Lawyer CEOs*

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We examine the value of CEOs with specialized professional skills by focusing on CEOs with law degrees and their effect on corporate litigation. We find that lawyer CEOs are associated with both lower litigation frequency and less severe litigation. This relation is observed for most of nine types of common corporate litigation. This reduction in litigation is achieved, in part, through a decrease in activities that can lead to litigation, such as earnings management, and an increase in legal oversight by directors with legal expertise. Moreover, CEOs with legal training are associated with higher value in firms with high litigation risk and growth firms.

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In 2004, Merck found itself amidst allegations that its blockbuster rheumatoid arthritis drug, Vioxx, was causing cardiovascular damage to its users. Merck pulled Vioxx off the market in September and subsequently embarked on a multi-year legal battle with lawsuits filed in nearly every jurisdiction. By 2007, Merck set aside a $4.85 billion legal reserve to settle product liability claims, abandoning its position that it would litigate every claim; in 2011 it plead guilty to a federal misdemeanor with a $0.95 billion penalty and, in 2016, agreed to a $0.83 billion securities class action settlement.

About the same time, similar concerns about Bextra and Celebrex - two drugs in the same class as Vioxx, but produced by Pfizer - started to surface. Similar to Vioxx, Bextra was pulled off the market, but Celebrex remained approved for cautious use with approval from the Food and Drug Administration. In 2008, Pfizer agreed to set aside $0.89 billion for a product liability settlement, followed by a $2.30 billion marketing settlement in 2009, a $0.16 billion securities class action in 2012 and another $0.49 billion securities settlement in 2016.

Both scandals were accompanied by CEO turnover. At Merck, CEO Raymond Gilmartin stepped down and was replaced by its former president of manufacturing Richard Clark. Pfizer went a different route by selecting its General Counsel Jeff Kindler to succeed Henry McKinnel, explicitly to deal with this wave of litigation. These scandals created a unique setting in which two large pharmaceutical firms simultaneously faced similar problems related to similar drugs and replaced their top managers; however, one hired a CEO with a set of skills tailored to guide the firm through litigation.

Pfizer's strategy of hiring a CEO with legal expertise illustrates the central research question of the paper: do CEOs with legal training have an advantage in managing the litigation environments of their firms? Intuitively, legal expertise of the CEO can affect firm litigation through several channels. First, the CEO can reduce risky firm activities that lead to subsequent litigation by instituting more conservative policies, better compliance and disclosure practices, and more effective gatekeeping. Second, the CEO can take actions to lower the probability of wrongdoing detection or prevent its escalation to a costly and publicly observable lawsuit through arbitration and out-of-court settlements. Further, litigation prevention

and management can be facilitated by the careful choice of external counsel. Anecdotally, CEOs with law degrees are hired by firms either in regulated industries or those with a potential for costly litigation, suggesting that CEOs with legal training are valuable. For example, CEOs of Goldman Sachs, MetLife, FirstEnergy, Consolidated Edison, WellPoint, Southwest Airlines and Wyeth all had law degrees.

We find that firms run by CEOs with legal expertise are indeed associated with less corporate litigation. In our baseline analysis of nine types of common corporate litigation, these firms exhibit lower frequency of antitrust, employment civil rights, contract, labor, securities and personal injury litigation.[1] Further, CEOs with legal expertise, conditional on experiencing litigation, are also associated with a lower proportion of lost and settled litigation. These results are robust to different specifications and controls such as firm characteristics, CEO characteristics, presence and influence of other gatekeepers such as directors and in-house legal counsel, as well as year and industry fixed effects.

We recognize that our empirical finding may not be fully due to the active management of litigation by the CEO with legal expertise. Rather, lower levels of litigation in firms ran by lawyers could result from CEOs matching to firms with low long-run litigation risk. In one potential type of matching, CEOs with legal expertise, who are risk averse and better at evaluating firm litigation risk, may take jobs with firms with lower litigation frequency. Another type of matching can occur when firms experience an unexpected spike in litigation and hire a CEO with legal background purely as window dressing. Barring any future recidivism, litigation levels ultimately mean-revert to their normal low levels, thus creating a negative relation between legal expertise of the CEO and litigation volume.

We pursue several identification strategies to determine whether our results are driven by the active management of the CEO or induced by passive CEO-firm matching. While these explanations need not be

[1] In univariate analyses and some regression specifications we observe higher incidence of product liability litigation in firms with lawyer CEOs. We attribute this to high volume product liability lawsuit waves, much like in the case of Merck or Pfizer. After excluding the pharmaceutical industry from our analyses, the coefficient estimate on the variable measuring legal expertise of the CEO in product liability litigation loses its statistical significance. [****I feel we should leave this to the main text. Seems somewhat confusing and too much detailed for Intro****]

mutually exclusive, we find that litigation reduction is, at least in part, consistent with active management by the CEO. First, we use an instrumental variable regression, in which CEO type is instrumented with the variable that is independent of the firm litigation risk and is based on the potential pool of executives with legal expertise located in the 50-mile radius of the firm's headquarters. The instrumented CEO type remains a strong predictor of litigation frequency. Our second identification strategy exploits the differential effect of a shock to the litigation environment on firms with and without lawyer CEOs. We use the passage of the Sarbannes-Oxley Act in 2002 as a shock that increases compliance and litigation. The act was designed to curb financial malfeasance by improving financial disclosure, increasing personal accountability of top managers and other firm monitors, in addition to setting more severe criminal penalties for white-collar crime. We find that during the key events of the Act's passage, firms with lawyer CEOs experience a positive market reaction while firms without lawyer CEOs experience the opposite. This finding confirms the greater value of CEO legal expertise during the periods of high compliance standards and more stringent legal enforcement.

We then focus on several channels that lead to lawyer CEO effectiveness. First, CEOs with legal training are associated with the greater future presence of directors with legal expertise, who may contribute to litigation reduction (Litov, Sepe and Whitehead 2014). Second, CEOs with legal training implement some cautious earnings management policies. We provide evidence that lawyer CEOs are associated with less earnings management, particularly in industries with high litigation risk. Moreover, firms with lawyer CEOs have a smaller reaction to earnings announcements consistent with better management of analyst expectations, more conservative investment firm policies measured by both R&D and tangible assets, and less total and idiosyncratic return volatility. These results are consistent with the active role of the CEO in firm and litigation management.

If litigation reduction is economically important to firms, why do lawyers represent such a small portion of the CEO pool? We find that CEOs with legal training are associated with higher firm value, but only in a subset of high litigation, high growth, or pharmaceutical industries. Outside of this setting, the

benefits of litigation reduction are offset by their cautious firm investment policies that negatively affect cash flows and growth, which we confirm by documenting lower investment in intangible and tangible assets as well as lower risk of firm investment policies.

In summary, the implications of our findings are two-fold. First, we are among the first to document that CEO legal expertise executives results in variation in corporate policies. Second, our paper demonstrates that the legal training of the CEO is likely to be value enhancing when firms operate in an environment with higher litigation risk or high compliance standards. Currently, 9.1 percent of firms in our sample of Standard & Poor's 1500 firms are run by a CEO with a law degree.

The rest of the paper is organized as follows. The next section summarizes previous literature that links CEO style to various firm policies and outcomes. Section 3 describes data sources. In Section 4, we present our main empirical results and tests of causality. In Section 5, we report the effect of CEOs with legal training on firm value. We then conclude in Section 6 with a brief discussion.

2. Benefits of Legal Expertise

2.1 Professional Experience

Growing literature on the importance of CEO style provides evidence that CEO characteristics that are either endowed or developed through personal or professional experiences can affect firm policies and outcomes. For example, CEO overconfidence leads to distorted investment decisions due to overestimated cost of external financing (Malmendier and Tate 2005) as well as aggressive firm policies (Ben-David, Graham, and Harvey 2013). CEO's talent and characteristics such as execution, resoluteness and overconfidence are positively related to buyout success (Kaplan, Klebanov, and Sorensen 2012). Other features such as height, facial attractiveness (Halford and Hsu, 2013; Cook and Mobbs, 2016) or an appearance that suggests professional competence (Graham, Harvey and Puri, 2015), personal conservatism conveyed by political preferences (Hutton, Jiang and Kumar, 2014) or, in general, unquantifiable uniqueness captured by the individual CEO fixed effect (Bertrand and Schoar, 2003) have been shown to matter for firm policies. Life experiences such as the Great Depression (Malmendier and Tate, 2005) and

trauma (Bernile, Bhagwat and Rau, 2015) also have a detectible effect on management style through changes in personal risk aversion.

In addition to personal characteristics, professional experiences have been shown to matter just as much for firm outcomes. Custodio, Ferreira, and Matos (2012) document that CEOs with broader professional experiences are viewed as more valuable to restructuring and M&A activities than those who are specialists. CEOs with military backgrounds are better equipped to guide firms during crisis (Benmelech and Frydman, 2011). Similarly, CEOs with finance training or experience (Custodio and Metzger, 2012) carry out more sophisticated financial policies and investment policies that are less sensitive to firm cash flows. Malmendier and Tate (2005) similarly find that investment policies of CEOs with financial education or background have less cash flow sensitivity.

Legal training is a form of human capital much like other types of professional training. Legal expertise can give CEOs an edge in managing and preventing corporate litigation as well as in the broader context of corporate governance, compliance, and risk management. In the words of Frank Blake, the CEO of Home Depot, "law school consists of taking normal people and getting them to worry about what no sane person would worry about." Some existing evidence points to the usefulness of lawyers in executive or director positions. Morse, Wang, and Wu (2016) find that general counsel elevated in importance to the executive team is effective in curbing regulatory non-compliance, monitoring failures and promoting business development. Similarly, general counsel represented among top executives leads to more accurate earnings forecast disclosures (Kwak, Ro and Suk, 2012). Jagolinzer, Larcker, and Taylor (2011) find that general counsel have the ability to reduce the extent of insider trading based on private knowledge and rent extraction. Moreover, Litov, Sepe and Whitehead (2013) show that directors with legal education are useful in monitoring executives, managing litigation, and reducing regulatory costs. Similarly, Krishnan, Wen, and Zhao (2011) demonstrate that the presence of directors with legal backgrounds on the audit committee is associated with higher financial reporting quality through better monitoring. In related literature, Karsten, Malmendier, and Sautner (2015) show that legal advisors with more expertise are associated with a range of better contractual outcomes for their clients in acquisitions.

In our paper, we focus on the effect of the legal training of the CEO since, arguably, the CEO has a more profound impact on firm policies and outcomes than directors or general counsel. However, we acknowledge the important role of these gatekeepers and control for their presence.

2.2 Litigation Reduction

The cost of corporate litigation is not trivial. Lawsuits, especially those stemming from more egregious offences, lead to large losses in market value, legal costs, court penalties or settlement costs, reputational losses, and management time. Existing evidence suggests that the economic magnitude of these costs is quite large (Bhagat, Bizjak, and Coles (1998), Karpoff and Lott (1999), Haslem (2005), Karpoff, Lott, and Wehrly (2005), Karpoff, Lee, Martin (2008), and Bessen and Meurer (2008)). Even milder offences that go unnoticed by the market result in some legal costs.

In our initial sample of 153,344 lawsuits for 3,410 publicly traded firms over 20 years (prior to its merge with CEO education data), approximately 32% of lawsuits are settled and nearly 2% are lost. The penalty attached to an average lost lawsuit, including lawsuits with zero or unreported penalties, is $0.835 million and approximately $2 million if we exclude observations with no recorded or zero values. The average reported settlement amount is $1.7 million, although the data availability is sparse. Other types of penalties that are difficult to quantify include clean-up costs in environmental litigation and injunctive relief in intellectual property litigation. While monetary penalties may not always be awarded, legal counsel compensation is often significant. These costs are compounded in cases when the defendant is required to reimburse the plaintiff's legal costs.

In addition to the penalties and legal costs, firms lose market value around the announcement of malfeasance or litigation filing. The three-day abnormal market value loss around the filing date is -0.13%, which amounts to $8.3 million for an average company in our sample. Market value losses are significantly larger for more impactful litigation. For example, Fich and Shivdasani (2007) and Gande and Lewis (2009) report value market losses on the order of 15 percent around the filing of class action securities lawsuits. Furthermore, other indirect costs such as changes in corporate strategy, managers' time and other resources committed to repairing damaged reputation exacerbate litigation damage.

While all firms may experience routine lawsuits that may not be cost effective to preempt—such as slip-and-fall accidents—there are very costly lawsuits that arise from falsifying clinical trial data, discriminatory or unfair work place policies, fabricated financial data, and other similar types of malfeasance. CEOs with legal training should be effective at preventing and mitigating these types of failures.

3. Data

3.1. Data Sources

We use data from multiple sources to identify the education background of CEOs. Our main sample of firms and managers is from the ExecuComp database and covers the period from 1992 to 2012. ExecuComp provides the full name, title, and position of S&P 1500 firm executives for each fiscal year. We use these data as a starting point for a thorough web search of individual biographies, which includes Factiva and Lexis-Nexis searches. We record all undergraduate and graduate degree and major information as well as the name of the educational institution. While, we believe, our searches yield a cleaner outcome, we cross-reference our data against Boardex. We classify a CEO as a lawyer if he is reported to have a J.D. or another law degree. These cases account for 96 percent of all CEOs with legal training in our sample. The remaining 4 percent have a Ph.D. in Jurisprudence or an undergraduate degree in law such as an LLB. We assume that legal education is equivalent to legal expertise and use these terms interchangeably throughout the paper. In unreported analyses, we explore career paths of CEOs with legal training in our sample. Many of them spend years working for legal firms or legal departments of corporations before transitioning to management roles, meaning that the legal expertise of CEOs with law degrees is often extensive.

Our robustness checks use CEO age, gender and age at the first CEO appointment, which we source either from ExecuComp or by hand collection. We obtain firm-level accounting variables from Compustat. The firm-level return volatility measures and stock returns are computed using data from the Center for Research in Security Prices (CRSP). Earnings announcements and analyst forecasts are sourced from I/B/E/S.

Summary statistics for CEO and firm characteristics are provided in Table 1. In our sample pool of 3,499 CEO-firm pairs, 320 or 9.1 percent hold law degrees. This non-trivial number of lawyers in top executive positions that are customarily held by individuals with business degrees, suggests that legal training has value in the executive labor market. The average CEO in our sample is born around 1947 and has a job tenure of roughly 7 years. Financial characteristics and stock returns of our sample firms are comparable to those documented in similar studies.

The sample of litigation events is constructed from civil terminations in Federal district courts compiled by the National Archive of Criminal Justice Data (NACJD) and disseminated by ICPSR (Inter-University Consortium for Political and Social Research). Terminated lawsuits are updated annually in the ICPSR, albeit with nearly a two-year lag making 2012 and some 2013 terminations available in 2014, which yields a sample of lawsuit filings spanning 1992 to 2012. It contains over five million lawsuits, which include government, individual, and private firm defendants. We map the names of defendants in the NACJD database to publicly traded firms generating a sample of 153,344 lawsuits for 3,410 firms. The advantage of NACJD data over other common sources of litigation data used in the finance literature is that it contains multiple litigation types in terms of subject matter (i.e., civil, labor, etc.) and impact (i.e., single plaintiff versus class action, penalty, disposition, etc.), and covers a longer time period. Thus, compared to another widely-used dataset provided by the Stanford Securities Class Action Clearinghouse, NACJD is much larger and more comprehensive.

Our dataset relies on the data filed and reported by Federal district courts, which exclude cases filed in state courts. Despite painting a somewhat incomplete picture of corporate litigation, we believe that the Federal court data is a good proxy for total corporate litigation. Some types of litigation such as securities, environmental, antitrust, and intellectual property fall under federal law and are filed in federal courts. Other types of lawsuits like employment civil rights stemming from discrimination can be in violation of both federal and state-specific discrimination law and may be filed in either court. Contract and torts (i.e., personal injury and product liability) cases are typically filed in state courts, but the more

significant suits may escalate to the federal level. Diversity jurisdiction cases (i.e., parties are citizens of different states) are tried in federal courts.

3.2. Litigation Variables

To construct measures of litigation frequency, we extract data on nine most common ligation types and match it to our firm-year-level data with available CEO education information. The intersection yields 70,756 lawsuits of 2,345 firms over 20 years.[2] The final litigation sample contains (1) antitrust, (2) contract, (3) employment civil rights, (4) environmental, (5) intellectual property, (6) labor lawsuits, (7) personal injury, (8) product liability and (9) securities lawsuits, which to our knowledge constitutes one of the most comprehensive litigation datasets. All lawsuit types are defined in Appendix A.

Our key litigation variables capture the frequency of alleged firm misconduct at firm-year level. We construct them by aggregating multiple lawsuits filed in the same fiscal year against the defendant into the total annual number of lawsuits for each of nine lawsuit types. For example, in a given year, a firm may have one filing of contract litigation, two filings of employment civil rights litigation, and zero filings of antitrust, labor, environmental and other types of litigation.

Panel A of Table 1 reports the average firm-year frequency of litigation filings by litigation type. The most common type is product liability litigation, with 1.155 average annual number of filings. This is followed by contract litigation (1.042), personal injury (0.687), employment civil rights (0.432), labor (0.209), intellectual property (0.199), securities litigation (0.136), anti-trust litigation (0.068) and environmental litigation (0.053). The distribution of the litigation variables is right skewed. In several cases (i.e., antitrust, environmental, securities and product liability), litigation volume for the 90th percentile is zero. While antitrust, environmental and securities are less frequent than other types of litigation, in the case of product liability some firms experience bursts of litigation, which generate high annual values in

[2] We use nature of suit (NOS) variable to identify the types of common corporate litigation, including antitrust (NOS=410), contract (190, 195), employment civil rights (442), environmental (893), intellectual property (820, 830, 840), labor (710, 720, 790), personal injury (310, 340, 350, 360), product liability (245, 315, 345, 355, 365), and securities (850). While NACJD provides other types of litigation, these nine categories contain the most corporate lawsuits.

the top percentiles. This is consistent with the very high standard deviation of product liability litigation of 19.951. In our empirical analyses, we mitigate the effect of outliers by using the natural log(1 + the number of lawsuits) as an alternative dependent variable and winsorizing the distribution of litigation variables.

Furthermore, litigation is not uniformly distributed across all firms in the sample. Some lawsuits are more prevalent in certain industries and certain types of firms. In our subsequent multivariate analyses, we control for firm characteristics that have been shown to affect litigation as well as year and industry fixed effects.

4. CEO Legal Expertise and Corporate Litigation

In this section, we present the main empirical results. Specifically, we test our conjecture that CEOs with legal training can reduce litigation frequency for most common types of corporate litigation and attempt to differentiate between explanations that can drive that relation.

4.1 Baseline Results

We begin our empirical analysis by comparing the average litigation frequency in firms run by CEOs with legal training versus those without. Litigation frequency is measured by the number of lawsuits in a given firm-year. These results are reported in Panel B of Table 1. The incidence of litigation in firms ran by CEOs with legal training is lower and consistent with our priors. Firms with lawyer CEOs as compared to firms with non-lawyer CEOs have lower annual frequency of antitrust (0.026 vs. 0.073), civil rights violations contract (0.286 vs. 0.447), contract (0.639 vs. 1.084), securities (0.113 vs. 0.221), labor (0.072 vs. 0.143), intellectual property (0.153 vs. 0.204), and personal injury (0.348 vs. 0.722). In all these cases, the differences in means are not only statistically but also economically significant as they differ by approximately a factor of two. We observe no statistically significant difference in litigation frequency for environmental litigation, which is the least frequent type in our sample and, consequently, most prone to noise. As stated previously, product liability litigation exhibits an opposite relation as it may be difficult to manage cascades of product liability lawsuits, which sometimes occur in multi-year bursts.[3] Alternatively

[3] In our sample firm-year product liability litigation has the highest mean and standard deviation among all nine types of litigation.

this finding may be due to reverse causality if a lawyer CEO is hired to deal with such catastrophic litigation. This example of reverse causality is similar, in spirit, to that described by Levitt (1997) who found that higher crime rates are associated with greater number of police who are hired to reduce the crime, thus resulting in a positive relation. In unreported analyses, we exclude the pharmaceutical industry, which attenuates this relation leading to a similar frequency of product liability litigation in the two groups of firms. Automobile manufacturing is the other major industry with infrequent, but heavy product liability litigation.

To assess the combined effect of corporate litigation, we aggregate lawsuits from nine categories into *"All"* category that measures the total number of lawsuits filed in a firm-year. We also combine eight lawsuit categories into *"All Without Product Liability"* since product liability litigation behaves unlike other litigation types.

Next, we estimate the incremental effect of the CEO's legal expertise on litigation frequency while controlling for the CEO and firm characteristics. Our independent variables include CEO age and tenure because older CEOs with extensive legal, firm and industry knowledge are more likely to be effective at managing litigation. Further, our firm controls include firm size, market-to-book ratio, leverage, profitability, stock return and stock return volatility as firm characteristics have been shown to matter for litigation occurrence. While not all of these variables have the same effect on every type of litigation, in general, large firms with deep pockets are sued more frequently. Firms with lower profitability, stock return and high volatility are more likely to be the subject of securities lawsuits. Firms that have high market valuations relative to their book values and low leverage, may have higher probability of intellectual property litigation. Furthermore, firms with poor financial performance may lack resources and underinvest in internal controls and litigation prevention, thus becoming prone to lawsuits. In all regressions, we include year and industry fixed effects based on the 2-digit SIC codes and cluster standard errors at firm-level.

These regression results are reported in Panel A of Table 2. The dependent variables in these regressions is the number of lawsuits if a certain type, filed in given firm year. Our key independent variable in these regressions is *Lawyer CEO*, which is equal to one if the CEO has legal expertise and zero otherwise.

Similar to our univariate results, we find that the legal training of the firm's CEO is associated with lower litigation in six out of nine regressions: antitrust, contract, civil rights, labor, securities, and personal injury. In environmental litigation regression the coefficient is negative but does not reach the cutoff of acceptable statistical significance. The coefficients in intellectual property and product liability regressions are positive, although not statistically significant.

The economic significance of the coefficients in the six statistically significant regressions is notable. When compared to the mean unconditional litigation frequency, CEOs with legal training reduce litigation in antitrust regression by 73.5% (coeff.=-0.050, mean=0.068), employment civil rights by 74.1% (coeff.=-0.320, mean=0.432), contract by 15.5% (coeff.=-0.162, mean=1.042), labor by 38.3% (coeff.=-0.080, mean=0.209), securities by 72.1% (coeff.=-0.098, mean=0.136), and personal injury regressions by 37% (coeff.=-0.254, mean=0.687). For environmental and intellectual property litigation and product liability litigation, we find no significant effect of lawyer CEOs.

Lastly, the coefficients of control variables are consistent with expectations. Firm size has the strongest and persistent effect in all regressions supporting the prior that in complex firms, where litigation prevention is difficult, there are more opportunities for wrongdoing and lawsuits are more likely because of the defendant's resources available for penalties or settlement. The remaining control variables including CEO age and tenure are significant only in some regressions.

Since our dependent variable can be affected by outlier years with heavy litigation, we use an alternative measure of litigation. In Panel B we transform our dependent variable with natural log (litigation+1), which mitigates the influence of large observations. The results become somewhat stronger as the key independent variable *Lawyer CEO* is now statistically significant in seven individual lawsuit regressions. However, the coefficient in the product liability regression is positive and statistically significant. Furthermore, we obtain similar results in unreported regressions where litigation frequency is winsorized at the top one percent. Moreover, we repeat the analyses using Poisson regression that may be more appropriate for count data. Our results remain qualitatively similar.

Overall the baseline regressions indicate that lawyer CEOs are associated with lower corporate litigation across multiple litigation types. In the next section we examine whether this effect is limited to frivolous litigation or more impactful cases that can result in losses and settlements for the defendant firm.

4.2. CEO Legal Expertise and Litigation Severity

Our baseline results indicate that CEOs with legal training are associated with lower litigation. In this section we examine whether, in addition to reducing litigation, lawyers succeed in mitigating its severity. In Table 2 Panel C, we examine the number of lost and settled suits as a measure of litigation severity. If the reduction in overall litigation levels is achieved by deterring frivolous litigation which is likely to be dismissed, rather than high quality cases, we may observe a similar number of lost and settled cases in firms with lawyer CEOs. However, we do find that lawyers are also able to reduce the number of cases that are ultimately lost and settled, in the same six out of nine litigation types, similar to the baseline specification. In Panel D, we examine the proportion of lost and settled litigation, to ensure the observed reduction in the number of lost and settled suits declines relative to total litigation filings in that firm-year. Like in the previous model, we observe a similar effect, albeit somewhat weaker.

We have evaluated and dismissed other types of litigation costs such as monetary penalties since they are frequently unavailable for settled litigation. In the case of lost litigation, financial penalties are not always awarded and can be replaced by clean-up expenses, split-ups, or injunctive relief which are difficult to translate into dollar terms. Legal fees are also not disclosed because of attorney-client confidentiality. Some studies such as Karsten, Malmendier, and Sautner (2015) and Garoupa and Gomez-Pomar (2008) resort to using litigation length as a proxy for legal fees. In this setting, the focus on litigation length is somewhat redundant since it is correlated with lawsuit disposition: lawsuits that are subsequently lost take more time to resolve. Nevertheless, in unreported analyses, we examine litigation duration and find that CEOs with legal expertise may shorten some lawsuit types, consistent with our lawsuit outcome results.

4.3. Robustness

So far our results demonstrate a negative relation between the CEO's legal expertise and litigation frequency and severity. In this section we ensure that this result is not due to an omitted variable problem.

In particular, we introduce the effect of directors with legal education and legal counsel, CEO ability, other types of CEO education and the adjustment period during the first two years following CEO appointment.

4.3.A. Alternative Gatekeepers

Several studies, including Litov, Sepe, and Whitehead (2014) and Morse, Wang, and Wu (2016) highlight the importance of alternative gatekeepers, in particular, the firm's general counsel elevated to the role of top five executive officers and directors with legal training. They show that these two groups of gatekeepers independently succeed at reducing various compliance failures and some types of lawsuits. In instances when a firm has several types of such gatekeepers in addition to the CEO with legal expertise, which is likely in firms with high litigation risk, our main result could be driven by the influence of these individuals rather than the CEO himself. To ensure that our result indeed reflects the influence of the firm's CEO, we repeat our baseline specification with two additional control variables *General Counsel* and *Lawyer Directors*. *General Counsel*, is set to 1 if the firm's general counsel is listed among its top executive officers in Execucomp and zero otherwise, following Morse, Wang, and Wu (2016). *Lawyer Directors* is constructed as a binary indicator equal to 1 if the board has at least one director with legal background, and 0 otherwise, following Litov, Sepe, and Whitehead (2014). We obtain director and board data from ISS (Riskmetrics) and Boardex to construct an indicator of director legal expertise. We consider a director to have legal expertise if he has a law specific degree (JD, LLM, et al.) or is listed as having graduated from a law school.

Our results reported in Panel A of Table 3 indicate that while the general counsel and directors with legal experience are associated with a negative impact on litigation, the effect is typically subsumed by the legal expertise of the CEO. Overall, we replicate our baseline result with the effect of CEO legal training on six types of litigation. To ensure that the lack of significance of *General Counsel* and *Lawyer Directors* is not due to the differences in sample composition between the studies, we replicate the findings of Morse, Wang, and Wu (2016) and Litov, Sepe, and Whitehead (2014) using our full sample in unreported regressions.

4.3.B. Personal Characteristics

Legal training of CEOs may be correlated with other unobservable CEO characteristics. For example, it is well known that law programs are both highly selective and demanding. Therefore, the law degree can proxy for a higher level of ability (***or higher skills***) or stronger work ethic of CEOs rather than their legal expertise. Further, our results can be affected by the greater gender-driven risk aversion if women are over-represented in the sample of lawyers. To remedy this, we include additional controls such as gender, several educational background indicators (*MBA*, *Ph.D/MD*, or *Science* degree in a STEM field) and proxies for the talent or professional connections of a CEO (undergraduate or graduate *Ivy League* alumnus and age at *First CEO* job following Custodio and Metzger (2014). These results are reported in panel B of Table 3. The results continue to remain similar to our baseline results in five of nine lawsuit types and the legal education of the CEO has an independent effect on litigation even after the inclusion of controls for other types of human capital. In unreported analyses, we find that Ivy League education and a Ph.D./M.D. degree also affect some litigation types when not combined with other education controls, but this effect is often weak and the directional relation varies across different litigation types.

4.3.C. Long-term Effect

There are several circumstances that may influence the performance of a CEO during the first few years of tenure. First, the firm may have existing policies and personnel that can affect the CEO's success. Even if changes are made immediately, the lag in litigation filings may distort the observed relation between lawyer CEO and litigation. Lastly, the new CEO may be hired after an increase in litigation activity, thus temporarily producing a positive relation between the legal training of the CEO and lawsuits. We repeat our baseline analysis after excluding the first two years of tenure to capture the more representative long-run effect of the CEO and report the results in Panel C of Table 3. The results remain qualitatively similar albeit the magnitude of coefficients on our key *Lawyer CEO* variable is lower than in the baseline regressions.

4.4 Causality

In this section we attempt to distinguish whether our results are due to the active management of litigation by the CEO with legal training or CEO-firm matching. Our identification strategy is two-pronged and uses an instrumental variable approach and a shock to the firm's litigation environment.

4.4.A. Instrumental Variable Approach

The association between legal expertise of the CEO and lower litigation levels may result from either active management of litigation or selection of lawyers into firms with low long-term litigation risk. The appropriate instrument in this setting is one that is independent of the firm's litigation risk but predicts the choice of the CEO with legal training. We identify the instrument on the supply side of CEO choice rather than demand side as it is less likely to be dependent on the firm's litigation risk. Specifically, we use the number individuals with law degrees in the local pool of human capital suitable for the CEO position, which consists of all directors, CEOs and top-five managers of firms located in the 50-mile radius. The choice of the instrument is guided by two studies that find significant geographic segmentation in the CEO labor market. Zhao (2015) finds that 39 percent of all CEO transitions take place within a 60- mile radius.[4] Similarly, Yonker (2015) reports another type of local bias in that 30 percent of all CEOs are native to the state in which the firm is headquartered.

We use this instrument in the first stage of two-stage least square (2SLS) instrumental variable regressions to predict the choice of lawyer CEO. In the first stage, the *Lawyer CEO* indicator variable is regressed on the instrumented variable, the *Lawyer CEO Pool* (the number of CEOs and top-five managers with law degrees of firms located in the 50-mile radius), together with the control variables. In the second stage, the instrumented *Lawyer CEO* is used to predict lawsuit filings. These results are reported in Table 4. In the first stage the instrument is positive and statistically significant (*t-statistic* = 2.49). The *F*-statistic that tests the validity of the instruments strongly rejects the null of a weak instrument (*F-statistic* = 11.40). In the second stage regressions, the relation between the instrumented *Lawyer CEO* and litigation volume remains statistically significant in six regressions. The coefficient estimates of *Lawyer CEO* are negative in

[4] Our results also hold when we base our instrument on the 60-mile radius.

all regressions. One potential concern with this instrument is that firms with high litigation risk that employ more executives and directors with legal expertise may co-locate, which may occur in major metropolitan areas such as New York City or other industry hubs such as Silicon Valley. However, if that were the case, we would be likely to observe a positive relation between the instrumented variable Lawyer CEO and litigation frequency, which is not what we find. Nevertheless, in unreported regressions, we exclude New York City and Silicon Valley and obtain a qualitatively similar result.

We interpret these analyses to be consistent with the active management of litigation rather than CEO-firm matching. In the next section, we provide additional evidence that supports the active litigation management channel.

4.4.B. Shock to the Litigation Environment

In addition to the instrumental variable approach, we make use of a "natural experiment" to establish an active effect of a CEO with legal training on the firm's policies and, ultimately, its litigation levels. A shock to either the litigation environment or compliance standards can make a CEO with legal training more valuable to the firm because of his skills and ability to manage the firm in the new regime. Therefore, we expect to observe a difference in market reaction to the shock between firms ran by CEOs with legal expertise compared to those without.

We use the passage of the Sarbanes-Oxley Act (SOX) in 2002 as a powerful regulatory shock with a market-wide effect. SOX was designed to reduce financial malfeasance by defining new standards for external auditor independence, requiring top managers' personal accountability for the accuracy of financial reports, improving financial disclosure, reducing conflicts of interest and setting more severe criminal penalties for white collar crime.

Similar to other regulatory events, the Act's passage spanned a period of time from its introduction in the House by Representative Oxley on February 14, 2002 to its signing by President Bush on July 30, 2002. This period was marked by three additional important milestones: the House of Representatives votes on Oxley's bill on April 24, 2002, the Senate votes on Senator Sarbanes's bill on July 15, 2002 and the Congress votes on the combination bill of Sarbanes and Oxley on July 25, 2002. We follow the

methodology used in several studies, including Karpoff, Lee and Martin (2008), who estimate the market reaction to litigation events by cumulating abnormal returns over all pre-filing information events in addition to the filing day return. More specifically, we cumulate market-adjusted returns using the value-weighted CRSP index over these five key dates on the Act's timeline. In one set of tests, we exclude the date of the bill signing because it is unlikely to have major market reaction due to its highly anticipated nature.

In Panel A of Table 5, we report cumulative abnormal returns (CARs) for two groups of firms based on the legal training of the CEO. We find that firms with lawyer CEOs generate a significantly positive reaction (mean = 0.014, *t-statistic* = 2.19) to the passage of SOX consistent with the greater value of the CEOs' legal expertise in a more regulated environment. The second group, including firms with non-lawyer CEOs, experiences a negative reaction (mean = -0.009, *t-statistic* = -3.07). This negative return is likely reflective of the additional compliance costs they were going to be incurred by these firms. Furthermore, in Panel B, we test these differences in a regression that controls for the same set of firm characteristics and fixed effects as in our baseline litigation regressions in Table 2. Across all firms, the coefficient of *Lawyer CEO* variable is positive at 0.013 and statistically significant at the 5% level.

We repeat these analyses using cumulative announcement returns computed without the date on which the bill was signed into law. We exclude this milestone as it was largely anticipated given the bill's strong bi-partisan support. We obtain qualitatively similar, albeit marginally stronger results in both the *t*-tests and regression; the coefficient of *Lawyer CEO* is 0.015, significant at the 1% level. Overall, we find that the shock to the litigation environment makes CEOs with legal training more valuable for the firm. This finding supports our conjecture that lawyer CEOs play in active role in managing litigation risk of their firms, particularly in an environment in which litigation risk is more heightened and compliance is more demanded.

4.5. Effectiveness Channels

Thus far our results indicate that CEOs with legal expertise may benefit firms by actively managing their litigation. In this section, we attempt to identify the channels through which CEOs influence their

firms' litigation environment (***risk or propensity? I thought environment is exogenous but firm risk can be managed).

4.5.A. Additional Oversight

Better risk management can be facilitated by changes in corporate governance. In this section, we focus on the composition of the board of directors, and, in particular, legal expertise of directors. Our expectation is that CEOs with legal training may actively seek to increase the number of directors with legal expertise that can provide the firm with additional legal oversight and advice on compliance and risk management. To test for this conjecture, we use a sample of 311 CEO changes that took place during our sample period and have available director data for up to three years following the turnover.

In Table 6, we examine whether the new hire of a lawyer CEO is associated with a subsequent increase in the proportion of directors with legal training on the board for up to three years after the CEO takes office. While directors of S&P 1500 firms typically have a one-year term, but many directors are re-elected, we control for the proportion of lawyer directors before the CEO turnover in addition to other firm characteristics. We find that the proportion of lawyer directors in years t=1, t=2, and t=3 after CEO turnover increases if the new CEO is a lawyer. The coefficient estimate of *Lawyer* is statistically significant at the 1% level in all three regressions. The pre-turnover proportion of lawyer directors, which is independent of the new CEO influence, is also a strong predictor of future directorships. However, the fact that the effect of the CEO remains significant in the presence of controls for board composition suggests that lawyer CEOs are likely to encourage lawyer directors to stay on the board and recruit new directors with legal training.

4.5.B. Market Reaction to Earnings Announcements

In addition to increasing the legal expertise of the board, we hypothesize that to avoid securities litigation, CEOs with legal expertise will manage analyst and investor expectations more carefully than their counterparts. To test this conjecture, we focus the market reaction to earnings announcements of firms with and without CEOs with legal expertise. Therefore, we expect to observe a more moderate reaction to the announcements of earnings in firms with lawyer CEOs after controlling for other factors that can affect the earnings announcement reaction.

Our data on earnings announcement dates, reported earnings and standard unexpected earnings (SUE) scores are sourced from I/B/E/S. The SUE score is defined as the difference between reported earnings and the mean analyst estimate divided by the standard deviation of analyst estimates. We proceed by computing cumulative abnormal returns (CAR (-1,0)) and standardized cumulative abnormal returns (SCAR (-1,0)), following Brown and Warner (1985), during the two-day period around the earnings announcement date, starting at one day before the filing date.

In Table 7, we report the results of CAR and SCAR regressions in which we control for our key explanatory variable *Lawyer CEO*, firm characteristics and fixed effects used in the baseline regression. In addition to these variables, we follow the earnings announcement literature and control for the SUE score, stock turnover over one month prior to the announcement, an indicator for the firm's fiscal fourth quarter, and a negative earnings indicator. In both regressions the coefficient on Lawyer CEO is negative (-0.002) and statistically significant at the 5% level (*t-statistic* = -2.31), suggesting that lawyer CEOs on average decreases the earnings reactions by 20 basis points. We interpret this coefficient as the earnings announcement returns of firms run by lawyer CEOs are less positive than those of firms run by non-lawyers since the unconditional sample mean of CAR is 0.0025 and significant at the 1%. The SCAR regression yields a similar result with a coefficient of -0.006, which is also significant at the 5% level. In summary, these results indicate that the market is less surprised by the earnings announcements of firms run by CEO's with legal expertise, which is consistent with lawyer CEOs more effectively managing analyst and investor expectations.

4.5.C. Financial Reporting

Low financial reporting quality is often associated with litigation. While its link to securities lawsuits is the strongest, financial misreporting has been linked to other types of litigation. For example, Gonzales, Schmid, and Yermack (2013) show that companies with antitrust violations are also plagued by governance problems and financial misbehavior. Furthermore, firms facing pressure to perpetuate earnings management may cut corners in other areas and make themselves vulnerable to lawsuits.

We examine the effect of CEO legal training on earnings manipulation by constructing two measures used to capture accrual-based and real earnings management. Although the prior literature has primarily focused on accrual-based manipulation, firms may engage in real earnings manipulation as it is harder to detect. To capture accrual-based earnings management, we use the modified cross-sectional Jones (1991) model as implemented by Cohen and Zarowin (2010) to compute discretionary current accruals (*Discretionary Accruals*). This variable picks up abnormal changes in current accruals relative to the industry levels, due to accelerated recognition of revenues and delayed recognition of expenses.

This real manipulation measure is based on the premise that firms rely on three main manipulation strategies to increase earnings. First, they increase sales by speeding up revenue recognition or by discounting prices and relaxing credit terms, which may temporarily increase the accounting of firm cash flows. Second, firms may reduce cost of goods sold by temporarily cutting production and allowing inventory stock to dwindle, appearing to cut costs temporarily but hurting future margins and the ability to replicate sales. Third, firms may cut aggregate discretionary expenses, like R&D, SG&A, or advertising expense. All of these strategies benefit current earnings and can improve current cash flows at the expense of future cash flows.

We follow the Cohen and Zarowin (2010) modification of the Roychowdhury (2006) measure, to compute industry-relative abnormal levels of cash flows from operations (*Cash Flow*), discretionary expenses (*Discretionary Expenses*), and variable production costs (*Production Costs*). For a given level of revenue, firms that manage earnings upward will ultimately have unusually low cash flow from operations, and/or unusually low discretionary expenses, and/or unusually high production costs. After constructing these three measures of real earnings management, we combine them into one comprehensive measure (*Real Earnings Management Proxy*) by adding abnormal discretionary expenses and abnormal production costs to abnormal cash flows. To facilitate interpretation, we first modify these variables by multiplying both cash flow from operations and discretionary expenses by -1 so that higher values of this composite variable indicate greater real management.

In Table 8 we report the results of these analyses. In addition to our key variable of interest, *Lawyer CEO*, we introduce its interaction with *High Litigation Industry* indicator variable. We consider industry high litigation if its total litigation volume is in the top 10th percentile during our sample period. This cutoff captures high, rather than only extreme litigation volume, since non-zero litigation values start in the top quartile of the litigation frequency distribution. The interaction term is important because in a subset of firms with high litigation risk, the need to reduce earnings management may be urgent and CEOs with legal expertise are likely to understand this need. In contrast, Lawyer CEOs in firms in industries with low litigation risk may have the luxury of taking time to correct existing managed earnings. In addition to the interaction terms, our control variables also include the natural log of equity-based compensation, log(Incentive Pay), that has been shown to encourage earnings management.

Our results indicate that in industries where litigation risk is low or moderate, CEO legal training does not have an effect on earnings management, evidence in the mostly insignificant coefficient on *Lawyer CEO*. However, in high litigation industries, lawyer CEOs are associated with less earnings management, consistent with our conjecture. In particular, these firms have lower discretionary accruals (significant at the 10% level) and less negative cash flow and production costs effects (significant at the 5% to 10% level). The overall proxy for real earnings management also reflects less manipulation associated with lawyer CEOs in high litigation industries. In summary, these results demonstrate that lawyer CEOs may be associated with real financial policy changes to reduce the riskiness of a firm in a litigious environment.

5. Effect on Firm Value

In our previous analyses we have shown that CEOs with legal training are associated with lower litigation, which is achieved through additional legal guidance, reduction in earnings management and management of earnings expectations of investors and analysts. If the reduction in litigation has a net benefit to the firm, we should observe higher valuations of firms run by CEOs with legal training. Thus, we examine whether CEOs with legal training exert a greater benefit (e.g., higher market valuation) on the subset of firms that can gain the most from litigation prevention and management. We focus on several types of firms: those in high litigation industries, high growth firms, and pharmaceutical firms. This choice is

intuitive because in high litigation firms, the reduction in litigation costs should be most valuable. High growth firms may benefit from the guidance related to disclosure, security issuance, insider trading or intellectual property, which can prevent litigation. Pharmaceutical firms may be the subject of catastrophic litigation and also have intellectual property concerns.

Table 9, we present results of regressions in which Tobin's Q serves as the dependent variable. In these regressions we control for firm characteristics and year fixed effects. Each of the three reported regressions also includes an additional variable: *High Litigation* dummy, *High Growth* dummy or *Pharmaceutical* dummy and its interaction with *Lawyer CEO* to identify the effect of CEOs with legal expertise on firm value in a particular subset of firms. *High Litigation* dummy equals one if the firm belongs to the industry that is in the top 10th percentile of litigation frequency during our sample period and zero otherwise. *High Growth* dummy includes industries that are in the 25 percent in revenue growth and top 25 percent in investment in R&D or Capital Expenditure. We use the cutoff point of 25 percent because this joint conditioning scheme results in too few High Growth observations at 10 percent. Finally, we classify firms in SIC code 28 as pharmaceutical firms. These classification schemes are largely non-redundant in that industries classified *High Litigation* firms and *High Growth* firms have little overlap.

We measure firm valuation using Tobin's Q, the market value over book value of firms. In all three regressions, the coefficient on our main variable of interest *Lawyer CEO* is negative and statistically significant, indicating that lawyer CEOs are associated with lower firm value in industries with low litigation risk. In contrast, its interactions with *High Litigation*, *High Growth* or *Pharma* indicators are positive and statistically significant at the 5% level or better, indicating a positive effect of CEO's with legal expertise in high litigation environments.

In summary, CEOs with legal training are associated with higher firm value only in settings where litigation is a significant concern or legal guidance is important. While this result should be interpreted as causal with caution, it is consistent with our prior finding that the value of lawyer CEOs comes from active litigation management.

5.1. Firm Policies

Thus far, our results indicate that CEOs with legal expertise are effective at reducing most types of corporate litigation, but their efforts enhance firm value only among the subset of firms most affected by litigation or the need for legal guidance. In other types of firms, lawyer CEOs are associated with lower firm value. One potential explanation for this result is that lawyers pursue risk management through more conservative firm policies at the expense of future growth and cash flows.

In this section, we examine the effect of lawyer CEOs on firm investment policies. Specifically, we consider: (i) firm investment in tangible assets, as measured by investment in tangible capital (INV), (ii) firm investment in intangible assets, as measured by R&D expenditures scaled by sales (R&D), and (iii) the riskiness of corporate investments as measured by the total return volatility (TVOL) and idiosyncratic return volatility (IVOL). TVOL is defined as the standard deviation of daily returns computed over one year and IVOL is the standard deviation of residual returns from regressions of daily returns on the Fama and French (1993) three factors over the same period.

In Table 10 regressions we focus on the investment spending on tangible assets (INV), as measured by capital expenditures divided by net tangible assets and R&D. In both regressions we control for firm characteristics and industry and year fixed effects. Our results indicate that lawyer CEOs are associated with more conservative spending of both types. The coefficient on *Lawyer CEO* is negative and significant at the 5% level in the tangible investment regression and one percent in the R&D regression. Relative to the unconditional rate of tangible (coeff.=-0.015) and R&D investment (coeff.=-0.027), a lawyer CEO is associated with 6.3% and 46.6% lower investment, respectively, all else equal. This finding highlights the conservatism of financial policies carried out by CEOs with legal training.

In Table 11 we examine the outcome of the firm's investment and other corporate policies as measured by the total volatility and idiosyncratic volatility of the firm's returns. Consistent with our conjecture, firms ran by CEO's with legal expertise have lower return volatility, regardless of the measure. The effect of lawyer CEOs is significant at one percent in the total volatility regression and five percent in the idiosyncratic volatility regression. The estimates suggest an 2% approximately reduction in firm volatility, relative to the average volatility level.

To summarize, risk management policies of CEO's with legal backgrounds come at the expense of lower and more cautious investment that produces a more moderate effect of firm value compared to peer firms. This finding explains at least partially why lawyer CEOs in firms operated in a less litigious environment are associated with lower firm valuations. Thus, the value of a lawyer CEO to a firm is contingent on the litigation environment of the firm's businesses.

6. Conclusion

In this paper, we study the effectiveness of CEOs with legal training in reducing and mitigating corporate litigation. We find that lawyer CEOs not only reduce the frequency of most types of common corporate litigation, but also their severity. We show that this result is at least partially causal rather than pure driven by passive lawyer CEOs mapping with firms with low litigation risk. Our identification of the causal impact is through an instrumental variable based on the local pool of potential CEOs with legal expertise and an analysis of an exogenous shock, the passage of SOX in 2002, to the litigation environment. Moreover, our result is not driven by omitted variables like CEO talents or the presence of other parties with legal training like the firm's General Counsel or lawyer Directors. Our results demonstrate that the reduction in litigation is consistent with the implementation of more cautious risk management firm policies, such as careful earnings management, management of analyst and investor expectations and increased oversight by additional directors with legal training. This risk management pays off in a subset of firms with high litigation risk and high growth firms as it leads to higher firm value. However, in all other firms, this conservatism negatively affects other firm policies and tempers firm value.

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Appendix A. Variable Definitions

Variable Name	Definition
Lawyer CEO	Indicator variable that equals 1 if the CEO has a J.D. degree, Ph.D. in Jurisprudence or an undergraduate degree such as LLB, and 0 otherwise. Source: hand collected.
Antitrust	Number of antitrust lawsuits filed in a fiscal firm-year. Antitrust litigation deals with monopolization, price fixing and price discrimination and similar offenses. Source: NACJD.
Civil	Number of employment civil rights lawsuits filed in a fiscal firm-year. Employment civil rights litigation deals with intimidating acts or discrimination based on race, ethnicity, national origin, religious beliefs, gender, sexual orientation, or disability. Source: NACJD.
Contract	Number of contract lawsuits filed in a fiscal firm-year. Contract litigation deals from contract breaches or contract disputes. Source: NACJD.
Environmental	Number of environmental lawsuits filed in a fiscal firm-year. Environmental litigation deals with air, land, and water supply pollution. Source: NACJD.
Intellectual Property	Number of intellectual property lawsuits filed in a fiscal firm-year. Intellectual property rights lawsuits deal with patent, copyright, and trademark infringements, false advertising, licensing, false marking, and trade secret matters. Source: NACJD.
Labor	Number of labor lawsuits filed in a fiscal firm-year. Labor litigation deals with union and labor disputes and other similar employee matters. Source: NACJD.
Securities	Number of securities lawsuits filed in a fiscal firm-year. Securities litigation deals with activities unfairly influencing security prices, or otherwise benefiting from insider knowledge about security prices, such as earnings manipulation, opportunistic merger and acquisition activities, security issuances, insider trading, option backdating, and other related events. Source: NACJD.
Personal Injury	Number of personal injury lawsuits filed in a fiscal firm-year. Personal injury lawsuits deal with policies, conditions, or faulty products that caused injury or harm. Source: NACJD.
Product Liability	Number of product liability lawsuits filed in a fiscal firm-year. Product liability lawsuits deal with faulty products that caused injury or harm. Source: NACJD.
All	Number of all lawsuits (across all nine types) filed in a fiscal firm-year. Source: NACJD.
All w/o Product Liability	Number of all lawsuits filed in a fiscal firm-year excluding product liability. Source: NACJD.
Log TA	Natural logarithm of a firm's total book assets (AT). Source: Compustat.
ROA	Return on total assets defined as net income (NI) over total assets (AT). Source: Compustat.
MB	Market to book ratio defined as market value of equity (PRCC F) over book value of equity (BKVLPS). Source: Compustat.
Leverage	Debt in current book liabilities (DLC) and long-term book debt (DLTT) divided by total book assets (AT). Source: Compustat.
Return	Market-adjusted monthly return (RET) compounded over the fiscal year. Source: CRSP.
Volatility	Standard deviation of monthly stock returns (RET) computed over the fiscal year. Source: CRSP.
Age	Age of the CEO (AGE). Source: Execucomp.
Tenure	Number of years in the current CEO position defined as current year (YEAR) minus the year of appointment (BECAMECEO). Source: Execucomp.
Log Incentive	Natural logarithm of the sum of a CEO's incentive-based option and equity grants (OPTION_AWARDS_BLK_VALUE and RSTKGRNT) compensation. Source: Execucomp.

Female	Indicator variable equal to 1 if the CEO is female (GENDER) and 0 otherwise. Source: Execucomp.
MBA	Indicator variable equal to 1 if the CEO holds an MBA and 0 otherwise. Source: hand collected.
Science	Indicator variable equal to 1 if the CEO holds a degree in a STEM field and 0 otherwise. Source: hand collected.
PhD	Indicator variable equal to 1 if the CEO holds a Ph.D. or M.D. and 0 otherwise. Source: hand collected.
Ivy	Indicator variable equal to 1 if the CEO holds an undergraduate or graduate degree from an Ivy League institution broadened to include Chicago and Stanford and 0 otherwise. Source: hand collected.
First CEO	Age (AGE) at first CEO appointment (BECAMECEO). Source: Execucomp.
Pharma	Pharma is an indicator equal to 1 if a firm is in a 2-digit SIC code 28 (pharmaceutical) and 0 otherwise. Source: Compustat.
High Lit. Ind.	Indicator variable equal to 1 if a firm is in an industry within the top 10th percentile of litigation frequency over the sample period and 0 otherwise. Source: NACJD.
High Growth Ind.	Indicator variable equal to 1 if a firm is in an industry that is in the top 25th percentile of revenue growth and combined investment in R&D and CAPEX and 0 otherwise. Source: Compustat.
General Counsel	Indicator variable equal to 1 if a firm has an executive general counsel, elevated to the firm's top 5 officers in pay rank (EXECRANKANN)and 0 otherwise. Source: Execucomp.
Lawyer Directors	Lawyer Directors is an indicator variable equal to 1 if the firm has at least one director with legal background and 0 otherwise. Source: ISS and Boardex.
% Lawyers	Percentage of lawyer directors on a firm's board. Source: ISS and Boardex.
Discretionary Accruals	Industry-adjusted accruals calculated using the modified Jones (1991) model.
Cash Flow REM	Industry-adjusted effect of real earnings management (REM) on the firm's cash flow, calculated following Roychowdhury (2005).
Discretionary Expenses REM	Industry-adjusted effect of real earnings management on the firm's discretionary expenses, calculated following Roychowdhury (2005).
Production Costs REM	Industry-adjusted effect of real earnings management on the firm's production costs, calculated following Roychowdhury (2005).
Total REM	The sum of Cash Flow REM, Discretionary Expenses REM, and Production Costs REM, where Cash Flow and Discretionary Expenses are multiplied by -1 so that higher values indicate greater real earnings management.
Tobin's Q	Ratio of market values of debt (AT-SEQ) and equity (CSHO*PRCC_F) to total book assets (TA). Source: Compustat.
INV	Capital expenditures (CAPX) divided by net tangible assets (PPENT). Source: Compustat.
R&D	Research& Development expense (XRD) divided by sales (SALE). Source: Compustat.
TVOL	Standard deviation of daily returns (RET) computed over one year. Source: CRSP.
IVOL	Standard deviation of residual returns from regressions of daily returns (RET) on the Fama and French (1993) three factors computed over one year. Source: CRSP and Kenneth French's Data Library.
Negative earnings	Indicator variable equal to 1 if the announced earnings (VALUE) is negative and 0 otherwise. Source: I/B/E/S.
SUE	Standardized unexpected earnings defined as the difference between reported earnings and the mean analyst estimate (SURPMEAN) divided by the standard deviation of analyst estimates (SURPSTDEV). Source: I/B/E/S.
Q4	Indicator variable equal to 1 if the announced earnings (VALUE) is in the fourth fiscal quarter and 0 otherwise. Source: I/B/E/S.

Table 1. Summary Statistics

Panel A presents summary statistics for the firms and CEOs used in our sample. Panel B presents *t*-tests for the difference in the annual number of litigation filings in firms ran by lawyer CEOs versus non-lawyer CEOs. Lawyer is defined as for a CEO with legal expertise. Variable definitions are provided in Appendix A. In Panel B, the *t*-statistics are reported in parentheses below the estimates. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A. Summary Statistics						
	Mean	Std. Dev.	10%	50%	90%	No. Obs.
CEO characteristics						
Lawyer	0.091	0.288	0.000	0.000	0.000	3,499
CEO Birth Year	1947	9.988	1935	1947	1959	3,499
Tenure	7.277	7.690	2.000	5.000	17.000	18,027
Litigation (1992-2012)						
Antitrust	0.068	1.178	0.000	0.000	0.000	18,027
Civil	1.017	3.698	0.000	0.000	2.000	18,027
Contract	0.423	1.600	0.000	0.000	1.000	18,027
Environmental	0.053	2.825	0.000	0.000	0.000	18,027
Intellectual property	0.199	0.643	0.000	0.000	1.000	18,027
Labor	0.209	1.790	0.000	0.000	1.000	18,027
Securities	0.128	1.469	0.000	0.000	0.000	18,027
Personal Injury	0.672	6.671	0.000	0.000	1.000	18,027
Product Liability	1.155	19.951	0.000	0.000	0.000	18,027
Firm characteristics						
Total Assets (millions)	6,401	14,848	211	1,434	15,294	18,027
Leverage	0.225	0.191	0.000	0.208	0.458	18,027
Market to Book	3.022	4.552	1.023	2.164	5.767	18,027
Return on Assets	0.033	0.157	-0.034	0.043	0.125	18,027
Volatility	0.115	0.077	0.049	0.096	0.200	18,027
Stock Return	0.111	0.994	-0.422	0.006	0.609	18,027

Panel B. Differences in Total Annual Litigation Filings for CEOs with and without Legal Training

	All	All w/o Prod. Liab	Antitrust	Civil	Contract	Environ.	Securities	Labor	Intel. Property	Personal Injury	Product Liability
Lawyer CEO	4.555***	1.483***	0.026***	0.286***	0.639***	0.025***	0.113***	0.072***	0.153***	0.348***	2.894***
	(4.64)	(14.58)	(2.95)	(9.97)	(12.74)	(5.13)	(10.44)	(5.23)	(10.57)	(8.36)	(3.05)
	1,848	1,848	1,848	1,848	1,848	1,848	1,848	1,848	1,848	1,848	1,848
Non-Lawyer CEO	3.936***	2.691***	0.073***	0.447***	1.084***	0.055***	0.221***	0.143***	0.204***	0.722***	0.986***
	(23.88)	(32.13)	(8.12)	(35.48)	(36.90)	(2.57)	(16.12)	(12.56)	(41.38)	(13.94)	(7.51)
	17,720	17,720	17,720	17,720	17,720	17,720	17,720	17,720	17,720	17,720	17,720
Difference	0.619	-1.208***	-0.048***	-0.161***	-0.445***	-0.030	-0.108***	-0.071***	-0.051***	-0.374***	1.907*
	(0.54)	(6.51)	(2.66)	(3.91)	(5.60)	(1.13)	(4.42)	(2.84)	(2.64)	(4.00)	(1.76)

Table 2. Lawyer CEO and Litigation

This table presents OLS regression estimates of the effect of CEO legal training on annual firm litigation in Panels A, B, C and D. In these panels, the annual firm litigation is measured by the total number of lawsuits, natural log of total number of lawsuits, the total number of lost and settled lawsuits and the proportion of lost and settled lawsuits conditional on litigation, respectively. Lawyer CEO is an indicator variable for a CEO with legal expertise. All control variables are defined in Appendix A and are lagged by one year. The *t*-statistics are computed using standard errors corrected for clustering of observations by firm and are reported in parentheses below the estimates. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A. Total Number of Lawsuit Filings per Year

	All	All w/o Prod. Liab.	Antitrust	Civil	Contract	Environ.	Intel. Property	Labor	Securities	Personal Injury	Product Liability
Lawyer CEO	1.561	-0.964***	-0.050**	-0.320***	-0.162***	-0.033	0.020	-0.080***	-0.098**	-0.254*	2.538
	(0.85)	(-3.47)	(-2.29)	(-2.91)	(-3.20)	(-1.30)	(0.78)	(-3.38)	(-2.51)	(-1.79)	(1.43)
Log TA	3.988***	2.156***	0.058***	0.881***	0.355***	0.043***	0.126***	0.157***	0.085***	0.621***	1.663***
	(6.76)	(8.56)	(4.20)	(9.49)	(6.10)	(3.01)	(10.29)	(6.28)	(5.06)	(4.41)	(3.48)
ROA	-1.162	-1.989***	0.044	-0.488**	-0.218**	-0.080	-0.051	-0.122***	-0.520	-0.685**	0.959
	(-1.12)	(-3.98)	(0.99)	(-2.39)	(-2.21)	(-0.86)	(-1.15)	(-2.77)	(-1.60)	(-2.53)	(1.22)
MB	0.132***	0.047**	0.004*	0.012	0.008**	-0.001	0.006***	0.005*	0.013***	0.005	0.081**
	(3.16)	(2.53)	(1.76)	(1.37)	(2.38)	(-0.87)	(4.27)	(1.76)	(3.31)	(0.65)	(2.42)
Leverage	-3.877*	-1.498*	-0.085	-0.703**	-0.032	0.113	-0.208***	-0.073	0.011	-0.616	-2.283
	(-1.95)	(-1.90)	(-1.55)	(-2.23)	(-0.25)	(0.57)	(-4.15)	(-0.76)	(0.09)	(-1.58)	(-1.38)
Return	-0.029	0.002	-0.007	-0.011	-0.001	-0.002	-0.004	-0.000	-0.014	0.034	-0.025
	(-0.46)	(0.07)	(-1.47)	(-0.98)	(-0.12)	(-1.01)	(-1.29)	(-0.10)	(-1.22)	(1.24)	(-0.52)
Volatility	1.280	0.398	0.032	-0.037	0.401*	-0.106	-0.021	-0.006	0.884***	-0.877	1.009
	(0.63)	(0.32)	(0.49)	(-0.10)	(1.82)	(-0.39)	(-0.26)	(-0.06)	(3.36)	(-1.04)	(0.77)
Age	0.013	0.005	-0.000	0.008	-0.002	-0.003	-0.003***	0.000	-0.003	0.002	0.014
	(0.43)	(0.40)	(-0.06)	(1.54)	(-0.83)	(-0.86)	(-3.17)	(0.00)	(-1.30)	(0.33)	(0.57)
Tenure	-0.043	-0.043**	-0.001	-0.024***	-0.005**	-0.000	0.001	-0.006***	0.001	-0.007	-0.001
	(-1.37)	(-2.41)	(-0.77)	(-3.43)	(-2.51)	(-0.52)	(0.63)	(-2.59)	(0.72)	(-0.61)	(-0.02)
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027
R-squared	0.09	0.18	0.01	0.23	0.14	0.00	0.14	0.04	0.03	0.10	0.03

Panel B. Total Number of Lawsuit Filings per Year (Log Transformed)

	All	All w/o Prod. Liab	Antitrust	Civil	Contract	Environ.	Intel. Property	Labor	Securities	Personal Injury	Product Liability
Lawyer CEO	-0.040	-0.096***	-0.011**	-0.050**	-0.060***	-0.006*	0.006	-0.025***	-0.023***	-0.031*	0.062*
	(-0.98)	(-2.99)	(-2.47)	(-2.15)	(-4.00)	(-1.69)	(0.52)	(-2.69)	(-3.42)	(-1.77)	(1.90)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027
R-squared	0.39	0.38	0.04	0.35	0.20	0.08	0.15	0.16	0.04	0.30	0.19

Panel C. Number of Lost and Settled Lawsuits

	All	All w/o Prod. Liab.	Antitrust	Civil	Contract	Environ.	Intel. Property	Labor	Securities	Personal Injury	Product Liability
Lawyer CEO	-0.253	-0.420***	-0.008**	-0.145***	-0.080***	-0.025	0.008	-0.034**	-0.021***	-0.131*	0.183
	(-1.17)	(-3.32)	(-2.23)	(-2.99)	(-3.40)	(-1.17)	(0.67)	(-2.53)	(-4.11)	(-1.94)	(1.19)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027
R-Squared	0.10	0.16	0.01	0.21	0.09	0.00	0.09	0.01	0.01	0.11	0.02

Panel D. Proportion of Lost and Settled Lawsuits, Conditional on Litigation

	All	All w/o Prod. Liab.	Antitrust	Civil	Contract	Environ.	Intel. Property	Labor	Securities	Personal Injury	Product Liability
Lawyer CEO	-0.427	-0.801***	-0.206	-0.467***	-0.220**	0.618	0.083	-0.268*	-0.342**	-0.698	1.419
	(-1.05)	(-3.19)	(-0.88)	(-2.92)	(-2.40)	(0.35)	(1.16)	(-1.74)	(-2.39)	(-1.51)	(0.99)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9,226	8,121	430	5,101	3,747	355	2,393	1,868	645	2,665	1,616
R-Squared	0.116	0.184	0.136	0.248	0.123	0.118	0.083	0.026	0.155	0.182	0.059

Table 3. Alternative Explanations

This table presents results on the effect of lawyer CEOs and alternative gatekeepers on annual firm litigation and litigation outcomes. The dependent variable is the total number of lawsuits in all regressions. Lawyer CEO is an indicator variable for a CEO with legal expertise. All control variables are defined in Appendix A and are lagged by one year. The t-statistics are computed using standard errors corrected for clustering of observations by firm and are reported in parentheses below the estimates. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A. Influence of General Counsel and Lawyer Directors

	All	All w/o Prod. Liab	Antitrust	Civil	Contract	Environ.	Intel. Property	Labor	Securities	Personal Injury	Product Liability
Lawyer CEO	1.263	-0.870***	-0.046**	-0.273***	-0.153***	-0.020	0.021	-0.057**	-0.088**	-0.254*	2.132
	(0.63)	(-3.27)	(-2.25)	(-2.64)	(-3.22)	(-1.10)	(0.76)	(-2.56)	(-2.47)	(-1.71)	(1.10)
Gen. Counsel	-2.079	0.055	-0.059	-0.264	0.456	0.036	0.159	0.156	0.070	-0.303	-2.331
	(-0.69)	(0.04)	(-0.71)	(-0.39)	(1.09)	(0.40)	(0.81)	(1.06)	(1.58)	(-0.38)	(-1.08)
Lawyer Dir.	1.288	-0.389	-0.015	-0.190	-0.051	-0.055	-0.009	-0.098**	-0.042	0.006	1.741
	(0.86)	(-0.69)	(-0.64)	(-1.09)	(-0.89)	(-1.34)	(-0.34)	(-2.39)	(-1.45)	(0.02)	(1.28)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027
R-squared	0.09	0.18	0.01	0.23	0.14	0.00	0.14	0.04	0.03	0.10	0.03

Panel B. Influence of Other CEO Attributes

	All	All w/o Prod. Liab	Antitrust	Civil	Contract	Environ.	Intel. Property	Labor	Securities	Personal Injury	Product Liability
Lawyer CEO	1.604	-0.734**	-0.046**	-0.267**	-0.136**	-0.047	0.013	-0.095**	-0.060***	-0.130	2.373
	(0.92)	(-2.44)	(-2.19)	(-2.15)	(-2.16)	(-1.41)	(0.44)	(-2.47)	(-3.13)	(-0.92)	(1.43)
PhD	-0.642	0.487	-0.001	0.237	0.059	-0.104	0.013	-0.013	0.027	0.178	-1.038
	(-0.61)	(1.23)	(-0.03)	(1.19)	(0.89)	(-1.11)	(0.40)	(-0.29)	(0.54)	(1.14)	(-1.20)
Science	0.252	0.253	0.015	0.035	0.112***	-0.069	-0.005	-0.000	-0.006	0.098	0.073
	(0.37)	(0.78)	(0.95)	(0.23)	(2.69)	(-1.35)	(-0.26)	(-0.01)	(-0.31)	(0.57)	(0.13)
MBA	-0.420	0.285	-0.037*	0.202	-0.047	0.068	-0.021	-0.000	0.024	0.143	-0.752
	(-0.41)	(0.65)	(-1.77)	(1.40)	(-0.59)	(1.15)	(-0.93)	(-0.00)	(0.97)	(0.51)	(-0.89)
Ivy	-0.567	0.013	-0.015	0.015	-0.008	-0.035	-0.008	0.068	0.047*	-0.095	-0.537
	(-0.84)	(0.04)	(-0.94)	(0.12)	(-0.16)	(-0.93)	(-0.41)	(1.08)	(1.95)	(-0.77)	(-0.91)
Female	0.841	0.728	0.016	0.113	-0.019	0.020	-0.060	0.015	0.005	0.598	0.154
	(0.84)	(0.91)	(0.58)	(0.48)	(-0.30)	(0.83)	(-0.88)	(0.33)	(0.08)	(1.03)	(0.32)
First CEO	-0.194	-0.057	-0.010***	-0.049	-0.014	-0.008	0.002	-0.007	-0.004	0.026	-0.132
	(-1.15)	(-0.75)	(-2.83)	(-1.39)	(-0.84)	(-1.16)	(0.34)	(-0.94)	(-0.79)	(0.78)	(-0.93)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	14,861	14,861	14,861	14,861	14,861	14,861	14,861	14,861	14,861	14,861	14,861
R-squared	0.09	0.18	0.01	0.24	0.15	0.01	0.14	0.04	0.03	0.10	0.03

Panel C. Excluding First Two Years of Tenure

	All	All w/o Prod. Liab	Antitrust	Civil	Contract	Environ.	Intel. Property	Labor	Securities	Personal Injury	Product Liability
Lawyer CEO	0.641	-0.937***	-0.045**	-0.317***	-0.165***	-0.005	0.030	-0.080***	-0.096**	-0.233	1.552
	(0.45)	(-3.46)	(-2.32)	(-3.09)	(-2.81)	(-0.62)	(1.08)	(-3.32)	(-1.97)	(-1.62)	(1.18)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	14,333	14,333	14,333	14,333	14,333	14,333	14,333	14,333	14,333	14,333	14,333
R-squared	0.08	0.17	0.02	0.22	0.13	0.08	0.13	0.03	0.02	0.10	0.03

Table 4. Instrumental Variable Regression

This table reports the results of instrumental variable regressions. Lawyer CEO is an indicator variable for a CEO with legal expertise. In panel A, Lawyer CEO is instrumented by the supply of potential CEO candidates with legal expertise within a 50-mile radius of a firm (Lawyer CEO Pool). In Panel B, the instrumented Lawyer CEO is used to predict firm litigation. Lawyer CEO is an indicator variable for a CEO with legal expertise. The control variables are the same as in the baseline regression reported in panel A of Table 2. The *t*-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A. First Stage 2SLS & *F*-test	
	Lawyer CEO
Lawyer CEO Pool	0.001**
	(2.49)
Controls	Yes
Industry FE	Yes
Year FE	Yes
Observations	18,027
R-squared	0.01
F-Test for Significance of Instrument	11.40***

Panel B. Second Stage 2SLS

	All w/o Prod. Liab.	All	Anti-Trust	Civil	Contract	Environ.	Intellectual Property	Labor	Securities	Personal Injury	Product Liability
Instr. Lawyer CEO	-10.226***	-14.108**	-0.279*	-3.822**	-2.164***	-0.327	-0.257	-1.096**	-0.515	-2.350*	-3.297
	(-2.63)	(-2.16)	(-1.80)	(-2.13)	(-3.08)	(-1.51)	(-0.83)	(-2.21)	(-1.43)	(-1.80)	(-0.79)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027	18,027
R-squared	0.01	0.00	0.00	0.02	0.00	0.00	0.01	0.01	0.00	0.03	0.00

Table 5. The Effect of Lawyer CEO on Market Reaction around Shocks to Litigation Environment

This table reports differences in cumulative abnormal returns (CARs) surrounding the passage of Sarbannes-Oxley Act (2002) between firms with and without CEOs with legal training. Lawyer CEO is an indicator variable for a CEO with legal expertise. The Cumulative Abnormal Returns (CARs) are computed by cumulating market adjusted returns on five key event dates on the timeline of the Act's passage following Karpoff, Lee and Martin (2008). The control variables are the same as in the baseline regression reported in panel A of Table 2. *t*-statistics are reported in parentheses below the estimates. ***, **, * indicate statistically significance at the 1%, 5%, and 10% level, respectively.

Panel A. T-tests

	CARs around Sarbannes-Oxley Passage	
	All	W/o Pres. Bush Signing
Lawyer CEO	0.014**	0.016***
	(2.19)	(2.89)
Non-Lawyer	-0.009***	-0.009***
	(-3.07)	(-3.48)
Diff.	-0.023***	-0.025***
	(-3.24)	(-4.09)

Panel B. OLS Regressions

	CARs around Sarbannes-Oxley Passage	
	All	W/o Pres. Bush Signing
Lawyer CEO	0.013**	0.015***
	(1.98)	(2.66)
Controls	Yes	Yes
Industry FE	Yes	Yes
Observations	939	939
R-squared	0.18	0.22

Table 6. Future Board of Directors Composition

This table presents the results of OLS regressions estimating the relation between the CEOs with legal training and the future proportion of lawyers on the board of directors. Lawyer CEO is an indicator variable for a CEO with legal expertise. All control variables are defined in Appendix A and are lagged by one year. *t*-statistics are computed using standard errors corrected for clustering of observations by firm and are reported in parentheses below the estimates. ***, **, * indicate the coefficient statistical significance at the 1%, 5%, and 10% level, respectively.

	% of Lawyers on Board		
	$t+3$	$t+2$	$t+1$
Lawyer CEO	0.219***	0.223***	0.262***
	(3.98)	(4.75)	(4.81)
% Dir. Lawyers (t - 1)	0.433***	0.489***	0.503***
	(6.88)	(7.19)	(7.94)
Log TA	0.007	0.003	0.011
	(0.83)	(0.29)	(1.36)
ROA	0.016	0.033	-0.030
	(0.19)	(0.48)	(-0.46)
MB	-0.002	-0.002	-0.003
	(-0.98)	(-1.34)	(-1.56)
Leverage	-0.044	-0.014	-0.020
	(-0.68)	(-0.25)	(-0.35)
Return	0.017	0.005	0.002
	(0.68)	(0.28)	(0.10)
Volatility	0.394*	0.090	0.110
	(1.83)	(0.60)	(0.69)
Age	0.000	0.002	-0.002*
	(0.13)	(0.92)	(-1.69)
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	311	341	356
R-squared	0.58	0.58	0.61

Table 7. Market Reaction to Earnings Announcements.

This table reports the effect of CEO legal training on cumulative abnormal returns (CAR (-1,0) and SCAR(-1,0)) around earnings announcements. The returns are computed using the market model. Lawyer CEO is an indicator variable for a CEO with legal expertise. The control variables are defined in Appendix A and Log TA, ROA, MB and Leverage are lagged one year. *t*-statistics are reported in parentheses below the estimates. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	CAR (-1,0)	SCAR (-1,0)
Lawyer CEO	-0.002**	-0.063**
	(-2.31)	(-2.29)
Log TA	-0.001**	-0.010
	(-2.48)	(-1.54)
ROA	-0.002	0.013
	(-0.62)	(0.24)
MB	-0.000**	-0.005**
	(-2.08)	(-2.57)
Leverage	0.004**	0.110**
	(2.41)	(2.03)
Return	-0.008***	-0.209***
	(-10.70)	(-12.85)
Volatility	0.021***	0.147
	(2.71)	(1.30)
Age	0.000	0.000
	(0.96)	(0.26)
Tenure	-0.000	-0.001
	(-1.61)	(-1.18)
SUE	0.003***	0.114***
	(27.91)	(30.10)
Q4	0.001	0.043**
	(0.95)	(2.48)
Negative earnings	-0.001	0.046*
	(-0.66)	(1.67)
Turnover	0.000	0.005
	(1.03)	(0.99)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Observations	69,858	69,858
R-squared	0.043	0.051

Table 8. Earnings Management

This table presents the results of OLS regressions estimating the relation between the CEOs with legal training and earnings management. Earnings management is measured by absolute discretionary actuals and three components of real earnings management (REM): Cash Flow, Discretionary Expenses and Production Costs. Lawyer CEO is an indicator variable for a CEO with legal expertise. REM Proxy is the aggregation of all three measures. All control variables are defined in Appendix A and are lagged by one year. *t*-statistics are computed using standard errors corrected for clustering of observations by firm and are reported in parentheses below the estimates. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	Earnings Management				
	Discretionary Accruals	Cash Flow REM	Discretionary Expense REM	Product Costs REM	REM Proxy
Lawyer CEO	0.002	0.004	-0.008	-0.006*	-0.008
	(1.10)	(1.01)	(-0.68)	(-1.65)	(-0.94)
High Lit. Ind.	-0.000	0.002	-0.010	0.010	0.020
	(-0.10)	(0.54)	(-0.56)	(1.43)	(0.91)
Lawyer * High Lit. Ind.	-0.012*	0.013	0.113**	-0.043*	-0.149**
	(-1.74)	(1.50)	(2.36)	(-1.96)	(-2.39)
Log Incentive	-0.001**	0.002**	0.005***	-0.000	-0.005***
	(-2.25)	(2.22)	(2.60)	(-0.81)	(-2.86)
MB	-0.002***	-0.005***	0.004	-0.002**	-0.000
	(-3.24)	(-4.17)	(1.39)	(-2.20)	(-0.12)
Log TA	-0.001**	0.004***	0.008***	-0.001***	-0.011***
	(-2.49)	(6.53)	(6.23)	(-4.42)	(-7.50)
ROA	0.039***	0.100***	-0.008	-0.013	-0.107***
	(4.91)	(6.37)	(-0.45)	(-1.40)	(-4.53)
Leverage	0.007	-0.041***	-0.104***	0.024***	0.113***
	(1.56)	(-4.59)	(-4.34)	(3.27)	(5.80)
Age	0.001***	-0.000	-0.002***	0.001***	0.002***
	(4.64)	(-0.12)	(-4.33)	(3.02)	(3.98)
Tenure	-0.000	-0.000	0.001*	-0.000	-0.001
	(-0.56)	(-0.51)	(1.88)	(-1.29)	(-1.31)
Year FE	Yes	Yes	Yes	Yes	Yes
Observations	17,109	17,104	10,940	17,405	17,671
R-squared	0.02	0.03	0.06	0.02	0.06

Table 9. Firm Value

This table reports the results of OLS regressions estimating the relation between CEOs with legal training and Tobin's Q. Lawyer CEO is an indicator variable for a CEO with legal expertise. All control variables are defined in Appendix A and are lagged by one year. *t*-statistics are computed using standard errors corrected for clustering of observations by firm and are reported in parentheses below the estimates. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	Tobin's Q		
Lawyer CEO	-0.217***	-0.241***	-0.214***
	(-2.91)	(-4.11)	(-2.93)
High Lit. Ind.	0.322***		
	(3.21)		
Lawyer CEO* High Lit. Ind.	0.802**		
	(2.48)		
High Growth Ind.		0.527***	
		(6.81)	
Lawyer CEO*High Growth Ind.		0.887**	
		(2.48)	
Pharma			0.678***
			(4.68)
Lawyer CEO* Pharma			0.942***
			(2.58)
Log TA	-0.220***	-0.205***	-0.215***
	(-7.14)	(-6.68)	(-6.96)
ROA	0.784	0.784	0.791
	(1.35)	(1.35)	(1.36)
Leverage	-0.499	-0.411	-0.503
	(-1.19)	(-0.99)	(-1.20)
Volatility	1.384***	1.237***	1.428***
	(3.20)	(2.95)	(3.27)
Age	-0.018***	-0.015***	-0.018***
	(-5.14)	(-4.38)	(-5.16)
Tenure	0.004	0.005	0.005
	(1.20)	(1.45)	(1.52)
Year FE	Yes	Yes	Yes
Observations	18,013	18,013	18,013
R-squared	0.12	0.14	0.13

Table 10. Firm Investment Policies

This table reports the results of OLS regressions estimating the relation between CEOs with legal training and corporate investment in tangible (INV) and intangible (R&D) assets. Lawyer CEO is an indicator variable for a CEO with legal expertise. All control variables are defined in Appendix A and are lagged by one year. *t*-statistics are computed using standard errors corrected for clustering of observations by firm and are reported in parentheses below the estimates. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	INV	R&D
Lawyer CEO	-0.015**	-0.027***
	(-2.24)	(-2.91)
Log TA	-0.021***	-0.023***
	(-12.39)	(-2.89)
ROA	0.045**	-0.481***
	(2.40)	(-3.28)
MB	0.004***	0.004**
	(8.54)	(2.47)
Leverage	-0.101***	-0.051
	(-5.88)	(-0.71)
Return	0.036***	0.003
	(12.12)	(0.42)
Volatility	0.060**	0.208***
	(2.11)	(2.84)
Age	-0.002***	0.000
	(-5.02)	(0.16)
Tenure	-0.000	-0.000
	(-0.12)	(-0.37)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Observations	16,292	17,463
R-squared	0.323	0.148

Table 11. Return Volatility

This table reports the results of OLS regressions estimating the relation between CEOs with legal training and total (TVOL) and idiosyncratic (IVOL) volatility. Lawyer CEO is an indicator variable for a CEO with legal expertise. All control variables are defined in Appendix A and are lagged by one year. *t*-statistics are computed using standard errors corrected for clustering of observations by firm and are reported in parentheses below the estimates. ***, **, * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

	TVOL	IVOL
Lawyer CEO	-0.051***	-0.042**
	(-2.62)	(-2.23)
Log TA	-0.082***	-0.096***
	(-12.80)	(-13.75)
ROA	-0.624***	-0.666***
	(-5.63)	(-6.28)
MB	0.007***	0.005***
	(3.70)	(2.74)
Leverage	0.194***	0.218***
	(3.29)	(3.80)
Return	-0.012	-0.076***
	(-0.57)	(-4.03)
Age	-0.005***	-0.005***
	(-4.65)	(-4.81)
Tenure	0.001	0.001
	(1.37)	(1.30)
$TVOL_{-1}$	0.670***	
	(51.47)	
$IVOL_{-1}$		0.645***
		(42.10)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Observations	17,227	17,227
R-squared	0.702	0.665