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Universal Corporate Governance

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Abstract

A widely accepted principle in finance is that good corporate governance is associated with higher firm value. However, what is "good governance" and whether the same set of good governance practices can be universally adopted are fiercely debated. In this paper, we construct various measures of firm- and country-level corporate governance, including a "global entrenchment index". We then test their relation with firm value on a large sample of more than 20,000 firms across 47 countries. We find substantial heterogeneity in the relation between some governance practices—especially those related to corporate rules constraining insider entrenchment—and firm value across countries, which is contingent on firms' ownership structure and institutional environments. In contrast, higher institutional ownership is unconditionally correlated with higher firm valuation. Our results cast doubt on the universality of rule-based corporate governance practices.

Keywords: corporate governance, entrenchment index, institutional ownership, institutional environment, contingency

JEL Classifications: G30, G34, G23

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UNIVERSAL CORPORATE GOVERNANCE

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A widely accepted principle in finance is that good corporate governance is associated with higher firm value. However, what is "good governance" and whether the same set of good governance practices can be universally adopted are fiercely debated. In this paper, we construct various measures of firm- and country-level corporate governance, including a "global entrenchment index". We then test their relation with firm value on a large sample of more than 20,000 firms across 47 countries. We find substantial heterogeneity in the relation between ***some*** governance practices—especially those related to corporate rules constraining insider entrenchment—and firm value across countries, which is contingent on firms' ownership structure and institutional environments. In contrast, higher institutional ownership is unconditionally correlated with higher firm valuation. Our results cast doubt on the universality of rule-based corporate governance practices.

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1. Introduction

Policymakers and investors around the world have been increasingly emphasizing the importance of effective corporate governance systems. Corporate governance refers to the structure of rights and responsibilities among the parties with a stake in the firm (Aoiki, 2001; Aguilera et al., 2008). Effective corporate governance uses mechanisms to align the interests of managers and of the company's shareholders and various stakeholders for them to act responsibly regarding the protection, generation, and distribution of wealth invested in the firm. It has been widely recognized that good corporate governance with regard to shareholder protection can lead to higher shareholder value and more efficient capital allocation (Gompers et al., 2003; Bebchuk et al., 2008), which are in turn associated with better economic outcomes (La Porta. Lopez-de-Silanes, Shleifer, Vishny, 1997, 1998, 2002; La Porta. Lopez-de-Silanes, Shleifer, 2008). There is also a considerable amount of evidence that governance practice can spill over around the world (Aggarwal, Erel, Stulz, Williamson, 2009; Aggarwal, Erel, Ferreira, Matos, 2011; Albuquerque, Brandao Marques, Ferreira, Matos, 2018). Despite the widespread recognition and spillover of governance practice, a central issue in this literature is the extent to which "good" governance practices are universal (one size mostly fits all) or instead depend on country and firm characteristics (Black, De Carvalho, Gorga, 2012). The latter refers to the interdependencies between organizations and diverse environments which may determine governance effectiveness (Aguilera & Jackson, 2003; Aguilera et al., 2008). For long, researchers have been arguing that there are systematic differences in corporate governance structures and practices across countries, which are related to law (La Porta et al., 1997, 1998), political institutions (Roe, 2003; Pagano and Volpin, 2005; Perotti and von Thadden, 2006), cultures and social norms (Stulz and Williamson, 2003), economic and financial development (Doidge, Karolyi, and Stulz, 2007) as well as other institutional factors (Aguilera, Filatotchev, Gospel & Jackson, 2008; Aguilera & Jackson, 2010). The voluminous studies on comparative corporate governance have also generated debates on which type of governance is "superior" in protecting investor rights and maximizing firm value, and whether there is an "end of history" for corporate law and corporate governance (Hansmann and Kraakman, 2001).[2]

These academic debates have triggered a moving landscape globally: in the past few decades, corporate governance reforms have taken place around the world. These reforms are mostly towards the Anglo-

[2] Hansmann and Kraakman (2001) argue that there is a strong likelihood of convergence toward a single governance model, and assert that the basic corporate form has already achieved a high degree of uniformity. They find that governance systems in Germany, Japan, and the U.S. show signs of convergence toward each other (e.g., German and Japanese firms are increasingly adopting a single-tier board model). The significant international evidence of privatizations further represents a move toward private ownership that characterizes the world's major economies. These developments suggest that the role of corporate governance may be conditioned by a range of outside factors, however, others have approached the debate assuming there exist objective standards. For example, Aggarwal, Erel, Stulz, and Williamson (2009) consider the United States as having very strong protection for investors and property rights and suggest that the internal governance of firms in the US should be the benchmark for all firms around the world if it were not constrained by weaker institutions and lower development.

American governance model, featured by high proportion of independent directors on the board, elimination of provisions empowering managers, active market for corporate control, equity- and option-based compensation structure, dispersed ownership structure, and strong role of external governance forces such as auditors, analysts and institutional investors (Khanna, Kogan and Palepu, 2002; Denis and McConnell, 2003).[3] These developments have created an implicit quest for a single and universally "best" set of corporate governance practices. In turn, this has profoundly influenced decisions of policymakers and corporate executives.[4] Meanwhile, we have also witnessed the advent of new governance forms, such as the rise of sovereign wealth funds and the rise in investor activism around the world (Becht et al., 2017; Bebchuk et al., 2015; Dimson et al., 2015; also see an overview by Bebchuk and Weisbach (2010)). As the landscapes and corporate ownership and governance keep evolving (Bebchuk et al., 2017), it becomes even more challenging to formalize what good governance practices are. The governance issues today are no longer only about addressing agency problems between corporate managers and shareholders that result from the dispersion of ownership in large publicly traded corporations. These developments are further changing the way firms are governed and therefore will demand a closer inspection and re-evaluation of universality and standardization of good governance practices.

To enhance our current debate, understanding the *how* and *when* questions of corporate governance is of important policy relevance. Bebchuk & Hamdani (2009) argue that the quest for a universal set of global corporate governance standards is misleading, as the effectiveness of governance mechanisms crucially depend on companies' ownership structures. Ownership can vary immensely across countries and corporations (La Porta et al., 1999) and mechanisms that protect outside investors in a company without a controlling shareholder are often irrelevant or even harmful when it comes to investor protection. Even within the same company, Cremers et al., (2015) argue that different governance mechanisms can function in distinct ways under different circumstances.[5] The notion of a single set of criteria to evaluate firm-level governance around the world, i.e., a "universal corporate governance

[3] These mechanisms are in place to keep managers and corporate insiders on check, usually with the firm's financial performance as the benchmark (a practice commonly referred to as financialized corporate governance; see Admati (2017)).

[4] For example, corporations in China traditionally adopted the German-style corporate law and governance systems under the German civil law, such as a two-tier board structure and a significant influence of the government and banks. The Chinese reform has been moving toward the Anglo-American governance model, featured by a single-tier board with significant portion of independent directors. According to a recent Corporate Governance Report by MSCI, which uses the Anglo-American governance metrics as a benchmark for "good governance," Alibaba Group Holdings, one of the most valuable companies in China and in the world, is also considered as one of the worst-governed public companies in China due to its dual-class shares structure and the significant influence of the founder (See MSCI: Corporate Governance in China (September 2017): https://www.msci.com/documents/10199/1d443a3d-0437-4af7-aa27-ada3a2655f6d).

[5] For example, staggered boards and other "entrenchment mechanisms" can in fact be value-enhancing. Meanwhile, as Goshen & Hannes (2018) have observed, the compositional shift in equity markets from retail to institutional ownership has relocated regulatory power over corporations from courts to markets.

model," is undoubtedly appealing. Institutional Shareholder Services (ISS; formerly RiskMetrics) have issued guidance and metrics based on the renowned G-index (Gompers et al., 2003), E-index (Bebchuk et al., 2009), and the *GOV* index (Aggarwal et al., 2009) for institutional investors and companies worldwide to evaluate their corporate governance "quality." However, extant studies often focus on the classic agency theory, i.e., the separation of ownership (shareholders) and control (managers), while largely neglect the diversity of its institutional contexts. By contemplating differing origins of the systems, one can also appreciate what determines different forms of governance. The contingencies that affect governance outcomes are debatable, yet surprisingly, there exist only few studies investigating these topics (e.g., Pagano & Volpin, 2005; Griffin et al., 2017; Doidge et al., 2007)**.** Motivated by all these developments, we try to empirically answer the following two questions in this paper. Are some sets of corporate governance practice universally effective across the world? If some governance practices are not unconditionally applicable, under what conditions are they effective?

To address these questions, we assemble information from all major international corporate governance databases, including RiskMetrics (ISS), Thomson Reuters, MSCI, and Factset, among others, and test their relation with firm value on a large sample of more than 20,000 firms across 47 countries. Empirically, to investigate the (non-)existence of a universal corporate governance model, we consider a few sets of "good governance" from the perspectives of corporate rules, ownership structure, and investor legal protection. In particular, we primarily focus on corporate rules which are more implementable and self-constructed a "global entrenchment index" (Global E-index) as our primary proxy for the (lack of) rule-based governance. We then compare it with the governance indices in existing studies (mostly based on US samples for firm-level governance) and the aggregate indices provided by major governance data providers (e.g., ISS Governance and MSCI Governance Metrics).[6] We find the relation between rule-based governance practices and firm value indeed vary substantially across countries. In many subsamples that are well studied in the literature (e.g., common law, French civil law, Western Europe, East Asia, developing counties, etc.) the results are simply not there. This result casts serious doubts on the existence of a universal corporate governance model, thus the universality of a standard set of corporate governance practices around the world. We further find that the effect of rule-based governance (i.e., Global E-index) on q is contingent on ownership structure (e.g., institutional ownership) and institutional environments (e.g., legal protections and political systems). In particular, its effect becomes stronger in firms with greater independent institutional

[6] As explained in greater details in the next section, we argue that using an aggregate firm-level index containing various aspects of governance issues is by nature problematic, primarily because these different dimensions do not function to enhance investor protection in a linear way, but their effects intervene with each other. What's more problematic is that the role of governance varies significantly across countries and jurisdictions with dramatically different institutional environments, and the resulting ownership structures of public corporations. Separating their effects by different dimensions of governance and by different institutional backgrounds is not only an important consideration but also a necessity.

ownership, stronger investor protection and rule of law, and under left-wing and majoritarian political regimes. In contrast, we find that (independent) institutional ownership is conditionally associated with higher *q* across all subsamples, consistent with the recent advocates on the unique role of institutional investors' activism in dealing with agency problems in their portfolio companies. This is further supported by our analysis on the voting outcomes of governance-related shareholder proposals during shareholder meetings under a regression discontinuity framework for global companies. We find that even within a small margin, the passage of corporate governance proposals which are usually sponsored by institutional shareholders is associated with positive stock market reactions.

We aim to make significant contributions to the academic literature and to policy debates. From the academic perspective, there have been numerous papers documenting the important of governance, and a standard set of implementable governance practices have been set by Gompers, Ishii, Metrick (2003) and Bebchuk, Cohen, Ferrell (2009) for U.S. firms. However, as argued by Black, De Carvalho, Gorga (2012), we still know relatively little about factors influence both which aspects of governance predict firm market value (Tobin's *q*) and for which firms. Beyond firm-level rule-based governance, which has been the focus of most governance studies, we also find that country (institutional) ownership structure and country-level minority shareholder rights all play a strong governance role. Even for the firm-level rule-based governance, we provide systematic evidence that its effect on firm valuation hinges on other external governance mechanisms and institutional environments. Although our empirical investigation is exploratory in nature, it extends the scope of empirical corporate governance research and can enhance the understanding of governance mechanisms at the theoretical level.

From the policy perspective, it is well known that a firm's governance is chosen by those who control the firm to maximize their welfare (Aggarwal, Erel, Stulz, Williamson, 2009). Historically, conflicts over corporate control in the U.S. frequently originated from hostile takeover attempts (Goshen & Hannes, 2018). Outside the U.S., control usually took the form of ownership concentration (e.g., in the hands of wealthy families or of the state) as well as regulations and laws. Such difference in historically-determined control arrangement implies that regulators should take different approaches of corporate governance (not merely legal rules versus comply-or-explain), instead of questing for global governance standards, as advocated by rating agencies (e.g., ISS) and international institutions (e.g., World Bank), but criticized by Bebchuk & Hamdani (2009). Our results using international sample and self-constructed global governance indices support this view and will have vast implications for the ongoing corporate governance reforms around the world.

2. Data

Before diving into details of the data, we begin this section by acknowledging and slightly elaborating on the past developments of corporate governance data collection efforts and the overall trend. To date, there have been a handful of international corporate governance metrics constructed by researchers and institutions. For example, the ISS measures on governance provide data on classic takeover defenses and other corporate governance provisions, including classified boards, cumulative voting, golden parachutes, poison pills, takeover laws, etc. However, ISS stopped providing global governance measures in 2008, and has recently developed a Governance Quality Score, which ranks global companies from 1 to 10 based on assessed risks in the areas of board structure, compensation programs, shareholder rights, and audit & risk oversight. Other international metrics include the extensive *GOV* measure by Aggarwal et al. (2009), which includes 41 governance attributes and is based on the ISS metrics. Another main dataset on firm-level corporate governance is from MSCI Governance Metrics, which is based on 96 unique governance and accounting metrics, organized into four individual scoring themes. They too provide a weighted-average aggregate score, *GOVSCORE*, based on their metrics. Finally, some researchers have begun to utilize the firm-level environmental, social, and corporate governance (ESG) ratings and extract the governance (G) component of ESG as a measure of corporate governance. For example, Albuquerque, Brandao-Marques, Ferreira, and Matos (2018) who constructed a governance measure using 16 governance attributes obtained from the Governance category of the Bloomberg ESG database.

While it is tempting to aggregate information from all these data sources into one single corporate governance measure—it is theoretically unclear why various dimensions can and should be combined in a linear way to capture governance quality. In addition, in the case of MSCI's *GOVSCORE*, its weighted-average composition is largely a "blackbox" to outside researchers. In fact, according to Bebchuk et al. (2009), most governance provisions are not strongly relevant to firm value, or at least are partly the endogenous product of the allocation of power within a firm set by other provisions. What's more worrying is that firm performance is usually hardwired into the aggregate score (as an "economic" dimension) when constructing such a comprehensive governance rating (e.g., *GOVSCORE*) by ESG data providers. Indeed, our conversations with various data providers confirm that this is a serious concern from researchers' point of view. Given all these theoretical and practical concerns, Bebchuk et al. (2009) caution against the "kitchen sink" approach of building ever-larger indexes of governance measures. Practically, the development and use of these indexes has put pressure on firms to adjust their governance arrangements in ways that would improve their index scores, which help them attract more institutional investors.

We concur with Bebchuk et al. (2009) and argue that there is significant value for using an index that is parsimonious and that investors care most about. The components of the Entrenchment Index (E-Index), which they constructed and are widely used in finance research, were motivated by the

substantial sentiment of institutional investors. This is consistent with the observation that conflicts over corporate control in the U.S. frequently originated from hostile takeover attempts (Goshen & Hannes, 2018). However, "entrenchment" by managers, directors, and large shareholders are not only a US phenomenon, but has also been frequently mentioned as a major corporate governance issue around the world (e.g., Claessens, Djankov, Fan and Lang, 2002).

We have tackled an extensive data collection process to explore corporate governance to the fullest extent possible. To our knowledge, we are the first to assemble a large set of data from all major corporate governance databases including ISS (formerly RiskMetrics), Thomson Reuters, MSCI (ESG ratings and GovernanceMetrics), and Factset. We also collect country-level governance data from the World Bank and from La Porta et al. (2008). Lastly, we collected historical data on shareholder voting results from ISS Voting Analytics. To distinguish between the different forms of corporate governance and investor protection, as well as to better keep track of the composition of the data, we divide our governance variables into three distinct categories: (1) corporate rules, (2) ownership, and (3) institutional constraints (i.e., country-level governance). The following sub-sections further clarify on the collected information of each distinctive category and hypothesized effect on firm value.

2.1 Corporate Rules

The first and most direct form of corporate governance is often attributed with firm-level rules set up in the corporate charter or bylaw that dictate the roles and powers between managers and owners. There are many dimensions to this topic and we have collected the most relevant information available. Originally, the Governance Index (G-Index) was developed by Gompers et al. (2003), which consists of 24 governance rules measuring the degree of shareholder rights for US public companies, with higher index score representing worse corporate governance, which is in turn correlated with lower equity price and firm value. Bebchuk et al. (2009) find that only six provisions out of the 24 governance rules in the G-Index are strongly correlated with firm valuation, and constructed the well-known Entrenchment Index (E-Index) based on these six governance rules which are mostly anti-takeover defenses. Many subsequent studies further established and legitimized the negative association between the E-Index and firm valuation (e.g., Cremers & Ferrell, 2013; Bebchuk et al., 2013), and the E-Index has become a standard proxy for corporate governance in most studies. Recently, the discussion has further developed, whereby Cremers et al., (2015) argue that only certain components of the E-index (i.e., unilateral arrangements that do not require shareholder approval, such as poison pills and golden parachutes) negatively affect firm value, while components related to commitment (i.e., protective components or bilateral protection arrangements that require shareholder approval, such as staggered

board) are seen as value enhancing.[7] Even with these new developments, the E-Index is still generally perceived as a proxy for poor corporate governance that is associated with lower firm value (Cohen and Wang, 2013). For example, Masulis, Wang and Xie (2007) find that acquirers with more of such antitakeover provisions experience significantly lower announcement-period abnormal stock returns. Karpoff, Schonlau, Wehrly (2017) further demonstrate that these measures of takeover defenses are indeed significantly and negatively related to the likelihood of the company being acquired, justifying their construct validity.

Following these theoretical and empirical debates and justifications, we construct a global entrenchment index (Global E-Index) as our parsimonious proxy for the rule-based corporate governance. Our E-Index has five components consisting of (i) staggered board, (ii) poison pill, (iii) golden parachute, (iv) charter amendments, and (v) bylaw amendments. Similar to the original E-index by Bebchuk et al. (2009), a higher index value can be considered as management and other corporate insiders are more easily entrenched. We have collected this information from *MSCI Governance Metrics* database. For additional tests, we also constructed an E-Index using data from *Thomson Reuters Asset4 ESG* as well as the ISS database for comparative analyses. Our index is built for a global sample and therefore is slightly different to the original dataset (which was only for US firms)[8]. The missing component is the supermajority requirements for mergers, which MSCI Governance Metrics do not provide. While conflicts over corporate control in the U.S. frequently originated from hostile takeover attempts, this is usually not the case for firms outside the U.S. Therefore, it is not an exact replica of the original Bebhcuk et al. (2009) E-Index.[9] As one can observe, the variables are nearly the same, and we have re-created this index for a global sample to the best extent that is currently available. It should be noted that, similar to the original E-index, the values of our E-index components vary along the time series. That is, certain governance provisions such as staggered board may change over time: from non-staggered to staggered, and vice versa.

[7] Cremers et al. suggest that arrangements that can be unilaterally adopted by directors (i.e., "unilateral protection arrangements"), which include poison pills, golden parachutes, and supermajority requirements to amend the bylaws, are associated with decreased firm value and hence fit the entrenchment theory of incumbent protection. Conversely, protective arrangements that require shareholder approval (i.e., "bilateral protection arrangements"), including staggered boards, supermajority requirements to amend the charter and to approve mergers, are associated with increased firm value. Based on these arguments, they decompose the E-Index into a commitment index (C-Index), only including the E-Index's three bilateral provisions, and an incumbent index (I-Index), only including the E-Index's three unilateral provisions. The authors find that increased scores on the C-Index (i.e., more commitment) are associated with increases in firm value. Conversely, increased scores on the I-Index (i.e., more entrenchment) is associated with decreases in firm value. They also find that the use of bilateral protection arrangements is more valuable in firms where the limited commitment problem appears to be more severe.

[8] The appendix provides more information on the exact components of each index.

[9] The original E-Index by Bebchuk et al. (2009) consisted of six separate components; (i) staggered board (ii) limits to shareholder amendments or bylaws (iii) supermajority requirements for mergers (iv) supermajority requirements for charter amendments (v) poison pill (vi) golden parachute.

One may argue that most of components in the Entrenchment Index are about anti-takeover provisions, and the role of the takeover market as an external disciplining mechanism outside the US may not be as significant as that in the US. However, we argue that although most of the provisions in the original E-Index are closely related to anti-takeover, they are also associated with the entrenchment of corporate insiders in general, even without a takeover market. In addition, many other studies have found that the international market for corporate control can be an effective governance tool as in the US market (e.g., Kang, 1993; Albuquerque, Ferreira, Marques, Matos, 2018). Moreover, our goal is to test whether what are effective for U.S. firms (e.g., rules facilitating/reducing insider entrenchment through takeover defenses) are universally applicable to companies in other countries. Therefore, we stick to the Global E-Index as a proxy for rule-based corporate governance for our analysis on the global sample.

2.2. Institutional Ownership

Corporate ownership can have varying effects on the way corporations are run. Alchian and Demsetz (1972) argue that managerial agency problems are controlled in part by dynamic changes in ownership, and Bebchuk & Hamdani (2009) further argue that the functioning of corporate rules crucially depends on a firm's ownership structure. Different interest groups, whether they be family owners or speculators, can have substantial influence on corporate processes due to differing inherent interests. In addition, large owners can also be a substitute of board in terms of monitor, advise, and mediate among shareholders (Burkart, Miglietta, Ostergaard, 2017).

While the effects of ownership concentration are still being fiercely debated, the literature has rapidly moved to the role of a particular type of blockholding as an important governance mechanism, namely the presence and concentration of institutional ownership. Institutional owners are regarded as relatively independent stakeholders—since they often have fewer business ties to firms and are also more involved in monitoring corporations—and as informed "smart money" since they are sophisticated investors (Borochin & Yang, 2017). In most firms, especially the largest ones in the US, institutional investors collectively hold a dominant position. Such presence in terms of ownership concentration reduces coordination costs and providers greater monitoring incentives. Institutional investors have higher competence as shareholders (vis-à-vis retail investors) because they employ teams of professional investment managers who are knowledgeable and experienced in business and finance (Goshen & Hannes, 2018). As shown by Ferreira and Matos (2008) and Bena et al. (2017), institutional ownership, especially the foreign one, is often associated with higher firm valuations. The positive value effect is mostly driven by institutional investors' activism, though its magnitude varies over time (Denes, Karpoff, McWilliams, 2017). Some recent studies have argued that the incentives and transparency concerns of mutual fund managers can lead to corporate myopia (e.g., Agarwal, Vashishtha, Venkatachalam, 2017; Bebchuk, Cohen, Hirst, 2017). However, as argued by Fisch, Hamdani and Solomon (2018), even "passive" institutional investors such as index funds and ETFs are still

incentivized to increasingly engage with portfolio firms and increase resources to that engagement by focusing on improving corporate governance,[10] which is supported by empirical evidence.

We collect firm level institutional ownership information from the *FactSet* database. This database allows us to exploit a range of information specific to the characteristics of institutional ownership. We have information on total institutional ownership in percentage of market capitalization (IO), total independent ownership ratio (IO_INDEP)[11] and foreign institutional ownership in percentage of market capitalization (IO_FOR). Furthermore, we have information on the concentration of institutional ownership. We have Herfindahl-Hirschman Index for ownership concentration, institutional blockholders (>=5%) in percentage of market capitalization and the total number of institutional owners (NBR_FIRMS). These variables were originally compiled by Ferreira and Matos (2008) and have been updated over time for international public firms in the Factset universe. In our latter section, we conduct analyses both on the whole Factset universe to utilize the ownership information to the fullest, but also on the subsample of firms which have MSCI *GOVSCORE* ratings to make our analyses more comparable.

2.3. Country-level Governance Rules

Country-level laws and regulations protecting investor rights and maintaining societal orders are another important aspect of governance (La Porta et al., 2008), and can affect firm-level governance rules. Aggarwal et al. (2009) argue that firm-level and country-level governance rules can be either substitutes or complements, and find more supporting evidence for the latter. Iliev, Lins, Miller, Roth (2015) also argue that without the ability to cast a mandatory and binding vote by laws and regulations, the use of voting to engage in activism will be less effective.[12] Nuances also exist with regard to what country-level rules actually matter, such as investor protection, rule of law and regulatory quality, and political institutions (Perotti, 2014). We take these views in the existing studies as the base for our empirical investigation and test whether and how the rule-based firm-level governance (i.e., the Global

[10] The argument offered by Fisch, Hamdani, and Solomon (2018) is that although passives institutional investors such as index funds are locked into their investments, the shareholders who invest in these funds are not and can exit at any time by selling their shares. As a result, mutual funds compete for investors. If active managers can generate substantial alpha on a cost-adjusted basis, fund investors will exit index funds in favor of actively-managed alternatives. Passive investors can reduce the comparative advantage of active funds by monitoring their portfolio companies and exercising their governance rights to promote firm value by replying on "voice" (monitoring on decision-making) instead of exit.

[11] Ferreira and Matos (2008) classify institutions according to the potential for business ties to a corporation as independent or "grey" institutions. Independent institutional ownership is the percentage of shares held by mutual fund managers and investment advisers. These institutions are more likely to collect information, are subject to fewer regulatory restrictions, and have fewer potential business relationships with the corporations in which they invest.

[12] More specifically, They find significantly lower levels of shareholder support for company recommendations in countries with weak investor protection laws, weak legal enforcement, and low levels of corporate disclosure, and conclude that investors engage in greater activism through dissent voting when they expect greater expropriation as a result of poor country-level institutions.

E-Index) is contingent on the country-level institutional environment. To confront these nuances, we have collected a range of data on institutional characteristics that measure country-level governance rules.

Investor Protection: We measure the level of investor protection, by incorporating a variety of proxies. First, we collected data on legal origins and investor protection laws such as the Anti-Director Rights Index (ADRI) and the Anti-Self-Dealing Index (ASDI) from the author's website (La Porta et al., 2008; (Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2008). In the literature, common law is traditionally regarded as a legal family that provides stronger investor protection. ADRI is a well-established measure quantifying country level shareholder protection and incorporates a range on information including whether proxy voting by mail is allowed, ability to call extraordinary meetings, board representation and more. ASDI is a measure of legal protection of minority shareholders against expropriation by corporate insiders, and incorporates a range of information (including ease of taking legal action, disclosure requirements, etc.) and establishes ex ante and ex post indices of private control of self-dealing. Here as well, the higher the index value, the better minority shareholders are protected.

Institutional Quality: Besides the above indices measuring investor protection by laws, we also measure country-level governance rules using the Institutional Quality data from the World Bank's World Governance Indicators database, one of the most widely used country-level governance measures in the literature. There are a total of six variables that measure institutional quality: (1) Rule of Law, which measures the citizens' confidence on the rules of society); (2) Government Effectiveness, which measures the quality of public services, (3) Control of Corruption, which measures the extent to which public power is exercised for private gains; (4) Regulatory Quality, which measures the ability of the government to formulate and implement sounds policies; (5) Political Stability & Absence of Violence, which measures the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means; and (6) Voice and Accountability, which measures the extent to which a country's citizens are able to participate in selecting their government. We use all these six measures to explore the contingent effect of institutional quality in our analysis.

Political Institutions: Scholars have also argued that the roles of corporate governance are crucially determined by political institutions of a company's country (e.g., Roe, 2003; Pagano & Volpin, 2005; Bebchuk & Neeman, 2010). Political institutions influence policymakers' choice of the degree of investor and stakeholder (such as labor) protections via policy leaning, electoral system, and lobbying by corporate insiders. For example, Pagano & Volpin (2005) find that proportional electoral systems are conducive to weaker investor protection and stronger employment protection than majoritarian systems, and Döring and Manow (2017) find that countries with majoritarian rules more often elect conservative governments than those with proportional representation electoral systems.

We collect information from the World Bank's Database of Political Institutions. The database provides a comprehensive dataset of a country's political systems, including stability of the government, fragmentation of opposition, government parties in the legislature, the political orientation of the ruling governments and parties, and the electoral system, etc. In our analysis, the variable Executive Political Orientation measures chief executive party's political orientation with respect to economic policy, which is coded as 1 for right-leaning (parties that are defined as conservative, Christian democratic, or right-wing), 2 for center-leaning (parties that are defined as centrist or when party position can best be described as centrist, e.g. party advocates strengthening private enterprise in a social-liberal context; a party is not described as centrist if competing factions "average out" to a centrist position, and 3 for left-leaning (parties that are defined as communist, socialist, social democratic, or left-wing). Furthermore, we also constructed an indicator for the proportionality of the voting system similar to that used by Pagano and Volpin (2005). We construct a single variable, *Proportionality*, combining three indicators that describe the electoral system. These include *Proportional Rules* ("PR", which equals one if at least some cadidates are elected via proportional rule), *Plurality* (PLURALITY, which equals one if at least some legislators are elected via a majoritarian rule) and *House System* (HOUSESYS, which equals one if most House seats are allocated via a majoritarian rule). The indicator is defined as $PR - PLURALITY - HOUSESYS + 2$. The variable equals to three for a purely proportional system and 0 for a pure majoritarian system.

2.4. Other Variables

Our key dependent variable is Tobin's *q*, measured as the market-to-book ratio of assets.[13] To take into account of the potential "joint hypothesis" issues, we also include an accounting measure for operational

[13] We are aware of some recent critiques on using Tobin's q (or market-to-book ratio) as a proxy for firm valuation in corporate governance, corporate law, and finance studies (Dybvig and Warachka, 2015; Bartlett and Partnoy, 2018). In particular, there are potential measurement errors, namely market values for preferred stock and debt are usually not available and simply replaced by their book values. The measure does not perfectly capture the replacement costs of both tangible assets and intangible assets, with the later including monopoly power, customer goodwill, patents and other technical knowledge, quality of management, growth opportunities, etc. Also, while Bebchuk et al. (2009) use industry-adjusted *q* as the dependent variable, we control for industry fixed effects in all of our analysis and therefore do not use industry-adjusted *q* following the critique by Gomley and Matsa (2014).

performance, namely, Return on Assets (ROA). Data for Tobin's q and ROA are collected from the Thomson Reuter's Worldscope. In our analysis, we control for a range of standard firm- and country-level covariates. At the firm-level, we control for firm size (the logarithm of total assets), leverage (total debt to total assets ratio), cash holdings (scaled by total assets), capital expenditures (scaled by total assets), and sales growth rate. We collect information on these variables from the Thomson Reuter's Worldscope database. In addition, we include the logarithm of GDP per capita from the World Bank.

2.5. Summary Statistics

We present a series of summary statistics in Tables 1 and 2. In Table 1, we report the number of observations as well as the basic characteristics of our variables. Due to the wide extent of information that we are incorporating, it is important to understand the overlap in our data with respect to country-year coverage. Therefore, in Table 2, we report the number of countries and years that we have available for each variable of interest, conditional that we observe basic firm characteristics as well.

Because the Global E-Index in our main analyses is constructed using the MSCI Governance Metrics data, it is constrained to the 7,000+ companies covered by the Governance Metrics sample. In contrast, variables related to institutional ownership apply to the whole Factset universe covering 27,000+ companies across the world.

[Insert here Tables 1 & 2]

3. Main Results

We begin our empirical analysis by validating our self-constructed E-Index on a subsample of US firms and comparing it to the results using the original Bebchuk et al. (2009) E-Index and other governance indices. We then test these self-constructed and aggregate governance indices on the global sample of firms, which allows us to take a first glimpse into the effects of governance practices and whether they are in line with prior expectations. After analyzing the global sample, we turn our focus into an extended sub-sample analysis, whereby we run the same regressions, but on various sub-samples classified in the previous literature, such as common law countries, French civil law countries, Western Europe, Scandinavian countries, East Asian countries, developed or OECD countries, etc. We use these extensive tests to determine whether we are able to find any universal corporate practices. Once we identify those deemed as non-universal, we explore their contingencies, that is, under what ownership and institutional environment do firm-level rule-based governance become effective.

3.2. Baseline Results: Rule-Based Governance in the U.S. Sample

We first perform the baseline tests by replicating the results in the original Bebchuk et al. (2009) paper, using various measures of E-Index to verify that our sample are indeed representative and our self-

constructed indices are comparable to those in the literature. In particular, these measures are constructed using data from MSCI Governance Metrics (MSCI E-Index), the "G" part of Thomson Reuters ASSET4 ESG (TR E-Index), the ISS Governance (ISS E-Index), as well as the original E-Index from Bebchuk et al. (2009). These serve as a sanity check that our self-constructed E-index capture similar aspects as the original E-Index. To investigate that whether the governance effects show up in both short-term market valuations and operating profitability, we use both Tobin's *q* and ROA as our dependent variables. Columns (1), (3), (5), (7) report the results on Tobin's *q*, whereas Columns (2), (4), (6), (8) report the results on ROA. All independent variables are lagged by one-year.

Some interesting observations can be made. First, the coefficients of various E-indices are negative and statistically significant. This is consistent with the key finding in the original thesis of Bebchuk et al. (2009). The coefficient is –0.04 when the dependent variable is Tobin's *q*, which is also comparable to –0.02 in Bebchuk et al. (2009) with industry-adjusted *q* as the dependent variable. Given that all of four E-indices have the "correct" sign of coefficient with Tobin's *q*, and that the original E-Index and the ISS E-Index only cover US firms, we consider our self-constructed MSCI E-Index and TR E-Index as valid measures of corporate rules that can be expanded to the global sample and represent the original E-Index by Bebchuk et al. (2009). Therefore, in the next section we extend the MSCI E-Index and the TR E-Index to the global sample using the same construction (i.e., Global E-Index for MSCI and TR, respectively).

[Insert here Table 3]

3.3. Baseline Results: Rule-Based Governance in the Global Sample

We next move to the global sample by using our self-constructed MSCI Global E-Index and the TR Global E-Index, together with the aggregated Governance Score assembled by MSCI as a comparison which also covers global firms. The base results for a global sample of firms are reported in Table 4. The coefficient for the MSCI Global E-Index remains negative and significant, but with much smaller economic magnitude. The coefficient of the TR Global E-Index becomes insignificant, which may be due to the missing values for some firms resulting in lack of power with a smaller sample. The coefficient for the MSCI Governance Score, which can be considered as the inverse of "entrenchment" and is constructed using a "kitchen sink" approach of aggregating all possible governance dimensions, is positive and marginally significant, indicating that it measures similar aspects of governance (at least in terms of the direction of the effect) as our self-constructed E-index. The economic significance of the MSCI Global E-Index is comparable to that in our US sample and to the one in Bebchuk et al. (2009). The results are not that clear for ROA, as all the coefficients of the Global E-Index and the Governance Score are insignificant and virtually zero. This is unsurprising given that corporate rules and governance provisions within a firm are stable over time, whereas ROA reflects the firm's short-

term profitability which can vary substantially over time. It is also indicative that the effects of rule-based governance on firm valuation and operational performance may not function in the same way, and market reactions capture things other than operational performance.

[Insert here Table 4]

Among the three governance measures, we think MSCI Global E-Index is a better proxy for rule-based corporate governance (or "poor governance") for the global sample for several reasons. First, it has much fewer missing observations and covers much more global firms than the Thomson Reuters Global E-Index. Second, although the MSCI Governance Score also covers a significant number of firms with non-missing observations, as mentioned earlier and similar to the critique by Bebchuk et al. (2009), a measure that aggregates many aspects of governance is usually not informative and may create substantial noises in the measurement of governance. The central debate in the universal corporate governance literature is that what matters for corporate governance in the U.S.—i.e., insider entrenchment as measured by Bebchuk et al. (2009)—can be universally applied to the rest of the world. An aggregate governance rating or score constructed using the "kitchen sink" approach may obscure the distinction between what governance issues matter for the U.S. and for other countries; some provisions in the aggregate score may not even matter for U.S. firms. Third, the policy implications are clearer if we focus on the most important governance practices, which policymakers and shareholders can enact upon. For these reasons, we will use our self-constructed MSCI Global E-Index as a proxy for firm-level corporate rules in the subsequent analyses.

3.4. The Role of Institutional Ownership

We continue the analysis by examining the effects of institutional ownership, another important governance mechanism that has been broadly discussed. In particular, the extant literature considers the governance effects of ownership being mostly from the stakes held by institutional investors, which translate into stronger monitoring and higher firm valuation, not only within but also across countries. As shown in Table 5, under a global sample, the number of institutional investors (*Ln(Number of IO firms)*), total institutional ownership (*Total IO*), ownership by independent institutional investors (*Independent IO*) and by foreign investors (*Foreign IO*) are all loaded with positive coefficients, whereas the coefficient of the concentration of institutional ownership based on the Herfindahl measure (*IO Herf*) has a negative sign. Institutional investors holding more than 5% ownership (*IO Block Holders*) is also negatively correlated with firm valuation. In addition, the sign and significance of the coefficients in Tobin's *q* regressions and ROA regressions are mostly consistent across different measures of ownership. When we conduct the same test on a subsample of firms with MSCI Governance Metrics coverage, we obtain very similar results.

These results are largely consistent with the extant literature on the non-monotonic effect of institutional ownership. In general, some degree of concentration in ownership—especially that held by independent institutional investors (vis-à-vis the "captive" institutions which may have different incentive structures) and foreign ones—help promote governance practices (Aggarwal et al., 2011; Ferreira & Matos, 2008; Bena et al., 2017). However, a high degree of ownership concentration by blockholders, even if it's held by institutional investors, may be detrimental to firm value. Overall, our results on global sample are largely consistent with the findings in the literature based on the U.S. sample.

[Insert here Table 5]

3.5. The Role of Country-level Investor Protections

We further test the roles of country-level investor protections by law as another mechanism of corporate governance. Given that all these country-level indices are time-invariant, whereas ROA as an operational measure can vary significantly across time, we only test the effects on market valuations (Tobin's q) on our global sample and without controlling for country fixed effects (due to the multicollinearity concern). Investor protections by law are proxied by the widely-cited Antidirector Rights Index (ADRI), Anti-self-dealing Index (ASDI), and a common law dummy. The results are reported in Table 6. Again, most country-level investor protection indices have the "correct" signs: firms operating in common law countries and countries with higher index values for ADRI and ASDI (i.e., stronger investor protections by law) have higher valuations. This is in line with the prior literature and serves as another "sanity check" of our empirical investigation: our sample firms are comparable to those in the extant studies investigating country-level governance (e.g., La Porta et al., 2002; Djankov et al., 2008).

[Insert here Table 6]

Overall, our results on corporate rules, institutional ownership, and country-level investor protections based on both the U.S. sample and the global sample suggest that insider entrenchment is associated with lower firm valuation, whereas more (dispersed) institutional ownership and stronger legal investor protections against corporate insiders are associated with higher firm valuation. Of course, these results need to be interpreted with caution given the lack of a proper identification strategy. Other time-varying firm and country characteristics may simultaneously drive the governance structures and firm value, and institutional investors may selectively invest in firms with certain characteristics that are more likely to be overvalued. Nevertheless, they are mostly consistent with the arguments and findings in the prior literature, lending credibility to the representativeness of our sample and the validity of our empirical proxies, especially the Global E-Index.

3.6. Sub-Sample Analyses

Having established the validity of our sample and measurements, we next ask: do our results based on the global full sample carry over to country and regional subsamples? In other words, are the corporate governance practices we identified in the previous section universally applicable in terms of enhancing firm value? This is the central question to the universal corporate governance debates. While country-level investor protection laws are usually very sticky over time (La Porta et al., 2002), there have also been dramatic changes in firm-level governance rules in many countries in recent years.[14] Therefore, exploring whether and how the effectiveness of firm-level governance varies across countries can have significant policy implications and shed light on policy reforms in different countries.

Obviously, the governance effects of country-level investor protection indices cannot be tested in single or a few countries due to its lack of variations within and across countries. Therefore, we only focus on the applicability of the firm-level rule-based governance (i.e., Global E-Index that we identified earlier), and conduct the same tests as in our U.S. and global samples on different country-subsamples. The subsamples in which we group countries or single out certain countries mostly follow those in the extant studies: (1) common law countries; (2) French civil law countries; (3) German civil law countries, which commonly apply the two-tier board structure and other German-style governance arrangements; (4) Western Europe, following the classification by Faccio & Lang (2002); (5) Western Europe excluding United Kingdom, to tease out the "common law" effect; (6) Scandinavian countries, which are classified as a unique legal origin by La Porta et al. (1998, 2008); (7) East Asia, following the classification by Clasessens et al. (2000); (8) Non-US countries; (9) Developed countries, based on the IMF classifications; (10) Developing countries, also based on the IMF classifications; (11) OECD countries; (12) non-OECD countries. We also include in our subsample analysis a few single countries which are deemed in comparative corporate governance literature: (13) Japan, the country with the largest capital market in Asia and most firms in our sample of Asia-Pacific countries; (14) United Kingdom, the origin of common law; (15) China, the largest emerging economy; (16) Canada, a common law country with similar level of investor protection as the U.S. (La Porta et al., 1998) but also significant presence of business groups (La Porta et al., 1999; Morck and Tian, 2015); (17) Germany, where a two-tier board structure is mandated by company law; (18) Singapore and Hong Kong, the two financial centers and common law economies in Asia. Since we have already shown the results of our E-Index in the whole sample and in the U.S. subsample, we do not repeat the analysis here. In addition, given the space limitation as well as the results from previous tables on ROA and related concerns on the accounting-

[14] For example, Miyajima, Ogawa & Saito (2017) document that, in Japan, the presence of a main bank has been weakened, the ownership of institutional investors has dramatically increased, and independent outside directors have been widely introduced. Also see Kim & Lu (2013) and Fauver, Hung, Li & Taboada (2017) for more systematic evidence on firm-level rule-based corporate governance reforms around the world.

based operational performance measure, from this point onward we will only report results using Tobin's *q* as the dependent variable. Results for the subsample analysis are reported in Table 7.

Some salient findings emerge from these results. First, for most subsamples, the coefficient of the Global E-Index is statistically insignificant, and the sign is not always negative, despite the sizable number of observations in each subsample. Even across common law countries—including the subsample of firms in the UK, the origin of common law—which are widely regarded as offering stronger investor protections, the effects of the Global E-Index are not consistent. Only in the subsample of Japan, China, Canada, Non-U.S., developed countries and the OECD countries, we observe a negative and significant coefficient. In other words, while it is established that managerial entrenchment is negatively correlated with firm valuation in U.S. firms and in our global sample, such negative correlation in the global sample seems to be driven by only a few countries and regions.

[Insert here Table 7]

We conduct similar analysis for our institutional ownership variables from Factset with the same classifications of subsamples and report the results in Table 8, as well as the overall sample and the U.S. sample. Interestingly, we find that most institutional ownership variables (e.g., *Total IO, Independent IO, Foreign IO, Ln(number of IO firms)*) are consistently and positively correlated with Tobin's *q* across different subsamples. Similarly, the Herfindahl index of institutional ownership (*IO Herf*) and blockholdings of institutional investors (*IO Block Holders*)—two variables that we interpret as capturing ownership concentration—are consistently and negatively correlated with Tobin's Q across the board. The numbers of observations are much larger in these tests because we are not bounded by the Governance Metrics ratings but are able to utilize the whole Factset universe. In Panel B of Table 8, we conduct the similar analysis on the same country subsamples, and only on those firms that are covered by the MSCI Governance Metrics data. This results in much smaller sample sizes, and we lose statistical significance in some subsamples—especially for Total IO and Independent IO in French civil law and German civil law countries, as well as in single-country subsamples—likely due to the issue of weaker predictive power with smaller sample. Nevertheless, none of the coefficients flips the sign. For the total number of institutional investors (i.e., *Ln(Num IO)*) and the concentration of institutional ownership (e.g., *IO Herf*), the previous results are mostly upheld.

The consistent significance of the coefficients on institutional ownership variables in more subsamples echoes the recent wave of studies on the role of professional institutional investors in shaping corporate governance practice around the world. They are regarded as increasingly sophisticated shareholders who are capable of achieving governance aims via activism without judicial assistance (Goshen & Hannes, 2018). In particular, most prior studies have shown that institutional owners act as effective

monitors of firms and they are not concentrating solely on short term gains (Ferreira & Matos, 2008; Aggarwal et al., 2011; Bebchuk, Brav & Jiang, 2015; Cremers et al., 2016; Bena et al., 2017). Although Bebchuk, Cohen, Hirst (2017) caution that agency problems within institutional investors may reduce their incentive to exert activism to their portfolio companies, Fisch, Hamdani, Solomon (2018) argue and find supporting evidence that even passive investors are incentivized to actively engage with their portfolio firms on improving their corporate governance and reducing underperformance. Our results are consistent with the latter argument, as well as with recent literature on "governance traveling around the world" enabled by institutional investors (e.g., Ferreira & Matos, 2008; Aggarwal, Erel, Ferreira, Matos, 2011).

[Insert here Table 8]

As suggested by Black, de Carvalho, and Gorga (2012), if there is sufficient commonality in some aspects of corporate governance practices, such as our findings on institutional ownership, it could make sense to adopt "across the board" rules, both within and across countries. However, if some standard sets of corporate governance practice do not universally apply across countries, such as our findings on insider entrenchment, a natural and important question is when such governance practice will work, which we will address in the next section.

3.7. What Matters in Corporate Governance…. and When?

Having showed that the standard set of governance practices, or the lack of such governance mechanisms, do not universally apply to different countries and regions, it is important to understand why this is the case and under what conditions they can function effectively as observed in the US. Our investigation of the conditional (or contingent) effects of corporate governance is largely motivated by the literature focusing on what institutions are critical for finance: contracting, protection of investor rights, and prudential regulation (see a review by Perotti (2014)). Similarly, research on comparative corporate governance from the perspectives of economics, management, and law has offered primarily three main explanations on the effectiveness of corporate governance. First, the effectiveness of firm-level governance depends considerably on companies' ownership structure, and measures that protect outside investors in a company without a controlling shareholder are often irrelevant or even harmful when it comes to investor protection in companies with a controlling shareholder, and vice versa (e.g., Bebchuk and Hamdani, 2009). Second, the effectiveness of firm-level governance depends on the strength of country-level governance and institutional environment, which include a country's laws and the institutions that enforce the laws. Aggarwal, Erel, Stulz, and Williamson (2009) argue that firm-level governance and country-level investor protection can be substitutes or complements, and find empirical supports for the complementary effects. That is, rule-based governance at the firm-level is enacted by strong institutional infrastructure. Third, some researchers favor a political theory of

corporate governance, arguing that the form and effectiveness of firm-level governance are shaped by political forces, such as electoral system and the political orientation (e.g. left versus right) of the ruling parties, the government, or the nation as a whole (e.g., Pagano & Volpin, 2005; Roe, 2003).

All of the above theories suggest that the effect of corporate governance mechanisms should vary across countries and some of these conditions (e.g., ownership structure, country-level governance, and politics) may account for our cross-country results. Aguilera, Judge and Terjesen (2018) summarize these different firm- and country-level factors as *contingencies* for the effectiveness of corporate governance. To further understand the reasons that hinder or foster the effectiveness of corporate governance practices, we test the above theories on corporate governance contingencies. Our primary focus in this section is on the contingent effects of corporate rules (i.e., the Global E-Index), because they are more implementable at the firm-level and their effects are shown to be varying across different subsamples in Table 7. We test the contingencies of the firm-level governance rules' effects on firm valuation by conducting analyses on its interaction with other external governance mechanisms as well as with institutional characteristics.

3.7.1. The *Contingent* Effect of Institutional Ownership

One argument on the universality of corporate governance practices is that the functioning of firm-level corporate rules crucially depends on the ownership structure of the firm (Bebchuk & Hamdani, 2009; Bebchuk & Weisbach. 2010). In particular, Bebchuk & Hamdani (2009) argue that the E-index principally measure take-over defenses, which are of limited relevance in countries in which most firms have controlling shareholders who can block any major decision. Ownership concentration and the presence of controlling shareholders may be endogenous (e.g., Demsetz & Lehn, 1985; Demsetz & Villalonga, 2001), and can have different and direct effects on firm value which have been well documented in the literature (e.g., Claessens, Djankov, Fan and Lang, 2002). However, our focus is on the governance role of ownership. While blockholdings by family or state are prevalent and may affect managerial incentives (La Porta, Lopez-de-Silanes, Shleifer, Vishny, 1999), the nature of agency problems and governance are very different in these firms Therefore, we focus on the role of institutional ownership which is usually considered as an external governance mechanism (e.g., Gillan & Starks, 2000; Aggarwal et al., 2011). To test the association between insider entrenchment and firm valuation conditional on institutional ownership as an external governance mechanism, we interact Global E-Index with various institutional ownership variables to see if its effect becomes stronger or weaker with more institutional shareholdings. We report the results for both Tobin's q as dependent variables in Table 9.

First, we find that the interactions between Global E-Index and various measures of institutional ownership are mostly negative and significant. Perhaps the most interesting results are those in Columns

(1)-(2), in which the interaction of Global E-Index with Total IO and with Independent IO are negative and significant. As Total IO and Independent IO measure the aggregate ownership in a company held by professional institutional investors, these results speak to the overall contingency effect of institutional shareholdings. In unreported tests when we "inverse" the Global E-Index by using greater value to denote better governance, the coefficient of the interaction term is positive and significant. The results potentially imply that the costs of "poor" governance (i.e., strong entrenchment) are greater in firms where there are higher levels of monitoring by institutional investors. A plausible explanation is that stronger monitoring by institutional investors makes rule-based governance at the firm-level more important, as managerial entrenchment can be more harmful in firms that heavily reply on external monitoring. This finding potentially highlight the role of entrenchment is conditional on external governance mechanisms such as institutional holdings. These results are similar in spirit to the results of Aggarwal et al. (2009), which highlight the additional benefits of good governance in environments with more independent (i.e. institutional) ownership, and potentially suggest that it may be costlier to enact value enhancing governance rules in firms with less institutional owners.

An alternative interpretation is that institutional investors may target badly governed firms (in which managers are more entrenched) so as to benefit more from the improvement in valuation under their monitoring. However, this interpretation is inconsistent with the findings by Ferreira & Matos (2008) that institutional investors usually target better governed firms to invest in the first place. Nevertheless, we acknowledge the plausibility of such explanation. However, along this line, a more plausible interpretation is that given that entrenchment has different effects on firm value, institutional investors usually target firms in which managerial entrenchment signifies agency problem, rather than firms in which entrenched managers act in the interest of the firm. In other words, firms with a high E-index value and no institutional investors may be inherently different from firms scoring high in the E-index and institutional owners. This interpretation can also explain why the effect of the Global E-Index is positive when Institutional Ownership takes the value of zero. Similar can be said for Column (3) and Column (4) when we interact the Global E-Index with the number of institutional investors and ownership by institutional blockholders (above 5% holdings), although the coefficient of the interaction term is insignificant in Column (3), and the coefficients of *IO Block Holders (5%)* are mostly negative in Table 5 and Table 7. The latter (i.e., results for *IO Block Holders (5%)*) may potentially suggest that while blockholding itself may negatively affect firm value in general, it can also serve to balance managerial power by reducing managerial entrenchment.

Table 9 also reports positive coefficients of the interaction terms *Global E-Index* × *IO Herf* (Column (5)) and *Global E-Index* × *Foreign IO* (Column (6)), suggesting that in firms with greater ownership concentration (by institutional investors) and foreign ownership, the negative effect of managerial entrenchment is weaker. The result in Column (5) is consistent with the argument by Bebchuk and

Hamdani (2009) that managerial entrenchment becomes less of a governance issue in firms with concentrated ownership, as the nature of agency problem is fundamentally different in this type of firms. The result in Column (6) is consistent with the argument by Bena et al. (2017) that foreign institutional investors can exert a disciplinary role on entrenched corporate insiders worldwide. While the exact mechanisms for how corporate rules and institutional ownership interact may still need further investigation with more detailed data, these results point to the fact that managerial entrenchment does not universally affect firm value across firms with different ownership structures in the same way.

[Insert here Table 9]

3.7.2. The *Contingent* Effect of Country-level Governance

Another view considers legal rules and other country-level governance institutions as central and that good governance is achieved through rules that protect minority investors. This approach can be effective if a common set of rules can be applied to a broad spectrum of countries and a broad spectrum of firms within a country (Black, de Carvalho, Gorga, 2012; Aggarwal et al., 2009). Our investigation of how country-level governance interacts with firm-level rule-based governance is in line with Aggarwal et al. (2009), especially with regard to whether country-level governance and firm-level governance are substitutive or complementary.[15] More specifically, we interact the Global E-Index with the aforementioned investor protection indices (ADRI, ASDI, and the common law dummy) as in Table 10, as well as with the institutional quality indices (using the World Bank's World Governance Indicators) as in Table 11. For simplicity, we call both investor protection indices and World Bank institutional quality indices "country-level governance".

Again, some interesting observations can be made. First, in both Table 10 and Table 11, we find that the effect of the E-index crucially depends on country-level institutional quality, and their interactions are mostly negative, especially with World Governance Indicators. The negative association between insider entrenchment and firm value is stronger in countries with stronger governance rules. Again, when we inverse the value of the E-index, the coefficient of the interaction term becomes positive. That is, when country-level governance rules are strong, the role of firm-level corporate governance is also greater. This is consistent with the "complement" view of corporate governance and we show that similar effects persist with regards to institutional quality—not just investor protection—as well on a on a global scale (not only from a US vs. non-US angle). Similar to the earlier results conditional on institutional ownership, the results imply that in an environment with strong institutional quality,

[15] Aggarwal et al. (2008) examined whether comparable non-U.S. firms chose higher or lower levels of investor protection compared to similar U.S. firms. They found that compared to matching firms, only a small proportion of foreign firms have a higher index value (for investor protection), yet the value of foreign firms fell as the index decreases relative to the index of matching U.S firms.

entrenchment is related to lower firm valuation. Since firms usually do not choose their institutional environments, a more plausible interpretation of these results may be that it is costlier to enact good rule-based corporate governance (i.e. lower E-index values) in countries with lower levels of institutional development. These results further cast doubt on the feasibility of setting a global governance standard in terms of corporate rules at the firm-level. Indexes on corporate level investor protection such as the one used by Aggarwal, Erel, Stulz, & Williamson (2009) may be misleading if they are designed from the perspective of protecting shareholders in the U.S. situation, namely, when ownership structure is relatively dispersed, institutional shareholdings are relatively prevalent, and investor protection by laws are relatively strong.

[Insert here Table 10 and 11]

Combining the results of the conditional effects of institutional quality—which is arguably more exogenously determined—with that on institutional ownership, they seem to suggest that strong external governance mechanisms (institutional investors and regulations) make internal governance mechanisms (i.e., curbing managerial entrenchment) more important. External governance and internal governance are more complementary than substitutive, consistent with the argument by Aggarwal et al. (2009).

3.7.3. The *Contingent* Effect of Political Institutions

A third view emphasizes the importance of the political economy in influencing the effectiveness of corporate governance practices. Political institutions matter for how some polities settle conflict, or the ways in which corporate players team up to work together, can affect insider-shareholder relationship (Roe, 2003). They also matter as political orientation and electoral systems can fundamentally determine how those in power can influence protections towards shareholders vis-à-vis other stakeholders such as employees (Pagano & Volpin, 2005). For example, lobbying by interest groups such as powerful corporate insiders and incumbent firms seeking to retain market power can lead to weaker protections for outside insiders and new entrants (Rajan and Zingales, 2003, 2004;; Bebchuk and Neeman, 2009). Similarly, Pagano & Volpin (2005) argue that proportional electoral systems (vis-à-vis majoritarian systems) are conductive to weaker investor protection and in favor of stronger employment protection. Despite their importance, there has been limited research on the political determinants of firm-level corporate governance practices and their effectiveness, especially from a systematic and global perspective. Our empirical investigation here, albeit mostly exploratory, aims to provide some systematic evidence of such political contingency by focusing on the ruling government's political orientation and the country's electoral system. Specifically, we examine the country-level political determinants of firm-level corporate governance by first interacting our Global E-Index with a dummy indicating right-leaning governments which are those defined as conservative, Christian

democratic or right-wing, which are often regarded as more pro-business, and favorable towards capital markets, investors and management (vis-à-vis other stakeholders) (Potrafke, 2010). Similarly, we also interact the country's electoral system—proportional vs. majoritarian—with the Global E-Index to explore its political contingency. We report the interaction results in Table 12.

We find that firms operating in countries with right-leaning governments and with proportional electoral systems have higher Tobin's *q* when they score higher on the Global E-Index (i.e. the interaction is positive). The result in Column (1) indicates that the negative effect of entrenchment on firm value is weaker when the political regime is more right-leaning which is arguably more pro-business. The result in Column (2) suggests that a proportional (vis-à-vis majoritarian) electoral system also attenuates the negative association between entrenchment and firm value. At the first sight, the latter result seems to be inconsistent with the argument made by Pagano & Volpin (2005) that the proportionality of the electoral system is negatively correlated with shareholder protection (vis-à-vis employment protection). The argument by Pagano & Volpin (2005) is in line with what has been argued in the political science literature that proportional representation is more favorable for the election of left-wing parties into power (e.g., Doring & Manow, 2017), which are less likely to support pro-shareholder policies. A key distinction of our empirical investigation is that we focus on the *conditional* (instead of *direct*) effect of electoral system on insider entrenchment and valuation at the firm-level. In this regard, our results may suggest that while electoral rules and the executive party's political leaning may be interrelated, they may also function differently on influencing the governance effects at the firm level. Both pro-business polities and broader participation tend to lead to stronger investor protection (Perotti, 2014). While the exact mechanisms require further in-depth analysis, one might argue that firms with greater entrenchment of their insiders are better at capturing value in such environments by focusing more on the long-term. Of course, this analysis is exploratory in nature as a first step towards understanding the political effects of corporate governance efficiency, and we show that certain types of political movements (e.g. right wing dominated governments) affect corporate governance outcomes.

[Insert here Table 12]

In summary, our empirical evidences suggest that the role of entrenchment or corporate-rule-based governance mechanisms cannot universally apply across countries, and are contingent on the firm's ownership structure (especially with regard to institutional ownership), country-level governance, and the political environments. Of course, there may be other contingencies to corporate governance, such as cultures. However, cultural traits are notoriously difficult to measure, and the main purpose of our research is to provide relevant policy and managerial implications with respect to corporate governance reforms at both the country-level and the firm-level, leaving limited room for considering the roles of culture and social norms. In addition, culture and norms are very time-invariant, making them poor

candidates to explain phases of corporate governance change and financial evolution (Perotti, 2014). Our ultimate goal is to shed light on which aspects of governance matter for firm valuation and under what conditions. Therefore, we only focus on a few important firm- and country-level governance mechanisms discussed above.

4. Evidence from Shareholder Proposals on Corporate Governance Around the World

So far, our results indicate that while the effects of corporate-rule-based governance mechanisms (proxied by the global E-index) are conditional on external governance and political environments, the effects of institutional shareholdings seem to be universally associated with higher firm valuation. We try to provide further evidence on whether corporate governance enacted by institutional investors is correlated to higher firm valuation across the world. A widely accepted argument in the literature is that institutional investors can act as monitors and use their activism to influence the decision-making process within their portfolio companies during board meetings and with proxy fights, and help spill over similar governance practices across national borders (e.g., Aggarwal et al., 2011). Even for passive investors, their sponsors have an incentive to use "voice" to compete with active fund managers and force their funds to actively engage with their portfolio firms on improving their corporate governance and reducing underperformance (Fisch, Hamdami, Solomon, 2018).

Of course, there are many ways institutional investors can monitor the portfolio company. For identification purpose, we focus on one particular but also commonly used way, namely, through sponsoring governance proposals during portfolio companies' shareholder meetings. To do so, we collect data from the ISS Voting Analytics database for both US and Global Voting Outcomes datasets. This is the most comprehensive dataset available on voting data for U.S. and global companies. The detailed voting outcomes data are available from 2003 (for global companies, most data are available from 2013 onwards). The dataset provides over 700,000 historical votes, sponsored by management or shareholders, as well as information on the threshold of passage, as some proposals are not necessarily passed by more than 50% of support. For example, they may only be considered as being passed if they receive supporting votes that are over 66.7% or 75% of the cumulative votes. Our analysis uses actual thresholds of passing instead of the conventional 50% threshold. We then apply a regression discontinuity design (RDD) on both the U.S. sample and the global sample by focusing on the stock market reaction to the passage of governance-related close-call proposals. The identification is based on the assumption that the passage of such close-call proposals is akin to a randomly assigning shareholder-initiated (i.e., mostly by institutional investors) governance to companies and hence is less likely to be correlated with firm characteristics. This is similar to Cunat, Gine and Guadalupe (2012) who find positive abnormal returns around the passage of close-call governance proposals for U.S.

companies. They interpret the result as being suggestive that corporate governance enacted by shareholder proposals is value-enhancing thus induces favorable stock market reaction.

An example of such close-call proposal is CA Immobilien Anlagen AG, whereby the shareholder proposal won by a small margin. By looking at the voting data, one can infer that shareholders wanted to increase the size of the board, whereas management wanted to decrease the size of the board—they had their own proposal opposing that of the shareholders. The management proposal consequently failed by a small margin. Overall, shareholders won, and analysts seem to have agreed with their case as the cumulative abnormal return around the voting day was positive. In addition, to rule out potential confounding effect, we drop the observations for which there were several proposals being voted on the same day.[16]

We limit our analysis to shareholder proposals (vis-à-vis management proposals), similar to Cunat et al. (2012), because we are mostly interested in the effects of votes cast by institutional investors and it is commonly understood that the vast majority of shareholder proposals are cast by these investors. We then employ the RDD analysis as in Cunat et al. (2012) by comparing the stock market reaction, i.e., the cumulative abnormal returns (CARs) by the voting company, to shareholder proposals which passed or failed by a small margin.[17] We visually show the CARs around the required threshold for both the U.S. sample and the non-U.S. sample in Figure 1. Due to the nature of RDD which relies on a narrow margin around the passing threshold, we are not able to split our sample into more granular subsamples as what we did in Table 7, otherwise for most subsamples we won't have sufficient observations. Nevertheless, we still find that investors in general react positively to the passage of shareholder proposals by institutional shareholders for both the U.S. subsample and for the non-U.S. subsample. In other words, this may potentially indicate that the external governance by institutional investors is not only a value adding mechanism in the U.S. as shown by Cunat et al. (2012) but also globally. In Table 13, we formally report the RDD estimates of the difference in abnormal returns between proposals that pass and proposals that do not pass for varying intervals along the threshold of the day of the vote. As the votes are restricted to samples close to the threshold, the results become more and more positive. To be more precise, for the votes within two percentage points of the threshold, the abnormal returns are positive and significant for the proposals that passed for both the U.S. and non-U.S. samples. The average difference in one-day abnormal return between firms that marginally pass or fail a governance

[16] An example of a confounding event is the shareholder sponsored vote by Bellamy's Australia Limited, which failed by a margin of about 7%. Interestingly, in this case, the cumulative abnormal return was positive, however, there was a clear reason for this. On that same day, there were two other votes taking place, and in the end, all three votes were surrounding the election of specific directors. Shareholders ended up winning the other two proposals by a margin of 11% and 15%, which explains why the cumulative abnormal return was positive.
[17] The cumulative abnormal returns are computed in the three days surrounding the shareholder vote and the expected returns are obtained from the market model estimated over a period starting 280 days before the vote until 30 days before the vote.

proposal is about 80 basis points for U.S. firms, and 4% for non-U.S. firms. The magnitude of results for the U.S. sample is slightly smaller but still quite comparable to that of Cunat et al. (2012) results (+0.013), and the results for non-U.S. firms are much larger, probably due to the fact that the sample sizes are much smaller for non-U.S. firms. Again, despite our identification using the RDD setting, our results should still be interpreted with caution, especially in light of the caveat by Bach & Metzger (2018) that one cannot routinely use an RDD to identify the causal effects of changes in corporate governance generated by shareholder votes. Nevertheless, these results provide further supporting evidence for the universality of institutional ownership on firm value.

[Insert here Figure 1 & Table 13]

5. Conclusion

By now, there has been substantial evidence that one size does not always fit all firms in all countries. Optimal governance likely differs across different countries. Within a given country, optimal governance may depend on firm characteristics such as the ownership structure, especially with the involvement of institutional shareholders. To date, we still know relatively little about the extent to which broad corporate governance principles can be applied across countries. More importantly, if one size doesn't fit all, under what conditions do the commonly well-regarded "good" governance practices can enhance firm value?

With increasing globalization, the emergence of institutional investors, and changes in governance regulation[18] around the world, the landscape of corporate governance has been rapidly changing as well. It is therefore important to understand which corporate governance mechanisms are effective and under what conditions. Legal rules can be effective if many corporate governance practices are universal, so that a common set of rules can be applied to a broad spectrum of countries, and a broad spectrum of firms within each country. In contrast, if good corporate governance is often "local", i.e., varying across countries, and across firms within a country, a more flexible approach will often be appropriate, such as comply or explain rules and multiple governance stock exchange listing tiers (Black, de Carvalho, Gorga, 2012). Similar debates exist regarding whether there are "best management practices" or whether every management practice is contingent (e.g., Bloom, Genakos, Sadun, Reenen, 2012).

Our approach combines firm-level agency and institutional context, which is a useful framework to understand corporate governance deviance around the world (Aguilera, Judge, Terjesen, 2018). Our

[18] For example, the securities regulators in Hong Kong and Singapore recently removed the "one-share-one-vote" requirement for stock exchange listing. See the Economist article: www.economist.com/finance-and-economics/2018/03/01/hong-kong-and-singapore-succumb-to-the-lure-of-dual-class-shares.

findings shed light on the recent literature of how governance can travel around the world due to the role of institutional investors, but also cast doubt on the effectiveness of such global governance transmission. They also echo the argument by Goshen & Hannes (2018) on the rise of institutional ownership and the death of corporate law in shaping governance in the U.S. As they argue, the more competent shareholders become, the less important corporate law will be. Our results show that, in an increasingly globalized era, such a shift in the composition of the capital markets and the importance of different governance mechanisms is not only happening in the U.S. but also around the world.

The analysis we have conducted here is in many ways exploratory, and many open questions remain. We have mainly analyzed firm-level governance rules that are strongly related to anti-takeover mechanisms—a typical way of obtaining corporate control in the U.S.—and their institutional contexts across other countries. There are many other governance arrangements outside the U.S., such as board structure (e.g., one-tier vs. two-tier board and different committees on the board) and CEO compensation contract, which we remain silent on. Also, given the lack of systematic governance reforms across the world, it is very difficult to pin down causality and the exact mechanisms through which governance affects firm value. More studies across various fields (e.g., finance, economics, accounting, management, law) can be done to further explore the other aspects of governance and the channels through which they affect firm value. Nevertheless, taking our findings at the face value, an important policy implication is that not all governance practices can be universally applied, and investors and policymakers need to pay attention to the institutional contexts of corporate governance in a more granular fashion.

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Table 1: Summary Statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rule-based governance	Obs.	Mean	Std. Dev.	Min.	Max.	25th percentile	Median	75th percentile
MSCI Global E-Index	25,113	1.484	1.184	0	5	1	1	2
Thomson Reuters Global E-Index	9,357	1.729	1.398	0	5	1	1	3
Bebchuk et al. (2009) E-Index	4,890	2.386	1.288	0	6	1	2	3
ISS E-Index	6,553	3.494	1.127	0	6	3	3	4
MSCI Governance Score	25,113	5.717	1.666	0	10	4.600	5.700	6.900
Institutional ownership	Obs.	Mean	Std. Dev.	Min.	Max.	25th percentile	Median	75th percentile
Ln(Num IO)	187,812	2.888	1.668	0.693	7.948	1.386	2.708	4.205
Total IO	187,812	0.201	0.270	0	1	0.0159	0.0805	0.261
Foreign IO	187,812	0.0457	0.0884	0	1	0.000883	0.0117	0.0531
Independent IO	187,812	0.190	0.257	0	1	0.0149	0.0758	0.244
IO Block Holders (5%)	187,812	0.0581	0.110	0	1	0	0	0.0748
IO Herf	187,797	0.381	0.344	0.00728	1	0.0886	0.244	0.614
Institutional quality	Obs.	Mean	Std. Dev.	Min.	Max.	25th percentile	Median	75th percentile
Rule of Law	259,780	1.117	0.756	-1.126	2.120	0.827	1.448	1.615
Government Effectiveness	259,780	1.260	0.669	-0.889	2.431	1.050	1.514	1.721
Control of Corruption	259,780	1.111	0.900	-1.134	2.586	0.461	1.357	1.766
Regulatory Quality	259,780	1.091	0.694	-0.796	2.263	0.803	1.263	1.617
Political Stability	259,780	0.405	0.711	-2.386	1.663	0.0486	0.575	0.973
Voice and Accountability	259,780	0.771	0.867	-1.687	1.826	0.614	1.079	1.328
Anti-Self-Dealing Index	300,200	0.610	0.197	0.172	1	0.499	0.654	0.757
Anti-Directors Rights Index (ADRI)	273,188	3.955	1.254	0	5	3	4	5
Common Law	300,200	0.513	0.500	0	1	0	1	1
Right-leaning Executive Party	251,460	0.485	0.500	0	1	0	0	1
Proportionality	271,553	0.849	1.010	0	3	0	1	1
Other variables	Obs.	Mean	Std. Dev.	Min.	Max.	25th percentile	Median	75th percentile
Ln(Assets)	300,200	12.37	1.911	8.272	16.16	11.09	12.32	13.66
Leverage	300,200	0.227	0.194	0	0.651	0.0444	0.198	0.360
Sales Growth	300,200	0.343	0.660	-0.504	2.268	-0.0576	0.174	0.519
Cash / Total Assets	300,200	0.166	0.169	0.00469	0.654	0.0403	0.108	0.231
CAPEX / Total Assets	300,200	0.0516	0.0513	0.000333	0.200	0.0140	0.0348	0.0707
Tobin's *q*	300,200	1.640	1.115	0.662	5.329	0.948	1.233	1.853
Return on Assets (ROA)	300,136	-0.00835	0.156	-0.587	0.159	-0.00893	0.0284	0.0665

Note: All firm level continuous controls (non-dummy variables) are winsorized at the 5th and 95th percentiles.

Table 2: Data Coverage of Governance Variables

Variables	Countries	Years
MSCI Entrenchment Index	45	2010 - 2015
Thomson Reuters Entrenchment Index	32	2003 - 2015
MSCI Governance Score	45	2010 - 2015
Ln (Num IO)	45	2001 - 2014
IO Herf	45	2001 - 2014
IO Block Holders (5%)	45	2001 - 2014
Total IO	45	2001 - 2014
Independent IO	45	2001 - 2014
Foreign IO	45	2001 - 2014
Control of Corruption	45	1996 - 2015
Government Effectiveness	45	1996 - 2015
Political Stability	45	1996 - 2015
Voice and Accountability	45	1996 - 2015
Regulatory Quality	45	1996 - 2015
Rule of Law	45	1996 - 2015
Common Law	45	As of 1993
Anti-director Rights Index (ADRI)	37	As of 1993
Anti-Self-Dealing Index (ASDI)	45	As of 1993

Table 3: US Results on Corporate Rules

The dependent variables are Tobin's *q* (Q) and Return on Assets (ROA). Q, ROA and all firm level controls are winsorized at the 5th and 95th percentiles. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	DV = Q	*DV = ROA*	*DV = Q*	*DV = ROA*	*DV = Q*	*DV = ROA*	*DV = Q*	*DV = ROA*
MSCI E-Index t-1	-0.032***	-0.037***						
	(0.012)	(0.012)						
Thomson Reuters E-Index t-1			-0.067***	-0.072***				
			(0.013)	(0.014)				
Bebchuk et al. (2009) E-Index t-1					-0.040***	-0.035***		
					(0.011)	(0.011)		
ISS E-Index t-1							-0.052***	-0.054***
							(0.010)	(0.011)
Ln(Assets) $_{t-1}$	-0.018*	-0.012	-0.295***	-0.285***	0.061***	0.064***	0.019	0.020*
	(0.009)	(0.010)	(0.025)	(0.026)	(0.014)	(0.015)	(0.012)	(0.012)
Leverage $_{t-1}$	-0.098	-0.098	-0.293***	-0.333**	-0.667***	-0.664***	-0.572***	-0.580***
	(0.074)	(0.076)	(0.112)	(0.132)	(0.111)	(0.114)	(0.093)	(0.097)
Cash / Total Assets $_{t-1}$	2.200***	2.166***	2.570***	2.552***	1.767***	1.770***	1.963***	1.986***
	(0.095)	(0.097)	(0.163)	(0.177)	(0.145)	(0.150)	(0.120)	(0.122)
CAPEX / Total Assets $_{t-1}$	2.941***	3.177***	3.095***	3.454***	3.702***	3.774***	3.511***	3.907***
	(0.315)	(0.319)	(0.466)	(0.557)	(0.447)	(0.472)	(0.363)	(0.380)
Sales Growth $_{t-1}$	0.300***	0.347***	0.232***	0.253***	0.241***	0.263***	0.301***	0.371***
	(0.028)	(0.030)	(0.040)	(0.051)	(0.039)	(0.043)	(0.037)	(0.042)
Observations	9,159	9,111	4,547	4,293	4,595	4,498	6,298	6,213
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	No	No	No	No	No	No	No	No
Countries	USA	USA	USA	USA	USA	USA	USA	USA

Table 4: Main Results on Corporate Rules

The dependent variables are Tobin's *q* (Q) and Return on Assets (ROA). Q, ROA and all firm-level controls are winsorized at the 5th and 95th percentiles. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)
	DV = Q	*DV = ROA*	*DV = Q*	*DV = ROA*	*DV = Q*	*DV = ROA*
MSCI Global E-Index t-1	-0.027***	-0.001				
	(0.009)	(0.001)				
Thomson Reuters Global E-Index t-1			-0.010	-0.001		
			(0.013)	(0.001)		
MSCI Governance Score t-1					0.007**	0.000
					(0.004)	(0.001)
Ln(Assets) $_{t-1}$	-0.203***	0.012***	-0.400***	-0.007***	-0.201***	0.012***
	(0.014)	(0.002)	(0.026)	(0.002)	(0.014)	(0.002)
Leverage $_{t-1}$	-0.282***	-0.079***	-0.253**	-0.050***	-0.283***	-0.080***
	(0.070)	(0.008)	(0.120)	(0.011)	(0.070)	(0.008)
Cash / Total Assets $_{t-1}$	1.007***	-0.009	1.366***	0.035**	1.009***	-0.009
	(0.090)	(0.010)	(0.169)	(0.017)	(0.090)	(0.010)
CAPEX / Total Assets $_{t-1}$	0.637***	0.066**	0.885***	0.074**	0.643***	0.066**
	(0.198)	(0.028)	(0.322)	(0.035)	(0.198)	(0.028)
Sales Growth $_{t-1}$	0.112***	0.009***	0.061**	0.010***	0.112***	0.009***
	(0.015)	(0.002)	(0.024)	(0.003)	(0.015)	(0.002)
Ln(GDP per capita) $_{t-1}$	-0.092	-0.040***	0.414***	0.042***	-0.078	-0.039***
	(0.058)	(0.007)	(0.143)	(0.016)	(0.059)	(0.007)
Observations	19,932	20,020	9,356	9,383	19,932	20,020
Number of company	4,825	4,838	1,852	1,852	4,825	4,838
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Table 5: Main Results on Corporate Ownership

The dependent variables are Tobin's *q* (Q) and Return on Assets (ROA). Q, ROA and all firm level controls are winsorized at the 5th and 95th percentiles. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Dependent variable	*Q*	*ROA*	*Q*	*ROA*	*Q*	*ROA*	*Q*	*ROA*	*Q*	*ROA*	*Q*	*ROA*
Ln(Number of IO firms) $_{t-1}$	0.199***	0.011***										
	(0.004)	(0.001)										
IO Herf $_{t-1}$			-0.282***	-0.017***								
			(0.011)	(0.002)								
IO Block Holders (5%) $_{t-1}$					-0.393***	-0.007						
					(0.036)	(0.006)						
Total IO $_{t-1}$							0.224***	0.072***				
							(0.026)	(0.004)				
Independent IO $_{t-1}$									0.222***	0.077***		
									(0.027)	(0.004)		
Foreign IO $_{t-1}$											0.657***	0.002
											(0.056)	(0.007)
Ln(Assets) $_{t-1}$	-0.339***	0.007***	-0.252***	0.012***	-0.216***	0.014***	-0.233***	0.010***	-0.232***	0.010***	-0.230***	0.014***
	(0.005)	(0.001)	(0.004)	(0.001)	(0.004)	(0.001)	(0.005)	(0.001)	(0.004)	(0.001)	(0.004)	(0.001)
Leverage $_{t-1}$	0.365***	-0.067***	0.230***	-0.074***	0.171***	-0.077***	0.194***	-0.071***	0.193***	-0.071***	0.189***	-0.077***
	(0.025)	(0.004)	(0.025)	(0.004)	(0.025)	(0.004)	(0.025)	(0.004)	(0.025)	(0.004)	(0.025)	(0.004)
Cash / Total Assets $_{t-1}$	0.590***	0.004	0.654***	0.008*	0.688***	0.010**	0.674***	0.005	0.674***	0.005	0.674***	0.010**
	(0.028)	(0.004)	(0.029)	(0.004)	(0.029)	(0.004)	(0.029)	(0.004)	(0.029)	(0.004)	(0.029)	(0.004)
CAPEX / Total Assets $_{t-1}$	0.274***	0.008	0.468***	0.018**	0.583***	0.025***	0.551***	0.017*	0.552***	0.016*	0.553***	0.025***
	(0.058)	(0.009)	(0.059)	(0.009)	(0.059)	(0.009)	(0.059)	(0.009)	(0.059)	(0.009)	(0.059)	(0.009)
Sales Growth $_{t-1}$	0.072***	0.005***	0.075***	0.006***	0.079***	0.006***	0.081***	0.006***	0.081***	0.006***	0.080***	0.006***
	(0.004)	(0.001)	(0.004)	(0.001)	(0.004)	(0.001)	(0.004)	(0.001)	(0.004)	(0.001)	(0.004)	(0.001)
Ln(GDP per capita) $_{t-1}$	0.130***	-0.023***	0.111***	-0.024***	0.104***	-0.025***	0.127***	-0.019***	0.128***	-0.019***	0.116***	-0.024***
	(0.019)	(0.002)	(0.019)	(0.002)	(0.019)	(0.002)	(0.019)	(0.002)	(0.019)	(0.002)	(0.020)	(0.002)
Observations	187,812	188,628	187,797	188,612	187,812	188,628	187,812	188,628	187,812	188,628	187,812	188,628
Number of company	27,890	27,993	27,887	27,990	27,890	27,993	27,890	27,993	27,890	27,993	27,890	27,993
Industry 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
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All	All	All	All	All	All	All

Table 6: Main Results on Country Variables

The dependent variables are Tobin's *q* in all regressions. Tobin's *q* and all firm level controls are winsorized at the 5th and 95th percentiles. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

Dependent Variable = Tobin's q	(1)	(2)	(3)
Anti-director Rights Index (ADRI)	0.083***		
	(0.004)		
Anti-Self-Dealing Index		0.365***	
		(0.023)	
Common Law			0.233***
			(0.010)
Ln(Assets) $_{t-1}$	-0.087***	-0.086***	-0.081***
	(0.003)	(0.003)	(0.003)
Leverage $_{t-1}$	0.352***	0.316***	0.315***
	(0.028)	(0.027)	(0.027)
Cash / Total Assets $_{t-1}$	1.313***	1.356***	1.404***
	(0.034)	(0.032)	(0.032)
CAPEX / Total Assets $_{t-1}$	1.613***	1.496***	1.441***
	(0.082)	(0.077)	(0.077)
Sales Growth $_{t-1}$	0.141***	0.145***	0.143***
	(0.005)	(0.005)	(0.005)
Ln(GDP per capita) $_{t-1}$	0.025***	-0.019***	-0.036***
	(0.006)	(0.005)	(0.005)
Observations	273,116	300,129	300,129
Country FE	No	No	No
Industry x Year FE	Yes	Yes	Yes
Countries	All	All	All

Table 7: Sub-Sample Results on Corporate Rules Variables

The dependent variables are Tobin's *q* (Q) in all regressions. Q and all firm level controls are winsorized at the 5th and 95th percentiles. The Global E-Index is constructed using the MSCI Governance Metrics data. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

Dependent Variable = Q	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Global E-Index t-1	-0.014	-0.007	0.013	-0.011	0.015	0.058	0.003	-0.056***	-0.015*
	(0.010)	(0.023)	(0.020)	(0.018)	(0.018)	(0.062)	(0.026)	(0.012)	(0.009)
Observations	13,674	2,058	3,515	3,503	2,039	554	3,519	10,715	17,014
Samples	Common Law	French Civil Law	German Civil Law	Western Europe	Western Europe ex-UK	Scandinavian countries	East Asia	Non-US	Developed (IMF)

Dependent Variable = Q	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Global E-Index t-1	-0.002	-0.023***	0.019	-0.050*	-0.045	-0.299***	-0.102**	-0.024	0.170***
	(0.026)	(0.009)	(0.030)	(0.027)	(0.046)	(0.091)	(0.046)	(0.032)	(0.061)
Observations	2,738	17,247	2,554	2,006	1,349	325	661	365	376
Sample	Developing (IMF)	OECD	Non-OECD	Japan	United Kingdom	China	Canada	Germany	Singapore & Hong Kong

Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 8: Sub-Sample Results on Ownership Variables

The dependent variables are Tobin's *q* in all regressions. Tobin's *q* and all firm level controls are winsorized at the 5th and 95th percentiles. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

Panel A. Results of Ownership Variables based on Full Factset Sample

Dependent Variable = Tobin's q	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Ln(Num IO) $_{t-1}$	0.199***	0.280***	0.146***	0.131***	0.214***	0.177***	0.294***	0.199***	0.290***	0.181***
	(0.004)	(0.008)	(0.010)	(0.007)	(0.010)	(0.011)	(0.026)	(0.007)	(0.013)	(0.005)
Observations	187,812	96,579	23,765	60,617	38,304	25,448	6,851	53,226	46,498	141,314
IO Herf $_{t-1}$	-0.282***	-0.340***	-0.238***	-0.226***	-0.247***	-0.216***	-0.399***	-0.347***	-0.174***	-0.288***
	(0.011)	(0.020)	(0.026)	(0.015)	(0.024)	(0.026)	(0.061)	(0.016)	(0.042)	(0.011)
Observations	187,797	96,565	23,764	60,617	38,304	25,448	6,851	53,225	46,486	141,311
IO Block Holders (5%) $_{t-1}$	-0.393***	-0.397***	-0.053	-0.390***	-0.368***	-0.399***	-0.450***	-0.731***	-0.349***	-0.323***
	(0.036)	(0.040)	(0.151)	(0.116)	(0.085)	(0.145)	(0.168)	(0.143)	(0.048)	(0.056)
Observations	187,812	96,579	23,765	60,617	38,304	25,448	6,851	53,226	46,498	141,314
Total IO $_{t-1}$	0.224***	0.253***	0.269***	0.497***	0.237***	0.251***	0.401***	0.931***	0.355***	0.416***
	(0.026)	(0.031)	(0.092)	(0.070)	(0.059)	(0.082)	(0.152)	(0.100)	(0.039)	(0.039)
Observations	187,812	96,579	23,765	60,617	38,304	25,448	6,851	53,226	46,498	141,314
Independent IO $_{t-1}$	0.222***	0.250***	0.293***	0.538***	0.238***	0.293***	0.495***	0.947***	0.353***	0.435***
	(0.027)	(0.032)	(0.101)	(0.076)	(0.062)	(0.090)	(0.164)	(0.103)	(0.040)	(0.041)
Observations	187,812	96,579	23,765	60,617	38,304	25,448	6,851	53,226	46,498	141,314
Foreign IO $_{t-1}$	0.657***	0.890***	0.373***	0.186*	0.791***	0.654***	1.416***	0.529***	0.177	0.566***
	(0.056)	(0.084)	(0.113)	(0.098)	(0.094)	(0.114)	(0.238)	(0.112)	(0.210)	(0.058)
Observations	187,812	96,579	23,765	60,617	38,304	25,448	6,851	53,226	46,498	141,314
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	Common Law	French Civil Law	German Law	Western Europe	Western Europe ex-UK	Scandinavian countries	East Asia	U.S.	Non-U.S.

Table 8 (Continued)

Dependent Variable = Tobin's q	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Ln(Num IO) $_{t-1}$	0.213***	0.174***	0.209***	0.182***	0.213***	0.315***	0.073***	0.308***	0.092***	0.245***
	(0.005)	(0.009)	(0.005)	(0.009)	(0.009)	(0.025)	(0.014)	(0.023)	(0.020)	(0.030)
Observations	145,842	41,970	149,338	38,474	31,657	12,172	11,382	7,882	5,624	4,788
IO Herf $_{t-1}$	-0.276***	-0.299***	-0.269***	-0.326***	-0.339***	-0.301***	-0.159***	-0.317***	-0.087*	-0.353***
	(0.013)	(0.019)	(0.013)	(0.020)	(0.019)	(0.051)	(0.031)	(0.064)	(0.047)	(0.069)
Observations	145,828	41,969	149,324	38,473	31,657	12,172	11,382	7,880	5,624	4,788
IO Block Holders (5%) $_{t-1}$	-0.404***	-0.228*	-0.385***	-0.350***	-0.670***	-0.422***	-0.349	-0.392***	-0.359	-0.273
	(0.038)	(0.120)	(0.038)	(0.120)	(0.209)	(0.107)	(0.266)	(0.131)	(0.262)	(0.299)
Observations	145,842	41,970	149,338	38,474	31,657	12,172	11,382	7,882	5,624	4,788
Total IO $_{t-1}$	0.222***	0.472***	0.214***	0.637***	1.351***	0.158*	0.375***	0.579***	0.048	0.907***
	(0.028)	(0.078)	(0.028)	(0.096)	(0.148)	(0.090)	(0.144)	(0.115)	(0.156)	(0.286)
Observations	145,842	41,970	149,338	38,474	31,657	12,172	11,382	7,882	5,624	4,788
Independent IO $_{t-1}$	0.215***	0.549***	0.209***	0.661***	1.388***	0.134	0.408***	0.608***	0.067	0.966***
	(0.029)	(0.085)	(0.029)	(0.098)	(0.155)	(0.091)	(0.144)	(0.122)	(0.162)	(0.292)
Observations	145,842	41,970	149,338	38,474	31,657	12,172	11,382	7,882	5,624	4,788
Foreign IO $_{t-1}$	0.762***	0.359***	0.741***	0.319***	0.769***	1.235***	-0.812***	0.873***	0.235	0.786**
	(0.063)	(0.109)	(0.062)	(0.120)	(0.200)	(0.210)	(0.204)	(0.170)	(0.196)	(0.310)
Observations	145,842	41,970	149,338	38,474	31,657	12,172	11,382	7,882	5,624	4,788
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Countries	Developed (IMF)	Developing (IMF)	OECD	Non-OECD	Japan	UK	China	Canada	Germany	Singapore and Hong Kong

Table 8 (Continued)

Panel B: Results of Ownership Variables Based on MSCI Governance Metrics Sample										
Dependent Variable = Tobin's q	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Ln(Num IO) $_{t-1}$	0.459***	0.599***	0.167***	0.296***	0.360***	0.230***	0.243**	0.284***	0.673***	0.335***
	(0.028)	(0.039)	(0.049)	(0.055)	(0.050)	(0.055)	(0.115)	(0.058)	(0.053)	(0.031)
Observations	16,365	11,095	1,792	3,012	3,011	1,777	466	2,832	7,452	8,913
IO Herf $_{t-1}$	-0.799***	-1.044***	-0.097	-0.925***	-1.409***	-1.013***	-0.455	-0.878***	-0.824***	-0.826***
	(0.127)	(0.187)	(0.194)	(0.250)	(0.264)	(0.280)	(0.531)	(0.270)	(0.241)	(0.152)
Observations	16,365	11,095	1,792	3,012	3,011	1,777	466	2,832	7,452	8,913
IO Block Holders (5%) $_{t-1}$	-0.223***	-0.246***	-0.356	-0.857***	-0.542***	-0.702***	-0.097	-1.275***	-0.341***	-0.413***
	(0.077)	(0.082)	(0.293)	(0.288)	(0.177)	(0.267)	(0.458)	(0.482)	(0.090)	(0.145)
Observations	16,365	11,095	1,792	3,012	3,011	1,777	466	2,832	7,452	8,913
Total IO $_{t-1}$	0.304***	0.287***	0.382	0.083	0.149	-0.026	0.490	0.460*	0.097	0.446***
	(0.067)	(0.077)	(0.241)	(0.176)	(0.147)	(0.180)	(0.452)	(0.238)	(0.088)	(0.102)
Observations	16,365	11,095	1,792	3,012	3,011	1,777	466	2,832	7,452	8,913
Independent IO $_{t-1}$	0.325***	0.292***	0.426*	0.130	0.238	0.071	0.798	0.484**	0.095	0.490***
	(0.069)	(0.078)	(0.257)	(0.196)	(0.159)	(0.196)	(0.534)	(0.243)	(0.090)	(0.110)
Observations	16,365	11,095	1,792	3,012	3,011	1,777	466	2,832	7,452	8,913
Foreign IO $_{t-1}$	0.664***	0.798***	0.459	0.123	0.429**	0.160	0.915*	0.418	0.234	0.643***
	(0.113)	(0.167)	(0.288)	(0.196)	(0.174)	(0.192)	(0.476)	(0.273)	(0.309)	(0.120)
Observations	16,365	11,095	1,792	3,012	3,011	1,777	466	2,832	7,452	8,913
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	Common Law	French Civil Law	German Civil Law	Western Europe	Western Europe ex-UK	Scandinavian countries	East Asia	U.S.	Non-U.S.

Table 8 (Continued)

Dependent Variable = Tobin's q	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Ln(Num IO) $_{t-1}$	0.335***	0.341***	0.474***	0.323***	0.446***	0.648***	0.224**	0.215	0.427**	0.434***
	(0.031)	(0.061)	(0.032)	(0.062)	(0.058)	(0.090)	(0.094)	(0.143)	(0.199)	(0.129)
Observations	8,913	2,248	14,285	2,080	1,631	1,140	321	505	330	334
IO Herf $_{t-1}$	-0.826***	-0.492**	-0.789***	-0.722***	-0.837***	-1.801***	-1.130**	-0.571	-4.259**	-0.721
	(0.152)	(0.245)	(0.149)	(0.265)	(0.308)	(0.477)	(0.505)	(0.406)	(1.859)	(0.935)
Observations	8,913	2,248	14,285	2,080	1,631	1,140	321	505	330	334
IO Block Holders (5%) $_{t-1}$	-0.413***	-0.296	-0.273***	-0.515	-0.300	-0.515*	-0.019	0.249	-0.922*	-0.129
	(0.145)	(0.315)	(0.079)	(0.372)	(0.489)	(0.263)	(0.600)	(0.381)	(0.480)	(1.850)
Observations	8,913	2,248	14,285	2,080	1,631	1,140	321	505	330	334
Total IO $_{t-1}$	0.446***	0.445**	0.236***	0.364*	1.034***	0.120	0.258	0.507	0.124	0.869
	(0.102)	(0.221)	(0.070)	(0.218)	(0.271)	(0.273)	(0.528)	(0.315)	(0.445)	(0.821)
Observations	8,913	2,248	14,285	2,080	1,631	1,140	321	505	330	334
Independent IO $_{t-1}$	0.490***	0.536**	0.250***	0.411*	1.054***	0.216	0.308	0.515	0.285	0.982
	(0.110)	(0.241)	(0.072)	(0.226)	(0.291)	(0.288)	(0.541)	(0.321)	(0.489)	(0.818)
Observations	8,913	2,248	14,285	2,080	1,631	1,140	321	505	330	334
Foreign IO $_{t-1}$	0.643***	0.532**	0.612***	0.347	1.099***	0.628	0.573	1.424***	0.080	1.223
	(0.120)	(0.263)	(0.125)	(0.242)	(0.315)	(0.403)	(0.436)	(0.358)	(0.551)	(1.010)
Observations	8,913	2,248	14,285	2,080	1,631	1,140	321	505	330	334
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Countries	Developed (IMF)	Developing (IMF)	OECD	Non-OECD	Japan	United Kingdom	China	Canada	Germany	Singapore and Hong Kong

Table 9: The Role of Entrenchment Conditional on Institutional Ownership

The dependent variables are Tobin's *q*. All firm level controls are winsorized at the 5th and 95th percentiles. The Global E-Index is constructed using the MSCI Governance Metrics data. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)
Total IO $_{t-1}$ × Global E-Index $_{t-1}$	-0.179***					
	(0.014)					
Total IO $_{t-1}$	0.601***					
	(0.071)					
Independent IO $_{t-1}$ × Global E-Index$_{t-1}$		-0.184***				
		(0.015)				
Independent IO $_{t-1}$		0.624***				
		(0.074)				
Ln(Num IO) $_{t-1}$ × Global E-Index $_{t-1}$			-0.001			
			(0.006)			
Ln(Num IO) $_{t-1}$			0.462***			
			(0.029)			
IO Block Holders$_{t-1}$ × Global E-Index $_{t-1}$				-0.321***		
				(0.034)		
IO Block Holders $_{t-1}$				0.349***		
				(0.098)		
IO Herf $_{t-1}$ × Global E-Index $_{t-1}$					0.194**	
					(0.083)	
IO Herf $_{t-1}$					-1.044***	
					(0.173)	
Foreign IO $_{t-1}$ × Global E-Index $_{t-1}$						0.139***
						(0.038)
Foreign IO $_{t-1}$						0.437***
						(0.125)
Global E-Index $_{t-1}$	0.075***	0.072***	-0.022	0.021**	-0.034***	-0.038***
	(0.012)	(0.012)	(0.031)	(0.010)	(0.010)	(0.010)
Observations	16,365	16,365	16,365	16,365	16,365	16,365
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Table 10: The Role of Entrenchment Conditional on Investor Protection Laws

The dependent variables are Tobin's *q*. All firm level controls are winsorized at the 5th and 95th percentiles. The Global E-Index is constructed using the MSCI Governance Metrics data. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

Dependent variable = Tobin's q	(1)	(2)	(3)
Common Law × Global E-Index $_{t-1}$	-0.022***		
	(0.004)		
Common Law	0.034**		
	(0.014)		
Anti-Self-Dealing Index × Global E-Index $_{t-1}$		-0.014	
		(0.023)	
Anti-Self-Dealing Index		-0.052	
		(0.078)	
Anti-director Rights Index (ADRI) × Global E-Index $_{t-1}$			-0.048***
			(0.009)
Anti-director Rights Index (ADRI)			0.186***
			(0.034)
Global E-Index $_{t-1}$	0.076***	-0.015	0.010
	(0.022)	(0.017)	(0.011)
Observations	19,353	19,932	19,932
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Country FE	No	No	No
Countries	All	All	All

Table 11: The Role of Entrenchment Index Conditional on Institutional Quality

The dependent variables are Tobin's *q*. All firm level controls are winsorized at the 5th and 95th percentiles. The Global E-Index is constructed using the MSCI Governance Metrics data. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

Dependent variable = Tobin's q	(1)	(2)	(3)	(4)	(5)	(6)
Rule of Law $_{t-1}$ × Global E-Index $_{t-1}$	-0.080***					
	(0.009)					
Rule of Law $_{t-1}$	-0.012					
	(0.033)					
Regulatory Quality $_{t-1}$ × Global E-Index $_{t-1}$		-0.065***				
		(0.010)				
Regulatory Quality $_{t-1}$		-0.064*				
		(0.036)				
Voice and Accountability $_{t-1}$ × Global E-Index $_{t-1}$			-0.065***			
			(0.008)			
Voice and Accountability $_{t-1}$			0.129***			
			(0.030)			
Political Stability $_{t-1}$ × Global E-Index $_{t-1}$				-0.037***		
				(0.010)		
Political Stability $_{t-1}$				-0.037		
				(0.031)		
Government Effectiveness $_{t-1}$ × Global E-Index $_{t-1}$					-0.077***	
					(0.011)	
Government Effectiveness $_{t-1}$					0.094***	
					(0.030)	
Control of Corruption $_{t-1}$ × Global E-Index $_{t-1}$						-0.037***
						(0.008)
Control of Corruption $_{t-1}$						0.147***
						(0.030)
Global E-Index $_{t-1}$	0.097***	0.061***	0.045***	-0.006	0.087***	0.029**
	(0.016)	(0.015)	(0.012)	(0.010)	(0.018)	(0.013)
Observations	19,932	19,932	19,932	19,932	19,932	19,932
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 12: The Role of Entrenchment Conditional on Political Institutions

The dependent variables are Tobin's *q*. All firm level controls are winsorized at the 5th and 95th percentiles. All regressions control for firm characteristics and fixed effects are reported at the bottom of the table. Precise definitions for each variable can be found in the Appendix. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively. Standard errors are clustered at the firm level and reported in parentheses.

Dependent variable = Tobin's Q	(1)	(2)
Right-leaning Executive Party $_{t-1}$ × Global E-Index $_{t-1}$	0.024**	
	(0.010)	
Right-leaning Executive Party $_{t-1}$	-0.014	
	(0.025)	
Proportionality × Global E-Index $_{t-1}$		0.031***
		(0.005)
Proportionality		-0.019
		(0.017)
Global E-Index $_{t-1}$	-0.033***	-0.039***
	(0.009)	(0.009)
Observations	16,311	19,220
Controls	Yes	Yes
Industry FE	Yes	Yes
Year FE	Yes	Yes
Countries	All	All

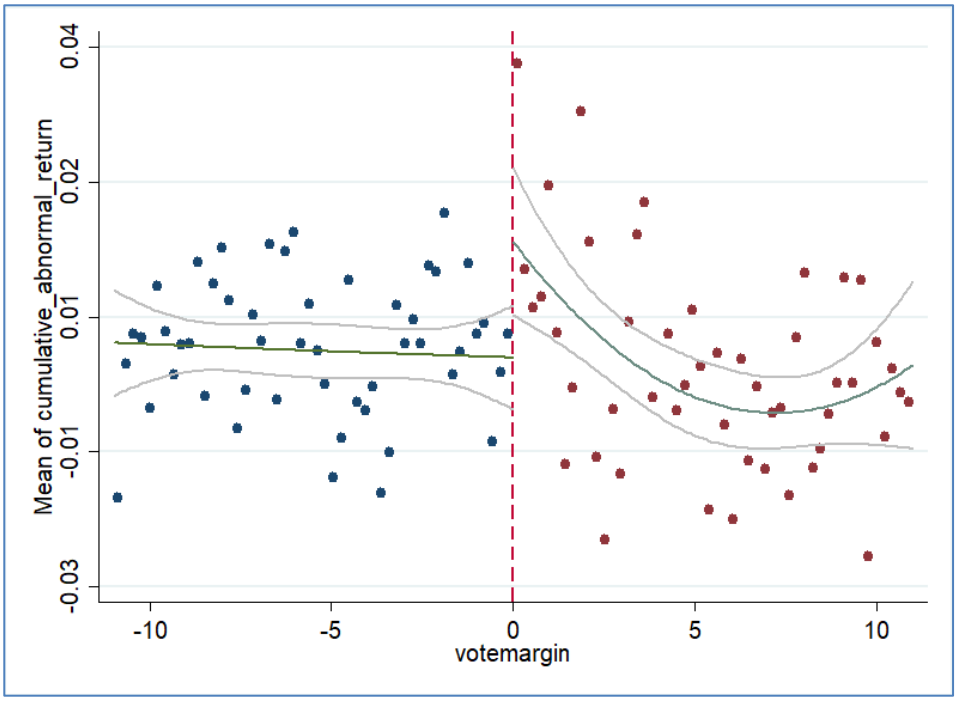
Table 13: Close-Call Shareholder Proposals and Abnormal Returns

This table presents regressions of the abnormal returns on the day of the vote on whether the shareholder proposal passed. Cumulative abnormal returns are computed in the three days surrounding the shareholder vote. Expected returns are obtained from the market model estimated over a period starting 280 days before the vote until 30 days before the vote. Each column restricts the sample to observations within certain points of the threshold indicated at the bottom of the table. Columns 1-3 restricts the sample to votes for US firms and columns 4-6 to non-US firms. *, **, *** stand for statistical significance at the 10%, 5%, and 1%, respectively.

	US Sample			Non-US Sample		
	(1)	(2)	(3)	(5)	(6)	(7)
Pass	-0.002	0.003	0.008*	0.005	0.007	0.040**
	(0.002)	(0.003)	(0.005)	(0.009)	(0.011)	(0.017)
Observations	555	292	112	46	32	11
R-squared	0.002	0.004	0.026	0.006	0.015	0.395
Vote Margin (%)	-12;+12	-6;-6	-2;-2	-12;-12	-6;-6	-2;-2

Figure 1: Evidence from Close-Call Shareholder Proposals on Corporate Governance

(a) US Sample



(b) non-US Sample

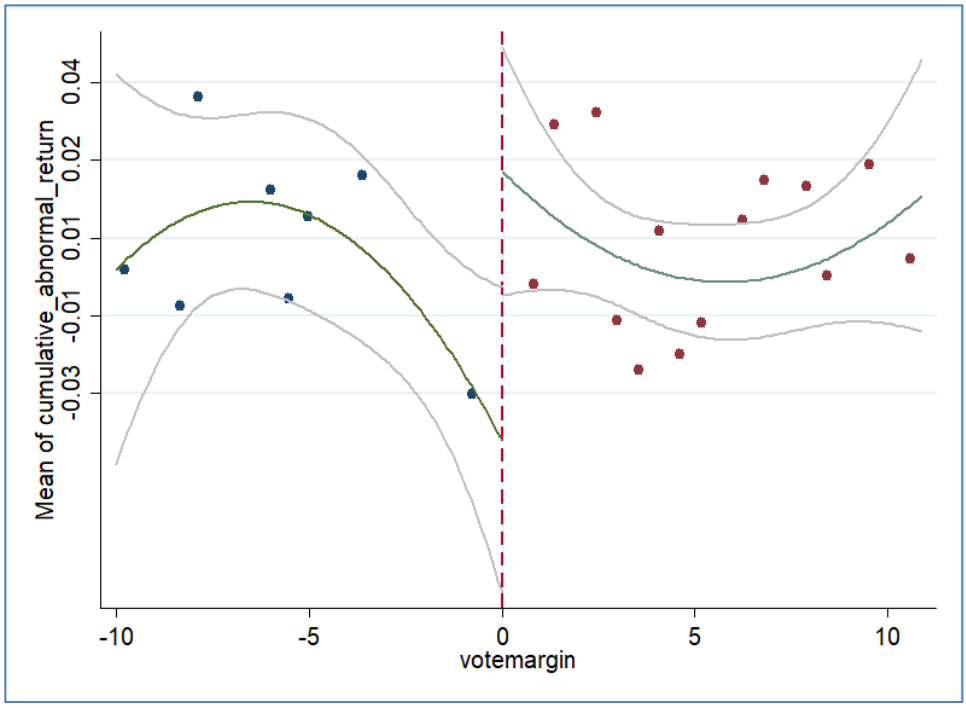


Table A1: Summary of the Data Sources

Variables	Source	Definition
Total IO	FactSet/LionShares	Total institutional ownership ratio in percentage of market capitalization
Independent IO	FactSet/LionShares	Ownership by independent institutions in percentage of market capitalization
Ln(Num IO)	FactSet/LionShares	The natural logarithm of the number of institutional owners
IO Herf	FactSet/LionShares	The Herfindahl-Hirschman index of institutional ownership of a company (a measure of concentration of institutional ownership)
IO Block Holder	FactSet/LionShares	Institutional ownership by institutional block holders (>=5%) in percentage of market capitalization
Foreign IO	FactSet/LionShares	Foreign institutional ownership ratio in percentage of market capitalization
(1) Staggered Board	Asset4 ESG	Dummy for whether the company has a staggered board structure (CGSRDP053)
(2) Poison Pill	Asset4 ESG	Dummy for whether the company have a poison pill (CGSRDP050)
(3) Golden Parachute	Asset4 ESG	Dummy for whether the company has a golden parachute or other restrictive clauses related to changes of control (compensation plan for accelerated pay-out) (CGSRDP055)
(4) Super-majority Requirement	Asset4 ESG	Dummy for whether the company has a supermajority vote requirement or qualified majority (for amendments of charters and bylaws or lock-in provisions) (CGSRDP054)
(5) Other Anti-Takeover Devices	Asset4 ESG	Dummy for whether the company has some other form of anti-takeover device (limitation of director liability, people pill, customer refund programme, etc.) (CGSRDP063)
(6) Election Super-Majority Requirement	Asset4 ESG	Dummy for whether the company's board members are generally elected with a majority vote (CGSRDP033)
Thomson Reuters Entrenchment Index	Asset4 ESG	(1) + (2) + (3) + (4) + (5) + (6)
(i) Classified Board	MSCI	Do all directors stand for annual re-election? Flagged if no.
(ii) Poison Pill	MSCI	Has the company adopted a shareholder rights plan ("poison pill")? Flagged if yes.
(iii) Golden Parachute	MSCI	Does the CEO's potential cash severance pay exceed five times their annual pay? Flagged if yes.
(iv) Charter Amendments	MSCI	Does the company have the unilateral right to amend the company's articles/ constitution without shareholder approval? Flagged if yes.
(v) Bylaws Amendments	MSCI	Does the company have the unilateral right to amend the company's bylaws without shareholder approval? Flagged if yes.
MSCI Entrenchment Index	MSCI	(i) + (ii) + (iii) + (iv) + (v)
Bebchuk et al. Entrenchment Index	Website	Their file contains the original Entrenchment Index for the period 1990-2006 for all the firms followed by the Investor Responsibility Research Center. For details on the construction of the entrenchment index, see Bebchuk, Lucian, Alma Cohen, and Allen Ferrel, "What Matters in Corporate Governance?" Review of Financial Studies (2009), available at http://papers.ssrn.com/abstract=593423. The original E-index provisions included i) Staggered board: a board in which directors are divided into separate classes (typically three) with each class being elected to overlapping terms ii) Limitation on amending bylaws: a provision limiting shareholders' ability through majority vote to amend the corporate bylaws iii) Limitation on amending the charter: a provision limiting shareholders' ability through majority iv) vote to amend the corporate charter v)

		supermajority to approve a merger: a requirement that requires more than a majority of shareholders to approve a merger vi) Golden parachute: a severance agreement that provides benefits to management/board members in the event of firing, demotion, or resignation following a change in control vii) poison pill: a shareholder right that is triggered in the event of an unauthorized change in control that typically renders the target company financially unattractive or dilutes the voting power of the acquirer.
a) Classified Board	ISS RiskMetrics	Classified Board
b) Poison Pill	ISS RiskMetrics	Poison Pill
c) Golden Parachutes	ISS RiskMetrics	Golden Parachutes
d) Limit Ability to Amend e) Charter	ISS RiskMetrics	Limit Ability to Amend Charter
f) Limit Ability to Amend ByLaws	ISS RiskMetrics	Limit Ability to Amend ByLaws
g) Supermajority in mergers dummy	ISS RiskMetrics	Supermajority in mergers dummy equal to one if supermajority requirement exceeded 66%.
ISS Entrenchment Index	ISS RiskMetrics	(a) + (b) + (c) + (d) + (e) + (f) + (g)
Supervisory Board	Orbis	Dummy equal to one if Orbis identifies the firm as having supervisory board or an advisory board.
GDP per capita	World Bank Indicators	GDP per capita (current US\$)
Control of Corruption	World Bank Indicators	capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests
Government Effectiveness	World Bank Indicators	capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies
Rule of Law	World Bank Indicators	capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
Regulatory Quality	World Bank Indicators	capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
Political Stability & Absence of Violence	World Bank Indicators	capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.
Voice and Accountability	World Bank Indicators	capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.
Right-leaning Executive Party	World Bank Database of Political Institutions	Dummy variable equal to one if chief executive party is right orientated
Proportionality	World Bank Database of Political Institutions	Indicator for the proportionality of the voting system as used by Pagano and Volpin (2005), combining a single indicator of three variables that describe the electoral system. These include PR (equals one if at least some cadidates are elected via proportional rule), PLURALITY (if at least some legislators are elected via a majoritarian rule) and HOUSESYS (if most seats are allocated via a majoritarian rule. The indicator is defined as PR – PLURALITY – HOUSESYS +

		2. If the variable equals 3, all the seats are assigned via a proportional rule (pure proportionality) and 0 if no seats are assigned this way (pure majoritarian)
Legal Origin	Website	Indicator for whether a country is from a Common (1), French Civil (2), German Civil (4) or Scandinavian Civil (5) law origin (LaPorta, Lopez-de-Silanes, and Shleifer, 2008) - http://scholar.harvard.edu/shleifer/publications
Anti-Self-Dealing Index (ASDI)	Website	Measures legal protection of minority shareholders against expropriation by corporate insiders (Shleifer, Djankov, LaPorta, and Lopez-de-Silanes, 2008) - http://scholar.harvard.edu/shleifer/publications
Anti-Director Rights Index (ADRI)	Website	Measures how shareholders and creditors are protected by law from expropriation by the managers and controlling shareholders of firms, compiled by LaPorta, Lopez-de-Silanes, Shleifer, and Vishny (1998) and updated by La Porta, Lopez-de-Silanes, and Shleifer (2008) - http://scholar.harvard.edu/shleifer/publications
Shareholder Proposals	ISS Voting Analytics	Institutional Shareholder Services (ISS) Voting Analytics provides corporate voting results at the proposal level. The data is available for both management and shareholder proposals. The coverage includes the S&P500 from 1997-2006 and the Russell 3000 from 2003 onwards.
Ln(Assets)	WorldScope	The natural logarithm of total assets in US dollars (item 02999)
Leverage	WorldScope	Total debt (item 03255) divided by total assets (item 02999)
Sales Growth	WorldScope	Two-year average growth rate in net sales (item 01001)
Cash/Total Assets	WorldScope	Cash and short-term investments (item 02001) divided by total assets (item 02999)
CAPEX/Total Assets	WorldScope	Capital expenditures (item 04601) divided by total assets (item 02999)
Tobin's *q*	WorldScope	Market Capitalization (WC08001) + Total Liabilities (WC03351) / Common Stock (WC03501) + Total Liabilities (WC03351)

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