Race to board independence:

Evidence on strategic compliance with corporate governance regulation

Fabrizio Di Meo
Universidad de Alcalá

Beatriz García Osma
Universidad Carlos III de Madrid

Cristina Grande-Herrera[†]
Bayes Business School
City, University of London

September 2021

[†] **Corresponding author**. Cristina Grande-Herrera. Bayes Business School. City, University of London. 106 Bunhill Row. London EC1Y 8TZ. United Kingdom. Email: *cristina.grande-herrera@city.ac.uk*

We gratefully acknowledge helpful comments and suggestions from Antonio B. Vázquez, seminar participants at Alliance Manchester Business School, Warwick Business School, and conference participants at the 2021 BAFA Annual Meeting. We acknowledge financial contribution from the Spanish Ministry of Innovation and Science (ECO2016-77579 and PID2019-111143GB-C33), and from the Madrid Region (Programa Excelencia para el Profesorado Universitario, convenio con Universidad Carlos III de Madrid, V Plan Regional de Investigación Científica e Innovación Tecnológica).

Race to board independence: Evidence on strategic compliance with corporate governance regulation

Abstract

We examine firms' strategies to comply with board independence regulation. In the past decades, firms have adjusted their corporate boards in response to mandates to increase board independence. These regulations force non-compliant companies to increase the percentage of independent directors during a limited time-window, tapping extensively into directors' labour market. We examine firms strategic choices in this race to board independence, in terms of (i) whom (composition); and (ii) when (timing) to appoint the necessary directors. Combining these composition and timing strategies, we identify 'serious' and 'label' compliers with board reforms. We find significant heterogeneity in compliance strategies and associated consequences. Only serious compliers reap benefits of enhanced monitoring, as measured by improvements in financial reporting quality. In contrast, label compliers have subsequent lower managerial quality. Finally, we document that those independent directors that are hired during the compliance period are more likely to be fired and have shorter tenures. Overall, our evidence indicates that compliance strategies have consequences for regulatory effectiveness.

Keywords: *Board independence, Endogenous compliance, Board composition strategies, Timing strategies, Financial reporting quality.*

Data Availability: *Data is available from the sources identified in the paper.*

1. Introduction

Regulatory effectiveness ultimately hinges on compliance. Recent regulations require firms to reform their corporate boards, increasing board independence. This creates potentially exogenous variation in board independence because to comply with regulations, firms must change their board's structure during a limited time-window (Duchin et al., 2010; Armstrong et al., 2014). However, despite broad interest in the economic consequences of these changes to board independence, there is a limited understanding of firms' endogenous compliance decisions. We add to the existing literature by arguing that firms design heterogenous compliance strategies exploiting the significant discretion that exists within mandatory implementation. Further, we predict that these compliance strategies have consequences for regulatory outcomes.

It is straightforward to see that, to increase board independence, firms may hire independent directors, fire non-independent directors, or use a mix of both strategies. These decisions, in turn, affect board size. We refer to these choices as *composition* strategies. Also, firms must decide when to comply with regulation: early or late in the compliance window. We refer to these choices as *timing* strategies. Considering the timing is relevant, given that the mandated increase in board independence gives rise to a race to board independence, where firms compete to appoint the same independent, increasingly busy, directors from a narrow pool. It is fair to assume that the number of available independent directors is finite, and therefore, appointments made by one firm influence the pool of remaining independent directors available for appointment by *other* firms.

We expect that the timing of decision-making and appointments, as well as firms' choices on how to restructure corporate boards influence whether firms attain the desired outcome of greater transparency and accounting quality, and to what extent. To test this expectation, we combine compliance strategies (i.e., composition and timing strategies) to identify firms that

take costly actions, which we denote as 'serious' compliers, and separate them from firms that take the path of minimum (baseline) compliance, which we denote as 'label' compliers with board independence regulation. This terminology is consistent with Daske et al. (2013), who use it to classify adopters of International Financial Reporting Standards.

We also study the potential consequences of compliance on CEOs and directors. Directors are of particular interest, given the focus of the regulation. We identify directors who have a net gain of board seats during the compliance window (*Net Hired* directors), and with a net loss of seats (*Net Fired* directors), and study their future labour market outcomes, in terms of whether they are more likely than other directors to lose those seats after compliance, or to have shorter tenures.

If the compliance strategy of label compliers responds to managerial motivations to retain a friendly board, we expect that, on average, no beneficial outcomes will be attained by the regulatory changes. Some existing evidence points towards this possibility. Armstrong et al. (2014) examines regulatory-driven changes in board independence and find no evidence of lower accrual-based earnings management, while Chen et al. (2015) shows that greater board independence only curbs earnings management in firms that operate in rich information environments.

We test our predictions using a large sample of US firms affected by board independence regulations. In 1999, the Blue-Ribbon Committee released a report with recommendations to improve financial reporting quality. One of the main recommendations is that audit committees are composed only by independent directors. SOX wrote this requirement to law in 2002. On November 2003, the SEC approved the NYSE and Nasdaq regulations that require listed companies to have a majority of independent directors on their boards by 2004. We follow Armstrong et al. (2014) to measure pre-comply board independence (fiscal-year end between May 2000 and June 2001). This results in 1,257 non-complying companies. We classify a firm

as a serious complier if it complies early –in 2001 or 2002–, and fires non-independent directors to comply. Label compliers are firms that comply late –in 2003 or 2004–, and keep their non-independent directors, and thus, meet the requirement by growing their boards. As robustness checks, we create a second proxy to identify serious (label) compliers imposing a further refinement: that the new independent directors hired join (do not join) a main committee (i.e., audit, nomination and/or compensation committees). We analyse the dynamics that explain non-compliant companies compliance strategies. To assess the consequences of compliance strategies, we focus on financial reporting quality as measured by accruals and real earnings management, given the regulatory focus on information quality. This also allows us to compare our findings with those of Armstrong et al. (2014), Chen et al. (2015), and Garcia Osma et al. (2019).

We report the following key findings. First, we provide descriptive evidence confirming the heterogeneity in the compliance strategies followed by firms to restructure their boards and in the timing of when to appoint directors, within the mandated time-frame. Second, we find that dynamics related to *other* companies in the industry, such as the speed in complying with the regulation (industry speed), or the availability of busy or independent directors in the industry, influence compliance strategies. This is consistent with the director pool being finite, and a certain competition among firms to appoint independent directors. Corporate governance quality also determines how companies respond to board regulations. Third, we find that compliance strategies affect financial reporting outcomes. We run an empirical analysis similar to difference-in-differences, where we examine whether our classification of compliers as either serious or label explains financial reporting quality. We find that serious adopters improve their financial reporting quality, while the opposite is true for label adopters. These label compliers have longer CEO tenures and lower managerial ability after compliance with

board independence. This is consistent with label compliers generally having lower corporate governance in the post-compliance period.

Finally, we find that independent (non-independent) directors lose (gain) directorships in the post-compliance period (i.e., from 2005 to 2008). This suggests a certain mean reversal back to the pre-compliance period. Independent directors who obtain seats during the implementation period are later penalized, being more likely to lose seats in the post-compliance period and having shorter tenures. In turn, non-independent directors who lose seats as a consequence of compliance recover their number of seats in the post-compliance period.

We make several contributions to the literature. First, we extend previous literature analysing board independence regulations (e.g., Armstrong et al., 2014; Chen et al., 2015) by considering the endogenous choices made by firms. This allows us to reconcile mixed findings in prior literature on the consequences of changes to board independence, which may not have resulted in the expected benefits in terms of financial reporting quality. Second, our evidence suggests that endogenous decision-making within 'exogenous' regulatory changes should be considered. We provide detailed descriptive analyses of firms' compliance strategies which suggests that substantial heterogeneity exists, and that these strategies have consequences for financial reporting quality and for CEOs' and directors' careers. Finally, we provide evidence on the role of compliance. Our results suggest that compliance with board regulation in a limited window resulted in a race between firms, given a finite pool of available directors with sufficient expertise. This evidence speaks also to the existing literature on the adoption of quotas, where firms may tap into a small pool of directors and short-term consequences may be heterogenous, depending on the company chosen compliance strategy.

2. Literature review and hypotheses development

2.1. Regulatory background

The New York Stock Exchange (NYSE) and the National Association of Securities Dealers (NASD) established, in 1998, the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees. The committee released, in 1999, a report with recommendations about how to improve the quality of corporate financial reporting, which was adopted by the exchanges during the same year. The recommendations of the "blue ribbon" panel focused on characteristics of the corporate audit committees such as the requirement for audit committees to consist entirely of independent directors. SOX wrote this requirement into law in 2002.

Almost concurrently, on August 2002, the NYSE filed with the Securities and Exchange Commission (SEC) a proposal to change aspects of listing standards in the Listed Company Manual, aimed at ensuring the independence of directors and to strengthen corporate governance (SEC, 2003). Similarly, on October 2002, Nasdaq proposed a change to NASD Rules 4200 and 4350 regarding board independence and independent committees. These amendments were approved by the SEC on November 2003, updating the definition of independent director,[1] and mandating that a majority of directors on the board should be independent. Non-compliant firms were required to comply by the earlier of (1) the first annual shareholders meeting of the firm, after January 15, 2004, or (2) no later than October 31, 2004.[2] These rules represent a major revision to company regulation in the US, particularly aimed at improving auditing, auditor oversight, and disclosure rules (Coates, 2007). However, we argue that their ultimate effectiveness hinges critically on the choices made by firms along two key

[1] This new regulation modified the definition of independent directors, to exclude employees, family members of executives, the internal or external auditor, or those employed by another company affiliated to the firm. SOX, sec. 301 (3), to be considered independent, a director may not: "(i) accept any consulting, advisory, or other compensatory fee from the issuer; or (ii) be an affiliated person of the issuer or any subsidiary thereof."

[2] Classified boards were given additional time to comply, as elections of classified board members could be postponed until the second annual meeting, but in no event later than December 31, 2005.

dimensions: board composition and timing of director appointments. We develop our predictions in the next section.

2.2. Background and hypotheses development

Duchin et al. (2010) find that firms respond to the new regulations by increasing board independence, however, the overall effectiveness of these regulations in securing board oversight and improved audit and financial reporting quality is still under question, as prior work provides mixed evidence (see, e.g., Armstrong et al., 2014; Chen et al., 2015).

Prior literature does not directly investigate the endogenous choices that underpin the regulatory-driven change in board independence. Prior work notes that these regulations could fail to attain their desired outcomes, for at least two reasons. First, CEOs can still choose, among directors, those who have a reputation for being executive-friendly (as opposed to shareholder-friendly), or those candidates they already know. This is the 'window-dressing' perspective (Duchin et al., 2010). Coles et al. (2014) provide evidence that directors chosen by the CEO (co-opted directors), have allegiance to the CEO and decrease their monitoring, while Granovetter (2005) finds that people tend to rely more on candidates belonging to the same network, especially in more complex environments. To the extent that CEOs influence the process of appointing directors, the regulations may be less effective. This prediction is however not without tension. Even when CEOs are strategically involved in the selection of new independent directors and these additional independent directors contribute to obtain a friendly board, it is still likely that, unconditionally, oversight over managerial decisions will be higher whenever more independent directors are added to boards (Weisbach, 1998; Adams and Ferreira, 2007).

Second, the requirement to impose a majority of independent directors on corporate boards fits under the 'one size fits all' type of regulatory efforts (Dahya and McConnell, 2005). Prior

research highlights that such regulatory solutions may not be optimal (McConnell, 2002). For example, optimal board size depends on firm complexity (Coles et al., 2008). If firms have optimal board composition pre-compliance (if for example, they were innovating and in more need for advice rather than monitoring (Baysinger et al., 1991)), the regulation alters this balance, leading to suboptimal board structures after regulation.

Building on the above discussion, we make two predictions. First, we expect that managers will exploit the discretion allowed within the regulation by choosing the compliance strategy that better fits their needs. Second, we expect that endogenous choices with respect to board composition and timing have consequences over financial reporting quality.

Existing literature indicates that, although skilled directors are likely to improve monitoring mechanisms (Rubin and Segal, 2019), the pool of qualified directors is limited (Knyazeva et al., 2013), and directors are often busy (Ferris et al., 2003; Jiraporn et al., 2009). Thus, it is likely that the regulation may drain the pool of talent, such that firms that adopt earlier may have a pick of directors to choose from, while firms that adopt relatively late would face a shrunken pool. However, early choice may not necessarily signal higher quality monitoring, as some directors may have a reputation for being friendly to managers (Hwang and Kim, 2009; Renneboog and Zhao, 2011), and these may be the first directors that managers seek (Levit and Malenko, 2016). Regardless, directors that are in high demand are likely to be appointed first, and firms that adopt relatively late may struggle to find well-qualified directors. For example, the work of Ahern and Dittmar (2012) and Matsa and Miller (2013), studying gender quotas in corporate boards in Norway, suggests that initial consequences of gender regulations were negative, given that these newly appointed female directors have lower expertise than the male directors they substituted.

Consider that a firm decides to adopt in 2003. The particulars of which directors are hired, and when, may depend on what other firms in the industry have done. If we assume the pool

of talent is finite, potentially, those directors that agree to join boards in 2001 and 2002 may no longer be available in 2003, when the firm originally aimed to comply.[3] Indeed, these dynamics may push the actual adoption date to 2004, if the impact on the pool is severe.

Given this discussion, we make the following predictions:

H1: *Firms strategically comply with board independence regulation.*

We predict that compliance strategies influence board composition. Extant prior research suggests that board composition is likely to have an impact on both firm performance (e.g., Eisemberg et al., 1998; Dalton et al., 1999; Cheng, 2008; Duru et al., 2016) and financial reporting quality (e.g., Beekes et al., 2004; Ahmed and Duellman, 2007; Petra, 2007; Ferreira et al., 2011). In particular, several aspects of board composition, such as gender diversity (e.g., Srinidhi et al., 2011; Garcia Lara et al., 2017) and financial expertise (e.g., DeFond et al., 2004; Krishnan and Visvanathan, 2008) of the board members, board size (e.g., Ahmed and Duellman, 2007; Ghosh et al., 2010), or the independence of directors (e.g., Xie et al., 2003; Peasnell et al., 2005) have been analysed in relation to the quality of financial reporting. Although firms' internal characteristics, such as board compositions, are likely to influence earnings management, other factors that are external to the firm, such as peers' behaviours, are also expected to impact financial reporting quality. For example, sharing a director with a firm that is managing earnings (Chiu et al. 2013), or being in an industry with high peer performance (Du and Shen, 2018) or restatements (Kedia et al., 2015) are likely to decrease earnings quality. We expect that the particular decisions adopted by firms in terms of whether to meet the requirement by appointing additional independent directors, and/or firing non-independent

[3] Such capacity constraints are not unlikely. For example, Brown and Knechel (2016) argue that auditor clients switching away from Arthur Andersen, after the Enron collapse, were likely to switch again later, as the first switch led them to a non-preferred auditor. They note that this behaviour reflects the "initial capacity constraints induced by the rapid auditor turnover affecting so many large clients at once" (p. 763), whereby clients could not switch to their preferred auditor, given the dynamics induced by the demise of Arthur Andersen, which was one of the five large audit firms at the time.

directors will also vary across firms, and will depend also on decisions made by other firms in the industry that adopt earlier. These decisions to comply by changing board size or not, by hiring/firing directors, especially in a context of early peers' compliance, will drive the consequences of board independence regulation.[4]

While we expect that financial reporting quality may vary because of changes to board independence, it is not straightforward to predict whether the outcome will be of higher or lower quality, given our discussion on the strategic decision making that may underpin the final composition of the board, and that the board may change along a number of dimensions (particularly, size) in addition to independence. There are two major streams of literature that provide theoretical insights into the consequences of exogenous changes to board structure (Armstrong et al., 2014). The first view states that board independence may be a function of exogenous firm characteristics. For example, in industries where the cost of acquiring information is high, an increase in the number of outsiders (i.e., independent directors) in the board may be less effective at improving monitoring and advice activities of the board (Duchin et al., 2010). If this is the case, forcing the company to change the optimal board composition may have negative consequences for companies. The second view states that independent directors can take actions to increase firms' transparency. Against this second stream of literature, managers may engage in better financial reporting and disclosure practices to increase transparency and, thus, to attract independent directors, making the improvement in transparency prior to the implementation of new board regulation. Managers could also

[4] To illustrate, consider the following simple case. A non-complying firm has the following initial board composition: 4 non-independent (NID) and 2 independent directors (ID). This would be mean board independence (BDIND) is 0.33 (2/6) and thus, the firm needs to change its board to comply. Several strategies could be adopted. If the firm wanted to retain board size, as it considered such a size optimal, it could fire 2 NIDs and hire 2 IDs, to end up with BDIND = 0.67 (4/6). It could also reduce board size to 5 and hire 1 outsider and fire 2 insiders (BDIND=0.6, or 3/5). It could increase board size to 7, hiring 2 IDs and firing 1 non-independent (board independence=0.57, 4/7). Indeed, many solutions are possible, one could even imagine the firm not wanting to fire any of its non-independent and hiring 3 independent directors, to have a final board of 9 members, and board independence=0.56 (5/9).

voluntarily decrease transparency when board independence exogenously increases to avoid more intensive board monitoring and, consequently, disciplining consequences (Armstrong et al., 2014). Therefore, the extent to which compliance strategies influence the outcome of the regulation is an empirical issue of interest.

This discussion leads us to our second hypothesis:

H2: *Strategic compliance with board independence regulation influences financial reporting quality.*

3. Methods and data

3.1. The dynamics of compliance

We study the dynamics of compliance using the following model:

$$Comply\_Strategy_{,t} = \eta' \, Industry\ Speed_{i,t} + \delta' \, Director\ Dynamics_{i,t} + \\ + \mu' Managerial\ Incentives_{i,2000} + \beta' Controls_{\,i,2000} + \alpha_j + \varepsilon_{i,t}, \quad (1)$$

where *Comply_Strategy* identifies the strategy followed by the firm to comply with the board independence regulation. We classify firms into *serious* or *label* compliers considering firm composition and timing strategies. *Serious* compliers take costly actions and reform their boards in the spirit of the regulation, leading to improvements to monitoring, and thus, to better financial reporting quality. We identify serious compliers as companies that comply early (i.e., during years 2001 and 2002) and that fire non-independent directors to achieve board independence (*Serious Comply*). *Label* compliers are firms that comply late (i.e., during years 2003 and 2004) and keep the same number of non-independent directors (*Label Comply*), i.e., they comply by expanding board size. Model (1) includes industry fixed effects (α_j) and it is run using the compliance year for each firm in our sample.

Industry Speed is the average number of months the *other* companies in the industry take to comply with regulation. It accounts for time dynamics. *Industry Speed* is multiplied by -1 for ease of interpretation (i.e., the less months, the faster other industry firms are complying). *Director Dynamics* are proxies for busy and independent directors in other companies in the industry. To the extent that firms in the industry have high percentages of busy and independent directors, we expect that there will be less availability of directors to hire, which may, in turn, push firms into *firing* non-independent directors to be able to comply (if no suitable independent directors remain the pool). We create two variables: *Non-available Directors [Busy]* and *Non-available Directors [IND]*. *Non-available Directors [Busy]* is the mean by industry and year of the percentage of busy directors excluding the own company.[5] *Non-available Directors [IND]* is the mean by industry and year of the percentage of independent directors excluding the own company. *Managerial Incentives* are measured by the level of *Entrenchment* which is a dummy variable that equals 1 if CEO tenure is larger than the sample average and/or the E-index[6] is larger than 3 and 0 otherwise.

Finally, *Controls* is a vector containing firm-level variables that may explain the decision to engage in the different compliance strategies. Control variables are measured at year 2000. This reflects our expectation that the decision on how and when to comply with the independence regulation is taken at the time when the rules where first issued. Even if the firm did not concern itself with taking any actions, inaction would also be best measured at the time when the rules are first announced, as it would reflect firm-level issues such as the lack of internal controls or regulatory unawareness, among others. Information costs can increase in

[5] Busy directors are those with 2 or more directorships.

[6] Bebchuk et al. (2009) elaborated the Entrenchment index (or E-index) based on the popular G-index from Gompers et al. (2003). In particular, Bebchuk et al. (2009) analyzed the importance of 24 antitakeover provisions that compose the G-index, and concluded that the associations between the G-index and firm value are mainly driven by 6 provisions (specifically, staggered boards, limits to shareholders amendments of bylaws, supermajority requirements for mergers, supermajority requirements for charter amendments, poison pills, and golden parachutes). The E-index only includes these 6 provisions and, thus, ranges between 0 and 6.

firms with high growth, high R&D, and in firms with high stock return volatility (Linck et al., 2008). High investments in R&D are generally risky (Baysinger et al., 1991) and they tend to increase information costs (Linck et al., 2008). As an example, firms with more independent directors, who are those that may have more difficulties in gathering information with respect to non-independent directors, are likely to issue more patents related to well-known technologies, rather than to technologies that require riskier exploration (Balsmeier et al., 2017). Thus, if firms engage in risky R&D projects, top executives may want to be highly represented in the board through non-independent directors (Coles et al., 2008). We use the variable *R&D* to proxy for investment in R&D projects. Additionally, firms with higher growth and those with stock return volatility over the fiscal year are likely to have greater information costs (Linck et al., 2008). In addition, compliance strategies are likely to vary according to firm complexity. Complex firms, which are those with several businesses and geographically dispersed operations, are expected to include more independent directors and to increase board size to improve the monitoring of complex activities (Boone et al., 2007; Coles et al., 2008; Linck et al., 2008). Thus, we include the variables *GEO segments* and *BUS segments* as controls. We also include the following control variables: *Board Size*, *Firm Size*, *Leverage*, *Returns Volatility*, *Price*, *BTM*, *Big 4 auditor* and *New auditor*. Appendix I provides details on the calculation of all proxies.

3.2. Consequences of compliance strategies

To assess the financial reporting quality consequences of compliance, we run the following model:

$$Earnings\_Management_{,t} = \alpha_t + \beta_1 P_t + \beta_2 Comply\_Strategy_{i,t} + \beta_3 Comply\_Strategy_{i,t} * P_t + \\ + \delta' Controls_{i,t} + \alpha_i + \delta_t + \varepsilon_{i,t} \quad (2)$$

where, *Earnings_Management* are measures of accrual- and real-based earnings management activities depending on the regression model. We use the absolute value of Jones (1991) model to calculate the accrual-based earnings management proxy. The real earnings management proxy is calculated as abnormal production minus abnormal discretionary expenses (Zang, 2012). *Comply_Strategy* relates to whether the company is considered a *serious* or *label* complier. *P* is a dummy variable that takes the value of 1 for the years after compliance (finishing in 2008); 0 otherwise. α_i and δ_t represent firm and year fixed effects, respectively. The coefficient of interest would be β_3, which corresponds to the interaction between the comply strategy (serious or label compliers) and the post-treatment period. According to our expectations, we expect that β_3 is negative (positive) for serious (label) compliers.

4. Sample and data

Data related to directors is collected from BoardEx database. Financial information is collected from CRSP and COMPUSTAT databases. Auditors information is collected from Audit Analytics database. Firms with fiscal year end between May 2000 and June 2001 are classified as compliant if the percentage of independent directors is higher than 50%. We find 1,257 non-compliant companies that comply in year 2001, 2002, 2003 or 2004.[7] Firms that were not initially compliant with the independence regulation would need to change their boards by the

[7] To ensure that our sample period measures board independence right after firms' mandatory compliance, and similarly to Duchin et al. (2010) and Armstrong et al. (2014), we consider as the ending period the fiscal years ending between May 2004 and June 2005. To observe the initial level of board independence right before the influence of these regulations, we consider, as the starting period, the fiscal years ending between May 2000 and June 2001 (Armstrong et al., 2014). The starting point is prior to the Enron collapse in 2001, to SOX in 2002, and to the NYSE and Nasdaq regulations in 2003, but right after the "Blue Ribbon" panel's recommendations. Thus, for example, firms that complied with a majority of board independence earlier in 2001 were likely to do so as a consequence of NYSE and Nasdaq already requiring audit committees to consist entirely of independent directors.

earlier of the firm's first annual shareholders meeting after January 2004 or by October 2004 (Armstrong et al., 2014).[8]

Figure 1 Panel A provides graphical evidence on changes to board composition (i.e., percentage of independent directors) between 2000 and 2004 for both comply companies and non-comply companies. This evidence is consistent with Duchin et al. (2010) and suggests that both comply and non-comply firms increase board independence. Figure 1 Panel B shows that this change in board independence goes together with a change in board size, as firms appear to comply with the board independence regulation by increasing board size, on average. Finally, Figure 1 Panel C provides graphical evidence consistent with that the timing of compliance with the regulation changes for the different companies. In particular, in our sample, from the 1,257 non-comply companies in year 2000, 339 companies (27%) comply in 2001, 325 companies (26%) comply in 2002, 335 companies (27%) comply in 2003 and 258 companies (20%) comply in 2004.

4.1. Descriptive evidence: Strategic decision-making by non-comply firms

Both Table 1 and Figure 2 provide evidence of changes in board size and board composition in non-comply firms. Table 1 Panel A indicates that non-comply companies have, according to the median, 6 members in the pre-comply period (i.e., year 2000) with a median of 4 (2) non-independent (independent) directors. Regarding the comply period (i.e., year 2001, 2002, 2003 or 2004), Figure 2 Panel A and Panel B show the change in the board size composition from the pre-comply to the comply year. It appears that many firms complied with the regulations by either shrinking the board to 5 members, or by expanding it to a 7-member board. As shown

[8] Firm's annual shareholder meeting is hold between four and six months following the firm's fiscal year-end. Thus, for instance, a company that has the fiscal-year end in December, would need to comply with the regulation on its annual shareholder meeting of Spring 2004. Another company with the annual shareholder meeting on November would need to comply by November 2003 annual meeting or holding an extraordinary meeting before November 2004 to comply with the regulation (Armstrong et al., 2014).

in Table 1 Panel A these new boards were slightly larger (the median board changes from 6 to 7 members), where now there is an median of 3 (4) non-independent (independent) directors after the reform. This shift is very noticeable in Figure 2 Panel C and Panel D, where it can be seen that the distribution of non-independent directors shifts to the left, while the distribution of independent directors shifts to the right.

Table 1 Panel A shows that 19.2% (8.4%) of companies in our sample are serious (label) compliers. Regarding the timing strategies, Table 1 Panel A shows that 52.8% of non-comply firms comply in years 2001 and 2002 (*Early comply*), while 47.2% of non-comply firms adopt board independence regulation in years 2003 and 2004 (*Resist Comply*). We also observe heterogeneity in the composition strategies, that is, in *how* non-comply firms complied with the board reforms. Although most of the firms fired non-independent directors (58.4%) to comply with board regulation, we also find that 21.5% of non-comply firms decided to keep their non-independent directors. Also, 52.3% of non-comply firms hired one or more independent directors that were included in one or more of the main committees, while the remaining non-comply firms (47.7%) hired independent directors, but without including them in those committees.

Untabulated results show that 188 companies (15% of non-comply firms) followed the strategy of changing the role of one or more directors from non-independent to independent. This alternative strategy is consistent with a three-year "cooling off" period that applies to the definition of independent directors, according to NYSE and NASDAQ regulation. In particular, directors can be classified as independent when they meet the corresponding requirements in the last three years, even if those directors did not meet the requirements during the time period previous to three years.[9]

[9] A complete explanation of firms with changes in their directors' roles can be found in Appendix II.

Table 1 Panel B shows the correlation matrix. *Industry speed* has a positive correlation with *Non-available Directors [Busy]*, and a negative correlation with *Non-available Directors [IND]*, indicating that, more independent directors with more than 2 board seats, and lower percentages of independent directors in the other companies from the same industry, accelerate the complying process of the industry. The correlations between serious (label) compliers and industry speed is positive (negative), suggesting that high (low) speed of companies in the same industry leads firms to accelerate (decelerate) the process of complying, making more (less) likely to be a serious (label) company.

Table 2 shows the changes in boards for non-comply firms. Table 2 Panel A is consistent with non-compliers generally expanding their boards to implement the reforms, being the total pre-comply board seats (8,824) smaller than the number of seats after the implementation of the board reforms (9,174). Although the non-independent directors' seats decrease from 2000 to the year in which firms comply by 37.13%, the number of independent directors' seats increases by 69.19%.

We also analyse the evolution of board seats and of the number of directors in non-comply firms by year (Table 2 Panel B), also by distinguishing between independent (Table 2 Panel C) and non-independent (Table 2 Panel D) board seats and directors. Table 2 Panel C and Panel D shows that, for every year, the net value of board seats is positive (negative) for independent (non-independent) directors. This shows that non-comply firms tend to comply by firing non-independent directors and hiring independent directors. In addition, the net value of board seats for all directors is positive (Table 2 Panel B) which indicates that non-comply companies tend to comply by increasing their board size. In terms of number of directors, non-comply firms generally hired more than fired, except in year 2002, when a higher number of directors was fired, compared to the directors hired. In fact, in year 2002, the positive net change (hiring minus firing) for independent directors (Table 2 Panel C) is lower, in absolute values, than the

negative net change for non-independent directors in year 2002 (Table 2 Panel D), explaining the negative net difference for all the directors in the same year (Table 2 Panel B).

4.2. Descriptive evidence: Characteristics of directors in non-comply firms

Table 3 reports descriptive statistics at directors' level, showing characteristics of independent (Table 3 Panel A) and non-independent (Table 3 Panel B) directors that have been hired, fired, or kept during the implementation period of the board independence reforms (i.e., during year 2001, 2002, 2003 and 2004). Compared to fired and kept independent directors, hired independent directors report a higher percentage of females, higher financial expertise, and a higher participation in audit, compensation, and nominating committees. Hired independent directors are also less busy (i.e., have a lower number of board seats) than fired or kept independent directors, as they have less directorships than their peers (*Board Seats* variable). On the other hand, fired non-independent directors are older and busier (i.e., have a larger number of board seats) , and report a lower percentage of foreigners, compared to non-independent directors that were hired or kept. They also participate more in multiple committees, and are more often a member of audit and compensation committees, compared to hired or kept non-independent directors. Independent directors that are kept are, on average, older than the non-independent directors that are kept.

In general, descriptive statistics from Table 3 suggest that, compared to fired non-independent directors, the profile of hired independent directors is younger, less busy, and more financial expert, also being the percentage of females higher than for fired non-independent directors. [10]

[10] We substitute the *Financial Expert* variable by 0 if the variable is missing. To account for this change, we create the dummy variable *Missing Data FinExp* that equals 1 for the missing observations of *Financial Expert*; 0 otherwise.

5. Results

5.1. The dynamics of being serious or label compliers

Table 4 reports the regression results from Model (1) to explore the dynamics and determinants of being a serious or label complier. We find that when the other companies in the industry are faster in complying (i.e., the *Industry speed* variable increases), it is more likely for a company to be classified as *serious*, which means that companies are more likely to comply earlier (during years 2001 and 2002) with board regulation and to fire non-independent directors. These results suggest that, when industry peers comply earlier, the availability of independent and less busy directors might decrease, pushing companies to comply earlier as well and possibly to fire non-independent directors and, thus, to achieve a majority of independent directors even earlier. This intuition is confirmed by the positive association between being a serious complier and both *Non-available Directors [Busy]* and *Non-available Directors [IND]*, indicating that a reduced availability of directors in a given industry is positively associated to being a serious complier.

On the contrary, higher industry speed is negatively related to being classified as label compliers. This could be because when the other companies in the industry take more time to comply, there exists a larger pool of directors that allows companies to choose independent directors to hire even in the last years of compliance. In fact, the availability of less busy directors and of independent directors in the same industry does not seem to affect the possibility of being a label complier, as indicated by the non-significant coefficients related to the two corresponding variables.

Besides time and director dynamics, we also find that managerial incentives matter in being classified as serious or label complier. In particular, our proxy for entrenchment, which is measured at year 2000, is not significantly related to being a serious complier, but it is

positively related, at a 5% significance level, to be classified as label complier. This result suggests that entrenched CEOs tend to comply with board regulation later and without firing non-independent directors, who are more likely to maintain CEOs' entrenchment levels even after the board reform.

Finally, some determinants, measured at year 2000, at firm level also contribute in being a serious or label complier when complying with board regulation. In particular, board size and returns volatility are positively associated with *Serious Comply*. Also, dynamics at firm level such as board size, R&D expenditures, returns volatility, and Big 4 auditors are all significantly and negatively associated with *Label Comply*, while the coefficient becomes positive and significant for auditors in their first year with the firm.

Taken together, results from Table 4 indicate that companies' endogenous choices to comply are related to time and director dynamics, managerial incentives and some firm characteristics. All these characteristics are likely to lead firms to follow different compliance strategies as responses to a common external shock which, in our setting, consists in a board independence regulation.

5.2. Compliance strategies and reporting outcomes

Table 5 reports the regression results from Model (2) to explore the consequences of complying strategies in financial reporting quality. We create a model similar to differences-in-differences model, where the treatment variable indicates the different compliance profiles (i.e., serious and label compliers), alternatively. The post-treatment variable (*P*) is a dummy variable that equals 1 for the years after compliance (finishing in 2008); 0 otherwise. The sample period for our analysis ranges from 1999 to 2008. For our model, we include the non-compliant companies (i.e., companies that are non-compliant in year 2000 and comply in year 2001, 2002, 2003 or 2004). The available sample comprises 9,673 firm-year observations when we use our

proxy for accrual-based manipulation (*AEM*) as the dependent variable, and 11,019 firm-year observations when we use our proxy of real earnings management (*REM*).

The coefficients of interest correspond to the interaction between the variables indicating the different specifications for serious and label compliers, and the post-treatment variable. As shown in Table 5, being a serious complier is likely to reduce accrual earnings management. The lack of significant results for real earnings management might be explained by the fact that committees such as the audit committee detect irregularities of accounting numbers better than distortions of operational practices, making the corresponding coefficient negative but not significant at conventional levels. With regards to label compliers, the coefficients corresponding to the interaction between *Label Comply* and *P* are positive and significant for real earnings management. These results indicates that being a label complier, is likely to increase real-based activities manipulation, which is in contrast with the results standard setters would expect through the board reform in terms of improving financial reporting quality.

5.3. Consequences for CEOs

Endogenous comply strategies are likely to affect not only firms' output such as financial reporting quality, but also CEOs' careers. Table 6 analyses implications of operating in a serious or label company for CEOs in terms of their tenure and ability in generating revenues from corporate resources as in Demerjian et al. (2012). The coefficient of interest corresponds to the interaction between the variable P and the profiles of non-comply firms (serious and label).

Results from Table 6 indicate that being in a company that is serious about the implementation of the board reforms is likely to have no effect on CEOs' career and ability after complying with board regulation. However, the interaction between *P* and label compliers reports positive and significant coefficient for *CEO tenure*, and a negative and significant

coefficient for *Managerial ability*. These results suggest that working in a label complier during the implementation of the board reform seems to be beneficial for CEOs in the post-treatment period, as it increases their tenure even though managerial ability is negatively affected.

Among the other determinants of consequences for CEOs, managerial entrenchment is positively related to CEO tenure, confirming that entrenched CEOs are less likely to be punished in terms of losing their job position. Managerial entrenchment makes more likely for a company to be classified as label, as shown in Table 4, where, in turns, there are less labour consequences for CEOs after a board reform, as shown in Table 6, highlighting the endogeneity of our empirical models even in an exogenous context such as a board reform.

With regards to the other determinants, business segments and firm size are likely to increase CEO tenure, while managerial ability is positively affected by firm size, and negatively affected by leverage and board size.

5.4. Consequences for directors

In this section, we analyze the consequences for independent directors. For each director we identify all directorships from which they have been hired and fired from year 2001 to 2004. Then, we calculate the difference between total number of new directorships minus total number of directorships lost in the period 2001-2004 for each director. Thus, net fired (hired) directors are those with more (less) fires than hires from 2001 to 2004. Finally, we distinguish between net hired and net fired that are independent and non-independent directors, to analyze the consequences of board regulation for independent and non-independent directors separately. The sample includes 3,083 directors: 1,926 net hired independent directors, 393 net hired non-independent directors, 27 net fired independent directors, and 737 net fired non-independent directors. Thus, *Net Hired IND* (*Net Hired NonIND*) is a dummy variable that takes the value of 1 for independent (non-independent) directors who have net hires in the

different board seats of the companies they belong from year 2001 to year 2004. *Net Loser IND* (*Net Loser NonIND*) is a dummy variable that takes the value of 1 for independent (non-independent) directors who have net fires in the different board seats of the companies they belong from year 2001 to year 2004. To analyze the consequences for both hired and fired directors, we track their subsequent board seats after the implementation period by using a time window of 4 years (from 2005 to 2008).

Results are reported in Table 7 Panel A. The associations between subsequent board seats and both net hired and net fired independent directors are negative and significant, while the associations between subsequent board seats and net hired and net fired non-independent directors are positive and significant. These results suggest that independent directors that gained or lost board seats during the implementation period of the board independence reform tend to experience negative labour consequences in the subsequent years. Many firms may have had optimal board composition once they achieved the requirement of board independence, as the independent directors appointed during regulation appear to be penalized later (i.e., those appointed just for compliance reasons, would later rotate faster). On the contrary, non-independent directors with net hires or net fires tend to increase the board seats in the subsequent years.

With regards to the control variables, as this is a model created at the director-year level, *Any Committee*, which is the director-year maximum of the dummy variable that equals 1 if the director belongs to any committee (i.e., audit committee, compensation committee or nomination committee), does not affect the number of future board seats. Both *Director Tenure* and *Director Age* are negatively related with the future number of board seats. Finally, being female increases directors' seats in the subsequent years, while being foreign does not significantly affects the change in future number of board seats.

Table 7 Panel B shows the consequences for hired independent directors during the regulation compliance period (i.e., 2001-2004) in terms of directorships lost and director tenure during the subsequent years. We find that independent directors hired during the compliance period are more likely to lose the gained directorships in the following four years (i.e., 2005-2008) and have lower tenure.[11] This relates with our previous result as firms may have an optimal composition before the regulation and hire independent directors to comply that are likely to be penalized later or are likely to rotate faster if they don't match with the company expectations.

6. Robustness Checks

As robustness checks we create alternative (and more restrictive) measures for both serious and label compliers. In particular, the alternative proxy for serious compliers is a dummy variable that equals 1 if *Early Comply*, *Fire NonIND* and *Hire IND* for Committees equal 1; 0 otherwise. The alternative proxy for label compliers is a dummy variable that equals 1 if *Resist Comply*, *Keep NonIND* and *Hire IND for No Committees* equal 1; 0 otherwise. These measures are more restrictive and, in our sample, 9.2% (3.1%) of the companies meet this alternative *serious* (*label*) comply definition. Untabulated results show that coefficients of the main models remain mostly unchanged for the alternative compliance measures.

To run our empirical models, and to obtain data that closely track directors, we used the *Individual Employment File* from BoardEx. However, BoardEx also provides the *Organization Summary File*. We find that from the 1,257 companies in our final sample, 320 companies appear in the *Individual Employment File* but not in *the Organization Summary File*. To ensure that this is not affecting our results, we run our main regressions both including a control dummy that equals 1 for the missing companies and for the subsample without the companies

[11] The results are similar when considering non-independent directors hired during the compliance period.

missing in the *Organization Summary* file and our main results remain unchanged. In addition, to ensure that all our directors are correctly classified we manually check the board of directors composition from 2000 to 2004 of some companies from the 320 that only appear in the *Individual Employment File* and compare them with the 10-Ks information from Edgar. We do not find significant differences in the board composition of the companies.

7. Conclusions

In the past decade, several regulations called for reforms in corporate boards, mandating independence. These regulations created 'exogenous' variation in board independence, in that *treated* firms were forced to increase their percentage of independent directors. However, firms could still choose who to appoint, and when to appoint these directors. We examine whether companies engage in different composition and timing strategies to comply with a recent board independence regulation. We document significant heterogeneity in the strategies companies follow to comply with the regulation both in terms of how (i.e., composition) and when (i.e., timing) they comply. We also identify, through composition and timing strategies, serious firms as firms that arguably take advantage of the board reform to improve their quality of accounting information, and label firms as firms that apply the board reform without the intention of implementing material changes in their reporting policies. We find that being a serious or label complier depends on both industry dynamics and managers' as well as firms' characteristics. Also, the endogenous firms' response to the exogenous shock represented by board reforms leads to different effects on financial reporting quality, and it is likely to affect CEOs' and directors' careers.

Appendix I. Variable definition

Variables	Definition	Database
Serious Comply	Dummy variable that takes the value of 1 if *Early Comply* and *Fire NonIND* equal 1; 0 otherwise.	BoardEx
Label Comply	Dummy variable that takes the value of 1 if *Resist Comply* and *Keep NonIND* equal 1; 0 otherwise.	BoardEx
Industry Speed	Mean by industry (SIC1) and year of the months companies use to comply excluding the own company. It is multiplied by -1 for interpretation reasons.	BoardEx
Non-available Directors [Busy]	Mean by industry (SIC1) and year of the percentage of busy directors excluding the own company.	BoardEx
Non-available Directors [IND]	Mean by industry (SIC1) and year of the percentage of independent directors excluding the own company.	BoardEx
Entrenchment	Dummy variable that equals 1 E-index is larger than 3 and CEO tenure is larger than the sample mean; 0 otherwise.	BoardEx & http://www.law.harvard.edu/faculty/bebchuk/data.shtml
Early Comply	Dummy variable that takes the value of 1 if the firm complies in year 2001 or 2002; 0 otherwise.	BoardEx
Resist Comply	Dummy variable that takes the value of 1 if the firm complies in year 2003 or 2004; 0 otherwise.	BoardEx
Fire NonIND	Dummy variable that equals 1 if the company fires one or more non independent directors to comply; 0 otherwise.	BoardEx
Hire IND for Committees	Dummy variable that takes the value of 1 if the firm hires one or more independent directors for one or more of the main committees (i..e, Audit, Compensation and/or Nomination Committee) to comply; 0 otherwise.	BoardEx
Keep NonIND	Dummy variable that takes the value of 1 if the firm keeps the same number of non-independent directors when it complies; 0 otherwise.	BoardEx
Hire IND for No Committees	Dummy variable that takes the value of 1 if the firm hires one or more independent directors who do not belong to any of the main committees (i..e, Audit, Compensation or Nomination Committee) to comply; 0 otherwise.	BoardEx
CEO tenure	Number of years the CEO stays in office.	BoardEx
Managerial ability	Mangerial ability proxy from Demerjian et al. (2012).	Demerjian et al. (2012) https://peterdemerjian.weebly.com/managerialability.html
Board Size	Number of directors in the board.	BoardEx
Firm Size	Natural logarithm of total assets.	COMPUSTAT
R&D	R&D expenditure (set to zero if missing) scaled by annual net sales.	COMPUSTAT
Leverage	Long-term total debt scaled by total assets.	COMPUSTAT
GEO segments	Natural logarithm of 1 plus the number of geographical segments recorded in the COMPUSTAT Segment file.	COMPUSTAT
BUS segments	Natural logarithm of 1 plus the number of business segments recorded in the COMPUSTAT Segment file.	COMPUSTAT
Returns Volatility	Monthly standard deviation of the previous 12 month's stock returns.	CRSP
Price	Closing market price per share.	COMPUSTAT
Firm Age	Natural logarithm of firm age measured as the earliest date on which the company appears in the CRSP database.	CRSP
BTM	Book-to-market ratio [AT/LT+(CSHO*PRCC_F)].	COMPUSTAT

ROA	Return on assets ratio.	COMPUSTAT
Big 4 auditor	Dummy variable that takes the value of 1 if the firm is audited by a big four auditor; 0 otherwise.	Audit Analytics
New auditor	Dummy variable that takes the value of 1 if the auditor is in its first year with the firm; 0 otherwise.	Audit Analytics
Director Age	Age of the director.	BoardEx
Female	Dummy variable that takes the value of 1 if the director gender is female; 0 otherwise.	BoardEx
Board Seats	Number of directorships of each director.	BoardEx
Foreign	Dummy variable that takes the value of 1 if the director nationality is different from US; 0 otherwise.	BoardEx
Financial Expert	Dummy variable that takes the value of 1 if the director is a financial expert; 0 otherwise.	BoardEx
Missing Data FinExp	Dummy variable that takes the value of 1 if *Financial Expert* is missing; 0 otherwise.	BoardEx
Audit (AC)	Dummy variable that takes the value of 1 if the director seats only in the Audit Committee; 0 otherwise.	BoardEx
Compensation (CC)	Dummy variable that takes the value of 1 if the director seats only in the Compensation Committee; 0 otherwise.	BoardEx
Nominating (NC)	Dummy variable that takes the value of 1 if the director seats only in the Nominating Committee; 0 otherwise.	BoardEx
Multiple Committees	Dummy variable that takes the value of 1 if the director seats in one or more of the main committees (i.e., Audit, Compensation, Nominating); 0 otherwise.	BoardEx
Net Hired IND	Dummy variable that takes the value of 1 for independent directors who have more hires than fires in the different board seats of the companies they belong from year 2001 to year 2004; 0 otherwise.	BoardEx
Net Hired NonIND	Dummy variable that takes the value of 1 for non-independent directors who have more hires than fires in the different board seats of the companies they belong from year 2001 to year 2004; 0 otherwise.	BoardEx
Net Fired IND	Dummy variable that takes the value of 1 for independent directors who have more fires than hires in the different board seats of the companies they belong from year 2001 to year 2004; 0 otherwise.	BoardEx
Net Fired NonIND	Dummy variable that takes the value of 1 for non-independent directors who have more fires than hires in the different board seats of the companies they belong from year 2001 to year 2004; 0 otherwise.	BoardEx
Any Committee	Maximum of the director-year dummy that equals 1 if the director belongs to any of the main committees (i.e., audit committee, compensation committee or nomination committee).	BoardEx
IND Directorship Loss (2005-2008)	Dummy variable that takes the value of 1 when independent directors hired during the compliance period (2001-2004) are fired between 2005-2008; 0 otherwise.	BoardEx
IND Appointed 2001-2004	Dummy variable that takes the value of 1 for independent directors hired during the compliance period (2001-2004); 0 otherwise.	BoardEx
Non-independent Directors	Number of non-independent directors on the board.	BoardEx
Independent Directors	Number of independent directors on the board.	BoardEx
Recycled	Dummy variable that takes the value of 1 if the firm changes one or more director's role from non-independent to independent (or from independent to non-independent); 0 otherwise.	BoardEx

Director Tenure	Number of years the director has been working for a company.	BoardEx
Board Seats	Number of directorships for each director-year.	BoardEx
AEM	Absolute variable of discretionary accruals calculated following Jones (1991).	COMPUSTAT
REM	Real earnings management proxy calculated following Zang (2012): abnormal production – abnormal discretionary expenses.	COMPUSTAT

Appendix II. Firms with role changes

Our sample consists of 1,257 firms that do not comply with SOX independence rules in year 2000 (i.e., they do not have a majority of independent directors in the board) and comply in 2001, 2002, 2003 or 2004. There are 188 companies that change the role of one or more directors during our sample period. Most of these companies have directors' role changes from non-independent to independent positions in the board. In particular, we observe the following changes:[12]

1) 154 companies comply in the year in which the director's role change is done. For instance, Company A has Director X as Chairman in years 2000, 2001, 2002 and 2003 and as Independent Director in year 2004. This company complies in year 2004 when board independence changes from 43% in year 2003 to 86% in 2004. Company B has Director Y as Director-SD (i.e., Supervisory Director) in years 2000 and 2001 and as Independent Director in year 2002. This company complies in year 2002 when board independence changes from 40% in year 2001 to 57% in 2002.
2) 182 companies change the role of one, two or three directors from non-independent to independent positions. For instance, Company C has Director X as Senior VP/CFO in 2000 and 2001 and as Independent Director in 2002. Company D has Director A as Chairman in years 2000-2003 and as Independent Director in year 2004. The same company has Director B as Director-SD (i.e., Supervisory Director) in years 2000-2003 and as Independent Chairman in year 2004. Company E has both Director U and Director was Director-SD (i.e., Supervisory Director) in years 2000-2003 and as Independent Director in year 2004. The same company also has Director P as Director-SD (i.e., Supervisory Director) in years 2000-2002 and 2003 and as Independent Chairman in year 2004.
3) 6 companies change one director's role from independent to non-independent director (2 of these companies comply in the year they make the director's role change). For instance, Company F has Director H as Independent Director in year 2000 and Senior VP in years 2001 and 2002. Company G has Director Z as Independent Director in year 2001 and as Interim Chairman in year 2002.

BoardEx support confirmed that these changes in directors' roles exist per public firm disclosure.

Both NYSE and NASDAQ include exemptions to independence rules. For instance, a director could change the role from non-independent to independent director if he/she has not been at any time during the last three years employed by the company or by any parent or subsidiary of the company (Weil et al., 2015). Related to this information, an example from our sample is the company Company W. In this company, Director B has the role of President/COO in year 2000 and the role of Independent Director in year 2003 (this is the comply year for the company). In the 2003 annual proxy statement, Company W discloses that, according to the NASDAQ independent rules, Director B meets the independence requirements on November 2003 when three years has passed since the director was last hired at the company. This information links with the NASDAQ (and NYSE) requirement of that annual meeting proxy statement on Form 10-K must include all the information (i.e., transactions and arrangements) considered by the board to establish the directors' independence status.

[12] Please note that the real companies and directors names has been changed for privacy reasons.

References

Adams, R.B., Ferreira, D., 2007. A theory of friendly boards. *The Journal of Finance* 62: 217-250.

Ahern, K.R., Dittmar, A. 2012. The changing of the boards: The impact on firm valuation of mandated female board representation. *Quarterly Journal of Economics* 127: 137–197.

Ahmed, A.S., Duellman, S., 2007. Accounting conservatism and board of director characteristics: an empirical analysis. *Journal of Accounting and Economics* 43, 411–437.

Armstrong, C.S., Core, J. E., Guay, W. R. 2014. Do independent directors cause improvements in firm transparency? *Journal of Financial Economics* 113, 383-403.

Balsmeier, B., Fleming, L., Manso, G., 2017. Independent boards and innovation. *Journal of Financial Economics* 123, 536-557.

Baysinger, B.D., Kosnik, R.D., Turk, T.A., 1991. Effects of board and ownership structure on corporate R&D strategy. *Academy of Management Journal* 34 (1), 205-214.

Bebchuk, L., Cohen, A., Ferrell, A., 2009. What matters in corporate governance?. *Review of Financial Studies* 22 (2), 783-827.

Beekes, W., Pope, P., Young, S., 2004. The link between earnings timeliness, earnings conservatism and board composition: evidence from the UK. *Corporate Governance: An International Review* 12, 47–59.

Boone, A.L., Casares, L., Karpoff, J.M., Raheja, C.G., 2007. The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics* 85, 66-101.

Brown, S.V., and Knechel, W.R. 2016. Auditor-client compatibility and audit firm selection. *Journal of Accounting Research* 54, 725-775.

Chen, X., Cheng, Q., Wang, X. 2015. Does increased board independence reduce earnings management? Evidence from recent regulatory reforms. *Review of Accounting Studies* 20, 899-933.

Cheng, S., 2008. Board size and the variability of corporate performance. *Journal of Financial Economics* 87, 157-176.

Chiu, P.C., Teoh, S.H., Tian, F., 2013. Board interlocks and earnings management contagion. *The Accounting Review* 88 (3), 915-944.

Coles, J.L., Daniel, N.D., Naveen, L., 2008. Boards: Does one size fit all? *Journal of Financial Economics* 87, 329-356.

Coles, J.L., Daniel, N.D., Naveen, L., 2014. Co-opted boards. *The Review of Financial Studies* 27 (6), 1751-1796.

Coates, J., 2007. The goals and promise of the Sarbanes-Oxley Act. *Journal of Economic Perspectives* 21, 91–116.

Dahya, J., McConnell, J. J., 2005. Outside directors and corporate board decisions. *Journal of Corporate Finance* 11 (1-2), 37-60.

Dalton, D. R., Daily, C. M., Johnson, J. L., Ellstrand, A. E., 1999. Number of directors and financial performance: a meta-analysis. *Academy of Management Journal* 42 (6), 674-686.

Daske, H., Hail, L., Leuz, C., Verdi, R., 2013. Adopting a label: Heterogeneity in the economic consequences around IAS/IFRS adoptions. *Journal of Accounting Research* 51 (3), 495-547.

DeFond, M.L., Hann, R.N., Hu, X., 2005. Does the market value financial expertise on audit committee of boards of directors? *Journal of Accounting Research* 43 (2), 153-193.

Demerjian, P., Lev., B., McVay, S., 2012. Quantifying managerial ability: A new measure and validity tests. *Management Science* 58(7), 1229-1248.

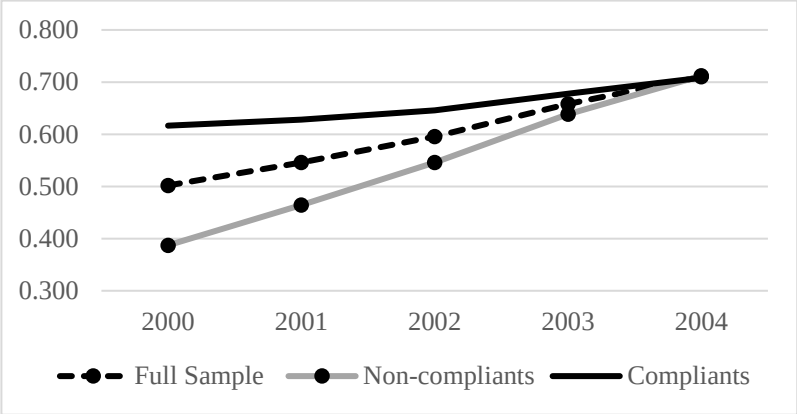
Du, K., Shen, R., 2018. Peer performance and earnings management. *Journal of Banking and Finance* 89, 125-137.

Duchin, R., Matsusaka, J.G., Ozbas, O., 2010. When are outside directors effective? *Journal of Financial Economics* 96, 195-214.
Duru, A., Iyengar, R. J., Zampelli, E. M., 2016. The dynamic relationship between CEO duality and firm performance: The moderating role of board independence. *Journal of Business Research* 69, 4269-4277.
Eisemberg, T., Sundgren, S., Wells, M.T., 1998. Larger board size and decreasing firm value in small firms. *Journal of Financial Economics* 48 (1), 35-54.
Ferreira, D., Ferreira, M., Raposo, C., 2011. Board structure and price informativeness. *Journal of Financial Economics* 99, 523–545.
Ferris, S.P., Jagannathan, M.P., Adam C. 2003. Too busy to mind the business? Monitoring by directors with multiple board appointments. *The Journal of Finance* 58 (3), 1087–1111.
Garcia Lara, J.M., Garcia Osma, B., Mora, A., Scapin, M., 2017. The monitoring role of female directors over accounting quality. *Journal of Corporate Finance* 45, 651-668.
Garcia Osma, B. Grande-Herrera, C., Vazquez, A.B. 2019. *Who is keeping an eye on real earnings management? Working paper*.
Ghosh, A., Marra, A., Moon, D., 2010. Corporate boards, audit committees, and earnings management: pre- and post-SOX evidence. *Journal of Business Finance & Accounting* 37 (9&10), 1145-1176.
Gompers, P., Ishii, J., Metrick, A., 2010. Extreme governance: An analysis of dual-class firms in the United States. *The Review of Financial Studies* 23 (3), 1051-1088.
Granovetter, M., 2005. The impact of social structure on economic outcomes. *Journal of Economic Perspectives* 9 (1), 33-50.
Hambrick, D.C., Fukutomi, G.D.S., 1991. The season of a CEO's tenure. *The Academy of Management Review* 16 (4), 719-742.
Hermalin, B., Weisbach, M., 1998. Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review* 88, 96-118.
Hwang, B.H., Kim, S., 2009. It pays to have friends. *Journal of Financial Economics* 93, 138-158.
Jiraporn, P., Davidson III, W. N., DaDalt, P., Ning, Y., 2009. Too busy to show up? An analysis of directors' absences. *The Quarterly Review of Economics and Finance* 49, 1159–1171.
Jones, J. J. 1991. Earnings management during import relief investigations. *Journal of Accounting Research* 29 (2), 193-228.
Kedia, S., Koh, K., Rajgopal, S., 2015. Evidence on contagion in earnings management. *The Accounting Review* 90 (6), 2337-2373.
Kim, K., Mauldin, E., Patro, S., 2014. Outside directors and board advising and monitoring performance. *Journal of Accounting and Economics* 57, 110-131.
Knyazeva, A., Knyazeva, D., Masulis, R. W., 2013. The supply of corporate directors and board independence. *The Review of Financial Studies* 26 (6), 1561-1605.
Krishnan, G.V., Visvanathan, G., 2008. Does the SOX definition of an accounting expert matter? The association between audit committee directors' accounting expertise and accounting conservatism. *Contemporary Accounting Research* 25 (3), 827-857.
Krishnaswami, S., Subramaniam, V., 1999. Information asymmetry, valuation, and the corporate spin-off decision. *Journal of Financial Economics* 53, 73-112.
Levit, D., Malenko, N., 2016. The labor market for directors and externalities in corporate governance. *The Journal of Finance* 71 (2), 775–808.
Linck, J.S., Netter, J.M., Yang, T., 2008. The determinants of board structure. *Journal of Financial Economics* 87, 308-328.
Matsa, D., Miller, A. 2013. A female style in corporate leadership? Evidence from quotas. *American Economic Journal: Applied Economics* 5: 136–169.

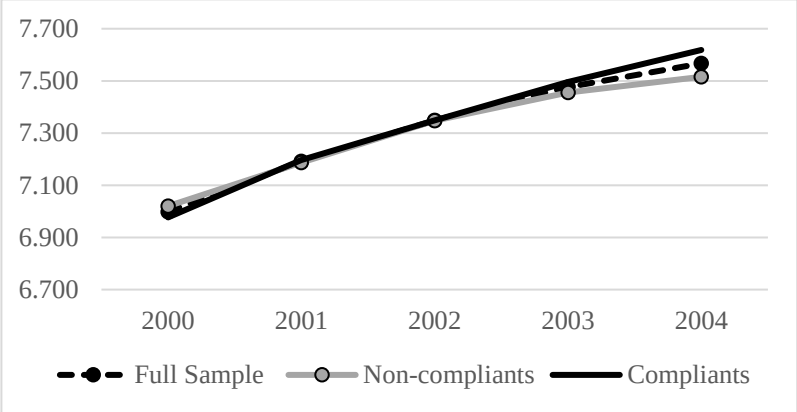
McConnell, J., 2002. Outside directors. Keynote address to annual meeting of Eastern Finance Association.
Peasnell, K.V., Pope, P.F., Young, S., 2005. Board monitoring and earnings management: do outside directors influence abnormal accruals? *Journal of Business Finance & Accounting* 32 (7&8), 1311-1346.
Peters, F., Wagner, A. The Executive Turnover Risk Premium. *The Journal of Finance*, 69(4), 1529-1563.
Petra, S., 2007. The effects of corporate governance on the informativeness of earnings. *Economics of Governance* 8,129–152.
Raheja, C., 2005. Determinants of board size and composition: a theory of corporate boards. *Journal of Financial and Quantitative Analysis* 40, 283-306.
Renneboog, L., Zhao, Y., 2011. Us know us in the UK: On director networks and CEO compensation. *Journal of Corporate Finance* 17, 1132-1157.
Roychowdhury, S. 2006. Earnings management through real activities manipulation. *Journal of Accounting and Economics* 42 (3), 335-370.
Rubin, A., Segal, D., 2018. Directors skill and financial reporting quality. *Journal of Business, Finance & Accounting* 3-4, 457-493.
Securities and Exchange Commission (SEC). 2003. *NASD and NYSE Rulemaking: Relating to Corporate Governance*. November 4. Available at *https://www.sec.gov/rules/sro/34-48745.htm*, retrieved October 22nd, 2020.
Srinidhi, B., Gul, F.A., Tsui, J., 2011. Female directors and earnings quality. *Contemporary Accounting Research* 28 (5), 1610–1644.
Weisbach, M. S., 1998. Outside directors and CEO turnover. *Journal of Financial Economics* 20, 431-460.
Weil, Gotshal and Manges LLP (2015). Requirements for Public Company Boards. Including IPO transition rules. Public Company Advisory Group. Available at: *https://www.weil.com/~/media/files/pdfs/150154_pcag_board_requirements_chart_2015_v21.pdf*, retrieved November 23rd, 2020.
Xie, B., Davidson, W.N., DaDalt, P.J., 2003. Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance* 9, 295-316.
Zang, A. Y. 2012. Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The Accounting Review*, 87(2), 675-703.

Figure 1. Boards changes and compliance

Panel A. Evolution of board independence



Panel B. Evolution of board size



Panel C. Percentage of firms that comply by year

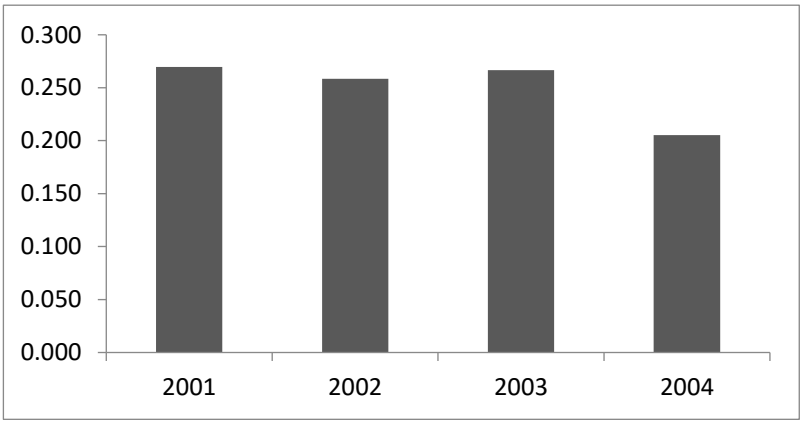
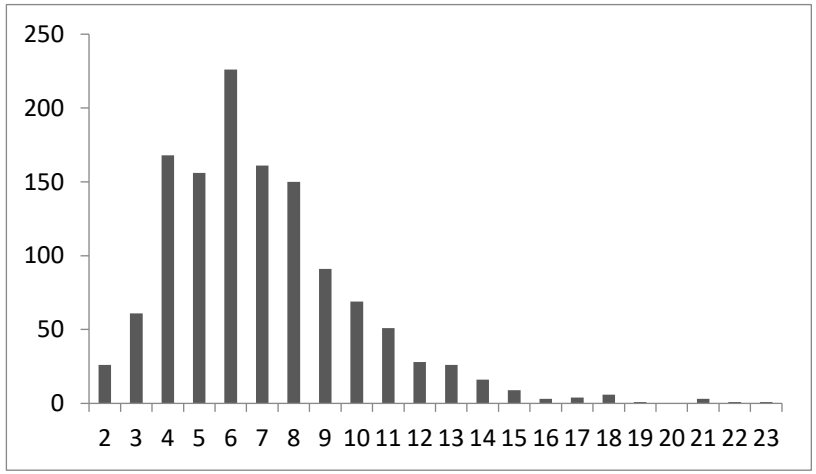


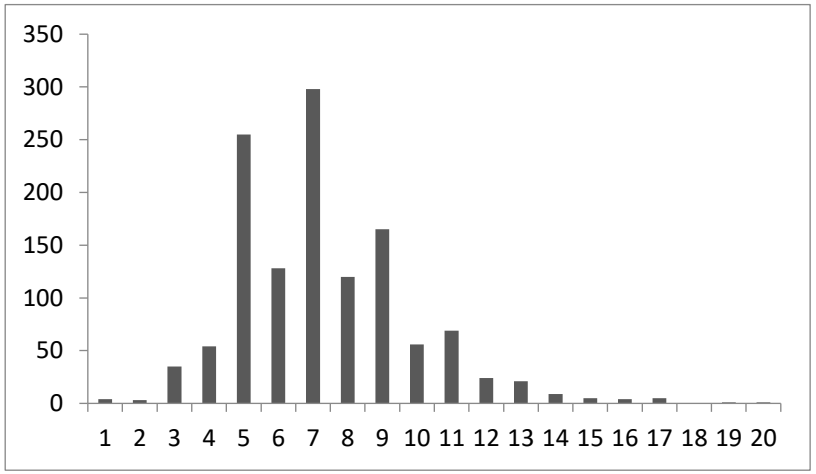
Figure 1 shows the board changes and percentage of compliance from 2000 to 2004. Panel A (Panel B) shows the evolution of board composition (board size) from 2000 to 2004 for comply and non-comply companies. Panel C shows the percentage of non-comply firms that comply from year 2001 to 2004.

Figure 2. Changes to board size and composition in non-comply firms.

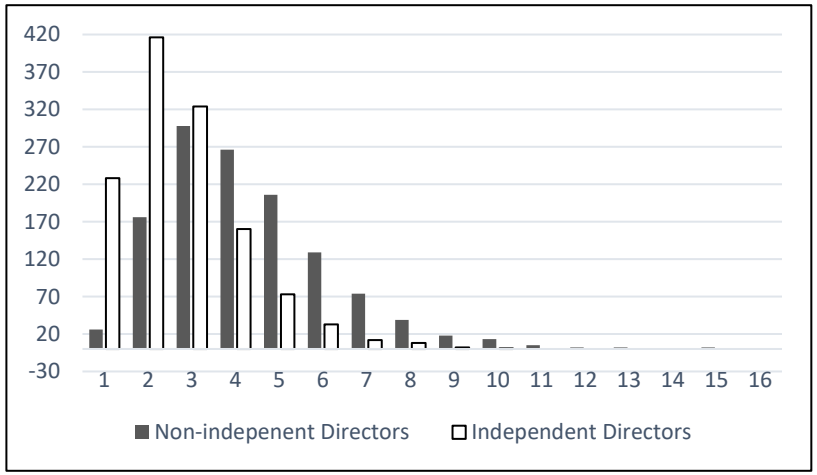
Panel A. Board size pre-comply (year 2000)



Panel B. Board size comply year



Panel C. Board independence pre-comply (year 2000)



Panel D. Board independence comply year

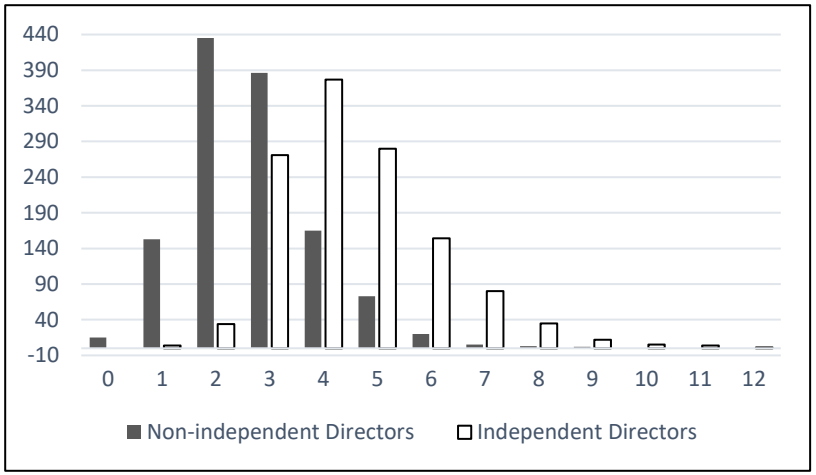


Figure 2 shows the board size and board composition for the 1,257 non-comply companies for the pre-comply period (i.e., year 2000) in Panel A and Panel C and the comply period (i.e., year 2001, 2002, 2003 or 2004 depending on the comply year of each company) in Panel B and Panel D.

Table 1. Descriptive statistics

Panel A. Descriptive statistics of boards of non-comply firms

	N	*Mean*	*Median*	*Std.*	*Min*	*Q1*	*Q3*	*Max*
Boards pre-comply (year 2000)								
Board Size	1,257	7.020	6	3.028	2	5	8	23
Non-independent Directors	1,257	4.306	4	1.989	1	3	5	16
Independent Directors	1,257	2.714	2	1.407	1	2	3	10
Boards comply year								
Board Size	1,257	7.298	7	2.515	1	5	9	20
Non-independent Directors	1,257	2.707	3	1.242	0	2	3	9
Independent Directors	1,257	4.591	4	1.525	1	4	5	12
Company Type								
Serious Comply	1,257	0.192	0	0.394	0	0	0	1
Label Comply	1,257	0.084	0	0.277	0	0	0	1
Timing strategies								
Early Comply	1,257	0.528	1	0.499	0	0	1	1
Resist Comply	1,257	0.472	0	0.499	0	0	1	1
Composition strategies								
Fire NonIND	1,257	0.584	1	0.493	0	0	1	1
Hire IND for Committees	1,257	0.523	1	0.500	0	0	1	1
Keep NonIND	1,257	0.215	0	0.411	0	0	0	1
Hire IND for No Committees	1,257	0.477	0	0.500	0	0	1	1
Managerial incentives								
Entrenchment	1,257	0.161	0	0.367	0	0	0	1
Industry and Director Dynamics								
Industry Speed	1,257	-21	-17	13	-42	-30	-6	0
Non-available directors [Busy]	1,257	0.154	0.155	0.041	0.064	0.122	0.177	0.237
Non-available directors [IND]	1,257	0.630	0.628	0.018	0.592	0.614	0.642	0.721

Panel B. Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Industry Speed	1					
(2) Non-available Directors [Busy]	**0.355**	1				
(3) Non-available Directors [IND]	**-0.415**	*-0.064*	1			
(4) Entrenchment	0.016	0.031	-0.009	1		
(5) Serious Comply	**0.182**	**0.327**	0.030	0.046	1	
(6) Label Comply	**-0.275**	**-0.132**	**0.116**	-0.038	**-0.147**	1

The sample comprises 1,257 firm-year observations for the period 2001-2004. Panel A shows the descriptive statistics of non-comply firms boards. Panel B presents the correlation matrix. It shows the Pearson correlation coefficients. Bold (italic) numbers indicate statistical significance at 1 % (5%) level. All variables are defined in Appendix I. All the continuous variables are winsorized at the 1% and 99% to mitigate the effect of outliers.

Table 2. Changes to boards of non-comply firms

Panel A. Aggregated changes to boards by non-comply firms

	Total board seats in non-comply firms	*Total non-independent director seats*	*Total independent director seats*
Comply Year	9,174	3,403	5,771
Pre-Comply (Year 2000)	8,824	5,413	3,411
Change	350	-2,010	2,360
(%)	*(4%)*	*(-37.13%)*	*(69.19%)*

Panel B. Total seats and directors in boards of non-comply firms

	Board seats			*Number of directors*		
Year	*Hired*	*Fired*	*Net*	*Hired*	*Fired*	*Net*
2001	501	(404)	97	464	(382)	82
2002	674	(644)	30	553	(598)	(45)
2003	952	(799)	153	693	(532)	161
2004	869	(799)	70	554	(460)	94
Total	2,996	(2,646)	350	2,264	(1,972)	292

Panel C. Independent directors' seats and directors in boards of non-comply firms

	Board seats			*Number of directors*		
Year	*Hired*	*Fired*	*Net*	*Hired*	*Fired*	*Net*
2001	433	(3)	430	397	(3)	394
2002	522	(7)	515	438	(4)	434
2003	696	(29)	667	531	(18)	513
2004	595	(50)	545	406	(28)	378
Total	2,246	(89)	2,157	1,772	(53)	1,719

Panel D. Non-independent directors' seats and directors in boards of non-comply firms

	Board seats			*Number of directors*		
Year	*Hired*	*Fired*	*Net*	*Hired*	*Fired*	*Net*
2001	68	(401)	(333)	67	(379)	(312)
2002	152	(637)	(485)	115	(594)	(479)
2003	256	(770)	(514)	162	(514)	(352)
2004	274	(749)	(475)	148	(432)	(284)
Total	750	(2,557)	(1,807)	492	(1,919)	(1,427)

The sample comprises 1,257 firm-year observations for the period 2001-2004. Panel A shows the aggregated changes to boards by non-comply firms in the *pre-comply* year (i.e., year 2000) and the *comply* year (i.e., year 2001, 2002, 2003 or 2004 depending on the comply year of each firm). Panel B shows the total seats (and directors) of fired and hired directors from year 2001 to 2004. Panel C shows total seats (and directors) of fired and hired independent directors from year 2001 to 2004. Panel D shows total seats (and directors) of fired and hired non-independent directors from year 2001 to 2004. All the continuous variables are winsorized at the 1% and 99% to mitigate the effect of outliers.

Table 3. Characteristics of directors hired and fired in non-comply firms

Panel A. Independent directors

	Independent directors hired					*Independent directors fired*					*Independent directors kept*				
	Mean	*P50*	*Std.*	*Min*	*Max*	*Mean*	*P50*	*Std*	*Min*	*Max*	*Mean*	*P50*	*Std.*	*Min*	*Max*
Director Age	55	56	8	27	82	57	56	11	32	84	60	61	9	28	96
Female	0.103	0	0.304	0	1	0.022	0	0.149	0	1	0.070	0	0.256	0	1
Board Seats	1.771	1	1.240	1	11	1.910	1	1.354	1	9	1.849	1	1.425	1	39
Foreign	0.374	0	0.484	0	1	0.416	0	0.496	0	1	0.350	0	0.477	0	1
Financial Expert	0.024	0	0.155	0	1	0.011	0	0.106	0	1	0.008	0	0.088	0	1
Missing Data FinExp	0.893	1	0.310	0	1	0.910	1	0.288	0	1	0.909	1	0.287	0	1
Audit (AC)	0.165	0	0.371	0	1	0.146	0	0.355	0	1	0.124	0	0.329	0	1
Compensation (CC)	0.081	0	0.272	0	1	0.022	0	0.149	0	1	0.075	0	0.263	0	1
Nominating (NC)	0.028	0	0.165	0	1	0.000	0	0.000	0	0	0.018	0	0.134	0	1
Multiple Committees	0.547	1	0.498	0	1	0.427	0	0.497	0	1	0.578	1	0.494	0	1

Panel B. Non-independent directors

	Non-independent directors hired					*Non-independent directors fired*					*Non-independent directors kept*				
	Mean	*P50*	*Std.*	*Min*	*Max*	*Mean*	*P50*	*Std*	*Min*	*Max*	*Mean*	*P50*	*Std.*	*Min*	*Max*
Director Age	51	51	9	26	87	58	58	11	29	95	56	55	10	30	95
Female	0.063	0	0.243	0	1	0.061	0	0.239	0	1	0.039	0	0.194	0	1
Board Seats	1.528	1	1.026	1	8	1.846	1	1.419	1	19	1.441	1	0.994	1	17
Foreign	0.311	0	0.463	0	1	0.272	0	0.445	0	1	0.400	0	0.490	0	1
Financial Expert	0.000	0	0.000	0	0	0.000	0	0.000	0	0	0.001	0	0.023	0	1
Missing Data FinExp	0.969	1	0.173	0	1	0.951	1	0.216	0	1	0.959	1	0.199	0	1
Audit (AC)	0.048	0	0.214	0	1	0.079	0	0.270	0	1	0.018	0	0.131	0	1
Compensation (CC)	0.039	0	0.193	0	1	0.075	0	0.264	0	1	0.036	0	0.186	0	1
Nominating (NC)	0.027	0	0.161	0	1	0.027	0	0.163	0	1	0.051	0	0.220	0	1
Multiple Committees	0.169	0	0.375	0	1	0.298	0	0.458	0	1	0.140	0	0.347	0	1

The sample comprises 22,811 director-year observations for the period 2001-2004. Panel A (Panel B) shows the descriptives for independent (non-independent) directors hired, fired and kept. Directors are considered as *kept directors* if they belong to the company from before year 2001 to the comply year. All variables are defined in Appendix I. All the continuous variables are winsorized at the 1% and 99% to mitigate the effect of outliers.

Table 4. The dynamics of compliance

	(1) Serious Comply	(2) Label Comply
Time Dynamics		
Industry Speed	0.003***	-0.005***
	(4.542)	(-5.801)
Director Dynamics		
Non-available Directors [Busy]	5.687***	-0.384
	(14.268)	(-1.528)
Non-available Directors [IND]	6.760***	-0.122
	(7.294)	(-0.141)
Managerial Incentives		
$Entrenchment_{2000}$	-0.029	0.037**
	(-1.275)	(2.077)
Controls		
$Board\ Size_{2000}$	0.014***	-0.017***
	(2.610)	(-5.195)
$Firm\ Size_{2000}$	0.013	-0.004
	(1.412)	(-0.649)
$R\&D_{2000}$	0.000	-0.000***
	(1.159)	(-5.054)
$Leverage_{2000}$	0.039	0.006
	(0.606)	(0.151)
$GEO\ segments_{2000}$	-0.003	0.003
	(-0.053)	(0.070)
$BUS\ segments_{2000}$	-0.035	-0.002
	(-0.541)	(-0.055)
$Returns\ Volatility_{2000}$	0.249***	-0.195***
	(3.092)	(-3.191)
$Price_{2000}$	0.000	-0.000
	(0.117)	(-0.981)
BTM_{2000}	0.024	-0.017
	(0.898)	(-0.884)
$Big\ 4\ auditor_{2000}$	0.005	-0.043*
	(0.177)	(-1.904)
$New\ auditor_{2000}$	-0.049	0.137**
	(-1.043)	(2.269)
Industry FE	YES	YES
Observations	1,045	1,045
Adj. R-sqr.	0.231	0.127

The sample comprises 1,045 firm-year observations for the period 2001-2004. The table shows the dynamics of compliance for 1,045 non-compliant companies that comply between year 2001 to 2004. All variables are defined in Appendix I. All the continuous variables are winsorized at the 1% and 99% to mitigate the effect of outliers.

Table 5. Compliance strategies and reporting outcomes

	(1) AEM	(2) REM	(3) AEM	(4) REM
Serious Comply*P	-0.048***	-0.067		
	(-4.099)	(-1.588)		
Label Comply*P			0.018	0.151**
			(1.440)	(2.557)
P	-0.001	-0.067	-0.011	-0.096**
	(-0.165)	(-1.616)	(-1.196)	(-2.312)
Entrenchment	-0.008*	-0.043*	-0.007	-0.043*
	(-1.682)	(-1.748)	(-1.541)	(-1.728)
Non-available Directors [Busy]	-0.020	0.557	0.028	0.552
	(-0.160)	(1.045)	(0.229)	(1.044)
Non-available Directors [IND]	-0.002	-0.146	-0.012	-0.152
	(-0.069)	(-1.029)	(-0.362)	(-1.075)
Board Size	-0.006***	0.010	-0.006***	0.009
	(-3.756)	(1.556)	(-3.562)	(1.399)
Leverage	-0.078***	0.221***	-0.078***	0.224***
	(-3.281)	(3.091)	(-3.290)	(3.128)
GEO segments	-0.006	-0.062	-0.006	-0.062
	(-0.741)	(-0.903)	(-0.706)	(-0.901)
BUS segments	-0.008	-0.045	-0.007	-0.044
	(-0.883)	(-0.644)	(-0.860)	(-0.635)
Firm Size	0.021***	0.003	0.021***	0.003
	(3.227)	(0.157)	(3.251)	(0.158)
New auditor	0.008	0.030	0.008	0.030
	(1.249)	(0.953)	(1.257)	(0.966)
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Observations	9,673	11,019	9,673	11,019
Adj. R-sqr.	0.236	0.737	0.234	0.737

The sample comprises 11,019 firm-year observations for the period 1999-2008. The table shows the compliance strategies and reporting outcomes. Panel A (B) shows the results for the serious (label) companies. All variables are defined in Appendix I. All the continuous variables are winsorized at the 1% and 99% to mitigate the effect of outliers.

Table 6. CEO tenure and managerial ability

	(1) CEO tenure	(2) Managerial ability	(3) CEO tenure	(4) Managerial ability
Serious Comply*P	0.148	-0.004		
	(0.749)	(-0.787)		
Label Comply*P			0.847**	-0.007*
			(2.533)	(-1.679)
P	0.037	0.000	-0.042	0.001
	(0.171)	(0.051)	(-0.195)	(0.142)
Entrenchment	8.031***	0.001	8.028***	0.001
	(40.394)	(0.283)	(40.451)	(0.317)
Non-available Directors [Busy]	1.258	-0.008	0.643	0.003
	(0.426)	(-0.105)	(0.217)	(0.041)
Non-available Directors [IND]	-0.554	0.002	-0.467	-0.000
	(-0.690)	(0.096)	(-0.580)	(-0.009)
GEO segments	0.493	0.013	0.488	0.013
	(1.598)	(1.489)	(1.586)	(1.494)
BUS segments	0.587*	0.014	0.584*	0.014
	(1.877)	(1.569)	(1.872)	(1.570)
Firm Size	0.558***	0.006**	0.556***	0.006**
	(5.464)	(2.055)	(5.453)	(2.073)
Leverage	-0.239	-0.055***	-0.216	-0.055***
	(-0.738)	(-5.858)	(-0.667)	(-5.880)
Board Size	0.004	-0.002**	-0.007	-0.002**
	(0.102)	(-2.384)	(-0.175)	(-2.239)
Firm FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Observations	8,818	9,102	8,818	9,102
Adj. R-sqr.	0.832	0.581	0.832	0.581

The sample comprises 9,102 firm-year observations for the period 1999-2008. The table shows the compliance strategies, CEO tenure and managerial ability. Panel A (B) shows the results for the serious (label) companies. All variables are defined in Appendix I. All the continuous variables are winsorized at the 1% and 99% to mitigate the effect of outliers.

Table 7. **Consequences for independent directors**

Panel A: Future directorships

	(1) Num $Seats_{2008-2005}$	(2) Num $Seats_{2008-2005}$	(3) Num $Seats_{2008-2005}$	(4) Num $Seats_{2008-2005}$
Net Hired IND	-0.075***			
	(-8.117)			
Net Hired NonIND		0.151***		
		(25.428)		
Net Fired IND			-0.064***	
			(-10.169)	
Net Fired NonIND				0.058***
				(6.381)
Any Committee	-0.044	-0.045	-0.055	-0.051
	(-0.679)	(-0.712)	(-0.864)	(-0.792)
Director Age	-0.011***	-0.011***	-0.012***	-0.012***
	(-156.031)	(-137.662)	(-170.337)	(-158.045)
Director Tenure	-0.024***	-0.022***	-0.022***	-0.023***
	(-15.283)	(-14.915)	(-14.648)	(-14.611)
Female	0.027***	0.030***	0.019***	0.020***
	(21.287)	(29.545)	(20.396)	(21.727)
Foreign	0.002	-0.001	-0.004	-0.000
	(1.026)	(-0.464)	(-1.329)	(-0.059)
Year FE	YES	YES	YES	YES
Observations	9,132	9,132	9,132	9,132
Adj. R-sqr.	0.030	0.031	0.028	0.029

Panel B: Directorships lost and tenure

	(1) IND Directorship Loss (2005-2008)	(2) Director Tenure
IND Appointed 2001-2004	0.302***	-3.768***
	(51.551)	(-64.720)
Any Committee	-0.008*	-0.825***
	(-1.938)	(-8.616)
Director Age	-0.000	0.286***
	(-1.347)	(54.362)
Director Tenure	-0.000	
	(-1.604)	
Female	-0.006	-1.010***
	(-1.414)	(-9.585)
Foreign	0.006**	-0.182**
	(2.450)	(-2.261)
Year FE	YES	YES
Observations	32,777	32,777
Adj. R-sqr.	0.269	0.166

Table 7 Panel A comprises a sample of 9,132 director-year observations for the period 2005-2008. It shows the relationship between net loser type (i.e., independent net loser or non-independent net loser) and the change in number of seats between 2005-2006, 2007-2005 and 2008-2005. Table 7 Panel B comprises a sample of 32,777 director-year observations for the period 2005-2008. It shows the relationship between the directors hired during the compliance period (2001-2004), the directorships lost during 2005-2008 (Column 1) and the director tenure (Column 2). All variables are defined in Appendix I. All the continuous variables are winsorized at the 1% and 99% to mitigate the effect of outliers.