Do Shareholders Gain from Their Right to Sue? Evidence from Federal Judge Turnover

Stefano Cassella A. Emanuele Rizzo *

January 13, 2019

Abstract

Judicial turnover in federal district courts generates exogenous variation in courts' attitude toward shareholders' right to sue a corporation and its managers. Using this novel identification, we document that shareholders' right to sue may lead to ex-ante equity value reduction. Such reduction is likely not due to the sources of equity value loss often entertained in the existing literature (e.g., incremental legal costs). Instead, the decline in equity value arises because the increased legal right to sue enjoyed by the shareholders of a firm may dissuade potential bidders in the firm, and thus impair the governance role of the market for corporate control. Overall, our results call for a more comprehensive analysis of the costs and benefits associated with shareholders' right to sue, and shed light on the existence of meaningful interactions between distinct (law-based versus market-based) governance mechanisms.

JEL Classification: G32, G34, G38

Keywords: Shareholder litigation, lawsuits, federal courts, judicial ideology, firm value, law and finance, takeover threat, investor protection, deterrence, governance.

*Stefano Cassella: Tilburg University. A. Emanuele Rizzo: Nova School of Business and Economics. We are grateful to Tobias Berg, Fabio Braggion, Thomas Chemmanur, Julio Crego, Marco Da Rin, Irem Demirci, Joost Driessen, Miguel Ferreira, Huseyin Gulen, Dirk Jenter, Craig Lewis, Jose Liberti, Alberto Manconi, Katie Moon, Julien Sauvagnat, Oliver Spalt, and participants at the CEPR Annual Spring Symposium in Financial Economics, the FMA Europe Conference, the AsianFA Conference and the Northern Finance Association Conference for their helpful comments and suggestions. We are responsible for all remaining errors and omissions.

1. Introduction

There is a growing consensus among financial economists that the legal protection of investor rights has a positive impact on corporate valuation (Doidge, Karolyi, and Stulz (2004), La Porta, Lopez-de Silanes, Shleifer, and Vishny (2002), Wurgler (2000)), as it shelters outside investors from expropriation by a corporation's insiders (La Porta, Lopez-de Silanes, Shleifer, and Vishny (1998)). While the notion that higher investor protection leads to equity value enhancement is generally accepted, the existing literature is mostly silent on how each individual investor protection mechanism contributes to such value creation. It is crucial to develop knowledge in this venue, as policy makers worldwide have, over the last 20 years, rushed to reform legal investor rights (Bris, Brisley, and Cabolis (2008)), often displaying a preference for targeting a particular component of these rights such as financial reporting (Leuz and Wysocki (2016)), or creditor rights (Djankov, McLiesh, and Shleifer (2007)).

In this paper, we study the impact of one salient investor protection mechanism on equity valuation, namely shareholders' right to sue their company, its managers and directors. [1] While shareholders' right to sue has attracted considerable public attention,[2] whether this investor protection mechanism is equity value-enhancing is ex-ante uncertain. On the one hand, shareholders' right to sue is seen as a key governance mechanism that allows outside dispersed equity investors to retain influence over managerial decisions (Thompson (1999)), and deter managerial misbehavior (Cox (1997)). This view predicts a positive link between shareholders' right to sue and equity value. On the other hand, critics contend that shareholders' right to sue may reduce equity value. This second view is predicated on the notion that the threat of shareholder lawsuits fails to discipline a corporations's executives, who are largely insulated against out-of-pocket liability risk (e.g., Black, Cheffins, and Klausner (2006)), while at the same time it imposes large litigation costs (direct and indirect) on the corporation (e.g., Romano (1991), Choi (2004)).

[1] For brevity, and unless otherwise specified, in the remainder of the paper we often refer to shareholders' right to sue their corporation, as well as the company management and directors, as "shareholders' right to sue". We also refer to the lawsuits initiated by shareholders to exercise such right as "shareholder lawsuits".

[2] For example, in December 1995, Congress enacted the Private Securities Litigation Reform Act of 1995 (PSLRA), considered by some to be the most significant securities legislation in several decades.

One approach to the study of the relation between shareholder lawsuits and equity valuation is to measure stock price changes around the realization of lawsuits.[3] This approach may be subject to two concerns. First, firm-level and local-level unobservables can affect at the same time the occurrence of lawsuits and firm outcomes, and thus lead to biased inference on the role of lawsuits for firm value. Second, changes in equity value that occur at the time of realized lawsuits may inform on the role of the ex-post compensation function of litigation, but fail to provide any indication on the ex-ante benefits and costs of this law-based deterrence of managerial misbehavior (Cox (1997), DeMott (1997)).

Our approach is very different. To estimate the effect of shareholders' right to sue on equity value, we use exogenous judicial turnover in U.S. federal courts. Turnover in federal district courts, that is for instance due to the retirement of an existing judge, is a source of variation in the de facto ability of shareholders to initiate a lawsuit against their corporation, executives, and directors for violations of federal securities laws. Shareholders' attempts to sue a company for breach of federal laws may and often are dismissed by federal judges. In this respect, we conjecture that changes in federal courts' friendliness toward shareholders that take place at the time of judicial turnover represent a shock to the ex-ante likelihood of observing the dismissal of shareholders' lawsuits. As a consequence, these changes represent a shock to the ex-ante threat of shareholder litigation faced by a corporation, its executives, and its directors. There are three main advantages of this approach. First, the rules of judicial independence in federal district courts guarantee that the timing and causes of a judge turnover are plausibly exogenous to firm-specific characteristics. Second, since we compare the evolution of shareholder wealth among firms operating in the same state, but different federal court districts, we can remove the effect of any unobserved time-varying state-level factor on our results. Finally, our setting allows to estimate the ex-ante effect of a strengthening of shareholders' right to sue on equity value.

The central contribution of this paper is to establish that a stronger shareholders' right to sue has, on average, a *negative* ex-ante effect on equity value: a one standard deviation increase

[3]Examples of prior work that relies on realized lawsuits to study a variety of outcomes are Ferris, Jandik, Lawless, and Makhija (2007), McTier and Wald (2011), and Rogers and Van Buskirk (2009).

in federal courts' friendliness toward shareholders leads to 3.1% (3.6%) lower raw (risk-adjusted) stock returns in the subsequent year. This finding suggests that the costs of a stronger threat of shareholder lawsuits outweigh the benefits, and it begs the question of what are the economic channels through which shareholder lawsuits destroy equity value. We first estimate how much of the value loss can be imputed to the higher expected costs (direct and indirect) of more frequent litigation. While this economic channel resonates well with the view in the law literature that shareholder lawsuits can be meritless and ultimately only benefit attorneys, our back-of-the-envelope calculation suggests that the surge in the expected costs of litigation accounts for about 15% of the ex-ante equity value loss we document.

Next, we conjecture that the documented equity value reduction arises because shareholders' right to sue leads to the deterioration of the overall governance of the firm. We provide support for this "worsening deterrence" hypothesis by showing that opportunistic ("lucky") CEO option grants increases and CEO pay-performance sensitivity declines when the courts become more shareholder-friendly. These two empirical findings have been associated with a higher managerial ability to extract private benefits and hence worse governance (see e.g., Bebchuk, Grinstein, and Peyer (2010), Coles, Daniel, and Naveen (2014)).

In the last part of the paper, we dig deeper into the hypothesis of worsening governance, and we propose one specific mechanism through which stronger shareholders' ability to sue may worsen the governance of the firm. In particular, we note that the threat of takeover (Jensen and Meckling (1976), Scharfstein (1988)), which ensures "competitive efficiency among corporate managers and thereby affords strong protection to the interest of vast numbers of small, non-controlling shareholders" (Manne (1965)), is a market-based mechanism of governance whose functioning heavily hinges on the legal environment (Andrade, Mitchell, and Stafford (2001)). We posit that a deterioration in the threat of takeover may arise as a byproduct of higher shareholder litigation risk. In particular, a lawsuit brought by the target shareholders during the acquisition process lengthens the acquisition process and increases target shareholders' bargaining power in determining their retained share of the synergies, thus ultimately worsening the conditions of

the deal for a potential acquirer (Krishnan, Masulis, Thomas, and Thompson (2012)). Given that such a lawsuit becomes more likely when shareholders enjoy a stronger right to sue, a prospective acquirer may be dissuaded from initiating or completing the acquisition of a target firm operating in a district whose court is more friendly toward shareholders. Our evidence provides strong support for this hypothesis. First, a firm headquartered in a district whose court becomes more shareholder-friendly faces a lower likelihood of becoming an acquisition target. Perhaps even stronger support for our hypothesis comes from the evidence that initiated deals have a 40% lower probability of being completed for a one standard deviation increase in the courts' friendliness toward target shareholders.

If the threat of being taken over and being replaced represents a more effective governance tool than the threat of shareholder litigation, a heightened shareholder right to sue may lead to an overall worsening of the governance and equity value destruction insofar as it impairs the disciplining role of the market for corporate control. There is a simple reason why takeover threat might provide more effective deterrence against managerial misbehavior than shareholder litigation: while managers of a corporation may be (and typically are) insulated against shareholder lawsuits via liability insurance, no such insurance exists that limits a manager's exposure to the losses that she faces if she is replaced after an acquisition. We establish evidence in support of this hypothesis by comparing the equity value loss following an increased shareholders' right to sue across two types of firms. Management in the first such type has pre-existing limited exposure to the governance role of the threat of takeover, due to either corporate charter provisions (e.g., poison pills) or existing state-level laws (e.g., business combination laws) that deter potential acquirers (e.g., Bertrand and Mullainathan (2003), Gormley and Matsa (2016), Gompers, Ishii, and Metrick (2003), Durnev and Han (2005), Bebchuk, Cohen, and Ferrell (2009)). Management in the second type of firms is instead exposed to the governing role of the markets, as such corporate bylaws or state-based statutes are not in place. We argue that if the decline in equity value that we document following a heightened shareholders' right to sue is due to the deterioration of the disciplining role of the markets, such decline should be particularly pronounced among

firms of the second type, as these firms may experience the largest decline in the likelihood of being taken over. Our results are consistent with this view. Furthermore, for firms of the first type, in which higher protection of shareholders' right to sue cannot result in an impaired threat of takeover (as such threat is very limited to begin with), our results indicate that increasing shareholders' right to sue is actually value-enhancing.

Overall, this paper contributes to the broad literature that investigates how different institutional arrangements that protect the rights of shareholders affect equity valuation (e.g., La Porta, Lopez-de Silanes, Shleifer, and Vishny (2002), Shleifer and Wolfenzon (2002), Claessens, Djankov, Fan, and Lang (2002)). We add to this literature by isolating the effect on equity value of a specific element of a developed legal system such as the U.S., namely shareholders' right to sue the company and its officers. Our paper also joins recent attempts to estimate the ex-ante impact of lawsuits on many outcomes ranging from governance (Appel (2016)), to innovation (Lin, Liu, and Manso (2017)), or the quality of disclosure (Boone, Fich, and Griffin (2018)).[4] While these studies provide valuable evidence on individual dimensions relevant to firm value, our study focuses on an overall quantification of the role of legal protection of shareholders' right to sue on equity value, and our evidence arguably encompasses all such individual dimensions. Our paper also joins a growing literature on the role of enforcement for outcomes such as corruption (Djankov, La Porta, Lopez-de Silanes, and Shleifer (2003)), access to finance (Ponticelli and Alencar (2016)), or innovation (Sampat and Williams (2015)). We differ from these studies as we study shareholder lawsuits in the US and their impact on equity value.

[4]These studies focus on derivative lawsuits, which are legal actions that are brought by the shareholder of a firm on behalf of the corporation and against managers and directors. As we make clear in Section 2.1, derivative lawsuits fall under state-level jurisdiction and are subject to regulation that is different from the one that applies to direct lawsuits. Such direct lawsuits are the object of interest in this paper.

2. Institutional Background and Hypothesis Development

2.1 Shareholder Lawsuits

Shareholders' right to sue a corporation is a legal investor provision that has been at the centre of an intense debate during the past decades. Many critics of shareholders' right to sue exist, who argue that such right may be harmful for shareholders. First, each shareholder in a firm may have an incentive to sue her company, as she is the only one who reaps the benefits of a successful lawsuit, while the costs of such lawsuit are borne by the entire investor base and by the firm management. This spurs securities lawsuits that are meritless (e.g., Romano (1991), Choi (2004)), and hence imposes costs on the corporation without increasing equity value. Second and related is the concern that shareholders' right to sue fails in its deterrence function, since managers and directors are largely insulated against out-of-pocket liability risk (e.g., Black, Cheffins, and Klausner (2006)). Third, as far as the compensatory role of shareholders' right to seek relief in court is concerned, critics suggest that shareholders extract very little actual compensation from the lawsuit, while an overall redistribution of value takes place from shareholders' wealth to self-interested attorneys, who are paid hefty fees (e.g., Rose (2008), Coffee (2015)).

An opposite view on the role of shareholders' litigation on equity value contends it has a positive impact on shareholders' wealth. Simply put, it represents an option rather than an obligation to take action (Grundfest and Huang (2006)), and it is part of the set of effective provisions that protect investors from expropriation by insiders (see e.g., La Porta, Lopez-de Silanes, and Shleifer (2006), Djankov, La Porta, Lopez-de Silanes, and Shleifer (2008)), as it provides a strong ex-ante deterrence mechanism against managerial misbehavior (e.g., Cox (1997)).

A third and last view of shareholders' legal right to sue is that it is irrelevant (Stigler (1964), Easterbrook and Fischel (1996)): if shareholder lawsuits were indeed harmful, shareholders might find it optimal to opt out of their right to sue through private contracting with the firm insiders. The indifference view of shareholders' right to sue is predicated on the assumption that opting out of such right is possible. However, waiving shareholders' right to sue a company and

its management may be explicitly forbidden in matters of federal securities laws (see Securities Exchange Act § 29(a), 15 U.S.C. § 78cc(a) (2012), and Securities Act of 1933 § 14, 15 U.S.C. § 77n (2012)). In such matters, shareholders sue the company either individually or as a class, seeking direct compensation for economic injury they suffered as a result of misleading statements, or omissions of material facts about the company. These so called direct lawsuits differ from derivative lawsuits, in which shareholders sue the management on behalf of the corporation, as such derivative lawsuits are filed in state courts, and they are regulated by a different legal apparatus.[5] By contrast, direct shareholder lawsuits for breach of federal securities regulation represent the most important form of litigation brought against a corporation in federal court (Eisenberg and Miller (2010)).[6]

2.2 Dismissal of Shareholder Lawsuits and Threat of Litigation

When a shareholder lawsuit is filed in federal court (or removed to federal court)[7] alleging a corporation's violation of securities laws, federal judges have the power to dismiss the lawsuit. Dismissal of shareholder lawsuits is intended to curb meritless "strike" lawsuits that target deep-pocketed corporations from occurring in the first place, and hence avoid the cost of frivolous litigation. Policy makers perceive the power to dismiss shareholder lawsuits to be such an effective means to reduce inefficient frivolous litigation that one of the major reforms in private (i.e., shareholder-initiated as opposed to regulator-initiated) securities litigation in several decades, the Private Securities Litigation Reform Act (PSLRA) of 1995, increases the set of tools at federal judges' disposal to justify dismissal (Chen (2017), Johnson, Kasznik, and Nelson (2000)).[8] On the

[5]See for instance Appel (2016) for a discussion of derivative suits.

[6]Fitzpatrick (2010) reports that shareholder lawsuits account for 70% of the total dollar value of settlements resulting from class actions filed in federal courts. Other types of lawsuits brought against a corporation in federal court relate to labor and employment, consumer rights, employee benefits, civil rights, debt collection, and antitrust. We consider those and their ex-ante effect on equity value later for robustness.

[7]In some instances, shareholders may file a lawsuit against a corporation in state court, but the corporation has the right to file a motion of removal to federal court, which then makes federal courts the ultimate courts for such cases.

[8]One of such tools is the set of "safe-harbor" provisions for corporations which makes it much harder for outside investors to initiate litigation and avoid dismissal, as well as the introduction of a pleading standard that makes it harder for shareholders to allege fraudulent behavior without specific evidence of wrong-doing.

other hand, critics of PSLRA propose that the decreased chance of successfully filing a shareholder lawsuit may ultimately excessively curtail such actions, even when they are meritorious.

As prospective plaintiffs and attorneys in a shareholder lawsuit weigh the expected costs of filing a lawsuit and the expected benefits (e.g., compensation), our first hypothesis is that the chance of facing dismissal in the early stage of a lawsuit reduces the expected benefits from the lawsuit, and as such it results in shareholders' decreased likelihood of initiating litigation, and firm managers' reduced ex-ante threat of shareholder lawsuits. Given this negative relation between the chance of facing dismissal in federal court and the threat of shareholder lawsuits, in the next section we argue that variation in the threat of shareholder litigation can arise from the functioning of the federal judicial system.

2.3 The Appointment and Ideology of Federal Judges

Judges of the federal district courts are appointed under Article III of the Constitution. Article III judges are appointed for life, and keep the bench provided that they maintain "good behavior".[9] This guarantees judicial independence, and it means that the only de facto reasons for a judicial turnover are death, retirement, and resignation.

When judicial turnover occurs and a sitting judge is replaced by a newly appointed one, the President of the United States puts forward a candidate who is often recommended by senators of the state whose district court the judge will join, if confirmed by Congress. As the process of judicial selection is a heavily politicized one, we hypothesize that the political ideology of any appointed federal district court judge can be inferred by the political views of the president and the state senators who were directly involved in his nomination. In particular, we posit that judges appointed by republican and democrat-elected politicians share these parties' pro-business and pro-shareholder friendliness, respectively. This ideological dichotomy on the protection of business as opposed to the protection of small investors naturally emerges from the pattern

[9]In principle, judges can be removed from office through the impeachment process. Judicial impeachment is a practice that is virtually absent in practice, with less than 20 judges have ever been impeached, and only half of them has been convicted and removed from office. More details can be found here.

of legislative reforms in the 20^{th} and early 21^{st} centuries. Coffee (2015) points out that "the two major political parties in the United States have aligned themselves with the rival camps - Democrats with the plaintiff's bar; Republicans with the business community". A case in point comes from the very 1995 PSLRA reform mentioned above, which increases the protection enjoyed by the corporation against shareholder lawsuits. The PSLRA was voted into law by a Republican-majority Congress on December 20 1995, after being vetoed one day before by a Democrat sitting President Bill Clinton.[10] Moreover, the association between political parties and the protection of shareholders and corporations finds strong support in the political science literature. For example, Epstein, Landes, and Posner (2012) show that "Justices appointed by Republican Presidents are notably more favorable to business than Justices appointed by Democratic Presidents".[11] Later, in subsection 5.1, we provide direct empirical evidence in support of this classification.

All in all, we conjecture that when a pro-business (pro-shareholder) judge is replaced by one whose appointment is sponsored by Democratic (Republican) politicians, this represents a shock to the enforcement of securities laws in federal courts, and may result in a change of the court's propensity toward dismissing or staying a shareholder lawsuit. Having laid out our hypothesis on the relation between judicial shareholder friendliness and the threat of shareholder lawsuits, we proceed to describe our empirical methodology.

[10]Hours before the PSLRA was finally voted into law by Congress, Clinton exercised his veto of PSLRA, stating that the stricter standards imposed by the new law "have the effect of closing the courthouse door on investors who have legitimate claims".

[11]Other studies include Kovacic (1991), Schultz and Petterson (1992), Rowland and Carp (1996), Haire, Lindquist, and Hartley (1999).

3. Empirical Strategy

3.1 Generating Variation in the Strength of Shareholders' Right to Sue

As prospective shareholders may or may not initiate direct lawsuits for (alleged) breach of securities laws depending on the perceived friendliness of federal courts (and the likelihood of facing dismissal), variation in such friendliness alters the ex-ante threat of shareholder legal actions. Therefore, in this paper, we measure variation in shareholders' ex-ante threat of litigation using a federal court's change in attitude towards corporations that occurs due to a judicial turnover event. In the context of lawsuits filed in federal courts, the most important venue from the viewpoint of a company is the court with jurisdiction over the firm headquarters.[12]

Therefore our metric *ProShareholder*, which measures the attitude of the federal judicial system toward the shareholders of a given firm, is the average political ideology of the politicians who elected the judges in the court where the firm is headquartered. To construct our metric, we assign each judge the ideology score originally developed by Giles, Hettinger, and Peppers (2001).[13] Overall, *ProShareholder* is a continuous measure which ranges from -1 (for most pro-business judges) to +1 (for the most pro-shareholder judges).[14]

3.2 Main Test

The main objective of this paper is to test whether improving shareholders' ability to exercise their right to sue their corporation produces net benefits for the shareholders. To do this, we examine stock returns around judicial turnover events that affect the overall friendliness of the

[12]Cox, Thomas, and Bai (2009) report that, according to many practicing attorneys, it is highly impractical for them to file a suit in a venue that is different from the defendant's headquarters. The company would immediately present a likely successful motion to relocate the suit, and such a motion would be highly time consuming and expensive. As a result, to avoid these costs, plaintiffs file directly in the firm's home district. We verify this using the sample of securities class action lawsuits from the Stanford Securities Class Action Clearinghouse. In this sample 84% of class action lawsuits are filed in the district court of the company's headquarters.

[13]Boyd, Christina L. 2015. "Federal District Court Judge Ideology Data." available at: http://cLboyd.net/ideology.html.

[14]The ideology score of Giles, Hettinger, and Peppers (2001) is increasing in an individual's inclination to favor business. Therefore, our pro-shareholder metric is obtained by multiplying a judge's ideology score by minus one.

courts to shareholder rights. Studying stock market reaction allows us to measure the *net* effect of increases in courts' shareholder-friendliness on equity value. We perform firm-level panel regressions of annual buy-hold stock returns (see e.g., Cooper, Gulen, and Ovtchinnikov (2010)). Specifically, we estimate the following model:

$$R_{iks(t+1)} = \alpha_k + \gamma_{s(t)} + \beta ProShareholder_{k(t)} + X_{iks(t)}\delta + \epsilon_{iks(t+1)} \tag{1}$$

where the unit of observation is a firm i headquartered in state s, district k. R is the return of the firm stock between the end of December of year t and the end of December of year t+1. $X_{iks(t)}$ is a matrix of firm-level control variables that are known to correlate with expected returns e.g., size, book-to-market, previous 12 months stock returns, stock return volatility, and profitability. α_k are district fixed effects. $\gamma_{s(t)}$ are state $\times$ year fixed effects. Including district fixed effects allows to isolate the effect of within-district changes in the judicial friendliness toward shareholders. State $\times$ year fixed effects are particularly important, since for β to provide an unbiased estimate of the causal effect of an increase in the threat of lawsuits on shareholder wealth, changes in $ProShareholder$ should be as good as randomly assigned. In this respect, while the event of a judge replacement is plausibly exogenous (most clearly in the case of death), the choice of the new judge is not. First, since the president nominates the new judge, changes in a court's attitude might be correlated with political cycles at the national level, which are known to affect firm outcomes (Santa-Clara and Valkanov (2003), Belo, Gala, and Li (2013)). Second, the senators of the state in which the judge takes office are crucial in the nomination and approval process. This suggests that it is important to control for time-varying state-level variables that might influence both shareholder wealth and variation in courts' political views. Our setting allows to purge the effect of such unobservable fluctuations in local variables by including state-time fixed effects, as we exploit the fact that the most economically relevant U.S. states include multiple districts within their borders.[15] Figure B.1, as well as further discussion in Appendix B, illustrates the

[15]The inclusion of state $\times$ year fixed effects implies that the variation we exploit to estimate our coefficients of interest comes from states with more than one district court. This poses no concern for the representativeness of our sample, as roughly 80% of the CRSP-Compustat merged firm-year observations pertain to multiple-courts

fragmentation of the federal judicial system, and it shows that the U.S. is split into the 12 circuits and the 94 district courts.

In addition, whenever necessary, and whenever the sample includes a sufficient number of observations, we include additional sets of multiplicative fixed effects, such as industry × year fixed effects, incorporation state × year fixed effects, or size-BM portfolio × year fixed effects. Industry × date fixed effects take care of potential time-varying omitted factors at the industry level. These factors may confound our analysis if firms belonging to certain industries tend to cluster in specific districts, and industry-level shocks occur at the time of a change in judicial friendliness toward shareholders. The inclusion of incorporation state × year fixed effects make sure that our results are not driven by time-varying unobservables that affect a firm given its state of incorporation. Such unobservables may be changes in state regulation, or characteristics of the judiciary within the company's incorporation state that can confound the results. Finally, size-BM portfolio × date fixed effects are an effective way to remove the influence of common unobserved risk factors without the risk of producing inconsistent estimates, as suggested by Gormley and Matsa (2014).

4. Data

We obtain information about the identity of judges in U.S. federal district courts from the History of the Federal Judiciary available on the Federal Judicial Center website. In each year, we consider all active judges, excluding senior judges.[16] Table 1, Panel A, presents summary statistics for variables at the court level. The total number of courts in our sample is 91. This is because we drop courts in the U.S. territories of Guam, the Northern Mariana Islands, and the Virgin Islands, since judges in these courts are not appointed under Article III. This panel shows statistics about the number of judges in federal district courts, the average number of turnover events by year, as well as the average number of turnover events due to death, retirement,

states.

[16]Senior status is a form of semi-retirement for U.S. federal judges. When we repeat our main tests using a measure of courts' friendliness to shareholders that includes senior judges, the results are virtually unchanged.

resignation, appointment to another office, and impeachment. Across district courts there is a full turnover of judicial benches every 9 years (6.44/0.73). Death and retirement represent 83% of all judicial turnover ((0.24+0.37)/0.73) in our sample, and are by far the most common reasons for termination. In unreported tests, we check the distribution of changes in courts' shareholder-friendliness across district courts, and we observe that judicial turnover and the corresponding changes in *ProShareholder* do not seem to be concentrated in a small number of districts, but are well spread across all 91 courts.

Our firm-level sample includes all companies in the CRSP-Compustat merged dataset, with share code 10 or 11, for the fiscal years from 1993 through 2015. We exclude financial firms (SIC codes 6000-6999), regulated utilities (SIC codes 4900-4999) and firms headquartered outside the US. Since the headquarters address reported in Compustat tapes is the current location of a firm's principal executive office, not the historical one, we follow Heider and Ljungqvist (2015) and extract company historical headquarters addresses from regulatory filings. When we are not able to extract the headquarters location from a SEC filing, we complement this data with information in the WRDS SEC Analytics Suite. The starting year of our sample is dictated by the availability of historical headquarters information from these two sources. Table 1, Panel B reports statistics on the firm-level variables used in the analyses below.

The M&A sample comes from the Securities Data Company's (SDC) U.S. Mergers and Acquisitions Database. We select all domestic mergers and acquisitions with announcement dates between 1993 and 2015. Following prior literature (e.g., Moeller, Schlingemann, and Stulz (2004)) we exclude deals in which: i) the acquirer controls more than 50% of the shares of the target firm before the announcement; ii) the deal value is smaller than $1 million; iii) the deal value relative to the market capitalization of the acquirer is less than 1%; iv) the number of days between the announcement and completion dates is greater than one thousand. We further require that we have CRSP and Compustat data for the target firm, as well as information about the target firm district court. This leaves us with 6,676 M&A deals in our sample.

Data on realized lawsuits, which we use later to test our hypothesis on the role of federal

courts' ideology for the threat of shareholder lawsuits, is from the Stanford Securities Class Action Clearinghouse. While this database does not report securities lawsuits filed by individual shareholders, it offers a comprehensive account of all private securities class action lawsuits filed in federal courts between 1996 and 2015. For each lawsuit, we obtain information about the filing date, the district court, the identity of the judge assigned to the case and the status of the case. Summary statistics for this sample of class action lawsuits are reported in Panel C of Table 1.

5. Results

5.1 Changes in Courts' Shareholder-Friendliness and Shareholder Lawsuits

Our first hypothesis above is that changes in courts' prevailing pro-business or pro-shareholder ideology are changes to the ex-ante threat of shareholder lawsuits. This is because such ideology changes are shocks to shareholders' perceived chance of facing dismissal when filing a lawsuit against their corporation, and hence to the ex-ante chance of observing lawsuits. As this hypothesis is instrumental for the interpretation of our main results presented later, in this section we provide empirical support for this. In particular, we show that an increase in a court's shareholder-friendliness increases the probability of observing a subsequent shareholder lawsuit, as well as the market assessment of the loss to firms due to filed lawsuits.

In the first test, we study whether an increase in a federal court's shareholder-friendliness leads to a higher probability of observing shareholder lawsuits in that court's jurisdiction in the subsequent year. We employ a linear probability model that estimates the increase in the chance of observing a shareholder lawsuit, in the form of a class action, in the year that follows an increase in the friendliness of the relevant federal court toward shareholders. Results are in columns (1) to (5) of Table 2, Panel A. In line with our hypothesis, an increase in the friendliness of the courts toward shareholders is associated with increased likelihood of observing a lawsuit. To illustrate the economic magnitude of our results, we consider two potential turnover scenarios. In the first

scenario, a court experiences a one-standard deviation increase in shareholder-friendliness. Such increase is associated with a 0.31 percentage point increase in the probability of observing the filing of a lawsuit in the year after the turnover, which corresponds to a 20% increase over the unconditional likelihood of a lawsuit in our sample. In the second more salient scenario, a very pro-business judge (whose ideology score is -1) is replaced by a very shareholder-friendly one (whose ideology score is +1),[17] and our estimates indicate that the probability of observing a lawsuit increases by 0.6 percentage points, a 39% rise over the unconditional mean.[18]

Columns (6) and (7) extend the analysis on the likelihood of lawsuits in the 3 or 5 years following a change in judicial turnover. These tests confirm the existence of a persistent shift in the probability of lawsuits following a change in judicial friendliness to shareholders.

In Panel B of Table 2, we test a possible further implication of our hypothesis on shareholder friendliness and shareholder lawsuit dismissal. In particular, we argue that the documented negative stock price reaction to the news of the filing of a shareholder lawsuit (see e.g., Gande and Lewis (2009)) may be more extreme when the filing occurs in a very pro-shareholder court. This is because, to the extent that the stock price drop is a consequence of firms' expected value loss due to litigation (e.g., attorney fees, settlement), and such losses are only faced if the lawsuit is not dismissed, then shareholder lawsuits may be associated to higher expected losses when they are filed in courts with lower chance of dismissal i.e., shareholder-friendly courts. To measure the stock market reaction, we use the Fama-French 3-factor model, and a 12-day window [-10,1] (Gande and Lewis (2009)). Column (2) of Panel B indicates that firms exposed to one standard deviation increase in shareholder-friendliness of courts have 1.9% lower FF 3-factor CARs in the 12-day window around the filing of a class action lawsuit. This effect corresponds to roughly 19% of the unconditional stock price decline around a shareholder lawsuit (-10.11% in Panel C

[17]While this scenario may not be likely in a country such as the US, where the rules of judicial independence and judicial appointment reduce the chance of observing such stark changes in a court's ideology, many countries enjoy very little judicial independence (La Porta, Lopez-de Silanes, Pop-Eleches, and Shleifer (2004)). In such countries, it is therefore possible that the judicial appointment is a more politicized process, where judges can be replaced by an incoming party, or the political views of the dominating party shape judicial decisions due to judges' career concerns (Glaeser, Johnson, and Shleifer (2001)).

[18]The average size of the a court in our sample is about 6.44. The turnover event we describe changes the average shareholder-friendliness of the court by 0.33. Then, we multiply 0.33 by the coefficient in column (2) of Table 1, Panel A, and obtain 0.6%.

of Table 1).

Collectively, results in Panel A and Panel B provide support for the hypothesis that an increase in the proportion of shareholder-friendly judges in a district court facilitates shareholder litigation, and it may therefore be associated with higher ex-ante threat of shareholder lawsuits.

5.2 Market Response to Changes in Courts' Shareholder-Friendliness

In this section, we use firm-level panel regressions to examine the impact of changes in a federal court's shareholder-friendliness on equity value (e.g., Cooper, Gulen, and Ovtchinnikov (2010)). The dependent variable is the 12-month buy-hold stock return over calendar year $t+1$. The main independent variable is *ProShareholder*, the measure of courts' shareholder-friendliness at the end of year t. Table 3 shows the results of this analysis, for specifications with different sets of fixed effects. As we include district fixed effects in all specifications, our identification relies on within-court time-series variation in shareholder-friendliness. In column (1), we report the results obtained by estimating a base specification that includes district court fixed effects, state $\times$ year fixed effects, and no controls. The estimated coefficient on *ProShareholder* indicates that firms exposed to a one standard deviation increase in courts' shareholder-friendliness have 3.1% lower returns relative to firms in the other districts of the same state. The yearly returns are even lower (-6%) in the scenario of replacement of an extremely pro-business judge with an extremely pro-shareholder one. The other columns of Table 3 show that this result is robust to variations to the base specification of column (1). In column (2), we add size-BM $\times$ year fixed effects, which account for unobserved risk factors in the spirit of Gormley and Matsa (2014). The *ProShareholder* coefficient remains negative and highly significant. In column (3), we add a standard set of firm-level controls, which includes size, book-to-market, previous 12 months stock return, stock return volatility, and profitability, all measured at the end of year t. The economic magnitude of the *ProShareholder* coefficient increases, and indicates that a one standard deviation increase in *ProShareholder* leads to 3.9% lower annual buy-hold stock returns. In column (4), we add industry $\times$ year fixed effects. The effect of changes in courts'

shareholder-friendliness remains negative and statistically significant, which suggests that our results are not induced by industry-level drivers, even if those drivers are unobservable and time-varying. In column (5), we add incorporation state × year fixed effects. Finally, in column (6) we include all sets of high-dimensional fixed effects, and the *ProShareholder* coefficient remains negative and highly significant.

Taking stock of the results in this and in the previous section, we conclude that: i) shareholder-friendliness increases shareholders' right to sue and the threat of shareholder lawsuits; ii) an increase in the ex-ante threat of such lawsuits is associated to equity value reduction.

6. Economic Channel

Results so far suggest that facilitating shareholders' right to sue leads to a loss of equity value. An important question is what causes such loss. To provide an answer, we use the theory framework of Shleifer and Wolfenzon (2002) as a conceptual reference. In their model, the manager in a corporation with dispersed ownership can decide whether to divert corporation profits. [19] In deciding whether to steal from the corporation, the manager weighs the benefit of each extra dollar diverted with the cost to him of facing a fine, in addition to having to return the diverted amount to the corporation, if he is caught.

In equilibrium, the price that outsider providers of capital are willing to pay for equity claims on the corporation increases with the probability k that a stealing manager gets caught. A higher value of the probability parameter k, which embodies the degree of investor protection in Shleifer and Wolfenzon (2002), increases equity valuation through two mechanisms: compensation and deterrence. Compensation occurs as a stealing manager that is found guilty of misconduct has to return the diverted profits to the corporation. When k increases, it becomes more likely that stolen profits are given back to the company, and hence the expected cash flows to outsiders

[19] In the discussion, we take as predetermined a manager's choice of ownership concentration. We also set aside considerations on how investor protection changes the demand for (and the supply of) external funds and hence also changes the discount rate. This second aspect appears less relevant to us, as to the extent that judicial turnover in one area is a very localized and possibly small-scale investor protection change, it will not result in changes in the prevailing interest rates.

increase, and so does the value of equity. Stronger deterrence of managerial misbehavior comes about with a higher investor protection, as managers face a heightened likelihood of being caught and having to pay a fine for their wrongdoing. This increases managers' marginal cost of stealing. Therefore managers' optimal diversion of corporate profits d^* declines. As a consequence, even in the $(1-k)$ cases when managerial misbehavior is not sanctioned, outside investors anticipate lower expropriation of corporate profits by insiders, and this boosts equity value. With this framework in mind, reconciling our findings of a negative link between shareholders' right to sue and equity value entails entertaining a failure of the compensatory role of such investor protection provision, a failure of its deterrence role, or both.

6.1 Equity Value Loss via Increased Cost of Litigation

In Shleifer and Wolfenzon (2002), diverted profits are returned to the corporation. Moreover, lawsuits are only filed in the presence of actual managerial misbehavior i.e., there are no frivolous lawsuits. Finally, the corporation does not pay legal costs, nor does it pay any imposed fine (which is instead paid by the manager), and it does not suffer from any long-term adverse effect of litigation.

By contrast, in direct shareholder lawsuits such as the ones filed in federal courts that we study, the corporation is not the plaintiff, but one of the entities that may be found guilty of expropriating outside shareholders. This means that an increased chance of detecting misconduct through an increase in investor protection does not benefit the value of the corporation. As a consequence, the compensatory mechanism of legal investor protection described in **??** may be absent in our setting. Furthermore, in the course of judicial process the corporation may amass hefty attorney fees, the likelihood of which is made even higher by the occurrence of meritless lawsuits (e.g., Romano (1991), Choi (2004)). Additionally, firms may face long-term consequences of being implicated in cases of managerial misconduct and the misrepresentation of financial information (Karpoff, Lee, and Martin (2008)).

If shareholder lawsuits do not deter managerial misbehavior, possibly due to the existence of

managerial liability insurance (e.g., Black, Cheffins, and Klausner (2006)), the costs to the firm of stronger shareholder's right to sue may be higher than the possibly small or absent benefits (e.g., Coffee (2006)). All in all, the loss of equity value that we observe following an increase in shareholders' de facto right to sue may be due to the increased costs of litigation that are borne by the corporation. We refer to this as the *"increased cost of litigation"* (ICL) hypothesis.

Using the procedure outlined in Appendix C, we obtain the following equation for the return on the equity of a generic firm i that undergoes a positive shock to shareholders' right to sue:

$$\frac{1}{P_{it}}\frac{\partial P_{it}}{\partial(RS)} = -\frac{C^*\frac{\partial \pi}{\partial(RS)} + \pi\frac{\partial C^*}{\partial(RS)}}{1-\pi C^*} \tag{2}$$

According to the ICL hypothesis, an increase in the right of shareholders to sue their corporation (RS) results in an equity value decline as it entails both a higher likelihood π of observing a lawsuit i.e., $\frac{\partial \pi}{\partial(RS)} > 0$ (Table 2, Panel A), and an increase in the cost (C^*) of litigation as a fraction of firm value i.e., $\frac{\partial C^*}{\partial(RS)} > 0$ (Table 2, Panel B). [20]

To estimate the magnitude of equity value reduction that is implied by equation 2, we use our results from Table 1 and 2. For the average firm in our sample we find that the return that is due to an increased costs of litigation is -2.49%. This can be compared with the effect of the same unit increase in $ProShareholder$ that emerges using the coefficient estimates in Table 3, to conclude that the ICL hypothesis can only explain between 10.9% and 16.27% of the drop in equity value that follows a strengthening of shareholders' legal right to sue.

6.2 Equity Value Loss through Worsening Governance

Our results so far indicate that roughly 85% of the equity value decline that follows an increase in shareholders' right to sue cannot be attributed to the increased costs of litigation. We next investigate our second hypothesis, namely that stronger shareholders' right to sue leads to a

[20] The denominator of equation 2 appears due to necessary scaling of the equity value loss by the initial price P_{it}. A higher initial price makes the dollar equity value loss captured by the numerator of equation 2 smaller. Since in on our stylized model of equation 5, P_{it} increases in $(1-\pi(C^*))$, the return that results from an increase in shareholders' right to sue shrinks with the reciprocal of $(1-\pi C^*)$.

worsening of deterrence and hence a worsening of firm governance and equity value loss.

In Shleifer and Wolfenzon (2002), the investor protection parameter k embodies the overall system of checks and balances that defines managers' marginal cost of stealing, and hence serves to dissuade managers from diverting corporation profits. So, the prediction in Shleifer and Wolfenzon (2002) that an increased investor protection leads to higher equity value due to improved deterrence, only applies to our setting to the extent that stronger shareholders' right to sue represents an *overall* increase in managers' marginal cost of diverting profits at the expense of outside investors. If instead the increased chance that a corporation is sued by its shareholders results in an overall lower managers' marginal cost of stealing, and hence worse deterrence, our shock to judicial friendliness represents a de facto negative shock to Shleifer and Wolfenzon (2002) overall investor protection, and hence should correspond to equity value decline. We refer to this as the *"worsening deterrence"* (WD) hypothesis.

We proceed here by first assessing whether there is evidence of worsening governance following an increase in shareholders' right to sue. To do so, we focus on firm-level outcomes that correlate with managerial ability to divert corporate profits toward personal benefits or higher pay. Then, we propose one mechanism through which shareholders' increased right to sue may lead to a deterioration in the overall protection of investors from managerial misbehavior.

Lucky Option Grants

We start by studying opportunistically timed ("lucky") stock option grants. Prior literature documents that observing lucky option grants is an indication of managerial ability to extract private benefits (e.g., Bebchuk, Grinstein, and Peyer (2010), Kempf, Manconi, and Spalt (2016)). Thus, if it is the case that managers become more entrenched when courts are more shareholder-friendly, we should observe a higher probability of having a lucky option grant associated with an increase in *ProShareholder*. These tests are reported in columns (1) through (3) of Table 4, Panel A. Following prior works, (e.g., Kempf, Manconi, and Spalt (2016)), we add the following variables to the standard set of controls used in the rest of the paper: CEO tenure, a dummy equal to one if the CEO was hired from the outside, a dummy equal to one if the CEO is also

the Chairman, and CEO ownership.

Consistent with the hypothesis of an overall worsening in the governance of the firm, managers become more entrenched after an increase in the threat of lawsuits. According to the estimates in columns (1) and (3), a one-standard deviation increase in *ProShareholder* raises the chance of a lucky CEO grant by 41-43% relative to the baseline of 12%.

CEO Pay-Performance Sensitivity

Next, we study CEO pay-performance sensitivity (PPS) and CEO compensation. Prior literature views a high sensitivity of CEO pay to performance as a way to align managerial incentive with shareholder value maximization, and as an indication of better governance and lower CEO ability to set her own compensation (Hartzell and Starks (2003), Faleye (2007)). Thus, if an increased threat of lawsuits leads to a worsening of the overall firm governance, then we should observe higher judicial shareholder-friendliness associated with lower pay-performance sensitivity. Tests of this hypothesis are reported in columns (4) through (6) of Table 4, Panel A. In these columns, the dependent variable is the first difference of CEO compensation, while the independent variables are: changes in shareholder wealth, computed as the product of the percentage return to shareholders during the year and the firm's market value at the end of the preceding year; *ProShareholder*; the interaction between changes in shareholder wealth and *ProShareholder*; the same set of controls used in columns (1) through (3).

Results show that firms exposed to higher judicial shareholder-friendliness provide significantly lower performance-sensitive compensation to their CEOs. Our specification allows for a standard interpretation of the main effect on shareholder wealth, that is, the dollar change in CEO compensation per $1,000 change in shareholder wealth (e.g., Jensen and Murphy (1990), Yermack (1996)). In this sense, in column (4) the coefficient on changes in shareholder wealth indicates an increase in total CEO compensation for a one-standard deviation change in shareholder value equal to $153,817. The main coefficient of interest, however, is the one on the interaction term between changes in shareholder wealth and *ProShareholder*, which reflects the differential sensitivity of CEO compensation to shareholder wealth, for firms exposed to different

levels of threat of lawsuits. In column (4), this coefficient shows that a one-standard deviation increase in courts' shareholder-friendliness reduces the change in total CEO compensation down to $11,440, a 93% reduction.

While interesting in and of itself, the reduction in CEO PPS cannot be directly interpreted as evidence of worse firm governance. An alternative is that such a reduction simply reflects a change in the CEO pay structure, and a decrease in compensation risk deriving from a lower PPS is balanced by a decrease in total CEO pay (Coles, Daniel, and Naveen (2014)). The last two columns of Table 4, Panel A show that *ProShareholder* has a small and insignificant impact on (log) total CEO pay. This implies that the lower risk imposed on the CEO in the form of lower PPS is not accompanied by a reduction in CEO pay, which strengthens the conclusion that the decrease in PPS reflects compensation policies that are more favorable to the CEO, and a weakened corporate governance.

Taken together, results in these sections suggest that higher courts' shareholder-friendliness has an overall negative effect on a firm governance. This provides ground for the worsening deterrence hypothesis. In the next section, we propose that shareholders' right to sue can lead to such worse governance as it impairs one powerful governance mechanism such as the threat of takeovers.

6.3 Worse Deterrence through a Reduction of Takeover Threats

6.3.1 Shareholder Lawsuits Detrimental Effect on the M&A Market

In a large number of M&A deals[21], target shareholders file class action lawsuits against their executives and board of directors, alleging that target firm high management breached its fiduciary duty to their shareholders by agreeing to sell the company for too low a price. Target shareholder class action lawsuits are associated with unequivocally negative effects for the bidder. A litigated deal is characterized by: longer time to completion, lower likelihood of deal

[21]Shareholders filed lawsuits in 82% of all M&A deals valued over $100 million (http://securities.stanford.edu/research-reports/1996-2017/Shareholder-Litigation-Involving-Acquisitions-of-Public-Companies-2017.pdf)

completion, and higher takeover premia (see e.g., Krishnan, Masulis, Thomas, and Thompson (2012)). Therefore, we argue that firms that are more likely to be subject to shareholder-initiated litigation are relatively less attractive to prospective buyers than otherwise identical firms that face a lower probability to be engaged in such lawsuits. Since courts' shareholder-friendliness has a significant influence on the probability and outcomes of shareholder litigation, as we document in section 5.1, we further conjecture that in districts where courts shareholder-friendliness increases, firms should face a lower threat of takeovers.

We confirm this intuition in Table 5. In Panel A, we test whether the change in a district court's attitude toward shareholders in year t influences the probability that firms headquartered in that district are acquired in subsequent years. To this end, we consider the sample of completed M&A deals involving a public target. There are 5,590 such deals in our sample between 1993 and 2015. As in the rest of the paper, we further exclude targets that operate in the financial industry or in utilities, and after requiring that firms have all information necessary to construct our variables we are left with 2,537 deals. We employ a linear probability model, using as dependent variable a dummy that is equal to one when a firm is taken over in year $t+1$. In the baseline specification of column (1), we include district court and state $\times$ year fixed effects. In the rest of the panel, we add industry $\times$ year fixed effects, incorporation state $\times$ year fixed effects, as well as a set of controls used in previous studies (see e.g., Cremers, Nair, and John (2008)). Results in the first 5 columns of Panel A indicate that a one-standard deviation increase in $ProShareholders$ causes a decrease in the probability of being a target in the next year between 0.48% and 0.53%. Given the unconditional probability of 3.35% that a firm is taken over, this effect is also economically significant. The last two columns of Panel A show that an increase in the local court's shareholder-friendliness in year t results in a persistent decline in a firm's probability of being acquired for a horizon as long as five years.

In Panel B of Table 5, we investigate whether a shareholder-friendly judicial turnover event in a generic district k leads to a lower probability of completion for deals announced that involve a target firm headquartered in district k. We use the sample of all announced M&A deals,

completed and non-completed, involving a public target. In our sample there are 6,676 such deals, but this number drops to 1,819 after we apply the same filters as in the rest of the paper, and we require information to construct our variables to be available for both the acquirer and the target.[22] For each announcement, we construct an indicator variable *I(ProShareholder)* that is equal to 1 if the district court where the target firm is headquartered experiences a federal judicial nomination that increases the average shareholder-friendliness of the court within 110 days (i.e., the median delay between deal announcement and completion) of the announcement date. We then perform a regression of a dummy variable that is equal to one when the deal is completed, on *I(ProShareholder)*. In the baseline specification of column (1), where we include target district court and target state × year fixed effects, we document that an increase in the friendliness of the target firm's court leads to a statistically significant and economically sizable reduction in the likelihood of deal completion, from 78% to 34.3%. The reduction is somewhat smaller once we introduce standard controls for deal characteristics, but is still highly statistically and economically significant.

Overall, results in Table 5 are consistent with the notion that firms operating in districts where courts become more shareholder-friendly face a lower takeover threat.

6.4 Impaired Threat of Takeover and Stock Returns

As a large literature in finance documents (e.g., Manne (1965), Jensen and Meckling (1976), Bertrand and Mullainathan (2003), Atanassov (2013), Lel and Miller (2015)), the threat of takeover is a value-enhancing governance mechanism that incentivizes a corporation's managers to maximize equity value, in order to reduce the chance of being fired during a hostile acquisition. Crucially, while the managers of a corporation can obtain relief from the adverse outcome of a shareholder lawsuit via standard liability insurance contracts, we argue that it is much harder to obtain a comparable insurance arrangement to compensate managers in the event of a job loss

[22] In our final sample, we document an unconditional probability of deal completion equal to 78%, which is a percentage similar to the one found in previous studies (e.g., Krishnan, Masulis, Thomas, and Thompson (2012)).

due to an acquisition. [23] Therefore, we conjecture that in practice the takeover threat is a more powerful deterrent of managerial misbehavior than shareholder lawsuits.

To the extent that an increased shareholders' right to sue has only limited direct deterrence, but at the same time it impairs the takeover threat as showed in 6.3.1, it may result in an overall deterioration of the checks and balances (both law-based and market-based) that jointly determine investor protection. We refer to this hypothesized mechanism for equity value destruction as the *takeover-deterrence* channel.

According to this hypothesized channel, one should observe that the equity value reduction is particularly severe in firms for which higher risk of facing shareholder lawsuits leads to stronger reduction in the threat of takeovers. Conversely, the anti-takeover channel suggests that the equity value reduction may be absent for firms whose chance of being taken over does not change with the risk of shareholder lawsuits.

We characterize a firm as a more or less likely target by means of the obstacles faced by a prospective acquirer who wants to take over such firm. We quantify the obstacles using the anti-takeover provisions measured through Gompers, Ishii, and Metrick (2003) G-index, and Bebchuk, Cohen, and Ferrell (2009) E-index. The G-index includes 24 unique antitakeover provisions, and it is constructed by adding one point for each provision that enhances managerial entrenchment. The E-Index is a more parsimonious index that is constructed based on the six provisions that are considered the most important from a legal standpoint: staggered boards, limits to shareholder bylaw amendments, limits to shareholder charter amendments, supermajority requirements for mergers, poison pills, and golden parachutes. A higher value of either indices indicates firms with stronger anti-takeover provisions.

To analyze the effect on equity value of changes in courts' shareholder-friendliness for firms with different pre-existing degrees of protection against takeover, we modify our main specifica-

[23] While it is true that firm executives may be fired as a result of a shareholder lawsuit that uncovers managers' misconduct, many such lawsuits result in out-of-court settlements and hence do not result in any investigation of a managers' misbehavior. Moreover, the threat of a hostile takeover that results in a manager's job loss is not only present in the event of a shareholder lawsuit, but it is constantly present.

tion of equation 1. Specifically, we run the following panel regression:

$$R_{iks(t+1)} = \alpha_k + \gamma_{s(t)} + \beta_1 ProShareholder_{k(t)} + \beta_2 ATP_{i(t)} + \theta(ProShareholder_{k(t)} \times ATP_{i(t)}) + X_{iks(t)}\delta + \epsilon_{iks(t+1)} \quad (3)$$

The main object of interest in this regression is the coefficient θ on the interaction term between our lawsuit-threat proxy *ProShareholder* and an anti-takeover provision (ATP) measure, such as the G-index or the E-index. Our hypothesis that the threat of lawsuits destroys equity value insofar as it deters takeovers suggests a positive sign of θ. Simply put, if equity value loss stems from the reduction in takeover threats that may occur when *ProShareholder* increases, such reduction does not occur in firms already sheltered against such threat, i.e., firms with high ATPs in place, and hence a smaller equity value loss for these firms, and a positive sign of θ. From an economic standpoint, two further objects are also of interest: i) the coefficient β_1, which measures the effect of an increase in the threat of shareholder lawsuits on equity value for firms with the least protection against takeovers. For these firms, the impairment of the takeover threat that is due to stronger threat of shareholder lawsuits is possibly the highest. So, if our intuition on the interaction between the threat of takeover and the threat of shareholder lawsuits is correct, one should expect a large and negative coefficient β_1. Second, having defined ATP^{MAX} as the maximum value of our proxy for anti-takeover provision, one can calculate the sum $\beta_1 + \theta ATP^{MAX}$, which represents the net effect of an increased protection of shareholders' right to sue on equity value, when such increase triggers the minimum reduction in the threat of takeover. One can think of this sum as the effect that an increased legal protection of shareholders' right to sue has in the absence of a well-developed M&A market.

Results of these tests are reported in Table 6. In the first four columns, we use the E-Index and G-Index from Lucian Bebchuk website. The original sample for the two indices includes up to 2006, because in 2007 there was a substantial change in the data collection methodology that makes the time series of the variables not directly comparable across periods. In both columns (1) and (3), the presence of ATPs reduces the negative impact of increases in *ProShareholder* on

equity value. Furthermore, and as expected, the effect of an increased protection of shareholders' right to sue on equity value is particularly negative for firms with no pre-existing ATPs, and it is 1.5 to 2 times larger than the effect documented in the unconditional tests of table 3. Finally, in the last line of the table, we compute the implied effect on equity value of a one-standard deviation increase in *ProShareholder*, when firms are *maximally* protected against takeovers (i.e., ATP^{MAX}). The results indicate that for these firms the net effect of higher protection of shareholders' right to sue on equity value is positive. For example, column (1) indicates that in firms with the highest value of the E-Index (6), a one-standard deviation increase in *ProShareholder* is associated with 2.3% higher risk-adjusted stock returns in the following 12 months. This suggests that, absent the negative impact the threat of shareholder lawsuits has on the functioning of the market for corporate control, an increase in shareholders' right to sue is beneficial for equity value. One can interpret this as evidence that the protection of shareholder rights may have a value-increasing role, possibly due its deterrence function (Cox (1997)), but that such deterrence function is enough to generate value for shareholders only in cases of extreme pre-existing managerial entrenchment (i.e., when sufficient ATPs are in place). Columns (2) and (4) indicate that the results survive the inclusion of industry $\times$ year fixed effects, and so are not driven by unobservable time-varying variable at the industry level. In column (5) and (6), we replicate the E-Index in the post-2007, and we are able to rerun the analysis in column (1) and (2) for the full sample period 1993-2015. In both columns, coefficients on the interaction terms convey the same message: when the threat of takeover is already weak, the negative impact of increases in *ProShareholder* on equity value is significantly reduced, and the sign of the overall effect switches from negative to positive.

7. Robustness Tests

The robustness tests presented in this section address three aspects of our empirical strategy. First, we aim at addressing concerns over the robustness of our main return predictability results to the use of alternative models to isolate the abnormal component of returns, and to changes in

the sample used. Second, we entertain the possibility that the shareholder-friendliness of a court may correlate not only with the protection of investor rights, but also with the protection of other stakeholders such as consumers, employees, or creditors. Third, we extend the test of our anti-takeover channel using recent developments in the measurement of the barriers to takeover.

7.1 Shareholders' Right to Sue and Stock Returns: Alternative Specifications

This section, and the corresponding Table 7, present robustness tests for the main results of the paper. We start with changes in the definition of abnormal stock return, and in the main specification. Column (1) of Table 7 repeats the main analysis of Table 3, by using Size-BM adjusted 12-month buy-hold stock returns as dependent variables. In column (2), we substitute district court fixed effects with firm fixed effects. Column (3) substitutes Size-BM $\times$ date fixed effects with Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) characteristic-based fixed effects. Table 7 shows that our main results are robust to these changes to the baseline specification.

7.2 Relocating Firms

In column (4) of Table 7, we exclude firms that change headquarters location. The concern is that firms may choose to relocate in response to the nomination of undesired judges, and such choice is endogenous. Column (4) of Table 7 shows that the coefficient on *ProShareholder* remains negative, statistically significant at the 1% level, and economically large.

7.3 Realized Lawsuits

One concern with our main result is that, while we interpret the 12-month ahead predictable decline in equity value following an increase in *ProShareholder* as an indication of the increased ex-ante costs of litigation, shareholder lawsuits can be realized during these 12 months. As realized lawsuits are associated with large negative stock returns at the filing date (see section

5.1), such lawsuits have the potential of invalidating our proposed interpretation of the results. To address this concern, in column (5) of Table 7, we repeat our baseline analysis excluding firms that are listed as defendant in a shareholder class action lawsuit in the year after a change in courts' judicial benches. The results indicate that after throwing out firms that face shareholder litigation in year $t+1$, the economic magnitude of the coefficient on $ProShareholder$ remains almost stable at 3.6%, and highly statistically significant.

7.4 Judicial Turnover: Restricted Sample

In the last test of Table 7, we address the concern that, although small, a fraction of the judicial turnover events in our sample is voluntary (and hence not as good as random). Specifically, we exclude year $t+1$ firm-level observations when the court that pertain to a judicial turnover even turnover events that are caused by "Appointment to Another Judicial Position", "Reassignment", "Resignation". Furthermore, we exclude "Retirement" events, when the judge does not retire as soon as she becomes eligible. [24] With this restricted sample we repeat our main analysis in column (6) of table 7. The results remain virtually unchanged.

7.5 Courts' Ideology: Pro-Shareholder or Pro-Stakeholder?

Our main analysis uses judges' ideology (republican versus democrat) as a proxy for their pro-business versus pro-shareholder views. While the ideology score may correlate with judges views on the rights of shareholders as opposed to the rights of the corporation, and hence affect the outcome of a shareholder-lawsuit that is brought in federal court, it may also capture a judge's overall support for the corporation in a broader set of disputes: labor and employment, employee benefits, civil rights, consumer, and antitrust.[25] Therefore, one concern is that it is the increase in the expected costs to the corporation that are due to these lawsuits, rather than shareholder litigation, that drives our finding of lower stock returns following an increase in the value of a

[24] These cases collectively account for 16% of the events in our sample.

[25] Another category omitted above is debt collection. We can rule out that debt collection lawsuits drive our results as they pertain to the financial industry, which we exclude from our analysis.

court's *ProShareholder* variable.

To address this concern, we construct industry-level proxies for the likelihood that a firm is hit by one of the aforementioned types of non-shareholder lawsuit. We then run an augmented version of our main model of equation 1 where we interact *ProShareholder* with the industry-specific lawsuit likelihood:

$$R_{iksj(t+1)} = \alpha_k + \gamma_{s(t)} + \beta_1 ProShareholder_{k(t)} + \beta_2 AltLawsuit_{j(t)} + \theta(ProShareholder_{k(t)} \times AltLawsuit_{j(t)}) + X_{iksj(t)}\delta + \epsilon_{iksj(t+1)} \quad (4)$$

In these regressions, *AltLawsuit* is the proxy for the likelihood of observing an alternative type of lawsuit. By construction, the minimum value of *AltLawsuit*, which corresponds to instances where an alternative lawsuit type is not likely, is zero. If our interpretation that the negative link between *ProShareholder* and future returns is due to the heightened chance of shareholder lawsuits, and not another type of lawsuit is correct, one empirical regularity should be observed when estimating equation 4: the coefficient β_1 should be negative and significant, i.e., an increase in *ProShareholder* is associated with negative returns even for those firms with very little likelihood of a non-shareholder lawsuit.

The results of our analysis are presented in panel B of table 7. In column (1), we include an interaction term between *ProShareholder* and our proxy for the likelihood of labor and employment, employment benefit, or civil rights lawsuits. For this, we use the year t industry-average level of firm labor intensity. This choice is based on the assumption that industries with higher labor intensity are more likely to face labor and employment-related lawsuits, as well as civil right lawsuits. Given the fact that the coefficient on *ProShareholder* is negative and statistically significant and almost identical to the one of our main results of table 3, we conclude that labor-related lawsuits do not drive our results. Moreover we find no evidence that the equity value loss is conditional on the labor-intensity of the firm.

In column (2) of panel B, we consider consumer lawsuits. We define an indicator variable that is equal to 1 for firms operating in one of the 48 Fama-French industries that, according to the

US Federal Trade Commission,[26] are more likely to experience consumer fraud. A substantial number of these lawsuits is brought under the Fair Credit Reporting Act, or are related to bank services, or credit cards, and thus are naturally excluded from our analyses since we filter out financial firms. Among the non-financially related consumer fraud cases the most common categories are: Communication; automobile; retail; consumer goods; and healthcare. Like in Column (1), column (2) shows that the coefficient on *ProShareholder* is negative, statistically significant, and roughly equal to the one documented in our main tests. Thus, we conclude that consumer lawsuits are unlikely to drive our results.

In column (3), we deal with antitrust lawsuits. We assume that firms in more concentrated industries are more likely to be subject to antitrust actions, and we therefore use a common measure of industry concentration, the Herfindahl-Hirschman index (HHI) (see e.g., Giroud and Mueller (2010)), to measure the likelihood that a firm is involved in an antitrust lawsuit. The results in this case are comparable to what is documented above for other lawsuit types.

Moreover, we consider the possibility that legal disputes over patents may drive our results, as they represent an important type of lawsuits in federal courts (Cohen, Gurun, and Kominers (2014)). In columns (4) and (5) of Table 7, Panel B, we include interaction terms between *ProShareholder* and i) the total number of citation-weighted patents granted at the industry level; ii) the average industry level of R&D expenditures. The underlying intuition is that the industries most affected by patent lawsuits should be the ones with stronger use of patents, and higher intensity of innovation activity. However, the results indicate that there is no significant difference between industries with low and high number of patents, or low and high levels of R&D expenses.

7.6 Shareholder- versus Investor-Friendliness

Finally, in column (6) of Table 7, we explore the possibility that the friendliness of courts to shareholders is actually friendliness towards outside investors in general. If this is the case, it is

[26]Data available at https://www.ftc.gov/enforcement.

possible that the equity value decline that we document happens as a consequence of stronger creditor rights, which curb managerial risk-taking and hence indirectly affect equity value. If this was the case, we would be drawing misleading conclusions on the detrimental role of shareholder protection for equity value. If an increase in our *ProShareholder* variable really captures the empowerment of creditors, we argue that the potential loss to shareholders that such bondholders' empowerment entails should be absent when there is no debt on the firm balance sheet, i.e., when the firm leverage is zero. We test for this in column (6) of Table 7, where we interact *ProShareholder* with firm leverage. We observe that the negative effect of an increase in *ProShareholder* is not statistically different between firms with different levels of leverage. Furthermore, the coefficient on *Proshareholder*, which measures the effect of judicial ideology on equity value in the absence of creditors, is negative and significant, as well as comparable to what we document unconditionally in Table 3. Overall, an increased threat of creditor rights enforcement does not seem to be driving our results.

7.7 The Anti-Takeover Channel: Alternative ATP Measures

In this section, we document the robustness of the results in section 6.4 to changes in the variables used to measure anti-takeover provisions. Specifically, we use the instrumental variables developed by Karpoff, Schonlau, and Wehrly (2017) to construct the instrumented versions of the E-Index and G-Index indices. The authors argue that, due to endogenous components, the raw values of the indices fail to capture takeover deterrence. On the contrary, the authors show that instrumenting the E-Index and G-Index using their proposed instrumental variables provides takeover defense indices that effectively measure takeover deterrence. We repeat our tests in Table 6 using all instruments developed by Karpoff, Schonlau, and Wehrly (2017), and we report the results in Panel C of Table 7. As this table shows, our result that the equity value loss that stems from an increase in *ProShareholder* does not occur in firms with high ATPs in place is robust to the use of these alternative measures of takeover defenses.

8. Conclusion

The large economic losses caused by shareholder lawsuits to companies have spurred a vivid debate on the optimal design of the shareholder litigation system. Our paper contributes substantial new evidence to this debate. We show that the shareholders' standing to sue the company, its officers, and its directors can have negative economic consequences on shareholders. We develop a novel empirical approach that exploits exogenous variation in the legal enforcement of shareholders' right to sue to shed light on the link between such fundamental right of equity investors and equity value. In particular, we focus on changes in the ease with which shareholders can seek and obtain remedy in courts, which are brought about by changes in the proportion of shareholder-friendly judges in a district court. We show that an improved ability of shareholders to initiate litigation against a corporation, its managers, and its directors, leads to an economically and statistically significant loss in equity value.

We then investigate the economic source of the equity value loss. While we find that stronger shareholders' right to sue is associated with more frequent and more costly lawsuits, we note that the incremental expected costs that stem from such litigation can explain only a small part of the ex-ante equity value decline we document. Rather, we conjecture and show that stronger shareholders' right to sue a company leads to equity value destruction because it results in an impoverished overall set of checks and balances that govern managers and deter them from misbehavior. In particular, corporate policies implemented after an increase in courts' shareholder-friendliness are consistent with a worsening of corporate governance. We observe a higher likelihood of CEO "lucky" option grants following an increase in shareholder-friendliness, as well as a decrease in the CEO pay sensitivity to firm performance.

We then posit and show that the worsening of the governance that we observe is likely the result of the detrimental role that a heightened chance of shareholder lawsuits has on a powerful market-based governing mechanism, namely the threat of takeover. First, we document that in more shareholder-friendly courts, firms face a lower probability of a takeover. Second, we find that the negative link between courts' shareholder-friendliness and equity value is not operative

if the firm was already shielded against hostile takeovers. This result is precisely what one would expect if the shareholder wealth loss is driven by the reduction in the takeover threat, because such reduction cannot take place if the takeover threat is not present in the first place.

Overall, our results call for the study of an important dimension often overlooked in prior literature on the legal protection of investor rights, namely the interaction between different (e.g., law-based versus market-based) components of the overall system of checks and balances that jointly determine investor protection. By showing that the net effect on equity value of strengthening shareholders' right to sue is conditional on the intensity of the threat of takeover, our paper stresses the need for a more comprehensive analyses of the costs and benefits of implementing any legal investor protection rule, and thus highlight an interesting area for future research. At the same time, and more to the specific investor right we study in the paper, our evidence suggests that expanding shareholders' legal right to litigate in a country with well developed capital markets and an overall functioning market for corporate control (such as the US), may lead to value destruction, while the opposite is true in developing economies, or in economies where the threat of takeover may be limited.

References

Andrade, Gregor, Mark Mitchell, and Erik Stafford, 2001, New evidence and perspectives on mergers, *Journal of Economic Perspectives* 15, 103–120.

Appel, Ian, 2016, Governance by litigation, Working Paper.

Atanassov, Julian, 2013, Do hostile takeovers stifle innovation? Evidence from antitakeover legislation and corporate patenting, *Journal of Finance* 68, 1097–1131.

Bebchuk, Lucian, Alma Cohen, and Allen Ferrell, 2009, What matters in corporate governance?, *Review of Financial studies* 22, 783–827.

Bebchuk, Lucian A., Yaniv Grinstein, and Urs Peyer, 2010, Lucky CEOs and lucky directors, *Journal of Finance* 65, 2363–2401.

Belo, Frederico, Vito D. Gala, and Jun Li, 2013, Government spending, political cycles, and the cross section of stock returns, *Journal of Financial Economics* 107, 305–324.

Bertrand, Marianne, and Sendhil Mullainathan, 2003, Enjoying the quiet life? Corporate governance and managerial preferences, *Journal of Political Economy* 111, 1043–1075.

Black, Bernard S., Brian R. Cheffins, and Michael Klausner, 2006, Outside director liability: A policy analysis, *Journal of Institutional and Theoretical Economics* 162, 5–20.

Boone, Audra L., Eliezer M. Fich, and Thomas Griffin, 2018, Shareholder litigation and the information environment, Working Paper.

Bris, Arturo, Neil Brisley, and Christos Cabolis, 2008, Adopting better corporate governance: Evidence from cross-border mergers, *Journal of Corporate Finance* 14, 224–240.

Chen, Wenjing, 2017, *A Comparative study of funding shareholder litigation* (Springer).

Choi, Stephen J., 2004, The evidence on securities class actions, *Vanderbilt Law Review* 57, 1465–1526.

Claessens, Stijn, Simeon Djankov, Joseph P.H. Fan, and Larry H.P. Lang, 2002, Disentangling the incentive and entrenchment effects of large shareholdings, *Journal of Finance* 57, 2741–2771.

Coffee, John C., 2006, Reforming the securities class action: An essay on deterrence and its implementation, *Columbia Law Review* 106, 1534–1586.

——— , 2015, *Entrepreneurial Litigation* (Harvard University Press).

Cohen, Lauren, Umit Gurun, and Scott Duke Kominers, 2014, Patent trolls: Evidence from targeted firms, Discussion paper National Bureau of Economic Research.

Coles, Jeffrey L., Naveen D. Daniel, and Lalitha Naveen, 2006, Managerial incentives and risk-taking, *Journal of Financial Economics* 79, 431–468.

——— , 2014, Co-opted boards, *Review of Financial Studies* 27, 1751–1796.

Cooper, Michael J., Huseyin Gulen, and Alexei V. Ovtchinnikov, 2010, Corporate political contributions and stock returns, *Journal of Finance* 65, 687–724.

Core, John, and Wayne Guay, 2002, Estimating the value of employee stock option portfolios and their sensitivities to price and volatility, *Journal of Accounting Research* 40, 613–630.

Cox, James D., 1997, Making securities fraud class actions virtuous, *Arizona Law Review* 39, 497.

——— , Randall S. Thomas, and Lynn Bai, 2009, Do differences in pleading standards cause forum shopping in securities class actions: Doctrinal and empirical analyses, *Wisconsin Law Review* p. 421.

Cremers, K.J. Martijn, Vinay B. Nair, and Kose John, 2008, Takeovers and the cross-section of returns, *Review of Financial Studies* 22, 1409–1445.

Daniel, Kent, Mark Grinblatt, Sheridan Titman, and Russ Wermers, 1997, Measuring mutual fund performance with characteristic-based benchmarks, *Journal of finance* 52, 1035–1058.

DeMott, Deborah A., 1997, Organizational incentives to care about the law, *Law and Contemporary Problems* 60, 39–66.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de Silanes, and Andrei Shleifer, 2003, Courts, *Quarterly Journal of Economics* 118, 453–517.

——— , 2008, The law and economics of self-dealing, *Journal of Financial Economics* 88, 430–465.

Djankov, Simeon, Caralee McLiesh, and Andrei Shleifer, 2007, Private credit in 129 countries, *Journal of Financial Economics* 84, 299–329.

Doidge, Craig, G. Andrew Karolyi, and René M. Stulz, 2004, Why are foreign firms listed in the us worth more?, *Journal of Financial Economics* 71, 205–238.

Durnev, Art, and E. Han, Kim, 2005, To steal or not to steal: Firm attributes, legal environment, and valuation, *Journal of Finance* 60, 1461–1493.

Easterbrook, Frank H., and Daniel R. Fischel, 1996, *The economic structure of corporate law* (Harvard University Press).

Eisenberg, Theodore, and Geoffrey P. Miller, 2010, Attorney fees and expenses in class action settlements: 1993–2008, *Journal of Empirical Legal Studies* 7, 248–281.

Epstein, Lee, William M. Landes, and Richard A. Posner, 2012, How business fares in the supreme court, *Minnesota Law Review* 97, 1431.

Faleye, Olubunmi, 2007, Classified boards, firm value, and managerial entrenchment, *Journal of Financial Economics* 83, 501–529.

Ferris, Stephen P., Tomas Jandik, Robert M. Lawless, and Anil Makhija, 2007, Derivative lawsuits as a corporate governance mechanism: Empirical evidence on board changes surrounding filings, *Journal of Financial and Quantitative Analysis* 42, 143–165.

Fitzpatrick, Brian T., 2010, An empirical study of class action settlements and their fee awards, *Journal of Empirical Legal Studies* 7, 811–846.

Gande, Amar, and Craig M. Lewis, 2009, Shareholder-initiated class action lawsuits: Shareholder wealth effects and industry spillovers, *Journal of Financial and Quantitative Analysis* 44, 823–850.

Giles, Micheal W., Virginia A. Hettinger, and Todd Peppers, 2001, Picking federal judges: A note on policy and partisan selection agendas, *Political Research Quarterly* 54, 623–641.

Giroud, Xavier, and Holger M. Mueller, 2010, Does corporate governance matter in competitive industries?, *Journal of Financial Economics* 95, 312–331.

Glaeser, Edward, Simon Johnson, and Andrei Shleifer, 2001, Coase versus the coasians, *Quarterly Journal of Economics* 116, 853–899.

Gompers, Paul, Joy Ishii, and Andrew Metrick, 2003, Corporate governance and equity prices, *Quarterly Journal of Economics* 118, 107–156.

Gormley, Todd A., and David A. Matsa, 2014, Common errors: How to (and not to) control for unobserved heterogeneity, *Review of Financial Studies* 27, 617–661.

——— , 2016, Playing it safe? Managerial preferences, risk, and agency conflicts, *Journal of Financial Economics* 122, 431–455.

Grundfest, Joseph A., and Peter H. Huang, 2006, The unexpected value of litigation: A real options model of litigation and settlement, in *Harvard Law School Law & Economics Workshop*.

Haire, Susan Brodie, Stefanie A. Lindquist, and Roger Hartley, 1999, Attorney expertise, litigant success, and judicial decisionmaking in the US courts of appeals, *Law and Society Review* pp. 667–685.

Hartzell, Jay C., and Laura T. Starks, 2003, Institutional investors and executive compensation, *Journal of Finance* 58, 2351–2374.

Heider, Florian, and Alexander Ljungqvist, 2015, As certain as debt and taxes: Estimating the tax sensitivity of leverage from state tax changes, *Journal of Financial Economics* 118, 684 – 712.

Jensen, Michael C., and William H. Meckling, 1976, Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3, 305–360.

Jensen, Michael C., and Kevin J. Murphy, 1990, Performance pay and top-management incentives, *Journal of Political Economy* 98, 225–264.

Johnson, Marilyn F., Ron Kasznik, and Karen K. Nelson, 2000, Shareholder wealth effects of the private securities litigation reform act of 1995, *Review of Accounting Studies* 5, 217–233.

Karpoff, Jonathan M., D. Scott Lee, and Gerald S. Martin, 2008, The cost to firms of cooking the books, *Journal of Financial and Quantitative Analysis* 43, 581–611.

Karpoff, Jonathan M., Robert J. Schonlau, and Eric W. Wehrly, 2017, Do takeover defense indices measure takeover deterrence?, *Review of Financial Studies* 30, 2359–2412.

Kempf, Elisabeth, Alberto Manconi, and Oliver Spalt, 2016, Distracted shareholders and corporate actions, *Review of Financial Studies* 30, 1660–1695.

Kovacic, William E., 1991, Reagan's judicial appointees and antitrust in the 1990s, *Fordham Law Review* 60, 49.

Krishnan, C.N.V., Ronald W. Masulis, Randall S. Thomas, and Robert B. Thompson, 2012, Shareholder litigation in mergers and acquisitions, *Journal of Corporate Finance* 18, 1248–1268.

La Porta, Rafael, Florencio Lopez-de Silanes, Cristian Pop-Eleches, and Andrei Shleifer, 2004, Judicial checks and balances, *Journal of Political Economy* 112, 445–470.

La Porta, Rafael, Florencio Lopez-de Silanes, and Andrei Shleifer, 2006, What works in securities laws?, *Journal of Finance* 61, 1–32.

——— , and Robert Vishny, 1998, Law and finance, *Journal of Political Economy* 106, 1113–1155.

——— , 2002, Investor protection and corporate valuation, *Journal of Finance* 57, 1147–1170.

Lel, Ugur, and Darius P. Miller, 2015, Does takeover activity cause managerial discipline? Evidence from international m&a laws, *Review of Financial Studies* 28, 1588–1622.

Leuz, Christian, and Peter D. Wysocki, 2016, The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research, *Journal of Accounting Research* 54, 525–622.

Lin, Chen, Sibo Liu, and Gustavo Manso, 2017, Shareholder litigation and explorative innovation, Working Paper.

Manne, Henry G., 1965, Mergers and the market for corporate control, *Journal of Political economy* 73, 110–120.

McTier, Brian C., and John K. Wald, 2011, The causes and consequences of securities class action litigation, *Journal of Corporate Finance* 17, 649–665.

Moeller, Sara B., Frederik P. Schlingemann, and René M. Stulz, 2004, Firm size and the gains from acquisitions, *Journal of Financial Economics* 73, 201 – 228.

Ponticelli, Jacopo, and Leonardo S Alencar, 2016, Court enforcement, bank loans, and firm investment: Evidence from a bankruptcy reform in brazil, *The Quarterly Journal of Economics* 131, 1365–1413.

Rogers, Jonathan L., and Andrew Van Buskirk, 2009, Shareholder litigation and changes in disclosure behavior, *Journal of Accounting and Economics* 47, 136–156.

Romano, Roberta, 1991, The shareholder suit: Litigation without foundation?, *Journal of Law, Economics, & Organization* 7, 55–87.

Rose, Amanda M., 2008, Reforming securities litigation reform: Restructuring the relationship between public and private enforcement of rule 10b-5, *Columbia Law Review* 108, 1301.

Rowland, Charles K., and Robert Carp, 1996, *Politics and judgment in federal district courts* (University Press of Kansas).

Sampat, Bhaven, and Heidi L. Williams, 2015, How do patents affect follow-on innovation? Evidence from the human genome, Discussion paper National Bureau of Economic Research.

Santa-Clara, Pedro, and Rossen Valkanov, 2003, The presidential puzzle: Political cycles and the stock market, *Journal of Finance* 58, 1841–1872.

Scharfstein, David, 1988, The disciplinary role of takeovers, *Review of Economic Studies* 55, 185–199.

Schultz, Vicki, and Stephen Petterson, 1992, Race, gender, work, and choice: An empirical study of the lack of interest defense in title VII cases challenging job segregation, *University of Chicago Law Review* 59, 1073–1181.

Shleifer, Andrei, and Daniel Wolfenzon, 2002, Investor protection and equity markets, *Journal of Financial Economics* 66, 3–27.

Stigler, George J., 1964, Public regulation of the securities markets, *Journal of Business* XXXVII, 117–142.

Thompson, Robert B., 1999, Preemption and federalism in corporate governance: Protecting shareholder rights to vote, sell, and sue, *Law and Contemporary Problems* 62, 215–242.

Wurgler, Jeffrey, 2000, Financial markets and the allocation of capital, *Journal of Financial Economics* 58, 187–214.

Yermack, David, 1996, Higher market valuation of companies with a small board of directors, *Journal of Financial Economics* 40, 185–211.

Table 1: Firm, Court and Lawsuits Statistics

This table shows summary statistics. Panel A reports yearly average statistics across district courts for number of judges, average number of turnover events per year, and average number of turnover events per year due to death, retirement, resignation, appointment to another office and impeachment. Panel B reports summary statistics for the firm-level variables used in the paper. Panel C shows descriptive statistics for abnormal returns from Fama-French 3-factor model over the 21-day event window around the announcement of a shareholder class action lawsuit, and for the unconditional probability that a firm acts as defendant in a shareholder class action lawsuit in a one-year period. A complete list of definitions for these variables is provided in the Appendix.

Panel A: Summary Statistics – Court Variables

	N. Courts	Mean	Std. Dev.	25%	50%	75%
Number of judges	91	6.44	4.80	3.06	4.67	8.67
All Turnover Events	91	0.73	0.51	0.36	0.58	0.88
Death Events	91	0.24	0.17	0.11	0.19	0.33
Retirement Events	91	0.37	0.21	0.19	0.36	0.50
Resignation Events	91	0.01	0.01	0.00	0.00	0.01
Other Appointment Events	91	0.10	0.16	0.00	0.03	0.13
Impeachment Events	91	0.01	0.03	0.00	0.00	0.00

Panel B: Summary Statistics – Firm Variables

	N. Obs.	Mean	Std. Dev.	25%	50%	75%
Main Independent Variable						
ProShareholder	71,610	−0.03	0.17	−0.15	−0.02	0.09
Main Dependent Variables						
12-month Buy-Hold Return (%)	71,610	19.90	189.62	−26.92	4.11	38.67
Other Firm-Level Variables						
Size	71,610	5.42	2.16	3.82	5.36	6.89
Book-to-Market	71,610	0.74	1.16	0.28	0.49	0.84
Previous 12 Months Return (%)	71,610	15.91	169.27	−24.85	3.14	34.72
Stock Volatility (Annualized)	71,610	1.03	7.72	0.38	0.57	0.85
Asset Tangibility	71,610	0.26	0.22	0.08	0.18	0.36
Profitability	71,610	0.02	0.28	0.02	0.09	0.13
Cash Holdings	71,610	0.20	0.23	0.03	0.10	0.30
Leverage	71,610	0.20	0.19	0.01	0.16	0.32
Institutional Ownership	71,610	0.45	0.31	0.17	0.44	0.72

Panel C: Summary Statistics – Shareholder Class Action Lawsuits

	N. Obs.	Mean	Std. Dev.	25%	50%	75%
FF 3-factor CAR [-10,1] (%)	1,623	−10.11	25.76	−21.27	−5.32	3.59
Probability of a Lawsuit in Year $t+1$ (%)	71,610	1.53	12.28	0.00	0.00	0.00

Table 2: Changes in Courts' Shareholder-Friendliness and Shareholder Lawsuits

In Panel A we estimate a linear probability model of shareholder lawsuits. The dependent variable is coded as 1 when the firm is involved in a shareholder lawsuit in year $t+1$ (columns (1) through (5)), in any year between $t+1$ and $t+3$ (column (6)), or between $t+1$ and $t+5$ (column (7)). Our main independent variable, *ProShareholder*, is the average ideology score of the federal district court that oversees the district where a firm is headquartered. It is our proxy for shareholders' de facto right to sue their corporation, its management and its directors in federal court, for breach of federal securities laws. Panel B reports coefficients from a regression of abnormal returns around the filing of a shareholder lawsuit on *ProShareholder*. The dependent variable is the Fama-French 3-factor model CAR [-10,1]. In panels A and B, controls include beginning of the year logarithm of market capitalization, log market-to-book, stock volatility, previous 12 months stock return, and profitability. Industry FE are based on the Fama-French 48-industry classification. Controls and fixed effects are included in the regressions as indicated. A complete list of definitions for these variables is provided in the Appendix.

Panel A: Changes in Courts' Shareholder-Friendliness and Lawsuit Probability

	Lawsuit by $Year_{t+1}$					$Year_{t+3}$	$Year_{t+5}$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ProShareholder	0.016**	0.018**	0.028***	0.020**	0.027**	0.061**	0.079**
	(2.14)	(2.37)	(2.92)	(2.01)	(2.54)	(2.10)	(2.02)
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes
District Court FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	No	No	Yes	No	Yes	Yes	Yes
Incorporation State × Year FE	No	No	No	Yes	Yes	Yes	Yes
Observations	64,478	64,478	64,478	58,265	58,265	58,265	58,265
Adjusted R^2	0.02	0.02	0.04	0.04	0.05	0.05	0.05

Panel B: Changes in Courts' Shareholder-Friendliness and FF 3-factor CAR [-10,1]

	(1)	(2)	(3)	(4)	(5)
ProShareholder	−0.100***	−0.111***	−0.105***	−0.121***	−0.116***
	(−2.74)	(−3.17)	(−2.81)	(−3.33)	(−3.04)
Controls	Yes	Yes	Yes	Yes	Yes
District FE	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	Yes	Yes
Industry FE	No	No	Yes	No	Yes
Incorporation State FE	No	No	No	Yes	Yes
Observations	1,623	1,623	1,623	1,623	1,623
Adjusted R^2	0.13	0.14	0.14	0.18	0.18

Table 3: Changes in Courts' Shareholder-Friendliness and 12-month Stock Returns

This table presents results of firm-level panel regressions of year-ahead annual buy-hold stock returns on *ProShareholder*. The different columns present results from various specification of equation (1). Controls include: size; book-to-market; previous 12 months stock return; stock return volatility; and profitability. Industry × year FE are based on the Fama-French 48-industry classification. *t*-statistic based on standard errors clustered at the district court level are shown in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. A complete list of definitions for these variables is provided in the Appendix.

	(1)	(2)	(3)	(4)	(5)	(6)
ProShareholder	-0.183^{***}	-0.213^{***}	-0.228^{***}	-0.175^{***}	-0.191^{***}	-0.153^{***}
	(-3.07)	(-3.09)	(-3.20)	(-3.66)	(-3.37)	(-3.91)
Size			-0.042^{***}	-0.043^{***}	-0.044^{***}	-0.045^{***}
			(-6.49)	(-6.12)	(-5.51)	(-5.41)
Book-to-Market			0.073^{***}	0.086^{***}	0.064^{***}	0.078^{***}
			(8.33)	(9.56)	(7.96)	(7.85)
Previous 12-month Return			0.001	0.001	0.001	0.001
			(0.22)	(0.35)	(0.13)	(0.44)
Return Volatility			0.007^{***}	0.007^{***}	0.007^{***}	0.007^{***}
			(4.47)	(4.75)	(4.02)	(4.41)
Profitability			0.110^{***}	0.146^{***}	0.110^{***}	0.145^{***}
			(5.29)	(7.26)	(5.06)	(7.06)
District Court FE	Yes	Yes	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Size-BM × Year FE	No	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	No	No	No	Yes	No	Yes
Incorporation State × Year FE	No	No	No	No	Yes	Yes
Observations	71,610	71,610	71,610	71,610	64,699	64,699
Adjusted R^2	0.08	0.10	0.09	0.12	0.11	0.13

Table 4: Changes in Courts' Shareholder-Friendliness and Managerial Entrenchment

This table reports coefficients from firm-level panel regressions of year-ahead CEO pay variables on *ProShareholder*. Controls and different sets of fixed effects are included as reported. In columns (1) through (3), the dependent variable is an indicator equal to one if a CEO receives a lucky grant in year $t+1$. Columns (4), (5), and (6) analyze CEO pay-performance sensitivity, defined as the dollar change in CEO compensation (dependent variable) per \$1,000 change in shareholder wealth. In the last two columns, the dependent variable is CEO total compensation. Control variables are: size; book-to-market; profitability; asset tangibility; leverage; cash holdings; and institutional ownership. We also include: CEO ownership, CEO Tenure, a dummy for CEO Outsider and CEO Duality. A complete list of variable definitions is provided in the Appendix. Industry × year FE are based on the Fama-French 48-industry classification. *t*-statistic based on standard errors clustered at the district court level are shown in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively.

	CEO Luck			CEO PPS			CEO Pay	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ProShareholder	0.289***	0.289***	0.305***	−117.880	−150.538	−304.071	−0.109	−0.062
	(2.95)	(3.04)	(3.41)	(−0.49)	(−0.59)	(−1.05)	(−0.78)	(−0.53)
Δ Mkt Value				0.023***	0.021***	0.018***		
				(3.76)	(3.38)	(2.92)		
ProShareholder* Δ Mkt Value				−0.128***	−0.128***	−0.126***		
				(−3.49)	(−3.59)	(−3.60)		
Controls	No	Yes	Yes	No	Yes	Yes	Yes	Yes
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	No	No	Yes	No	No	Yes	No	Yes
Observations	4,513	4,513	4,513	22,532	22,532	22,532	22,532	22,532
Adjusted R^2	0.02	0.02	0.02	0.01	0.03	0.03	0.48	0.49

Table 5: Changes in Courts' Shareholder-Friendliness and Takeover Threat

Panel A reports coefficients from firm-level panel regressions of the probability of being a target in a M&A deal on *ProShareholder*. The dependent variable is coded as 1 when the firm is the target in a M&A deal in year $t+1$ (columns (1) through (5)), in any year between $t+1$ and $t+3$ (column (6)), or between $t+1$ and $t+5$ (column (7)). Panel B reports coefficients from deal-level cross-sectional regressions of the probability of completing an M&A deal on $I(ProShareholder)$. The dependent variable is coded as 1 when the deal is successfully completed. $I(ProShareholder)$ is a dummy coded as 1 when a deal is exposed to an increase in the target district court shareholder-friendliness. Controls and various sets of fixed effects are included as reported. In both panels, firm-level controls include: size; book-to-market; profitability; asset tangibility; leverage; cash holdings; and institutional ownership. Deal-level controls include information on the method of payment (cash, stock); information on the nature of the deal (tender Offer, hostile takeover, conglomerate deal, competed deal), and whether the targeted firm is a "New Economy" firm. A complete list of definitions is provided in the Appendix. Industry × year FE are based on the Fama-French 48-industry classification. t-statistic based on standard errors clustered at the district court level are shown in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively.

Panel A: Changes in Courts' Shareholder-Friendliness and Takeover Probability

	Target by $Year_{t+1}$					$Year_{t+3}$	$Year_{t+5}$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ProShareholder	−0.031***	−0.028***	−0.029***	−0.029***	−0.028***	−0.060***	−0.082***
	(−3.04)	(−2.93)	(−2.94)	(−3.20)	(−3.05)	(−2.84)	(−2.75)
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	No	No	Yes	No	Yes	Yes	Yes
Incorporation State × Year FE	No	No	No	Yes	Yes	Yes	Yes
Observations	75,577	75,577	75,577	68,240	68,240	68,240	68,240
Adjusted R^2	0.03	0.03	0.03	0.03	0.04	0.04	0.04

Panel B: Changes in Courts' Shareholder-Friendliness and Deal Completion Probability

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I(ProShareholder)	-0.437^{***}	-0.422^{***}	-0.403^{***}	-0.368^{***}	-0.347^{***}	-0.368^{***}	-0.357^{***}
	(−7.95)	(−7.77)	(−7.25)	(−6.53)	(−5.91)	(−6.82)	(−4.67)
Acquirer Controls	No	Yes	Yes	Yes	Yes	Yes	Yes
Target Controls	No	No	Yes	Yes	Yes	Yes	Yes
Deal Controls	No	No	No	Yes	Yes	Yes	Yes
Target District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target Industry × Year FE	No	No	No	No	Yes	No	No
Target Incorp. State × Year FE	No	No	No	No	No	Yes	No
Acquirer District FE	No	No	No	No	No	No	Yes
Acquirer State × Year FE	No	No	No	No	No	No	Yes
Observations	1,819	1,819	1,819	1,819	1,819	1,410	1,476
Adjusted R^2	0.20	0.21	0.23	0.28	0.31	0.27	0.26

Table 6: Changes in Courts' Shareholder-Friendliness and Anti-Takeover Provisions

This table presents results of firm-level panel regressions of year-ahead annual buy-hold stock returns on *ProShareholder*, proxies for a firm's anti-takeover provisions in place, and their interactions. Columns (1) and (2) use the E-Index of Bebchuk, Cohen, and Ferrell (2009). In columns (3) and (4), we add the Gompers, Ishii, and Metrick (2003) G-Index. In columns (4) and (5), we extend the original E-Index (available until 2007) for the entire sample (1993-2015). Controls include: size; book-to-market; previous 12 months stock return; stock return volatility; and profitability. Industry × year FE are based on the Fama-French 48-industry classification. A complete list of variable definitions is in the Appendix. *t*-statistic based on standard errors clustered at the district court level are shown in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
ProShareholder (%) (1)	-0.321^{*}	-0.278^{*}	-0.356^{**}	-0.286^{**}	-0.283^{***}	-0.217^{***}
	(-1.91)	(-1.91)	(-2.23)	(-2.04)	(-2.90)	(-2.77)
E-Index	-0.008	-0.008			-0.005	-0.006
	(-1.47)	(-1.32)			(-1.41)	(-1.55)
ProShareholder × E-Index (2)	0.076^{**}	0.074^{**}			0.060^{***}	0.053^{***}
	(2.60)	(2.41)			(2.86)	(2.77)
G-Index			-0.001	0.001		
			(-0.11)	(0.45)		
ProShareholder × G-Index (2)			0.028^{**}	0.022^{*}		
			(2.07)	(1.72)		
Implied Effect (1) + ATP^{MAX} (2)	0.134	0.167	0.139	0.106	0.078	0.101
District Court FE	Yes	Yes	Yes	Yes	Yes	Yes
State × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Size-BM × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	No	Yes	No	Yes	No	Yes
Observations	48,584	48,584	48,584	48,584	71,610	71,610
Adjusted R^2	0.08	0.10	0.08	0.10	0.09	0.11

Table 7: Robustness Tests

This table shows robustness tests. Panel A presents results of firm-level panel regressions of year-ahead annual buy-hold stock returns on *ProShareholder*. All columns present results from different specifications of equation (1). In columns (1), the dependent variable is the 12-month ahead buy-hold Size-BM adjusted stock return. In column (2), we substitute district court FE with firm FE. In column (3), we substitute Size-BM × Date FE with DGTW × Date FE. In column (4), we exclude firms that change headquarters. In column (5), we exclude firms that are defendants in a shareholder class action lawsuit in year t+1. In column (6), we exclude firm-year observations that follow episodes of changes in *ProShareholder* that are not caused by death or retirement due to reaching the retirement age. In Panel B, we include interaction terms between *ProShareholder* and: i) average Fama-French 48 industry level of labor intensity; ii) indicator variable for FF48 industries with high incidence of consumer lawsuits; iii) the Herfindahl-Hirschman index at the Fama-French 48 industry level; iv) natural logarithm of the number of citation-weighted (CW) patents granted in each Fama-French 48 industry; v) average Fama-French 48 industry level of R&D expenditures; vi) the leverage of the company. Panel C reports results of firm-level panel regressions of year-ahead annual buy-hold stock returns on *ProShareholder*, the instrumented versions of E-Index and G-Index developed by Karpoff, Schonlau, and Wehrly (2017), and their interactions. In all panels, controls include: size; book-to-market; previous 12 months stock return; stock return volatility; and profitability. *t*-statistic based on standard errors clustered at the district court level are shown in parentheses. *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively. A complete list of definitions for these variables is provided in the Appendix.

Panel A: Variation in the Main Specification of Table 3

	(1)	(2)	(3)	(4)	(5)	(6)
ProShareholder (%)	−0.237***	−0.195**	−0.192**	0.245***	−0.213***	−0.197***
	(−2.99)	(−2.13)	(−2.27)	(−3.28)	(−2.92)	(−3.41)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
District Court FE	Yes	No	Yes	Yes	Yes	Yes
State × Date FE	Yes	Yes	Yes	Yes	Yes	Yes
Size-BM × Date FE	No	Yes	No	Yes	Yes	Yes
Firm FE	No	Yes	No	No	No	No
DGTW × Date FE	No	No	Yes	No	No	No
Observations	71,610	71,610	69,450	64,464	70,311	58,549
Adjusted R^2	0.03	0.15	0.09	0.09	0.09	0.10

Panel B: Variation in the Likelihood of Other Types of Lawsuits

	(1)	(2)	(3)	(4)	(5)	(6)
ProShareholder (%)	−0.241***	−0.242***	−0.222***	−0.287**	−0.218***	−0.209**
	(−3.42)	(−3.15)	(−3.36)	(−2.20)	(−2.98)	(−2.60)
Labor Intensity	−0.205***					
	(−3.44)					
ProShareholder × Labor Intensity	0.028					
	(0.10)					
Consumer Fraud		0.029***				
		(3.29)				
ProShareholder × Consumer Fraud		0.042				
		(0.93)				
Antitrust			−0.084			
			(−1.03)			
ProShareholder × Antitrust			−0.096			
			(−0.36)			
Number of CW Patents				0.000***		
				(3.10)		
ProShareholder × Number of CW Patents				0.001		
				(0.09)		
R&D Expenses					0.028***	
					(9.58)	
ProShareholder × R&D Expenses					−0.011	
					(−0.66)	
Leverage						−0.083***
						(−3.99)
ProShareholder × Leverage						−0.105
						(−0.74)
District Court FE	Yes	Yes	Yes	Yes	Yes	Yes
State × Date FE	Yes	Yes	Yes	Yes	Yes	Yes
Size-BM × Date FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	71,610	71,610	71,610	59,641	71,610	71,610
Adjusted R^2	0.10	0.09	0.08	0.09	0.09	0.09

Panel C: Variation in the Anti-Takeover Measures

	ProShareholder (1)	**ATP**	**Interaction (2)**	**(1) + ATP^{MAX} (2)**
E-index 5-year IV	-0.349^{**}	0.057	0.164^{*}	0.241
	(-2.38)	(1.26)	(1.98)	
G-index 5-year IV	-0.345^{**}	0.007	0.041^{*}	0.236
	(-2.34)	(0.85)	(1.66)	
E-index Static 90 IV	-0.359^{**}	0.042	0.141^{*}	0.488
	(-2.21)	(0.96)	(1.68)	
G-index Static 90 IV	-0.366^{**}	0.012	0.040^{*}	0.08
	(-2.25)	(0.68)	(1.79)	
G-index Static Pre-90 IV	-0.377^{**}	0.027	0.044^{*}	0.08
	(-2.33)	(1.02)	(1.94)	

APPENDIX

A Description of Variables

Variable	Description
Main independent variable	
ProShareholder	Average Giles, Hettinger, and Peppers (2001) ideology score at the federal district court level. Computed including all active judges in a given year, excluding senior judges. The measure ranks judges on a continuous scale that goes from -1, for most corporation-friendly judges, to +1, for most shareholder-friendly judges.
I(ProShareholder)	Indicator variable equal to 1 if a judicial nomination increases the average Giles, Hettinger, and Peppers (2001) ideology score at the federal district court level.
Dependent variables	
Annual Buy-Hold Return	Cumulative stock returns over the 12 months of a firm's calendar year. Source: CRSP.
FF 3-factor CAR [-10,1]	Cumulative abnormal returns over the 12-day window around the event (the filing of a shareholder class action lawsuit), calculated using the Fama-French 3-factor model estimated over trading days $(-231,-31)$. Source: CRSP.
SCA by $Year_{t+n}$	Indicator variable equal to 1 for firms that are defendants in a shareholder class action lawsuit in any year between $t+1$ and $t+n$.
Target by $Year_{t+n}$	Indicator variable equal to 1 for firms that are target in the context of a M&A deal in any year between $t+1$ and $t+n$. Source: Thomson Reuters SDC.
CEO (Director) Luck	Dummy variable equal to one for firm-years where the CEO (a director) received an option grant on a date where the lowest price of the month prevailed and zero otherwise, as in Bebchuk, Grinstein, and Peyer (2010).
CEO PPS	The dependent variable in the CEO pay-performance sensitivity regression is defined as the yearly change in total CEO compensation (item TDC1 in ExecuComp).
CEO Pay	Natural logarithm of total CEO compensation (TDC1). Source: ExecuComp).
Cost of Goods Sold	Defined as cost of goods sold (COGS) divided by sales (SALE). Source: Compustat.
Labor and Related Expenses	Defined as labor and related expenses (XLR) divided by total assets (AT). Source: Compustat.
M&A Indicator	Indicator variable equal to 1 for firm-years where the firm is engaged in a M&A deal. Source: Thomson Reuters SDC.
Total M&A Deal Value	Natural logarithm of the sum of the value of all M&A deals made by a firm in a given year. Source: Thomson Reuters SDC.
Diversifying M&A Indicator	Indicator variable equal to 1 for firm-years where the firm is engaged in a diversifying M&A deal. A deal is diversifying if the acquirer operates in a different FF48 industry than the target company. Source: Thomson Reuters SDC.
Control variables	
Log of Market Capitalization	Natural logarithm of price times shares outstanding from CRSP.

Log Book-to-Market	The natural log of the ratio of the book value of equity to the market value of equity . Book equity is total book value of assets, minus total liabilities, plus balance sheet deferred taxes and investment tax credit if available, minus preferred stock liquidating value if available, or redemption value if available, or carrying value. Market equity is price times shares outstanding from CRSP. Source: Compustat and CRSP.
Previous 12 months stock return	Cumulative annual stock return over the 12 months of calendar year $t-1$. Source: CRSP.
Return Volatility	Square root of the sum of squared daily returns over calendar year $t-1$. To adjust for differences in the number of trading days, the raw sum is multiplied by 252 and divided by the number of trading days. Source: CRSP.
Profitability	Ratio of operating income before depreciation (OIBDP) minus interest expenses (TIE) and income taxes (TXC), divided by total assets (AT). Source: Compustat.
Asset Tangibility	Ratio of property, plant, and equipment (PPENT), divided by total assets (AT). Source: Compustat.
Leverage	Ratio of long term debt (DLTT) plus short term debt (DLC), divided by total assets (AT). Source: Compustat.
Cash Holdings	Ratio of cash and short term investments (CHE), divided by total assets (AT). Source: Compustat.
Institutional Ownership	Percentage of firm shares in the hand of institutional investors. Values of this variable below 0.0001 and above 0.9999 are replaced with 0.0001 and 0.9999, respectively. Source: Thomson Reuters 13F filings.
CEO Ownership	CEO firm-specific wealth as defined by Core and Guay (2002) and Coles, Daniel, and Naveen (2006).
CEO Tenure	Number of years between t and the year in which the current CEO took office. Source: ExecuComp.
CEO Outsider	Indicator variable equal to 1 for CEOs appointed from outside of the firm. Source: ExecuComp.
CEO Duality	Indicator variable equal to 1 for CEOs who also hold the position of the chairman of the board. Source: ExecuComp.
Cash	Indicator variable indicating that a deal is financed with cash only. Source: SDC.
Stock	Indicator variable indicating that a deal is financed with stock only. Source: SDC.
Tender Offer	Indicator variable indicating a tender offer. Source: SDC.
Hostile Takeover	Indicator variable indicating hostile deals. Source: SDC.
Conglomerate Deal	Indicator variable indicating that bidder and target are in a different Fama-French 48 industry. Source: SDC.
Competed Deal	Indicator variable indicating deals with more than one bidder. Source: SDC.
New Economy	Indicator variable dummy variable indicating that the target is a new economy firm (SIC codes 3570 to 3579, 3661, 3674, 5045, 5961, or 7370 to 7379). Source: SDC.
Variables in Table 6 and Table 7, Panel B	
E-Index	The Bebchuk, Cohen, and Ferrell (2009) entrenchment index, which includes: staggered boards, limits to shareholder amendments of the bylaws, supermajority requirements for mergers, supermajority requirements for charter amendments, poison pills and golden parachute arrangements. Source: Investor Responsibility Research Center (IRRC).
G-Index	The Gompers, Ishii, and Metrick (2003) Governance Index. Source: Investor Responsibility Research Center (IRRC).

Consumer Fraud	Indicator equal to 1 for the following FF48 industries: Food Products; Consumer Goods; Medical Equipment; Pharmaceutical Products; Automobiles and Trucks; Communication; Retail .
Number of CW Patents	The number of citation-weighted patents granted up to year t to firms in each FF48 industry. Source: NBER Patent Database.
R&D Expenditures	Defined as average R&D Expenditures (XRD) divided by total assets (AT) in each FF48 industry-year pair. Source: Compustat.
Labour Intensity	Defined as Total Payroll (pay) divided by total value added (vadd) for each FF48 industry-year pair. Source: NBER-CES Manufacturing Database.
Antitrust	Measure of industry concentration, defined as the Herfindahl-Hirschman index at the FF48 industry level. We compute the squared market share of each firm in the industry using firm sales (SALE).

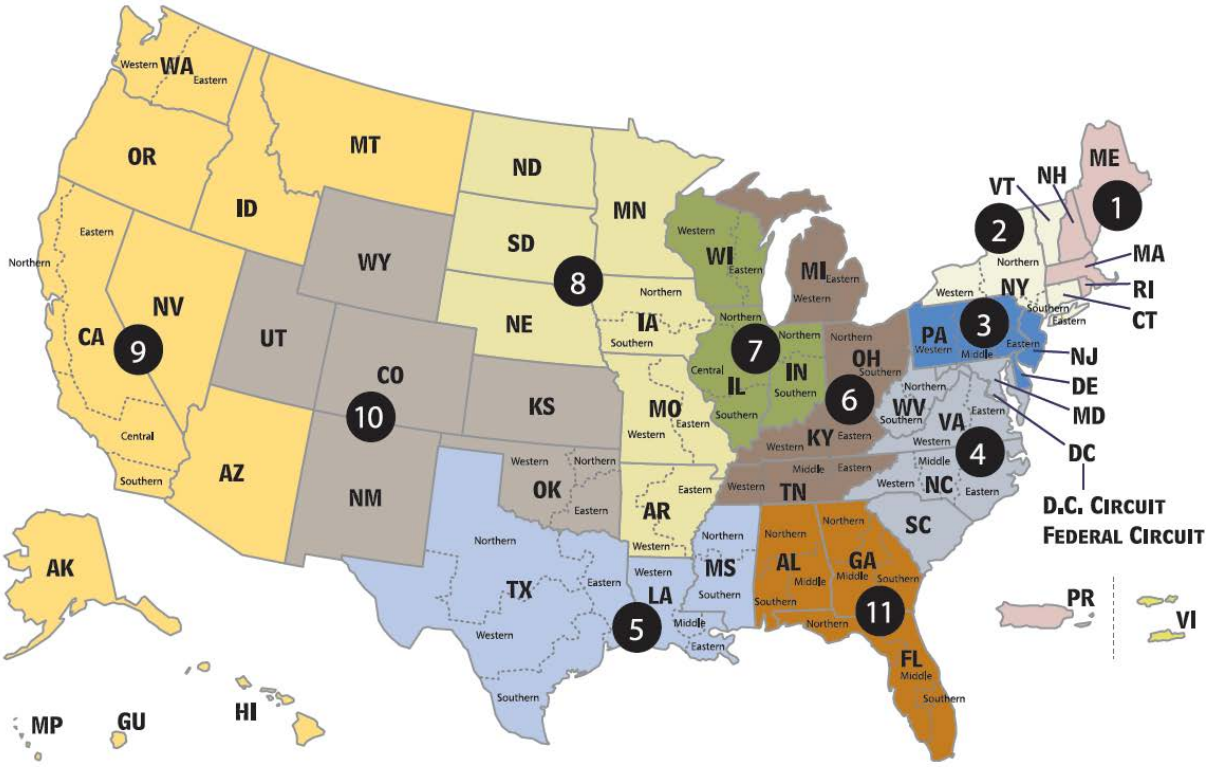
B U.S States and Federal District Courts

This table shows the number of federal district courts in each of the U.S states and territories.

State	# Courts	State	# Courts
Alabama	3	Nebraska	1
Alaska	1	Nevada	1
Arizona	1	New Hampshire	1
Arkansas	2	New Jersey	1
California	4	New Mexico	1
Colorado	1	New York	4
Connecticut	1	North Carolina	3
Delaware	1	North Dakota	1
Florida	3	Northern Marinara	1
Georgia	3	Ohio	2
Guam	1	Oklahoma	3
Hawaii	1	Oregon	1
Idaho	1	Pennsylvania	3
Illinois	3	Puerto Rico	1
Indiana	2	Rhode Island	1
Iowa	2	South Carolina	1
Kansas	1	South Dakota	1
Kentucky	2	Tennessee	3
Louisiana	3	Texas	4
Maine	1	Utah	1
Maryland	1	Vermont	1
Massachusetts	1	Virgin Islands	1
Michigan	2	Virginia	2
Minnesota	1	Washington	2
Mississippi	2	West Virginia	2
Missouri	2	Wisconsin	2
Montana	1	Wyoming	1

Figure B.1: Federal Court System

This figure shows the distribution of federal district courts and federal circuits among the U.S. states and territories. The numbers associated to the different colors represent the 11 U.S. federal circuits, which span multiple states. Each state, when applicable, is divided into its federal districts. (available at http://www.uscourts.gov/about-federal-courts/federal-courts-public/court-website-links)



C Stronger Shareholders' Right to Sue, Increased Cost of Litigation, and Loss of Equity Value

To assess whether the negative impact on equity value of an increased shareholders' right to sue stems from more frequent and more expensive litigation, we consider the following simple equation for equity market capitalization P_{it} of a generic firm i at time t:

$$
\begin{aligned}
P_{it} &= \frac{P^*(1-\pi)+\pi(P^*-C)}{(1+r)} \\
\frac{\partial P^*}{\partial RS} &= 0 \\
\frac{\partial r}{\partial RS} &= 0 \\
\pi &= f(RS); \quad \frac{\partial f}{\partial (RS)} > 0 \\
C &= g(RS); \quad \frac{\partial g}{\partial (RS)} > 0
\end{aligned}
\tag{5}
$$

where π is the time t probability of a lawsuit at the end of next period, C is the time t expected litigation cost faced by the corporation in the next period conditional on observing a lawsuit,[27] r is an exogenous 1-period ahead discount rate.[28] The current market capitalization is equal to the discounted one-period value of the equity in absence of lawsuits P^*, minus a term that captures the expected losses in case a lawsuit is filed against the corporation (πC). Following the legal view of shareholder litigation outlined in section 6.1, there is no deterrence benefit to shareholder litigation. Moreover, the fundamental value of the stock is determined by an exogenous return to invested capital process (Shleifer and Wolfenzon (2002)). In this sense, one can think of P^* as the fundamental value of the security, and that such value is independent of π, C, or shareholders' right to sue (RS). On the other hand, according to our estimates in Table 2 panel B, the probability of a lawsuit being filed in the future is an increasing function of shareholders' right to sue. Furthermore, our estimates in Table 2 suggest that the losses conditional on the filing of a lawsuit also increase with shareholders' ability to access courts.

For the purpose of easier quantification later, we rearrange equation 2 as follows:

$$
P_{it} = \frac{P^*(1-\pi\frac{C}{P^*})}{(1+r)}
$$

[27] Other literature is interested in the dichotomy between direct and indirect costs of litigation (e.g., Fitzpatrick (2010), Karpoff, Lee, and Martin (2008)) For our purpose here, this distinction does not matter.

[28] In Shleifer and Wolfenzon (2002), the discount rate is set by market clearing where the demand and supply of equity financing in the entire economy are equal. As a result, r changes as a function of insider entrepreneur's decision on the optimal size of the firm (I^*), the share of firm value financed with the insiders' wealth (R_E/I^*), and the insiders' optimal diverted share of firm profits $d*$. All these are in turn functions of the economy-wide investor protection level k. Here the shock to investor protection that we study is one that takes the form of a localized change in shareholder friendliness of the courts. Therefore we argue that such shock has little impact on aggregate demand and supply of equity, and hence does not change the interest rate.

where the loss that results from the filing of a lawsuit is expressed as a fraction C/P^* of the fundamental value that is lost due to the lawsuit. In the remainder, we shall refer to this scaled cost of litigation as C^*.

The time-t expected return on the stock in the next-period is:

$$E_t[R_{i(t+1)}] = \frac{P^*}{P_{it}}\Big[1 - \pi C^*\Big] - 1 \equiv r \tag{6}$$

Having assumed investors' required return r is independent of shareholders' right to sue, we can write:

$$\frac{\partial E_t[R_{t+1}]}{\partial(RS)} = \frac{P^*}{P_{it}}\Big[-\frac{1}{P_{it}}\frac{\partial P_{it}}{\partial(RS)}(1 - \pi C^*) - \frac{\partial(\pi C^*)}{\partial(RS)}\Big] \equiv 0 \tag{7}$$

Finally we can back out the return on the stock in the event of a unit increase in shareholders' right to sue:

$$\frac{1}{P_{it}}\frac{\partial P_{it}}{\partial(RS)} = -\frac{C^*\frac{\partial \pi}{\partial(RS)} + \pi\frac{\partial C^*}{\partial(RS)}}{1 - \pi C^*} \tag{8}$$

To estimate the magnitude of equity value reduction that is implied by equation 2, we use our results from table 1 and 2. In particular, we use table 1 panel C, jointly with the (half) the average life expectancy LE of firms in our sample to calculate the unconditional probability of observing a lawsuit for a firm any time until the expected dissolution of the firm($\pi = 1.53\% \times 5.5 years$). We use the expected return on a lawsuit announcement day as a proxy for the share of firm value that is lost due to the filing of a lawsuit ($C* = 10.11\%$). We also use our estimate in panel A of table 2 for the marginal increase in the probability of a lawsuit per unit increase in courts' shareholders' right to sue, as proxied by courts' friendliness to shareholders ($\frac{\partial \pi}{\partial(RS)} = 2.7\%$). Finally we use our estimate from panel A of table 2 for the marginal litigation cost increase ($\frac{\partial C^*}{\partial RS} = 11.6\%$). We obtain that the expected loss due to increased litigation costs is -2.49%.