment, and zero otherwise. Gov_{it} is a country governance index gauged by Regulatory Quality (RQ), Rule of Law (RL), Control of Corruption (CC) and the first principal component from principal component analysis (PC1) of the previous three governance measures. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. Deal control includes whether the acquiror (target) is public and the mode of payment being cash or otherwise. **FE** represents vector of target-acquiror nation pair and year fixed effects. Standard errors are clustered at firm level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	1	2	3
	Deal-premium 1 day prior	Deal completion likelihood	Deal completion time (ln)
[Law * After]	0.030***	-0.019***	0.080***
	(0.01)	(0.01)	(0.01)
Country-size	-0.113***	0.011	0.526***
	(0.00)	(0.57)	(0.00)
GDP-per-capita	0.247***	0.038*	-0.238**
	(0.00)	(0.08)	(0.02)
GDP-growth	-0.006***	-0.006***	-0.012**
	(0.00)	(0.00)	(0.02)
Market-cap	0.000***	-0.000	-0.000**
	(0.00)	(0.17)	(0.03)
Dom-credit	-0.001***	-0.001***	0.000
	(0.00)	(0.00)	(0.82)
FDI-in	-0.002	-0.001	-0.004
	(0.11)	(0.21)	(0.13)
FDI-out	-0.000	0.002*	0.004
	(0.98)	(0.05)	(0.18)
Trade	0.001***	0.001***	0.002**
	(0.00)	(0.00)	(0.04)
Inflation	0.002	0.000	-0.002
	(0.10)	(0.56)	(0.61)
Unemployment	0.004**	-0.010***	0.007
	(0.03)	(0.00)	(0.19)
[Law * After] * PC	-0.011**	-0.017***	-0.042**
	(0.03)	(0.00)	(0.03)
PC	-0.012*	-0.005	0.028
	(0.09)	(0.57)	(0.20)
Deal Control	Yes	Yes	Yes
Target nation-industry FE	Yes	Yes	Yes
Acquiror nation-industry FE	Yes	Yes	Yes
Target nation-acquiror nation pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
No. of obs.	62244	765528	600211
Adj. R^2	0.097	0.044	0.212

Table 8. Bilateral deals inquiry, governance distance

The table reports the results of the regression equation:

$$M\&A_{tg-a,t} = \alpha + \beta_1 ESGD_{tg,t1} + \beta_2 ESGD_{a,t2} + \beta_3[\, ESGD_{tg,t1} \times ESGD_{a,t2}] + \eta_1[\, ESGD_{tg,t1} \times Gov.dist_{tg-a,t}] + \eta_2[\, ESGD_{a,t2} \times Gov.dist_{tg-a,t}] + \eta_3[\, ESGD_{tg,t1} \times ESGD_{a,t2} \times Gov.dist_{tg-a,t}] + \delta X_{c,t-1} + \varphi_{tg-a} + \varphi_t + \varepsilon_{ct}$$

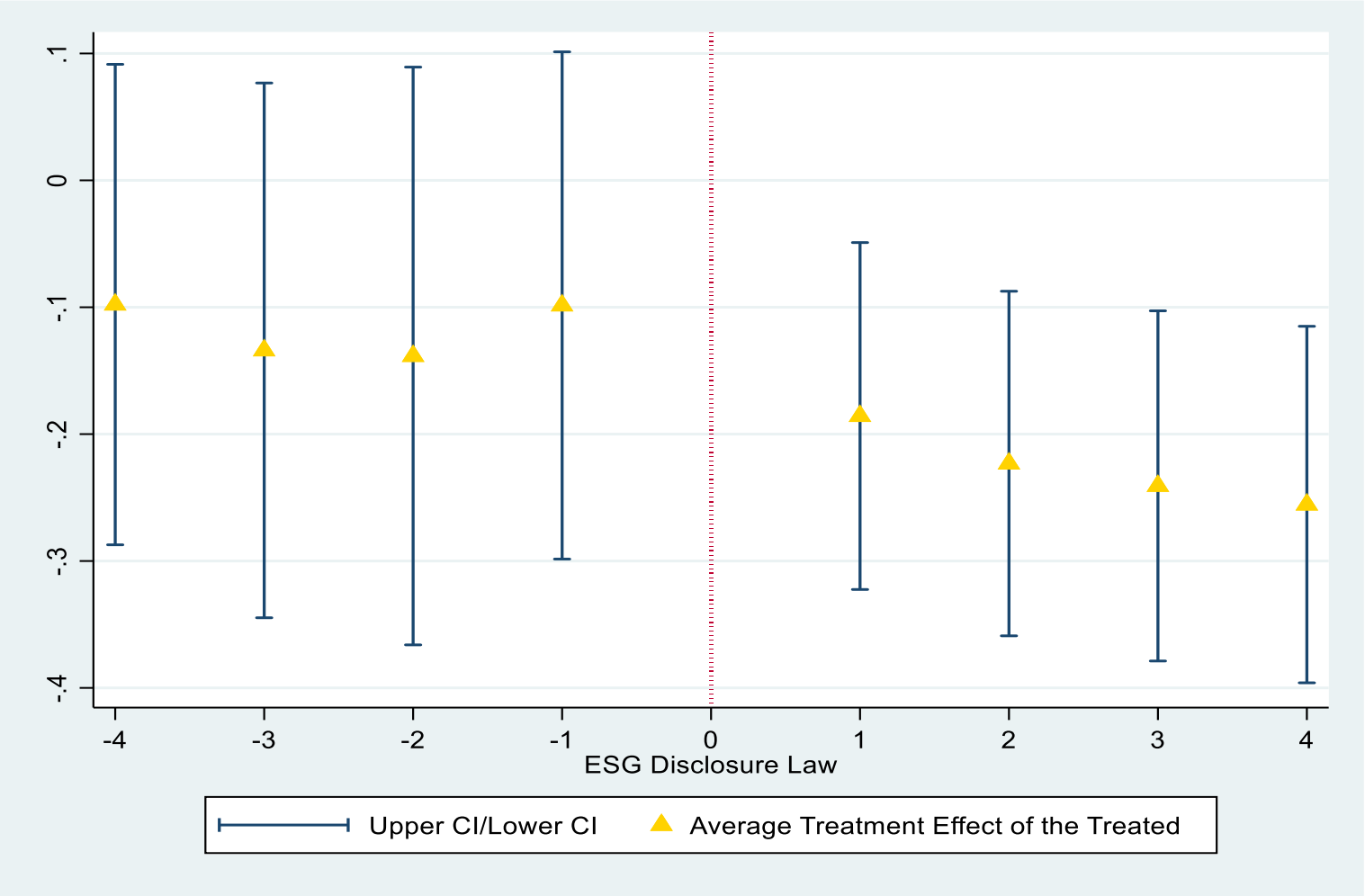
where $M\&A_{tg-a,t}$ is the M&A-outcome dependent variables aggregated at target-acquiror nation pair each year. $ESGD_{tg,t1}$ ($ESGD_{a,t2}$) is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting target (acquiror) country following the year of enactment, and zero otherwise.

where $M\&A_{tg-a,t}$ is the M&A-outcome dependent variables aggregated at target-acquiror nation pair each year. $ESGD_{tg,t1}$ ($ESGD_{a,t2}$) is a categorical variable that takes the value of one if a firm belongs to an ESG disclosure law enacting target (acquiror) country following the year of enactment, and zero otherwise. $Gov.dist_{tg-a,t}$ is a continuous governance difference index between target-acquiror nation pair where governance is gauged by Regulatory Quality (RQ), Rule of Law (RL), Control of Corruption (CC) and the first principal component from principal component analysis (PC1) of the previous three governance measures. Country controls include Country-size, *GDP per Capita,, GDP growth, Market Capitalization, Domestic Credit, FDI-in, FDI-out, Trade, Inflation* and *Unemployment Rate* as defined in Table 1. **FE** represents vector of target-acquiror nation pair and year fixed effects. Standard errors are clustered at target-acquiror nation pair and year level and respective p-values reported in parenthesis. *,**, and *** indicate significance levels at 10%, 5%, and 1% respectively. Sample period 2000-2022.

	Frequency					Volume				
	1	2	3	4	5	6	7	8	9	10
DiD-tgt * DiD-acq	0.760***	0.771***	0.772***	0.776***	0.773***	0.894***	0.785***	0.797***	0.795***	0.792***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
DiD-tgt	-0.352***	-0.358***	-0.362***	-0.360***	-0.361***	-0.346***	-0.316***	-0.324***	-0.311***	-0.314***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
DiD-acq	-0.328***	-0.317***	-0.314***	-0.320***	-0.317***	-0.265***	-0.207***	-0.209***	-0.216***	-0.213***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
DiD-tgt * DiD-acq* CC-Distance		0.147***					0.121**			
		(0.00)					(0.04)			
DiD-tgt * CC-Distance		-0.134***					-0.198***			
		(0.00)					(0.00)			
DiD-acq* CC-Distance		-0.005					0.080**			
		(0.70)					(0.02)			
CC-Distance		0.002					0.122***			
		(0.91)					(0.00)			
DiD-tgt * DiD-acq* RQ-Distance			0.173***					0.155**		
			(0.00)					(0.03)		
DiD-tgt * RQ-Distance			-0.175***					-0.265***		
			(0.00)					(0.00)		
DiD-acq* RQ-Distance			0.012					0.113**		
			(0.44)					(0.01)		
RQ-Distance			0.023					0.156***		
			(0.20)					(0.00)		
DiD-tgt * DiD-acq* RL-Distance				0.175***					0.170***	
				(0.00)					(0.01)	
DiD-tgt * RL-Distance				-0.160***					-0.251***	
				(0.00)					(0.00)	
DiD-acq* RL-Distance				-0.010					0.084**	
				(0.47)					(0.04)	
RL-Distance				0.026					0.204***	
				(0.11)					(0.00)	
DiD-tgt * DiD-acq* PC-Distance					0.090***					0.082**
					(0.00)					(0.02)

DiD-tgt * PC-Distance					-0.085***					-0.131***
					(0.00)					(0.00)
DiD-acq* PC-Distance					-0.001					0.048**
					(0.92)					(0.03)
PC-Distance					0.009					0.103***
					(0.34)					(0.00)
Controls										
Nation-pair FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	26785	26785	26785	26785	26785	26785	26785	26785	26785	26785
Adjusted R2	0.195	0.196	0.197	0.197	0.197	0.302	0.291	0.291	0.292	0.292

Figure 1. Average Treatment Effect plot.



Appendix table A1. Definition of variables

This table shows the construction of the variables. Explanations are provided in the description of the variables in the text.

Variables	Calculation	Source
Dependent Variables		
	Ln(1+Deal Frequency) where deal frequency is total deal count with data aggregated at target nation (and industry level for industry analysis) and year	SDC platimum
	Ln(1+Deal Frequency) where deal frequency is total deal count with data aggregated at target nation (and industry level for industry analysis) and year	SDC platimum
Deal premium	Deal premium based on one day, one week and four week target price prior announcement date.	SDC platimum
Deal completion	Ln of Time in days between deal completion and deal announcement	SDC platimum
Independent Variables		
ESG-law	Treated × Post	Own Calculation
Moderating variables [Enabling Institutions]		
CC	Control for corruption score	WGI database
RQ	Regulatory quality score	WGI database
RL	Rule of law score	WGI database
PC1	1st principal component of CC, RQ and RL scores.	
Country Control		
Country Size	ln (GDP at current USD)	World Bank WDI database
	PPE / Total Assets	World Bank WDI database
Ln (GDP per capita)	The natural log transformation of per capita GDP in USD	World Bank WDI database
GDP growth	The growth rate of GDP	World Bank WDI database
Market Cap	The total stock market capitalization divided by GDP.	World Bank WDI database
Domestic Credit	The total domestic credit divided by GDP.	World Bank WDI database
FDI-in	Inbound FDI as a proportion of GDP	World Bank WDI database
FDI-out	Inbound FDI as a proportion of GDP	World Bank WDI database
Trade	Trade as proportion of GDI	World Bank WDI database
Inflation	Annual inflation based on GDP deflator	World Bank WDI database
Unemployment	Unemployment rate as a percentage of the active population (14-65)	World Bank WDI database
Industry Factors		
Industry	65 unique industries based on SIC-2 digits non-financial firms	Compustat Global