# The governance of director compensation☆

Lily Fang [a], Sterling Huang [b,*]

[a] INSEAD, France [b] Singapore Management University, Singapore

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**Abstract**

The average total compensation of directors in U.S.-listed companies was $342,030 in 2020, 5.06 times the median household income. Directors set their own pay, giving rise to potential self-dealing. We argue and document that in the presence of self-dealing, external mechanisms such as legal standards act as effective means of governance. Following a landmark Delaware court ruling that subjected director pay to a more stringent legal standard, Delaware-incorporated firms reduced director compensation relative to non-Delaware firms and experienced positive and non-transient stock price reactions. Our results indicate that proper governance of director compensation enhances firm value.

**Keywords**: Determinants, Director compensation, Natural experiment, Seinfeld v. Slager, Self-dealing

## 1. Introduction

In 2020, directors of U.S.-listed firms received an average total compensation of $342,030, approximately 5.06 times the median household income. Considering that outside directorship is not a full-time role and many directors serve on multiple boards, such compensation levels are high both in relative and absolute terms. Despite an extensive literature on CEO and executive compensation spurred by public concerns about corporate governance and excess compensation, director compensation has received limited research attention.1 One reason could be that for decades before the 1990s, director compensation showed little variation over time and across firms, predominantly comprising a fixed retainer with additional fees allocated for specific roles on board committees (Yermack, 2004). The staid nature of director compensation prompted Fama and Jensen (1983) to suggest that the primary incentive for outside directors stemmed from their intent to cultivate a reputation as judicious decision makers. They further argued that such reputational signals would bear credibility when "the direct payments to outside directors are small, but there is a substantial devaluation of human capital when internal decision control breaks down…." (p. 315).

However, director compensation has undergone significant shifts over the past three decades. Notably, the average total compensation for directors at U.S.-listed entities surged from $133,930 in 2000 to

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* Corresponding author. E-mail address: shuang@smu.edu.sg (S. Huang).

[1] We provide a comprehensive literature review on director compensation in the Internet Appendix. Briefly, much of this empirical research focuses on the determinants of director compensation using compensation data on a cohort of large U.S. firms from the late 1990s to early 2000s (e.g., Bebchuk, Grinstein, and Peyer, 2010; Ryan and Wiggins, 2004; Farrell, Friesen, and Hersch, 2008; Brick, Palmon, and Wald, 2006; Linn and Park, 2005; Chen, Chien, and Huang, 2023; Yermack, 2004; Adams and Ferreira, 2008). Another stream of literature examines the relationship between director compensation and corporate decisions and finds that director compensation is associated with firm performance (Brick, Palmon, and Wald, 2006), corporate disclosure quality (Sengupta and Zhang, 2015; Archambeault, Dezoort, and Hermanson, 2008), related party transactions (Hope, Lu, and Saiy, 2019), and audit quality (Engel, Hayes, and Wang, 2010).

$342,030 in 2020, surpassing both inflation rates and the growth in CEO compensation. Furthermore, equity-linked compensation (options and restricted stocks) has emerged as the dominant component of the compensation package, accounting for about 66 % in our sample. This shift suggests that contemporary director compensation packages offer tangible and substantial financial incentives, challenging Fama and Jensen's (1983) propositions based on compensation practices of an earlier era. Given the pivotal role boards of directors play in corporate governance, the implications of their compensation structure extend to broader corporate governance considerations. In this paper, we provide stylized facts about director compensation in the last twenty years and study the governance of director compensation.

From a governance perspective, the setting of directors' compensation is unique. Per Section 8.11 of the Model Business Corporation Act, the board of directors holds the authority to determine their own compensation unless otherwise specified in the articles of incorporation. This stipulation potentially paves the way for "director self-dealing," where directors might award substantial compensation to themselves, irrespective of company performance. Equally noteworthy is that the same board sets the compensation structure for CEOs and other executives. Thus, apprehensions associated with excessive CEO or executive compensation should inherently extend to director compensation.

Concerns about director self-dealing have led to increased lawsuits filed against company boards and alleging breaches of fiduciary duties in connection with excessive director compensation. For example, in January 2016, Facebook settled the shareholder derivative lawsuit *Espinoza v. Zuckerberg* in which plaintiffs challenged the decision of Facebook's board of directors in 2013 to approve generous compensation for its outside directors. The plaintiffs asserted claims against the defendant directors, Zuckerberg et al., for breach of their fiduciary duties, unjust enrichment, and waste of corporate assets. In *Stein v. Blankfein* (Delaware Chancery Court No. 2017–0354), Goldman Sachs Group Inc. agreed to cut pay for some board members to settle a shareholder lawsuit alleging the bank's compensation plan was too generous. Academic literature also has documented other manifestations of director self-dealing. For example, Bebchuk et al. (2010) document systematic, advantageous backdating of option grants to directors and executives in U.S.-listed firms.

In this paper, we contribute to the literature on director compensation by first providing a comprehensive and updated set of stylized facts about director compensation practices in the last twenty years among U.S.-listed firms. We then argue and provide evidence that in situations involving self-dealing, the legal framework is an effective governance mechanism to guard against its ill effects.

We document two main facts. First, the current contractual features of director compensation are generally consistent with the predictions of contract theory. Compensation contracts for directors contain a significant equity portion that is performance-sensitive and aligns directors' incentives with that of the company. During our sample period, equity compensation – comprising options and share grants – makes up 66 % of directors' total compensation on average, with a notable shift from options to restricted stock units. Specifically, by 2020, option compensation is just 6 % of the equity component, down from 62 % in 2000. Meanwhile, directors' cash salaries rise by 217 % from $29,440 in 2000 to $93,370 in 2020, with significant growth observed between 2003 and 2007, a period marked by increased regulatory demands and heightened compliance costs (Adams and Ferreira, 2008). Directors' total compensation jumps 155 % from $133,930 in 2000 to $342,030 in 2020.

Although these contractual features generally align with theoretical predictions, both previous literature (e.g., Bebchuk et al., 2010) and the noted high compensation levels indicate potential director self-dealing in compensation arrangements. We argue and document that in the context of self-dealing, legal standards function as an effective governance mechanism for director remuneration. Generally, two legal standards apply to decisions made by corporate directors in the event of shareholder litigation: the "business judgment" standard and the "entire fairness" standard. The business judgment standard is more director-friendly and shelters director decisions from ex-post litigation risk based on the presumption that they have exercised reasonable business judgment. However, safe harbor granted by the business judgment standard does not automatically extend to self-dealing transactions, such as director compensation. Board decisions regarding directors' own compensation inherently involve self-dealing because a director who receives a financial benefit from the transaction stands on both sides of the transaction (i.e., setting and receiving the compensation). As a result, board members could bear the burden of proving that the compensation they pay themselves is "entirely fair" to the company. This entire fairness standard imposes a tougher burden of proof in that directors must establish fair dealing and fair price when transactions are challenged in court.

Before 2012, director compensation was generally exempt from the entire fairness standard *as long as* the compensation plan had been ratified by shareholder vote, a legal argument known as the "shareholder ratification defense." However, in a surprise landmark ruling in Seinfeld v. Slager (2012), the Delaware Court of Chancery defied legal tradition by ruling that the shareholder-approved director compensation plan of the plaintiff (Republic Service Inc.) was subject to the entire fairness standard due to the absence of meaningful compensation limits imposed in stockholder-approved plans.

Exploiting this ruling and using a difference-in-differences framework, we find that relative to firms incorporated elsewhere, Delaware-incorporated firms significantly reduce compensation to their directors after the ruling. Directors of Delaware-incorporated firms that previously awarded higher-than-average compensation before the ruling exhibit larger-than-average reductions in compensation after the ruling. These changes are accompanied by positive, non-transient stock market reactions.

Although the ruling in Seinfeld v. Slager (2012) clarifies the necessary condition of meaningful compensation limits for the application of the business judgment standard, it does not define meaningful limits. This definition became the central issue in a subsequent 2017 case, *In Re Investors Bancorp Inc Stockholder Litigation*[2] (henceforth referred to as the *Investors Bancorp* case). In the *Investors Bancorp* case, the Delaware supreme court Delaware Supreme Court ruled that shareholder ratification is a permissible defense in only two scenarios: (1) when stockholders approve specific awards to each named director; or (2) when the equity plan is a self-executing formula plan, such that the directors have no discretion in granting the awards to themselves. Examining the cumulative effect of *Seinfeld v Slager* and *Investors Bancorp* rulings, we find that the two cases cumulatively result in reduced director compensation at Delaware-based firms relative to other U.S. firms. Collectively, our evidence indicates that legal frameworks function as governance mechanisms for self-dealing transactions, such as director compensation, and that proper governance of director compensation is value-enhancing.

Our study contributes to the literature on incentive-compensation and corporate governance through multiple avenues. First, we offer new empirical and stylized facts concerning director compensation over the past two decades. Our data enrich and extend previous research that largely relied on samples from the late 1990s and early 2000s and focused on large corporations (Ryan and Wiggins, 2004; Linn and Park, 2005; Brick et al., 2006).

Second, our findings enhance the understanding of the governance of director compensation. Given the substantial increase in external director remuneration and directors' unique authority to set their own pay, understanding governance mechanisms becomes critical. Our empirical evidence demonstrates a significant attenuation in director compensation for Delaware-incorporated firms vis-à-vis non-Delaware entities, attributable to a legal paradigm shift from a director-centric

[2] In Re Investors Bancorp Inc Stockholder Litigation No 169, 2017 in the Supreme Court of the State of Delaware CA No. 12327-VCS.

to a shareholder-centric standard. Our study extends prior work on managerial self-dealing (e.g., Bebchuk et al., 2010; Johnson et al., 2000) by highlighting the pivotal role of legal frameworks in governing self-dealing activities such as director compensation.

Last, our study relates to the ongoing discourse on the valuation premium commanded by Delaware-incorporated firms. Prior literature attests to the importance of Delaware's sophisticated legal corpus in proffering clarity and predictability, thus rendering Delaware incorporation appealing to investors and contributing to a valuation premium (Winter, 1977; Cohen and Wang, 2013, 2017). However, Cary (1974) posits that state competition may engender excessively management-friendly rules, potentially diluting shareholder value. Several empirical works link reincorporation in Delaware to abnormal returns (Romano, 1985; Heron and Lewellen, 1998). Daines (2001) correlates Delaware incorporation with higher Tobin's Q. Our findings complement this body of research by illuminating how shifts in Delaware's legal oversight of self-dealing transactions can have a value-enhancing impact on corporate governance, specifically in director compensation.

The rest of the paper is organized as follows. Section 2 discusses our data sources and variable construction. Section 3 presents stylized facts about director compensation. Section 4 presents our main empirical results around the *Seinfeld v. Slager* ruling. Section 5 conducts additional analyses, and Section 6 concludes.

## 2. Sample selection and variable measurement

Our sample consists of listed non-financial firms in the U.S. from 2000 to 2020. We obtain directors' compensation data from Boardex, financial and share price information from Compustat and CRSP, and institutional ownership information from Thomson Reuters. Though boards include both inside (executive) and outside (non-executive) directors, our paper specifically focuses on the compensation of outside directors to differentiate it from the existing literature on executive compensation.[3] We exclude firms from financial industries (SIC 6000–6999) and firms with missing or changing state of incorporation. Our final sample comprises 91,326 observations associated with 11,265 unique outside directors and 11,179 unique firms.

To understand the determinants of director compensation, we construct several firm- and director-level variables, many of which prior research identifies as relevant to executives' compensation (e.g., Core et al., 1999, 2008). Firm-level measures include *Firm Size, ROA, Stock Return, Cash, Intangibles,* and Institutional Ownership (*IO*). Director-level variables include directors' membership on various board committees. For example, *Audit Cmmt, Nom Cmmt, Comp Cmmt, Risk Cmmt,* and *Tech Cmmt* are indicator variables for a director's membership on audit, nomination, compensation, risk, and technology committees, respectively. Consistent with prior literature (e.g., Larcker et al., 2013; Hallock, 1997), we measure a director's external network using the number of external board memberships a director holds during the year (*Num Pub Board*). Additional director-level attributes pertain to qualifications, experience, and personal traits. *MBA Degree* is an indicator that equals one if a director holds an MBA degree. *Tenure* indicates the number of years a director sits on a board.[4] *Industry Exp* measures the number of years a director sits on an external board operating in the same industry.

**Table 1**
Descriptive statistics.

| **Panel A Director characteristics** | | | | | | |
|---|---|---|---|---|---|---|
| | **N** | **Mean** | **Median** | **Std** | **P25** | **P75** |
| *Num Pub Board* | 91,326 | 2.22 | 2.00 | 1.26 | 1.00 | 3.00 |
| *Industry Exp* | 91,326 | 6.63 | 5.00 | 5.81 | 2.00 | 10.00 |
| *Tenure* | 91,326 | 7.90 | 6.10 | 6.73 | 2.80 | 11.10 |
| *Audit Cmmt* | 91,326 | 0.50 | 0.00 | 0.50 | 0.00 | 1.00 |
| *Comp Cmmt* | 91,326 | 0.46 | 0.00 | 0.50 | 0.00 | 1.00 |
| *Nom Cmmt* | 91,326 | 0.47 | 0.00 | 0.50 | 0.00 | 1.00 |
| *Risk Cmmt* | 91,326 | 0.04 | 0.00 | 0.21 | 0.00 | 0.00 |
| *Tech Cmmt* | 91,326 | 0.03 | 0.00 | 0.18 | 0.00 | 0.00 |
| *Female* | 91,326 | 0.18 | 0.00 | 0.38 | 0.00 | 0.00 |
| *International* | 91,326 | 0.05 | 0.00 | 0.21 | 0.00 | 0.00 |
| *MBA Degree* | 91,326 | 0.35 | 0.00 | 0.48 | 0.00 | 1.00 |
| **Panel B Firm Characteristics** | | | | | | |
| | **N** | **Mean** | **Median** | **Std** | **P25** | **P75** |
| *Firm Size (Raw)* | 11,179 | 18,822 | 5768 | 48,026 | 1792 | 17,067 |
| *Cash* | 11,179 | 0.150 | 0.087 | 0.165 | 0.029 | 0.213 |
| *Intangibles* | 11,179 | 0.149 | 0.104 | 0.153 | 0.007 | 0.249 |
| *IO* | 11,179 | 0.634 | 0.746 | 0.323 | 0.527 | 0.868 |
| *StockReturn* | 11,179 | 0.078 | 0.114 | 0.394 | −0.096 | 0.297 |
| *ROA* | 11,179 | 0.155 | 0.148 | 0.108 | 0.096 | 0.211 |

The sample period is from 2000 to 2020. All variables are defined in Appendix A. Panel A provides descriptive statistics for director characteristics at director-firm-year level, and Panel B reports those for firm characteristics at firm-year level.

*International* is a binary variable equal to one if a director is non-American.[5] Finally, *Female* is an indicator that takes the value of one if a director is female and zero otherwise.[6]

Panel A of Table 1 reports descriptive statistics for various director characteristics. Directors in our sample hold 2.22 board seats on average at listed firms. Their average tenure is 7.90 years, 6.63 of which are in the relevant industry. Respectively 50 %, 46 %, and 47 % of directors sit on audit, compensation, and nomination committees; 35 % hold an MBA degree; and 18 % are female. Panel B shows summary statistics for various firm characteristics at firm-year level. The average institutional ownership is 64 % among our firms. The average total firm assets are about 18 billion USD, which is larger than the average of the Compustat universe (excluding financial firms) of 12 billion USD.

## 3. Director compensation: stylized facts and prior literature's evidence of director self-dealing

### 3.1. Stylized facts

Directors' compensation packages comprise three main components: 1) salaries and bonuses (measured by the variable *SalBon*), which we refer to as the cash component of the compensation; 2) option awards (measured by the variable *Option*); and 3) stock awards (measured by the variable *Stock*). Both option and stock awards are parts of equity-linked compensation (measured by the variable *EquityComp*). The variable *TotalComp* is the value of director's total annual compensation.[7]

Table 2 Panel A tabulates the evolution of director compensation from 2000 to 2020, showing both the total compensation and individual

[3] Unless stated otherwise, we use director compensation to refer to compensation of outside directors.

[4] Huang and Hilary (2018) study the relationship between board tenure and firm performance and find that board tenure exhibits an inverted U-shaped relationship with firm performance, executive compensation, and financial reporting quality. Our inference remains the same when we additionally control for squared *Tenure*.

[5] Masulis, Wang, and Xie (2012) find that foreign independent directors affect firm performance and acquisition performance.

[6] Prior studies show that female board representation affects firm performance, investment, and corporate decisions (Chen, Crossland, and Huang, 2016; Adams and Ferreira, 2009).

[7] In Table 2, we report the raw figures for the compensation measures; in subsequent regression analyses, we use the natural logs of the compensation amounts.

**Table 2**
Director compensation trend and components.

| **Panel A Director compensation-time trend** | | | | | |
|---|---|---|---|---|---|
| **Year** | ***TotalComp ('000)*** | ***SalBon ('000)*** | ***EquityComp ('000)*** | ***Option ('000)*** | ***Stock ('000)*** |
| 2000 | 133.93 | 29.44 | 95.08 | 58.75 | 23.78 |
| 2001 | 125.34 | 29.03 | 86.39 | 54.60 | 22.55 |
| 2002 | 105.49 | 30.36 | 67.98 | 41.59 | 21.49 |
| 2003 | 122.87 | 32.47 | 81.41 | 49.40 | 27.00 |
| 2004 | 160.12 | 36.16 | 112.57 | 66.25 | 38.47 |
| 2005 | 192.79 | 40.31 | 136.97 | 76.29 | 51.70 |
| 2006 | 213.38 | 56.30 | 143.97 | 59.32 | 76.44 |
| 2007 | 215.78 | 65.91 | 140.12 | 55.63 | 81.02 |
| 2008 | 208.47 | 69.99 | 128.76 | 50.73 | 74.20 |
| 2009 | 256.90 | 73.87 | 172.87 | 59.46 | 109.17 |
| 2010 | 266.09 | 80.08 | 174.70 | 48.58 | 121.70 |
| 2011 | 263.10 | 83.47 | 167.84 | 39.65 | 121.72 |
| 2012 | 272.11 | 86.65 | 175.76 | 37.18 | 135.11 |
| 2013 | 301.73 | 88.94 | 202.77 | 36.81 | 158.73 |
| 2014 | 296.54 | 92.53 | 191.90 | 30.01 | 156.09 |
| 2015 | 287.17 | 94.15 | 181.63 | 24.01 | 152.65 |
| 2016 | 306.73 | 93.31 | 202.81 | 22.68 | 175.99 |
| 2017 | 322.46 | 94.32 | 216.23 | 20.84 | 190.98 |
| 2018 | 296.11 | 95.26 | 189.46 | 14.23 | 172.07 |
| 2019 | 320.58 | 97.28 | 212.41 | 15.22 | 192.58 |
| 2020 | 342.03 | 93.37 | 237.97 | 15.91 | 213.59 |
| **Panel B Director compensation-by industry** | | | | | |
| | ***TotalComp ('000)*** | ***SalBon ('000)*** | ***EquityComp ('000)*** | ***Option ('000)*** | ***Stock ('000)*** |
| Consumer Nondurables | 205.50 | 64.75 | 131.72 | 31.65 | 96.50 |
| Consumer Durables | 189.99 | 70.78 | 103.95 | 13.68 | 89.03 |
| Manufacturing | 203.94 | 68.94 | 124.39 | 24.82 | 95.77 |
| Energy | 250.35 | 80.67 | 155.95 | 20.46 | 130.68 |
| Business Equipment | 266.22 | 60.05 | 195.58 | 74.05 | 112.87 |
| Telecommunication | 237.17 | 76.07 | 150.01 | 42.60 | 98.64 |
| Wholesale, Retail and Service | 199.22 | 56.94 | 132.68 | 33.12 | 94.74 |
| Healthcare | 290.00 | 63.68 | 211.86 | 99.44 | 99.20 |
| Utilities | 180.15 | 70.08 | 102.05 | 5.36 | 93.29 |
| Other | 209.22 | 63.87 | 134.91 | 38.79 | 91.50 |

The sample period is from 2000 to 2020. Panel A tabulates director compensation by year. Panel B tabulates director compensation by the Fama-French ten industries. Compensation figures are in units of 1000 dollars. All variables are defined in Appendix A.

components.[8] The average total compensation of independent directors increased by 155 % from $133,930 in 2000 to $342,030 in 2020. This rate of increase far exceeds the 76 % increase in CEO compensation during the same period.

Equity compensation is a dominant component of director compensation in our sample, accounting for 61 % to 71 % (average = 66 %) of total compensation. It thus represents the most significant financial incentive for directors. A high percentage of equity-linked compensation is consistent with both existing theory (e.g., Holmstrom and Milgrom, 1987) and empirical evidence (e.g., Ryan and Wiggins, 2004)[9] about optimal contracts, which maintain that a significant equity component is important in aligning director incentives with shareholder interests. It also means that any governance challenges associated with director compensation will likely center on equity awards.

Equity has not always represented such a material incentive in directors' compensation contracts. Yermack (2004, p. 2286) reports that "director compensation for decades has followed an almost identical structure across firms: a fixed annual retainer (and smaller additional fees for things such as meeting attendance)." In his sample of 734 Fortune 500 directors from 1991 to 1996, he finds that the average annual retainer paid is $69,453, 62 % of which consists of equity (with options accounting for 40 % and restricted stock 22 %) and the remaining 38 % being cash. Our data indicate that in addition to the increase in equity's weighting in total compensation, the sheer dollar value of these awards also has dramatically increased due to the rising equity market. Large financial incentives are thus at stake for directors due to equity compensation.[10]

Equity compensation also has experienced a dramatic shift away from options toward restricted stock units. Option compensation declined from an average of $58,750 in 2000, or 61 % of the equity component, to an average of $15,910 in 2020, a mere 6.7 % of the equity component. In contrast, Yermack (2004) reports that in his sample from 1991 to 1996, options accounted for two-thirds of the equity component. This significant decline could be due to many boards' realization that options may give rise to excessive risk-taking incentives (Armstrong and Vashishtha, 2012).

Along with the decrease in options, a dramatic increase in the cash component of director compensation has occurred. Panel A in Table 2 shows that the average salary for directors grew from $29,440 in 2000 to $93,370 in 2020, a remarkable surge of 217 % that outpaced the 155 % rise in directors' equity pay during the same period. Most of this salary growth occurred between 2003 and 2007, during which the average *annual* increase stood at approximately 20 %. Some argue that large salary increases are related to heightened workload and increased compliance costs for firms (Adams and Ferreira, 2008). However, the substantial growth in the salary component appears to be unique to

[8] For comparison, we tabulate CEO compensation over the same period in the Internet Appendix.

[9] This paper finds that firms with more outside (inside) directors award more (less) equity-based compensation, indicating a relation between board independence and the structure of director compensation.

[10] Farrell, Friesen, and Hersch (2008) analyze data from 1998 to 2004 and note a trend towards fixed-value equity compensation, moving away from cash-only or fixed-number equity compensation. However, although the fixed value is determined at the time of equity grants, subsequent bull markets significantly increase grant value.

**Table 3**
Firms and director characteristics associated with director compensation.

| | (1) *TotalComp* | (2) *SalBon* | (3) *EquityComp* | (4) *Option* | (5) *Stock* |
|---|---|---|---|---|---|
| *Firm Size* | 0.111 | 0.045 | 0.196 | 0.039 | 0.357 |
| | (10.69)*** | (2.50)** | (9.12)*** | (1.52) | (18.41)*** |
| *Cash* | 0.177 | −0.216 | 0.586 | 0.808 | −0.014 |
| | (2.97)*** | (−2.66)*** | (4.75)*** | (5.39)*** | (−0.13) |
| *Intangibles* | −0.162 | −0.184 | −0.200 | 0.280 | −0.347 |
| | (−2.76)*** | (−2.05)** | (−1.58) | (1.91)* | (−3.02)*** |
| *IO* | 0.066 | 0.281 | 0.026 | 0.149 | −0.093 |
| | (3.18)*** | (6.37)*** | (0.53) | (2.73)*** | (−1.87)* |
| *Stock Return* | 0.207 | −0.024 | 0.322 | 0.035 | 0.303 |
| | (24.18)*** | (−2.22)** | (18.95)*** | (1.96)* | (20.45)*** |
| *ROA* | 0.566 | 0.419 | 0.669 | 0.394 | 0.501 |
| | (9.39)*** | (5.50)*** | (5.89)*** | (2.72)*** | (4.78)*** |
| *Num Pub Board* | 0.015 | 0.022 | 0.018 | −0.002 | 0.020 |
| | (6.15)*** | (3.72)*** | (3.44)*** | (−0.30) | (3.71)*** |
| *Industry Exp* | 0.004 | 0.006 | 0.009 | 0.001 | 0.009 |
| | (4.16)*** | (3.19)*** | (5.13)*** | (0.60) | (5.08)*** |
| *Tenure* | 0.010 | 0.016 | −0.002 | −0.000 | −0.001 |
| | (12.61)*** | (10.37)*** | (−1.02) | (−0.18) | (−0.48) |
| *Audit Cmmt* | 0.015 | 0.099 | 0.047 | 0.001 | 0.030 |
| | (2.18)** | (6.92)*** | (3.35)*** | (0.08) | (2.21)** |
| *Comp Cmmt* | 0.011 | 0.012 | 0.074 | 0.002 | 0.060 |
| | (1.71)* | (0.85) | (5.25)*** | (0.16) | (4.38)*** |
| *Nom Cmmt* | 0.013 | 0.066 | 0.040 | −0.001 | 0.034 |
| | (2.04)** | (4.48)*** | (2.94)*** | (−0.10) | (2.43)** |
| *Risk Cmmt* | −0.009 | 0.039 | −0.009 | −0.016 | −0.056 |
| | (−0.67) | (0.95) | (−0.28) | (−0.47) | (−1.59) |
| *Tech Cmmt* | 0.028 | 0.046 | 0.103 | 0.013 | 0.053 |
| | (1.43) | (0.97) | (2.66)*** | (0.25) | (1.22) |
| *Female* | −0.045 | 0.040 | −0.035 | −0.058 | 0.003 |
| | (−6.96)*** | (1.97)** | (−2.29)** | (−3.62)*** | (0.21) |
| *International* | −0.010 | −0.030 | −0.000 | −0.010 | 0.032 |
| | (−0.70) | (−0.76) | (−0.02) | (−0.31) | (1.01) |
| *MBA Degree* | 0.017 | −0.010 | 0.046 | 0.028 | 0.020 |
| | (2.94)*** | (−0.59) | (3.66)*** | (2.01)** | (1.55) |
| Observations | 91,326 | 91,326 | 91,326 | 91,326 | 91,326 |
| R-squared | 0.542 | 0.328 | 0.458 | 0.424 | 0.621 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |

The sample period is from 2000 to 2020. We exclude firms from financial industries (SIC 6000–6999). All variables are defined in Appendix A. Intercepts are included but unreported. *t*-statistics are presented below the coefficients in parentheses. Standard errors are corrected for heteroscedasticity and are clustered by directors. ***, **, and * denote statistical significance (two-sided) at the 1 %, 5 %, and 10 % levels, respectively.

director compensation and is not seen in CEO salary compensation, which declined 15 % between 2000 and 2020. These divergent salary trajectories are the most notable differences between director and CEO compensation.

Panel B tabulates directors' compensation by the Fama-French ten industries and shows that director compensation varies significantly across industries. Directors from the healthcare industry receive the highest total compensation of about $290,000 per year. Directors from consumer durables and utility industries are less well paid, fetching an average compensation of $189,990 and $180,150, respectively. Such cross-sectional variation also contrasts with earlier evidence (e.g., Yermack, 2004).

Table 3 examines firm and director characteristics associated with director compensation in a multivariate setting. We estimate the following panel regression:

$$DirComp_{ijt} = \alpha_0 + \beta' DirectorChar_{it} + \gamma' FirmChar_{jt} + FirmFE_i + YearFE_t + \epsilon_{ijt} \quad (1)$$

where *i*, *j*, and *t* index firms, directors, and time, respectively. *DirectorChar* is a vector of variables measuring director characteristics (e.g., committee membership, experience, education, gender). *FirmChar* is a vector of variables associated with firm characteristics (e.g., size, profitability, governance). *FirmFE* and *YearFE* are firm and year fixed effects, respectively.

Column (1) of Table 3 reports the baseline regression results for the total annual compensation for outside directors. Compensation varies significantly across firms and individuals. At the firm level, larger, more profitable firms and firms with higher past-12-month returns, higher cash holdings, higher institutional ownership, and less intangible assets are associated with higher total compensations to directors, relative to other firms. At the individual level, we find that director total compensation is related to workload. Directors who serve on committees, especially the audit, compensation, and nomination committees, are paid more. Director experience and qualifications are also associated with higher pay. Directors with MBA degrees, more industry experience, longer tenure at the firm, and multiple board seats are paid more. International directors are not paid differentially, but female directors are paid less than their male peers, even controlling for other characteristics, as indicated by a gender pay gap of 4.5 % or $10,735 among directors during our sample period.

### 3.2. Prior literature's evidence of self-dealing

Directors owe a fiduciary duty to the firm to act in its best interest, devoid of conflicts between their personal and the company's commercial interests. However, inherent conflicts emerge when directors partake in transactions in which they are both the decision maker and stand to receive a personal financial benefit from that decision (Jain,

2016), giving rise to self-dealing. Board decisions concerning directorial compensation epitomize this form of self-dealing, given the inherent conflict of interest in the remuneration-setting process.

Prior studies have documented self-dealing in director compensation. One seminal investigation by Bebchuk et al. (2010) examines the intricacies of options backdating among both CEOs and directors. Their findings expose the prevalence of this practice at US-listed firms and suggest that it is not due to oversight or miscalculation but rather deliberate decisions to circumvent standard oversight mechanisms. Similarly, Brick et al. (2006) find that director compensation is positively associated with CEO compensation and negatively associated with firm performance. Their findings suggest that directors are susceptible to cronyism, thereby providing another channel through which self-dealing can manifest. Ryan and Wiggins (2004) demonstrate that governance structures characterized by weaker boards and powerful executives facilitate suboptimal director compensation policies.[11]

## 4. The governance of director compensation

### 4.1. *Seinfeld v. Slager (2012) ruling*

Shareholder litigation falls under one of two legal standards: the business judgment standard and the entire fairness standard. Typically, directors' decisions are protected by the business judgment standard, which presumes directors exercise reasonable business judgment and thus can make decisions without fear of retrospective lawsuits by stockholders. However, this protection does not apply to self-dealing transactions, such as setting their own compensation, where directors have a personal financial interest. In these instances, the stringent entire fairness standard applies, shifting the burden of proof to the directors to establish a fair deal and fair price. To illustrate the difference, if shareholders sue directors for excessive compensation, the business judgment standard would require the plaintiffs (i.e., shareholders) to prove that the directors violated their duty of care and committed material waste, whereas the entire fairness standard would require the defendants (i.e., directors) to prove that their compensation is entirely fair to the company.

Directors can circumvent the entire fairness standard by obtaining shareholder approval for their compensation plan, thereby benefiting from the protection of the business judgment standard. Before 2012, the Delaware court generally recognized informed shareholder ratification as validating a transaction, thus subjecting it to the business judgment standard instead of the entire fairness standard. This approach, known as the shareholder ratification defense, was a longstanding legal tradition prior to 2012.

In an unanticipated landmark ruling on director compensation on June 29, 2012, Vice Chancellor Sam Glasscock of the Delaware Court of Chancery defied long-held legal interpretation in his decision in *Seinfeld v. Slager*. The case involved a board's fiduciary duties in awarding compensation to independent directors. The plaintiff, a stockholder of Republic Services, Inc., challenged the fairness of restricted stock units (RSUs) granted to the company's independent directors under the company's stockholder-approved compensation plan, which imposed generic limits of 10.5 million shares total that directors could receive annually. The board could theoretically award 875,000 RSUs to each director, worth over $21.6 million to each of the 12 directors per year, or $260 million for the entire board annually, though actual awards never approached this boundary.[12] The court ruled that in this case, the entire fairness standard applied rather than the business judgment standard, stating the following:

> Even though the stockholders approved the plan, the defendant directors are interested in self-dealing transactions under the stock plan. The stock plan lacks sufficient definition to afford the defendant directors protection under the business judgment rule. The sufficiency of definition that anoints a stockholder-approved option or bonus plan with business judgment rule protection exists on a continuum. Though the stockholders approved this plan, there must be some meaningful limit imposed by the stockholders on the Board for the plan to … receive the blessing of the business judgment rule … . A stockholder-approved carte blanche to the directors is insufficient. The more definite a plan, the more likely that a board's compensation decision will be labeled disinterested and qualify for protection under the business judgment rule. If a board is free to use its absolute discretion under even a stockholder-approved plan, with little guidance as to the total pay that can be awarded, a board will ultimately have to show that the transaction is entirely fair. (Seinfeld v. Slager (2012), p. 16)

The ruling specifies that the entire fairness standard should be used in assessing director compensation *unless* the stockholder-approved plans provide either the specific magnitude of compensation for the directors or director-specific ceilings on that compensation. Because Republic Services' stockholder-approved compensation plan did not provide these specific limits, the defendant was not entitled to the protections of the business judgment standard.

Seinfeld v. Slager (2012) is extensively cited by legal scholars and practicing lawyers, discussed in law firm memos and textbooks, and taught at law schools.[13] In 2015, the Delaware Chancery Court reaffirmed the entire fairness standard of review on director compensation in Calma *v.* Templeton (2015). In this case, the board's compensation committee granted RSU awards under Citrix's 2005 Equity Incentive Plan, which was approved by a majority of Citrix's shareholders. The only limit on compensation imposed by the compensation plan was that "no beneficiary could receive more than one million shares (or RSUs) per calendar year." (Calma *v.* Templeton 2015, p. 5) Based on Citrix's stock price, one million RSUs were worth over $55 million on the date the lawsuit was filed. As in Seinfeld v. Slager (2012), the court held that there is no shareholder ratification defense for self-awarded director compensation granted under a stockholder-approved compensation plan that lacks "sufficiently defined terms" or "some meaningful limit" on director discretion. The ruling further clarifies that benchmarking against peer companies alone is not likely to prove that compensation is entirely fair because shareholders may challenge the inclusion of specific peer firms or the exclusion of others.

[11] Similar to Brick, Palmon, and Wald (2006), we examine the relation between director compensation and CEO compensation at the same firm over our sample period to provide suggestive evidence of self-dealing. The intuition is that a board that is likely to overpay itself is also likely to overpay the CEO. A positive association between CEO and director compensation could indicate board quid-pro-quo with the CEO: If director compensation is soft-indexed to CEO pay, then awarding higher CEO pay not only curries favor with the CEO but also indirectly leads to higher director pay. In untabulated results, we find a significant positive correlation between CEO compensation and director compensation. The coefficient estimates indicate that a 1% rise in CEO compensation corresponds to a 0.11% increase in directors' total compensation, whereas a 1% increase in CEO's equity compensation is linked to a 0.19% increase in directors' equity compensation.

[12] RSUs granted to the directors were valued at approximately $25 per share at the time of the awards. In 2009, the board awarded each director $743,700 in RSUs, which raised their compensation in 2009 to between $843,000 and $891,000. In 2010, the board awarded each director 7,500 RSUs valued at $215,000, which brought their 2010 compensation to between $320,000 and $345,000 each.

[13] A Westlaw database search in July 2023, identified 402 entries citing *Seinfeld v. Slager* (2012): 290 are from initial court filings and 17 from subsequent appeal filings. These court files are associated with 35 legal case proceedings. The remaining 60 citations are secondary sources mainly reporting the court proceedings in traditional news outlets.

### 4.2. Director compensation around the Slager ruling

The landmark *Slager* ruling provides an opportunity to test the notion that legal standards act as effective governance in cases of self-dealing. The ruling unexpectedly increases the burden on company boards to prove that their own compensation is "entirely fair." Thus, if boards awarded themselves excess compensation prior to this ruling, we should see a drop in director compensation after it. Moreover, all else equal, we expect the drop in compensation to be larger for directors who had higher compensation prior to the ruling. Finally, if proper governance of director compensation is value-enhancing for firms, we expect to observe a positive stock market reaction. In this section, we empirically test these hypotheses. Because the Seinfeld v. Slager (2012) ruling affects Delaware-incorporated firms more than firms incorporated in other states, we use a difference-in-differences approach and compare the change in director pay or firm value in Delaware-incorporated firms (i.e., treated firms) with the change in non-Delaware firms (i.e., control firms) following the ruling.

To implement our difference-in-differences analysis, we use data from four years before (i.e., 2008–2011) to four years after (i.e., 2012–2015) the *Slager* ruling. We obtain historical incorporation information from SEC filings (McDonald and Loughran, 2016).[14] We exclude firms with missing historical incorporation information or with changing state of incorporation during the sample period to mitigate concerns that firms strategically change the state of incorporation to avoid the ruling.[15]

We estimate the following difference-in-differences specification:

$$DirComp_{ijt} = \alpha_0 + \beta_{1,ijt} Post_t \times Treat_{ij} + \gamma' X_{ijt} + FirmFE_i + YearFE_t + \varepsilon_{ijt} \quad (2)$$

where *i*, *j*, and *t* index firms, directors, and time, respectively. *X* represents a vector of control variables. *Post* is an indicator delineating the post-ruling period; it equals one from 2012 onwards and zero otherwise. *Treat* is an indicator that equals one for Delaware-incorporated firms and zero otherwise. *FirmFE* denotes firm fixed effects, included to control for firm-invariant, cross-sectional differences in director compensation. *YearFE* denotes year fixed effects, included to capture temporal effects. In this specification, the separate effects of *Post* and *Treat* are absorbed by the time and firm fixed effects, respectively. The key coefficient of inference is thus the interaction term *Post* × *Treat*. We cluster standard errors at the director level to account for serial correlations of director compensation that arise from directors holding multiple directorships (Fedaseyeu et al., 2018).[16] The $\beta_1$ coefficient in Eq. (2) captures the average treatment effect on the treated (ATT) and provides an estimate of the effect of court rulings on independent directors' compensation and incentives. The court ruling aims to curtail director self-dealing in the compensation setting process. Thus, we expect $\beta_1$ to be negative for treatment firms in the post-ruling period, relative to control firms.

**Table 4**
Director compensation around Seinfeld v. Slager (2012): difference-in-differences analysis.

| **Panel A No Controls** | | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post* × *Treat*** | **−0.089** | **0.049** | **−0.138** | **−0.324** | **0.003** |
| | **(−5.63)***** | **(1.42)** | **(−3.82)***** | **(−6.86)***** | **(0.08)** |
| Observations | 29,927 | 29,927 | 29,927 | 29,927 | 29,927 |
| R-squared | 0.390 | 0.331 | 0.379 | 0.619 | 0.533 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| **Panel B Control for firm and director characteristics** | | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post* × *Treat*** | **−0.097** | **0.039** | **−0.141** | **−0.313** | **−0.009** |
| | **(−6.56)***** | **(1.16)** | **(−4.01)***** | **(−6.75)***** | **(−0.22)** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 29,927 | 29,927 | 29,927 | 29,927 | 29,927 |
| R-squared | 0.425 | 0.343 | 0.392 | 0.621 | 0.541 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| **Panel C Control for Director FE** | | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post* × *Treat*** | **−0.094** | **0.034** | **−0.154** | **−0.319** | **−0.017** |
| | **(−5.84)***** | **(1.01)** | **(−3.95)***** | **(−6.08)***** | **(−0.40)** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 29,927 | 29,927 | 29,927 | 29,927 | 29,927 |
| R-squared | 0.592 | 0.673 | 0.523 | 0.680 | 0.643 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| Director FE | Yes | Yes | Yes | Yes | Yes |

The sample period is from 2008 to 2015. We exclude firms from financial industries (SIC 6000–6999) and firms with missing or changing state of incorporation. All variables are defined in Appendix A. We include all variables in Table 3 as control variables. For brevity, coefficients on intercepts and control variables are suppressed. Full tables are reported in the Internet Appendix. *t*-statistics are presented below the coefficients in parentheses. Standard errors are corrected for heteroscedasticity and are clustered by directors. ***, **, and * denote statistical significance (two-sided) at the 1 %, 5 %, and 10 % levels, respectively.

Table 4 reports the results from estimating Eq. (2). Panel A reports the results in the absence of any control variables (Sant' Anna and Zhao, 2020). We find that total compensation declines significantly (t-statistic=−5.63) for directors at treated firms, relative to those at control firms, following the Delaware court ruling. The decline is driven by a drop in equity compensation, in particular option compensation. In Panel B, we control for the time-varying firm and director characteristics along with firm and year fixed effects.[17] Results in this panel are qualitatively and quantitatively similar to the baseline results in Panel A.

To further mitigate concerns that our results are attributable to differences in directors' skills and abilities or other innate characteristics (e.g., risk aversion), we re-estimate our main specifications after including director fixed effects, in addition to firm and year fixed effects. We report the results in Table 4, Panel C. Director fixed effects absorb time-invariant features of director ability and other unobservable characteristics and restrict our analysis to within-director variation. Across all these specifications, we find robust evidence that treated firms experience a statistically and economically significant decline in total compensation and equity compensation. The estimate of the effect of the ruling on total compensation when we control director fixed effects is

[14] We thank Bill McDonald for making the parsed data available here: https://sraf.nd.edu/data/augmented-10-x-header-data/

[15] Prior studies show that corporate re-incorporation is rare (e.g., Bebchuk and Cohen, 2003; Huang et al., 2020). Consistent with these studies, only 38 of our sample firms re-incorporate during our sample period, and we exclude those firms from our analyses. However, our results remain robust when we include those firms.

[16] Prior studies on director compensation employ different clustering approaches, such as at the director (e.g., Fedaseyeu, Linck, and Wagner, 2018) or firm (e.g., Farrell, Friesen, and Hersch, 2008) level or using robust estimators (e.g., Yermack, 2004; Ryan and Wiggins, 2004; Boone, Field, Karpoff, and Raheja, 2007; Engel, Hayes, and Wang, 2010). These approaches likely reflect the underlying correlation structure of the respective samples. In untabulated results, we examine three alternatives for clustering standard errors: 1) at the firm and year levels to account for serial correlation of compensation practices within the same firm and year, 2) at the firm and director levels to account for serial correlation of pay setting processes for the same director sitting on different boards and for different directors sitting on the same board, and 3) at the firm, year, and director levels (Gow, Ormazabal, and Taylor, 2010). Our inference remains unchanged with these alternative clustering methods.

[17] For brevity, Panels B and C of Table 4 report only the key coefficients on the interaction term. Control variables are suppressed from the table. The full regression results are reported in the Internet Appendix.

−0.094 (i.e., Column (1)), suggesting that directors' total annual compensation declined by 9.4 %, relative to that at control firms, following the court ruling. The results are consistent with the notion that requiring more accountability of director pay leads to significant decreases in director pay at Delaware-incorporated firms, relative to other firms.

Columns (2) to (5) of Panel C report estimates for equity compensation and its components. The coefficients on *Post* × *Treat* show that the amount of directors' compensation paid in the form of stock and options declined for treated directors. The economic magnitude is such that the decline in equity compensation is 15 % among directors at treated firms, relative to those at control firms. Thus, the evidence in this table shows that the court ruling led to lower pay for directors of Delaware-incorporated companies, and the bulk of the pay cut came from the equity-linked portion, specifically options. The ruling had no effect on the cash portion of pay.

The findings of a significant decrease in director compensation following the ruling and the fact that the cut mainly derives from the equity, specifically the option portion of director compensation, are consistent with the notion that prior to the ruling, self-dealing led to inflated director pay. After the ruling, Delaware firms reduced director pay by cutting the least popular and least costly item (i.e., options).[18]

### 4.3. Cross-sectional tests around the slager ruling

We next turn to our second prediction that all else equal, directors with higher compensation prior to the *Slager* (2012) ruling should experience a larger drop in compensation after the ruling. To test this, we use the model developed in Section 3 as the benchmark. In the model, directors' compensation is associated with their experience, skill, function, and connections in addition to various firm and industry characteristics. We split our sample into two groups based on the compensation level in 2011 (i.e., the year immediately before the passage of the court ruling). *High Pay Directors* (*Low Pay Directors*) are those whose median compensation was above (below) that predicted by the model in 2011. We then re-estimate Eq. (2) for each subsample. We expect *High Pay Directors* to respond more to the shock.

Table 5 reports the results. Panel A shows the results for *High Pay Directors*, and Panel B reports the results for *Low Pay Directors*. Across both subsamples, we find a significant decline in total compensation driven by the decline in equity compensation. Consistent with our hypothesis, the economic magnitude is higher for *High Pay Directors*. The Chi-square statistics reported at the bottom of Table 5 reveal that the reduction in compensation is significantly more pronounced in the *High Pay Directors* subsample than in the *Low Pay Directors* group. We find some evidence that an increase in cash compensation partially offsets the reduction of equity compensation, but the effect is concentrated among *Low Pay Directors*. Though option compensation is declining across both subsamples, we do not observe any reduction in stock compensation among the *Low Pay Director* group, suggesting that the director compensation contract is designed in such a way that firms mitigate litigation risk associated with the introduction of the Delaware court ruling, but only to the extent that it does not jeopardize long-term incentive alignment. In designing the compensation contract, firms trade off the incentive alignment against the need to justify and defend the compensation plan in the event of a shareholder lawsuit.

**Table 5**
Cross-sectional analyses.

| **Panel A High pay directors** | | | | | |
|---|---|---|---|---|---|
| | (1) *TotalComp* | (2) *SalBon* | (3) *EquityComp* | (4) *Option* | (5) *Stock* |
| ***Post* × *Treat*** | **−0.112 (−5.50)*** ** | **−0.018 (−0.37)** | **−0.212 (−4.20)*** ** | **−0.299 (−3.84)*** ** | **−0.133 (−2.34)** ** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 11,920 | 11,920 | 11,920 | 11,920 | 11,920 |
| R-squared | 0.472 | 0.402 | 0.428 | 0.623 | 0.561 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| **Panel B Low pay directors** | | | | | |
| | (1) *TotalComp* | (2) *SalBon* | (3) *EquityComp* | (4) *Option* | (5) *Stock* |
| ***Post* × *Treat*** | **−0.073 (−3.27)*** ** | **0.088 (1.75)*** | **−0.077 (−1.37)** | **−0.350 (−5.21)*** ** | **0.118 (1.90)*** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 11,614 | 11,614 | 11,614 | 11,614 | 11,614 |
| R-squared | 0.553 | 0.398 | 0.422 | 0.636 | 0.544 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| **Test of difference in coefficients across subsamples** | | | | | |
| p-value | 0.002 | 0.075 | 0.000 | 0.819 | 0.000 |

The sample period is from 2008 to 2015. We exclude firms from financial industries (SIC 6000–6999) and firms with missing or changing state of incorporation. All variables are defined in Appendix A. Intercepts are included but unreported. We include the same set of control variables as in Table 4. *t*-statistics are presented below the coefficients in parentheses. Standard errors are corrected for heteroscedasticity and are clustered by directors. ***, **, and * denote statistical significance (two-sided) at the 1 %, 5 %, and 10 % levels, respectively.

### 4.4. *Valuation implications of Seinfeld v. Slager (2012)*

We examine the market reaction around the Seinfeld v. Slager (2012) ruling to test the hypothesis that if proper governance of director compensation is value-enhancing, then we should observe a positive market reaction to the ruling. We compute 4-day cumulative abnormal returns (CARs) for Delaware-incorporated and other-state-incorporated firms during the event window (0, +3), where event day 0 is the announcement date of the Delaware court ruling. We use the CRSP value-weighted return as the market return and estimate the market model parameters over the 255-day period to event day −11. To mitigate concerns that the Delaware ruling was anticipated, we also examine 4-day CARs during the event window (−4, −1).

Panel A of Table 6 reports the results. We find strong support that the Delaware court ruling holding directors more accountable for their compensation creates shareholder value. More specifically, Delaware-incorporated firms generate a CAR of 0.74 % over a 4-day window, whereas other firms generate a CAR of −0.44 %. The difference in CARs between treated and control firms is 1.18 % of firm value, which is significant both statistically and economically. On average, the 1.18 % higher stock return implies that the value associated with a court ruling reducing director self-dealing is about 300 million per firm. Note that we do not find any evidence that the ruling is anticipated. CARs during the pre-event window are statistically insignificant between treated and control firms.

To mitigate the concern that our event study captures the fundamental difference between Delaware-incorporated and other firms that happen to be correlated with the announcement of the court ruling, we conduct a placebo event test using June 19, 2012, the closest trading date for which the pre- and post-event windows do not overlap between

[18] An alternative, related argument is that options are also the least justified part of directors' pay. The theoretical agency literature highlights the importance of risk-related agency conflicts, whereby undiversified executives are more risk-averse to firm-specific risk than are diversified shareholders; providing executives with convex incentives tied to stock price (e.g., options) can alleviate these agency conflicts. Unlike executives, independent directors do not usually have a significant part of their wealth tied with the company and may be better diversified. It is thus unclear why they need to be compensated with options (Armstrong, Glaeser, and Huang, 2022). This reasoning may explain the overall decline in popularity of options in compensation packages and is consistent with the notion that options are the least "expensive" form of compensation to cut.

**Table 6**
Announcement return and firm valuation.

| **Panel A Announcement returns** | | | |
|---|---|---|---|
| | Non-Delaware | Delaware | P-value |
| *CAR[−4,−1]* | 0.29 % | 0.03 % | 0.553 |
| *CAR[0,+3]* | −0.44 % | 0.74 % | 0.000 |
| **Panel B Placebo tests** | | | |
| | Non-Delaware | Delaware | P-value |
| *CAR[−4,−1]* | −0.11 % | 0.16 % | 0.339 |
| *CAR[0,+3]* | −0.61 % | −0.30 % | 0.294 |
| **Panel C Firm Valuation** | | | |
| | (1) | | |
| | Tobin | | |
| ***Post* × *Treat*** | **0.047** | | |
| | **(2.20)**** | | |
| *Firm Size* | −0.483 | | |
| | (−9.19)*** | | |
| *Cash* | 0.373 | | |
| | (1.79)* | | |
| *Intangibles* | −0.262 | | |
| | (−1.18) | | |
| *IO* | −0.200 | | |
| | (−2.07)** | | |
| *Stock Return* | 0.277 | | |
| | (7.63)*** | | |
| *ROA* | 1.282 | | |
| | (5.90)*** | | |
| Observations | 3239 | | |
| R-squared | 0.860 | | |
| Firm FE | Yes | | |
| Year FE | Yes | | |

The sample period is from 2008 to 2015. We exclude firms from financial industries (SIC 6000–6999) and firms with missing or changing state of incorporation. All variables are defined in Appendix A. Intercepts are included but unreported. Standard errors are corrected for heteroscedasticity and are clustered by interaction of firms and pre/post-period. *t*-statistics are presented below the coefficients in parentheses. ***, **, and * denote statistical significance (two-sided) at the 1 %, 5 %, and 10 % levels, respectively.

actual and placebo events. Panel B presents the estimates for the placebo event study. We do not find any significant difference over the pre- and post-placebo event windows between treated and control firms.

We next examine in multivariate tests whether the court ruling affects firm valuation. We measure firm value using Tobin's Q (*Tobin*) at year $t+1$, which is defined as the market value of the firm's equity plus the difference between the book value of the firm's assets and the book value of the firm's equity and deferred tax, divided by the book value of the firm's assets.[19] Using a difference-in-differences specification, results in Panel C of Table 6 indicate that the Delaware-incorporated firms experience a significant increase in Tobin's Q, relative to the control firms, following the court's ruling. The coefficient on *Post* × *Treat* is 0.047, suggesting that treated firms experience an increase in firm value of 4.7 %, relative to control firms, after the ruling.

## 5. Additional analyses

### 5.1. Potential spillover effects

To the extent that similar laws are adopted in non-Delaware states over time, our findings might be weakened by changes in the control firms. To investigate this potential spillover effect, we use the Westlaw legal databases to conduct a thorough search of subsequent legal cases that cite Seinfeld v. Slager (2012) and identify 35 such cases. Panel A of Table 7 tabulates these cases by year and jurisdiction. The results show that 66 % (23 of 35) originate from Delaware courts, indicating that spillover to other states is unlikely to significantly affect our results.

[19] We truncate the Tobin's Q at top and bottom one percentile to avoid the influence of outliers on our estimation.

**Table 7**
Potential spillover effect.

**Panel A Cases Citing** Seinfeld v. Slager (2012)

| **Year** | **Number of Cases** | **DE Court** | **Non-DE Courts** | **List of Non-DE Courts (Case Outcomes)** |
|---|---|---|---|---|
| 2013 | 2 | 1 | 1 | FL (Dismissed) |
| 2014 | 12 | 7 | 5 | CO (Dismissed), CA (Dismissed), IL (Dismissed), MD (Dismissed), OK (Dismissed) |
| 2015 | 6 | 6 | 0 | |
| 2016 | 3 | 2 | 1 | NJ (Dismissed) |
| 2017 | 4 | 2 | 2 | NY (No Court Documents Found), NY (Dismissed) |
| 2018 | 1 | 1 | 0 | |
| 2019 | 3 | 1 | 2 | TX (Dismissed), NC (Dismissed) |
| 2020 | 1 | 0 | 1 | NY (Summary Judgment) |
| 2021 | 3 | 3 | 0 | |
| 2022 | 0 | 0 | 0 | |
| 2023 | 0 | 0 | 0 | |
| **Total** | **35** | **23** | **12** | |

**Panel B Exclude States Citing** Seinfeld v. Slager (2012) **during post-ruling period**

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post* × *Treat*** | **−0.120** | **0.043** | **−0.201** | **−0.377** | **−0.055** |
| | **(−7.04)***** | **(1.20)** | **(−4.88)***** | **(−7.04)***** | **(−1.22)** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 28,329 | 28,329 | 28,329 | 28,329 | 28,329 |
| R-squared | 0.596 | 0.674 | 0.530 | 0.684 | 0.647 |
| Director FE | Yes | Yes | Yes | Yes | Yes |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |

The sample period is from 2008 to 2015. In Panel A, we search all legal cases citing *Seinfeld v. Slager* from June 2012 to July 2023, in the Westlaw database. In Panel B, we re-estimate Eq. (2), excluding observations where a firm is incorporated in Florida, Colorado, California, Illinois, Maryland, or Oklahoma. All variables are defined in Appendix A. Intercepts are included but unreported. We include the same set of control variables as in Table 4. Standard errors are corrected for heteroscedasticity and are clustered by directors. *t*-statistics are presented below the coefficients in parentheses. ***, **, and * denote statistical significance (two-sided) at the 1 %, 5 %, and 10 % levels, respectively.

We then carefully read the court documents to understand the nature and outcomes of the remaining 12 non-Delaware cases. For one of the 12 cases, we are unable to locate the legal document. The 11 remaining cases were dismissed.[20] Relevant to the robustness of our difference-in-differences estimate, all six cases filed during the 4-year post-event period (i.e., from 2012 to 2015) in the non-Delaware courts were dismissed, suggesting that our findings are unlikely to be driven by changes in the pay setting process of control firms.[21] Although Seinfeld v. Slager (2012) is cited in cases in other states' jurisdictions, none of these cases

[20] We include summary judgment in the count of case dismissal. Summary judgment is granted when the court believes there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law.

[21] One assumption underlying difference-in-difference analyses is the stable unit treatment value assumption (SUTVA). SUTVA requires that the treatment status of one firm does not affect other firms' potential outcomes. In our setting, SUTVA implies that the decision by the Delaware court to apply the entire fairness standard in assessing director compensation does not affect the incentive compensation contracts of directors at other firms. Similar to the parallel trend assumption, SUTVA is inherently untestable because treated and untreated firms' counterfactual outcomes are unobservable. However, SUTVA is unlikely to be violated in our setting because the Delaware court ruling was a complete surprise and so firms in other states did not adjust contracts in anticipation of the ruling. Moreover, all non-Delaware cases filed after *Seinfeld v. Slager* (2012) that cited its ruling were dismissed by non-Delaware courts, suggesting that SUTVA is unlikely to be violated.

are successful, suggesting a limited spillover effect. To further assess the sensitivity of our results, we exclude all observations where a firm is incorporated in one of six states (i.e., Florida, Colorado, California, Illinois, Maryland or Oklahoma) where Seinfeld v. Slager (2012) is cited in legal proceedings. We then re-estimate our difference-in-differences estimation using the revised sample and report the results in Panel B of Table 7. Our inference remains unchanged. Collectively, our findings suggest that the Slager ruling is not widely adopted by non-Delaware courts.

### 5.2. In Re Investors Bancorp Inc Stockholder Litigation (2017)

The Chancery Court's ruling in Seinfeld v. Slager (2012) clarifies the necessary condition of meaningful compensation limits in stockholder-approved plans to apply the business judgment standard, but it does not define meaningful limits. This definition became a central issue in the subsequent legal case, *In Re Investors Bancorp Inc Stockholder Litigation*, in 2017.[22] In this case, Investors Bancorp's equity compensation plan allowed directors to allocate up to 30 % of all options or restricted stock shares as awards to themselves. After the plan was approved by the company's shareholders, the directors awarded themselves equity compensation totaling $51.5 million (within the 30 % approved limits) for the 12 board members at the time of the award. Despite meeting the shareholder-approved limits, the plaintiffs (i.e., investors) sued, claiming the rewards were disproportionately high compared to peer companies and other Wall Street firms. Delaware's Chancery Court dismissed the case, stating that the awards were indeed within "meaningful, specific limits," thus invoking the shareholder ratification defense. However, the Delaware Supreme Court reversed this decision, asserting that directors' self-interested decisions to approve equity awards, even within approved parameters, would not qualify for the ratification defense.

The Delaware Supreme Court ruled that shareholder ratification is a permissible defense in only two scenarios: (1) when stockholders approve specific awards to each named director or (2) when the equity plan is a self-executing formula plan such that directors have no discretion in granting the awards to themselves. Since Investors Bancorp's stockholder-approved plan did not contain these two types of limits, the shareholder ratification defense is not applicable. This ruling thus eliminates legal ambiguity surrounding the interpretation of meaningful limits and clarifies the types of equity compensation plans protected by the shareholder ratification defense and upheld under the business judgment standard.

This ruling has two potential effects on director compensation. On the one hand, it may increase the legal hurdle for the shareholder ratification defense by restricting its applicability to two scenarios. This restriction could lead to further reduction in director compensation, thereby reinforcing the effect of Seinfeld v. Slager (2012). On the other hand, the legal clarity provided by the ruling may help boards design equity compensation plans in accordance with the two scenarios, which will be unambiguously protected by the shareholder ratification defense. In theory, this could leave compensation levels unchanged or even an increase. Unlike *Seinfeld v. Slager*, which surprised boards and investors by denying the protection of the shareholder-ratification defense and business judgment standard, the effect of the Supreme Court's decision in *Investors Bancorp* on director compensation is expected to be more subtle and nuanced.

To understand the overall effect of legal standards on compensation, we are interested in the cumulative effect of both rulings. Empirically, we estimate the following difference-in-differences specification:

$$DirComp_{ijt} = \alpha_0 + \beta_{1,ijt} Post(Investors > t > Slager)_t \times Treat_{ij} + \beta_{2,ijt} Post(t > Investors)_t \times Treat_{ij} + \gamma' X_{ijt} + FirmFE_i + YearFE_t + \varepsilon_{ijt} \quad (3)$$

where *Post (Investors>t>Slager)* is an indicator that equals one for the period after the *Seinfeld v. Slager* ruling but before the *Investors Bancorp* ruling (i.e., between 2012 and 2017) and *Post(t>Investors)* is an indicator that equals one for the post-*Investors Bancorp* period (i.e., 2018–2020). We include the same set of control variables as in Eq. (2). The $\beta_1$ coefficient captures the average treatment effect from *Seinfeld v. Slager*, and the $\beta_2$ coefficient provides an estimate of the effect of *Investors Bancorp* on director compensation at Delaware-incorporated firms, relative to others. We cluster standard errors at the director level.

Table 8 reports the results from estimating Eq. (3). Panel A reports the findings without any control variables. Panel B reports our main specification following Eq. (3). Panel C re-estimates our main specifications incorporating director fixed effects.[23] Across all three panels, our analysis reveals consistent findings: each ruling, when compared to the pre-*Seinfeld v. Slager* period (i.e., pre-2012), is associated with reductions in director compensation. More importantly, the significant reduction in total compensation primarily stems from substantial decreases in the equity and option components of compensation, the focal points of the court cases and rulings. These results strongly support the notion that corporate law cumulatively curtails director pay. Furthermore, the coefficient estimate suggests that Seinfeld v. Slager (2012) has the most substantial impact.

We can compare the coefficients of the two interaction terms to estimate the fraction of the total effect attributable to each ruling. For instance, the coefficients on the *Post(t>Investors)* × *Treat* interaction term in Panel A indicate that, following *Investors Bancorp*, directors of Delaware firms experience a 10.2 % relative reduction in total compensation, compared to non-Delaware directors in the pre-Seinfeld v. Slager (2012) period. Their equity compensation decreases by 8.6 %, and their options compensation is 36.4 % smaller. Similarly, when examining the coefficients of *Post (Investors>t>Slager)* × *Treat*, we observe similar magnitudes: after Seinfeld v. Slager (2012) but before *Investors Bancorp*, Delaware directors' total compensation had already decreased by 9.5 %, driven by a 13.9 % decrease in equity compensation and a 34.5 % reduction in options compensation. These findings indicate that Seinfeld v. Slager (2012) accounts for most of the total reduction, with its effects persisting and even slightly increasing post-*Investors Bancorp*. Interestingly, the coefficient on equity compensation in the *Post (Investors>t>Slager)* × *Treat* interaction is slightly larger in absolute terms (meaning larger pay reductions) than the coefficient on *Post (t>Investors)* × *Treat*. This result suggests that after *Investors Bancorp*, some Delaware directors experienced an increase in equity compensation compared to the intervening years after Seinfeld v. Slager (2012). It also aligns with the notion that the *Investors Bancorp* ruling, by clarifying the legal applicability of shareholder ratification defense, could enable

[22] We thank the anonymous referee for bringing this case to our attention.

[23] For brevity, Panels B and C of Table 8 report only the key coefficients on the interaction term. Control variables are suppressed from the table. The full regression results are reported in our Internet Appendix.

**Table 8**
Cumulative effect of corporate law changes on director compensation.

| **Panel A No controls** | | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post (Investors>t>Slager)* × *Treat*** | **−0.095** | **0.029** | **−0.139** | **−0.345** | **−0.008** |
| | **(−6.55)***** | **(0.83)** | **(−4.21)***** | **(−7.62)***** | **(−0.20)** |
| ***Post(t>Investors)* × *Treat*** | **−0.102** | **−0.018** | **−0.086** | **−0.364** | **0.053** |
| | **(−6.08)***** | **(−0.37)** | **(−2.21)**** | **(−6.80)***** | **(1.13)** |
| Observations | 48,684 | 48,684 | 48,684 | 48,684 | 48,684 |
| R-squared | 0.352 | 0.313 | 0.368 | 0.540 | 0.483 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| Director FE | No | No | No | No | No |
| **Panel B Control for firm and director characteristics** | | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post (Investors>t>Slager)* × *Treat*** | **−0.102** | **0.018** | **−0.145** | **−0.333** | **−0.019** |
| | **(−7.35)***** | **(0.52)** | **(−4.47)***** | **(−7.41)***** | **(−0.50)** |
| ***Post(t>Investors)* × *Treat*** | **−0.106** | **−0.051** | **−0.077** | **−0.358** | **0.062** |
| | **(−6.52)***** | **(−1.05)** | **(−2.02)**** | **(−6.74)***** | **(1.34)** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 48,684 | 48,684 | 48,684 | 48,684 | 48,684 |
| R-squared | 0.387 | 0.325 | 0.380 | 0.542 | 0.494 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| **Panel C Control for director FE** | | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post (Investors>t>Slager)* × *Treat*** | **−0.088** | **0.024** | **−0.130** | **−0.340** | **0.002** |
| | **(−5.83)***** | **(0.68)** | **(−3.56)***** | **(−6.66)***** | **(0.04)** |
| ***Post(t>Investors)* × *Treat*** | **−0.098** | **−0.022** | **−0.064** | **−0.349** | **0.073** |
| | **(−5.13)***** | **(−0.45)** | **(−1.41)** | **(−5.36)***** | **(1.34)** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 48,684 | 48,684 | 48,684 | 48,684 | 48,684 |
| R-squared | 0.548 | 0.634 | 0.518 | 0.627 | 0.616 |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| Director FE | Yes | Yes | Yes | Yes | Yes |

The sample period is from 2008 to 2020. We exclude firms from financial industries (SIC 6000–6999) and firms with missing or changing state of incorporation. All variables are defined in Appendix A. We include the same set of control variables as in Table 4. For brevity coefficients on intercepts and control variables are suppressed. Full tables are reported in the Internet Appendix. *t*-statistics are presented below the coefficients in parentheses. Standard errors are corrected for heteroscedasticity and are clustered by directors. ***, **, and * denote statistical significance (two-sided) at the 1 %, 5 %, and 10 % levels, respectively.

firms to design compensation contracts with higher equity benefits in accordance with the two specified scenarios that are protected by the shareholder ratification defense under the business judgment standards.

### 5.3. Robustness tests

We conduct several robustness tests on our difference-in-differences analysis. First, the difference-in-differences analysis relies on the assumption that absent the treatment, both treated and control firms would continue to exhibit parallel trends in the outcomes of interest. Although the parallel trends assumption is inherently untestable, diagnostic tests of pre-trend differences can provide useful insights into potential violations of the assumption. These diagnostic tests rely on the assumption that one can infer the unobserved counterfactual relations in the post-period from observed relations in the pre-period, the validity of which hinges on the underlying theory and institutional details related to the specific setting being examined (Roberts and Whited, 2013; Armstrong et al., 2022). In our setting, the parallel trends assumption is likely to be satisfied because the Seinfeld v. Slager (2012) ruling was unexpected and otherwise exogenous with respect to changes in director compensation contracts.

To further assess the validity of the parallel trend assumption, we estimate a specification that is analogous to Eq. (2), except that we replace the *Post* indicator with separate indicators for each of the three years preceding and following the court ruling: *Year(t=−3), Year (t=−2), Year (t=−1), Year (t = 0), Year (t = 1)*, and *Year (t = 3)*. We use *Year (t=−4)* as the base year. Fig. 1 displays the coefficient estimates for each year and their 95 % confidence intervals. We find no apparent trend before the court ruling in 2012, suggesting that treatment and control firms exhibit a similar or parallel trend before the ruling. Immediately after the court ruling, a sharp decline occurs in both total and equity compensation, suggesting that firms set lower compensation in response to increased fiduciary duties in self-dealing transactions.

Second, to mitigate concerns that our results might be confounded by industry trend effects, we re-estimate our main regression after including industry and year joint fixed effects, which are constructed as a unique vector of year fixed effects for each two-digit SIC code. Panel A of Table 9 shows that our results remain robust.

Third, a related concern is that changes in state policies or rulings might occur at the headquarter location level. To address this, we include the state of headquarter location and year joint fixed effects. The resulting specification compares firms with different treatment intensities but located in the same state and at the same point in time. We present the results of this analysis in Panel B of Table 9. Again, the coefficient on *Post* × *Treat* remains largely unchanged. We conclude that our results are not driven by changes in economics or regulations at the state or industry level. The stability of coefficients across three different specifications suggests that these additional fixed effects do not capture any correlated and omitted effects, further supporting the exogeneity of the ruling and our research setting.

Fourth, to alleviate concerns about distributional differences between treatment and control groups, we use an entropy balancing

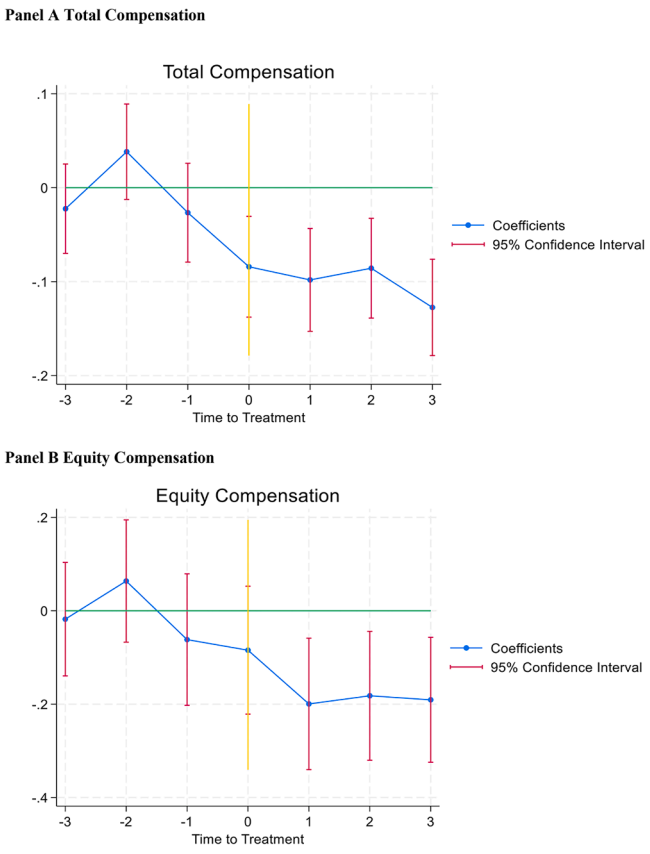


**Fig. 1.** Parallel trend.
The sample period is from 2008 to 2015. We exclude firms from financial industries (SIC 6000–6999) and firms with missing or changing states of incorporation. All variables are defined in Appendix A. We estimate a specification that is analogous to Eq. (2), except that we replace the *Post* indicator with separate indicators for each of the three years preceding and following the court ruling: *Year(t=−3), Year(t=−2), Year (t=−1), Year (t = 0), Year (t = 1)* and *Year (t = 3)*. We use *Year (t=−4)* as the base year. This figure displays the coefficient estimates for each year and their 95 % confidence intervals.

technique, which allows for covariate balance in studies with a binary treatment (Hainmueller, 2012). Entropy balancing is a quasi-matching approach that searches for the set of weights such that post-weighting covariate distributions of treatment and control observations match exactly on all prespecified moments. We re-estimate our main regressions on an entropy balanced sample and present the results of this analysis in Panel C of Table 9. We find that our inferences remain unchanged.

## 6. Conclusion

Compensation practices for outside corporate directors have changed dramatically in the last fifty years. For decades before the 1990s, director compensation varied little across firms and consisted mainly of a fixed retainer and fees for specific tasks such as meeting attendance. In the 1990s, compensation packages moved towards containing a significant equity component. Since then, director compensation has nearly tripled, from around $133,930 per director per year in 2000 to $342,030 in 2020. The significant rise in the compensation of outside directors, coupled with directors' unique power to set their own pay, underscores the importance of governance around director compensation. When significant remuneration is at stake, agency theory predicts that self-interested directors will be incentivized to award excessive compensation to themselves, which in turn reduces firm value and conflicts with their fiduciary duty.

**Table 9**
Robustness tests.

| **Panel A Control for industry-year fixed effects** | | | | | |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post* × *Treat*** | **−0.091** | **−0.022** | **−0.107** | **−0.392** | **0.071** |
| | **(−4.84)** *** | **(−0.59)** | **(−2.39)**** | **(−6.84)** *** | **(1.52)** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 29,927 | 29,927 | 29,927 | 29,927 | 29,927 |
| R-squared | 0.619 | 0.689 | 0.563 | 0.720 | 0.676 |
| Director FE | Yes | Yes | Yes | Yes | Yes |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Industry × Year FE | Yes | Yes | Yes | Yes | Yes |
| **Panel B Control for state-year fixed effects** | | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post* × *Treat*** | **−0.083** | **0.009** | **−0.172** | **−0.212** | **−0.095** |
| | **(−4.61)** *** | **(0.27)** | **(−4.12)** *** | **(−3.93)** *** | **(−2.01)** ** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 29,927 | 29,927 | 29,927 | 29,927 | 29,927 |
| R-squared | 0.612 | 0.683 | 0.556 | 0.708 | 0.670 |
| Director FE | Yes | Yes | Yes | Yes | Yes |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| State × Year FE | Yes | Yes | Yes | Yes | Yes |
| **Panel C Entropy balanced sample** | | | | | |
| | (1) | (2) | (3) | (4) | (5) |
| | *TotalComp* | *SalBon* | *EquityComp* | *Option* | *Stock* |
| ***Post* × *Treat*** | **−0.066** | **0.014** | **−0.087** | **−0.228** | **−0.009** |
| | **(−4.00)** *** | **(0.38)** | **(−2.19)**** | **(−3.89)** *** | **(−0.19)** |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Observations | 29,927 | 29,927 | 29,927 | 29,927 | 29,927 |
| R-squared | 0.580 | 0.671 | 0.519 | 0.696 | 0.643 |
| Director FE | Yes | Yes | Yes | Yes | Yes |
| Firm FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |

The sample period is from 2008 to 2015. We exclude firms from financial industries (SIC 6000–6999) and firms with missing or changing state of incorporation. All variables are defined in Appendix A. Intercepts are included but unreported. We include the same set of control variables as in Table 4. Standard errors are corrected for heteroscedasticity and are clustered by directors. *t*-statistics are presented below the coefficients in parentheses. ***, **, and * denote statistical significance (two-sided) at the 1 %, 5 %, and 10 % levels, respectively.

In this paper, we provide stylized facts about director compensation in the last twenty years and study the governance of director compensation. We make three main contributions. First, we provide new empirical and stylized facts about the trends in director compensation over the past twenty years. Second, our research provides insights into the governance mechanisms of director compensation. We argue and find evidence that external forces—legal standards in particular—serve as an effective governance mechanism for director compensation. Exploiting a pair of landmark rulings that require higher accountability of director compensation, we find that Delaware-based firms subject to the ruling significantly reduce compensation to their directors, relative to firms based elsewhere. Furthermore, directors with higher-than-average compensation before the ruling experienced larger-than-average reductions in compensation after the ruling, and these changes are accompanied by positive, non-transient stock market reactions. Collectively, our evidence indicates that proper governance of director compensation is value-enhancing. Lastly, our study contributes to the dialogue on the valuation premium of Delaware-incorporated firms. While earlier research emphasizes Delaware's legal clarity boosting investor appeal and valuation (Winter, 1977; Cohen and Wang, 2013, 2017), our findings demonstrate how Delaware's evolving legal oversight in managing self-dealing, particularly in director compensation, can positively impact corporate value. This finding broadly speaks to the value-enhancing function of corporate governance and the role

legal standards play in corporate governance.

## CRediT authorship contribution statement

**Lily Fang:** Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Conceptualization. **Sterling Huang:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Data availability

Data will be made available on request.
Code and Data (Reference data) (Mendeley Data)

## Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.jfineco.2024.103813.

## Appendix A Variable definitions

| Variable | Definition |
|---|---|
| *TotalComp* | The natural logarithm of total compensation. Total compensation consists of equity compensation including the stock award, LTIP and option award (Boardex variable *toteqatrisk*) and non-equity compensation including salary, bonus and other compensation (Boardex variable *totaldirectcomp*). |
| *SalBon* | The natural logarithm of one plus salary (Boardex variable *salary*) and bonus (Boardex variable *bonus*). |
| *Option* | The natural logarithm of one plus the value of option grants (Boardex variable *estvaloptaward*). |
| *Stock* | The natural logarithm of one plus the value of stock grants (Boardex variables *valeqaward)* and LTIP (Boardex variables *ltipvalue*). |
| *EquityComp* | The natural logarithm of one plus option and stock compensation (i.e., *Option*+*Stock*). |
| *Num Pub Board* | Number of external public board memberships (Boardex variable *totcurrnolstdbrd*). |
| *Industry Exp* | Tenure as a director in the same industry (Boardex variable *sector*) as the current firm (Boardex variable *timebrd*). |
| *Tenure* | Tenure as a director of the current firm (Boardex variable *timebrd*). |
| *Audit Cmmt* | An indicator that equals one if a director sits on the audit committee (Boardex variable *committeename*). |
| *Comp Cmmt* | An indicator that equals one if a director sits on the compensation committee (Boardex variable *committeename*). |
| *Nom Cmmt* | An indicator that equals one if a director sits on the nomination committee (Boardex variable *committeename*). |
| *Risk Cmmt* | An indicator that equals one if a director sits on the risk committee (Boardex variable *committeename*). |
| *Tech Cmmt* | An indicator that equals one if a director sits on the technology committee (Boardex variable *committeename*). |
| *Female* | An indicator that equals one if a director is female (Boardex variable *gender*). |
| *International* | An indicator that equals one if a director is non-American (Boardex variable *nationality*). |
| *MBA Degree* | An indicator that equals one if a director holds an MBA degree (Boardex variable *qualification*). |
| *Firm Size* | The natural logarithm of total assets (Compustat variable *at*). |
| *Cash* | Cash holding (Compustat variable *che*) over total assets (Compustat variable *at*). |
| *Intangibles* | Goodwill (Compustat variable *gdwl*) over total assets (Compustat variable *at*). |
| *IO* | Percentage of outstanding shares owned by institutional investors (Thomson Reuters *InstOwn*). |
| *StockReturn* | The natural logarithm of stock return (CRSP variable *ret*) over the fiscal year. |
| *ROA* | Operating profit before depreciation (Compustat variable *oibdp*) over beginning total assets (Compustat variable *at*). |
| *Post* | An indicator that equals one for years from 2012 onwards (i.e., 2012–2015). |
| *Treat* | An indicator that equals one for the Delaware-incorporated firms. |
| *Post (Investors>t>Slager)* | An indicator that equals one for the period after Seinfeld v. Slager (2012) but before *In Re Investors Bancorp Stockholder Litigation* (i.e., 2012 and 2017). |
| *Post(t>Investors)* | An indicator that equals one for the post-*Investors Bancorp* period (i.e., 2018–2020). |
| *CAR[x,y]* | Cumulative abnormal return from day *x* to day *y*, where day 0 is the announcement of the court ruling (June 29, 2012). The benchmark model is the market-adjusted model with parameters estimated over 255 trading day to event day −11. |
| *Tobin* | The market value of the firm's equity at the end of the year (Compustat variable *csho*prcc_f)* plus the difference between the book value of the firm's assets (Compustat variable *at*) and book value of the firm's equity (Compustat variable *ceq*) and deferred tax (Compustat variable *txdb*) at the end of the year, divided by the book value of the firm's assets at the end of the year. We measure Tobin's Q at year $t + 1$. |

## References


Adams, R., Ferreira, D., 2008. Do directors perform for pay? J. Account. Econ. 46, 154–171.
Adams, R., Ferreira, D., 2009. Women in the boardroom and their impact on governance and performance. J. Financ. Econ. 94, 291–309.
Armstrong, C., Glaeser, S., Huang, S., 2022a. Contracting with controllable risk. Account. Rev. 97, 27–50.
Armstrong, C., Kepler, J., Samuels, D., Taylor, D., 2022b. Causality redux: the evolution of empirical methods in accounting research and the growth of quasi-experiments. J. Account. Econ. 74, 101521.
Armstrong, C., Vashishtha, R., 2012. Executive stock options, differential risk-taking incentives, and firm value. J. Financ. Econ. 104, 70–88.
Bebchuk, L., Cohen, A., 2003. Firms' decision where to incorporate. J. Law Econ. 46, 383–425.
Bebchuk, L., Grinstein, Y., Peyer, U., 2010. Lucky CEOs and lucky directors. J. Finance 65, 2363–2401.
Boone, A., Field, L., Karpoff, J.M., Raheja, C.G., 2007. The determinants of corporate board size and composition: an empirical analysis. J. Financ. Econ. 85, 66–101.
Brick, I., Palmon, O., Wald, J., 2006. CEO compensation, director compensation, and firm performance: evidence of cronyism? J. Corp. Finance 12, 403–423.
Templeton, C.v., 2015. 114 A.3d 563. Del. Ch. April 30.
Cary, 1974. Federalism and corporate law: reflections upon Delaware. Yale Law J. 83, 663–705.
Chen, G., Crossland, C., Huang, S., 2016. Female board representation and corporate acquisition intensity. Strateg. Manage J. 37, 303–313.
Chen, S., Chien, C., Huang, C., 2023. The use of peer groups in setting director compensation: competition for talent vs. self-serving behavior. J. Financ. Quant. Anal. forthcoming.
Cohen, A., Wang, C., 2017. Reexamining staggered boards and shareholder value. J. Financ. Econ. 125, 637–647.
Cohen, A., Wang, C., 2013. How do staggered boards affect shareholder value? Evidence from a natural experiment. J. Financ. Econ. 110, 627–641.
Core, J.E., Guay, W.R., Larcker, D.F., 2008. The power of the pen and executive compensation. J. Financ. Econ. 88, 1–25.
Core, J.E., Holthausen, R.W., Larcker, D., 1999. Corporate governance, chief executive officer compensation, and firm performance. J. Financ. Econ. 51, 371–406.
Daines, R., 2001. Does Delaware law improve firm value. J. Financ. Econ. 62, 525–558.

Engel, E., Hayes, R.M., Wang, X., 2010. Audit committee compensation and the demand for monitoring of the financial reporting process. J. Account. Econ. 49, 136–154.
Fama, E., Jensen, M., 1983. Separation of ownership and control. J. Law Econ. 26, 301–325.
Farrell, K.A., Friesen, G.C., Hersch, P.L., 2008. How do firms adjust director compensation? J. Corp. Finance 14, 153–162.
Fedaseyeu, V., Linck, J., Wagner, H., 2018. Do Qualifications matter? New evidence on board functions and director compensation. J. Corp. Finance 48, 816–839.
Hainmueller, J., 2012. Entropy balancing for causal effects: a multivariate reweighting method to produce balanced samples in observational studies. Polit. Anal. 20, 25–46.
Hallock, K., 1997. Reciprocally interlocking boards of directors and executive compensation. J. Financ. Quant. Anal. 32, 331–344.
Heron, R.A., Lewellen, W.G., 1998. An empirical analysis of the reincorporation decision. J. Financ. Quant. Anal. 33, 549–568.
Holmstrom, B., Milgrom, P., 1987. Aggregation and linearity in the provision of intertemporal incentives. Econometrica 55, 303–328.
Hope, O.K., Lu, H., Saiy, S., 2019. Director compensation and related party transactions. Rev. Account. Stud. 24, 1392–1426.
Huang, S., Hilary, G., 2018. Zombie board: board tenure and firm performance. J. Account. Res. 56, 1285–1329.
Huang, S., Roychowdhury, S., Sletten, E., 2020. Does litigation encourage or deter real earnings management? Account. Rev. 95, 251–278.
In Re Investors Bancorp Inc Stockholder Litigation No 169, 2017 in the Supreme court of the State of Delaware CA No. 12327-VCS.
Jain, V., 2016. Who will watch the watchmen? A study of the law on self-dealing transactions by company directors. Natl. Law School Bus. Law Rev. 2, 49–72.
Johnson, S., La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 2000. Tunneling. Am. Econ. Rev. Pap. Proc. 90, 22–27.
Larcker, D., So, E., Wang, C., 2013. Boardroom centrality and firm performance. J. Account. Econ. 55, 225–250.
Linn, S.C., Park, D., 2005. Outside director compensation policy and the investment opportunity set. J. Corp. Finance 11, 680–715.
Masulis, R., Wang, C., Xie, F., 2012. Globalizing the boardroom-The effects of foreign directors on corporate governance and firm performance. J. Account. Econ. 53, 527–554.
McDonald, B., Loughran, T., 2016. Textual analysis in accounting and finance: a survey. J. Account. Res. 54, 1187–1230.
Roberts, M., Whited, T., 2013. Chapter 7 Endogeneity in empirical corporate finance 1. In: Constantinides, G.M., Harris, M., Stulz, R.M. (Eds.), Handbook of the Economics of Finance Volume 2, pp. 493–572.
Romano, R., 1985. Law as a product: some pieces of the incorporation puzzle. J. Law Econ. Organ. 1, 225–283.
Ryan, H., Wiggins, R., 2004. Who is in whose pocket? Director compensation, board independence, and barriers to effective monitoring. J. Financ. Econ. 73, 497–524.
Sant' Anna, P., Zhao, J., 2020. Doubly robust difference-in-differences estimators. J. Econom. 219, 101–122.
Seinfeld v. Slager, 2012. C.A. No. 6462-VCG. Del. Ch. June 29.
Sengupta, P., Zhang, S., 2015. Equity-based compensation of outside directors and corporate disclosure quality. Contemp. Account. Res. 32, 1073–1098.
Winter, R., 1977. State law, shareholder protection, and the theory of the corporation. J. Legal Stud. 6, 251–292.
Yermack, D., 2004. Remuneration, retention, and reputation incentives for outside directors. J. Finance 59, 2281–2308.