Sugar and Spice and Everything Nice: What Are Good Directors Made of?

Quoc-Anh Do *
Singapore Management University

Bang Dang Nguyen ** University of Cambridge

P. Raghavendra Rau ***
University of Cambridge

March 2012

Abstract

This paper analyzes the career paths followed by non-executive directors in a large sample of 40,585 unique directors associated with 5,246 unique US listed firms between 1999 and 2011. We document four types of characteristics that significantly influence the probability that a director will be successful in obtaining a second concurrent directorship. These include personal characteristics (belonging to large social networks, holding an MBA degree, having experience as a top executive in a large firm), macro-economic indicators (obtaining the first directorship in a recession, or after the passing of the Sarbanes-Oxley act of 2002), firm characteristics and firm performance (holding a directorship in large firms, firms with better valuations, or firms with higher return volatility) and firm reputation (announcing accounting restatements or being hit by class-action suits). Our paper provides stylized facts on the characteristics of non-executive directors and sheds light on the determinants of their career paths.

Keywords: Board of directors, corporate governance, career concerns, board composition *JEL* Classification codes: G34; J64

^{*} School of Economics, Singapore Management University, Singapore 178903. Tel: (+65) 6828 1916; Fax: (+65) 6828 0833; Email: quocanhdo@smu.edu.sg.

^{**} Finance and Accounting Group, Judge Business School, University of Cambridge, Cambridge CB2 1AG, U.K. Tel: (+44) 1223 760 740; Fax: (+44) 1223 339 701; Email: <u>b nguyen@jbs.cam.ac.uk</u>.

^{***} Finance and Accounting Group, Judge Business School, University of Cambridge, Cambridge CB2 1AG, U.K. Tel: (+44) 1223 761 079; Fax: (+44) 1223 339 701; Email: r rau@jbs.cam.ac.uk.

I. Introduction

The board of directors in a firm plays a critical role in controlling principal-agent conflicts between shareholders and managers. In particular, the non-executive independent directors on the board act on behalf of the shareholders in monitoring managers, forcing them to act on behalf of shareholders. There is however, very little research on what the characteristics of these directors are and how they obtain one or more professional directorships during their careers.

This is an important issue. Extant corporate governance studies typically use the composition of the board (for example, the number of independent non-executive directors on the board, the number of other outside board directorships that each director holds, or the gender of the director, among others) as proxies for corporate governance. In turn, these proxies have been shown to affect firm behavior, managerial behavior, and shareholder value. For example, Core, Holthausen, and Larcker (1999) find that CEO compensation is higher when the proportion of independent directors is lower and board size is larger. Conclusions drawn from these studies have also had significant policy implications with governments across the world typically mandating or suggesting that firms employ a significant proportion of independent non-executive directors. For example, in 1992, the Cadbury Committee in the United Kingdom (UK) issued a Code of Best Practice which recommended that boards of UK corporations include at least three outside directors. The underlying presumption was that this would lead to improved board oversight. Dahya, McConnell, and Travlos (2002) show that the negative relationship between CEO turnover and performance became stronger following the Code's issuance; and the increase in sensitivity of turnover to performance was concentrated among firms that adopted the Code. Despite this body of research and attendant policy recommendations, we still do not know much about what characterizes an effective non-executive director.

In this paper, we analyze the career paths followed by non-executive directors across their careers in a sample of 40,585 unique directors associated with 5,246 unique US firms listed on the BoardEx database. To the best of our knowledge, this is the largest sample of board members analyzed in the finance and economics literature. We first analyze the characteristics of directors at their first directorship. The majority of non-executive directors in our sample are aged between 40 and 70 years and hold only one directorship throughout their careers. A significant minority however, about 9% of our sample, go on to obtain concurrent directorships at multiple firms. Not

surprisingly, they have the highest number of concurrent directorships in their 60s. In our sample, the maximum number of concurrent directorships held by any one director is 12.

What distinguishes these successful directors from the rest? The answer is likely to depend on what the firm looks for when they employ an independent non-executive director. First, directors are likely to be evaluated on the basis of personal characteristics. Directors who are likely to be experts in their areas, measured either in terms of their educational qualifications or prior work experience at other firms, may be more likely to be hired. Boards might prize gender diversity (Farrell and Hersch, 2005). Directors with corporate governance experience, in particular those who have served on important committees such as the compensation committee, the nomination committee or the compensation committee, may also be more likely to be hired. In addition, connected directors with large networks of social connections may also be more valuable.

Second, a prospective employer is also likely to value the performance of the director on the prior board. To measure the performance of directors, prospective employers have two options. They can measure the performance of the firm in terms of operating and stock price performance. Alternatively, they can examine how the board members interacted with the management of the firm. In this interaction, potential directors face a trade-off. They can choose to serve on "mean" boards - boards that focus on maximizing shareholder value. Alternatively, they can serve on "nice" boards – boards that are sympathetic to the chief executive officer's (CEO) concerns, forgiving in case of errors, and generous in terms of compensation agreements. Shivdasani (1993) documents that when the CEO serves on the nominating committee to the board or when no nominating committee exists, firms appoint fewer independent outside directors and more gray outsiders with conflicts of interest. Stock price reactions to independent director appointments are significantly lower when the CEO is involved in director selection. Bebchuk and Fried (2004) argue that entrenched boards, presumably boards selected by or that are close to management, are insulated from shareholder concerns about performance. It is plausible therefore that mean board directors will be less likely to be hired by managers but might serve longer if they are seen to be committed to shareholder value. Similarly, it is plausible that nice board directors will be hired at a greater number of firms but if the firms destroy shareholder value, the director's board tenure might be shorter. To measure the interaction between the board and the management, we analyze

factors such as the pay granted to top management levels by the board and the entrenchment level of the management, among others.

Finally, the performance of a director may also be affected by changes in external macro-economic factors. Oyer (2008) shows that macro-economic factors such as the state of the economy play a significant role in determining whether an MBA graduate subsequently goes on to become an investment banker. It is plausible that market performance, industry performance, and other macroeconomic factors may also influence the perceived performance of a director in obtaining a subsequent directorship.

Hence in our analysis, we examine these four sets of factors – the director's personal characteristics, the performance of the firm, the relationship between the board and the management, and macro-economic characteristics, to test what role they play in the career path of a typical non-executive director. We begin by comparing these four sets of factors at the first and the subsequent directorship. We also use Cox survival analyses to model the time to the second (and subsequent) concurrent directorship.

We find, first, that personal characteristics of non-executive directors, such as director age, MBA degree, social network size, and prior experience are highly significant in determining the path of a director's career. Senior directors, with a MBA degree, are more likely to be successful in obtaining a second directorship. Belonging to large social networks, having experience in the government, as a CEO, a top executive, or an executive in a S&P500 firm appear to enhance the chance of a successful director career.

Second, consistent with Oyer (2008), macroeconomic economic factors, such as the state of the economy, around the time of the first directorship also shape the director's career. In particular, we find a consistently negative and significant impact of the Sarbanes-Oxley Act. It is more difficult for an non-executive director to obtain a second directorship after the Sarbanes-Oxley act was passed in 2002. Directors who hold a first directorship during a recession are significantly less likely to be successful in achieving a second directorship. These results are consistent with the hypothesis that firms are unable to distinguish effectively between firm performance and director performance. Hence they are likely to attribute superior firm performance to director ability in good economic times.

Third, we also document several firm characteristics and performance that impact the career success of directors. Having a directorship in a large firm facilitates obtaining a second directorship in another firm. Directors in firms which experience accounting re-statements and encounter class-action suits are less likely to obtain a second concurrent directorship. Directors from firms with better valuation and higher return volatility seem to be more likely to succeed in the market for non-executive directorships. We find little evidence that directors obtain multiple directorships by being "nice" to executives. Directors on boards that pay their CEO excess pay that is significantly above their peer firms, are not more likely to obtain second directorships.

Finally, we compare these characteristics for the new director with the average values for the second firm where the director is hired in order to analyze what the new firm might be looking for in a new director. We show that firms look for directors who are better educated and networked, and who are from more established, larger, more complex, more transparent, better governed companies. They do not necessarily look for directors from a firm with higher valuations, better performance, or higher return volatility.

The paper is organized as follows. Section 2 discusses extant literature on board careers. Section 3 discusses our data and methodology. Section 4 reports our empirical results on the determinants of career success of directors. First, we document the impact of each set of variables (board member characteristics, performance of directors' first employers, differences between the characteristics of the firms where they obtain their first and second directorships, macroeconomic circumstances and social networks between the board members and the executives of the boards they serve on). Subsequently, we exclude variables that are highly correlated and run pooled Cox survival analyses on the time to obtain a second directorship using the remaining variables from all the five sets of variables. Section 5 compares firm and board characteristics of firms associated with the first and the second subsequent directorships at the point when the director obtains a second directorship. Section 6 concludes.

2. Literature Review

The career concerns literature typically relates firm performance or effort strategies to the agent's career concerns. This literature spans a wide variety of agents. For example, Fee and Hadlock (2003) document that executives who move to CEO positions at new employers come from firms that exhibit above average stock price performance and this relationship is more

pronounced for more senior executives. Chevalier and Ellison (1999) show younger mutual fund managers follow incentives to avoid unsystematic risk and to "herd" into popular sectors. Brown, Goetzmann, and Park (2001) document similar relationships for hedge fund managers. Wu and Zang (2009) show that analysts with greater experience and especially experienced stars are more likely to be promoted to research executive positions following mergers of their employing firms.

Despite this large body of research on career concerns of agents in general, there is very little research on tying the career concerns of board directors in particular, to shareholder value. A few studies show that "mean" directors, who are committed to improving shareholder value at the expense of managerial comfort, perform well in the market for directorships. Coles and Hoi (2003) examine the relation between a board's decision to reject the anti-takeover provisions of Pennsylvania Senate Bill 1310 and the subsequent labor market opportunities of those board members. They show that directors rejecting all protective provisions of SB1310 are significantly more likely to gain additional external directorships and retain their internal slot on the board of that current firm. For external board seats, they also show that their results are driven by nonexecutive directors who are not members of the management team. Similarly, Ashraf, Chakrabarti, Fu, and Jayaraman (2010) test whether directors are valued more when they tailor the choice of antitakeover provision (ATP) levels to firm characteristics or whether CEOs seek directors with inclination for uniform and high ATP levels. They examine how changes in ATP levels and approval of value creating/destroying acquisitions affect the careers of nonexecutive directors and argue that directors who apply ATP provisions depending on whether they improve shareholder value are more likely to be rewarded. Wu (2004) finds that departing board members whose firms are publicly named as poorly governed by CalPER's corporate governance program, are less likely to take up future directorships. Ertimur, Ferri, and Stubben (2010) show that directors on boards that implement non-binding majority vote shareholder proposals that they initially opposed are significantly less likely to lose their board seat and other directorships.

However, other papers show that mean directors are not necessarily rewarded by additional directorships. Marshall (2010) reports that directors who resign in dissent from their board, experience a net loss in board seats of 85% over the five year period following the dispute, suggesting that dissenting directors are not able to recover the seat they give up by obtaining additional board seats at other public firms. In addition, "nice" directors – directors on boards who are more inclined to give managers their freedom of action, may also be successful in that they sit

on many boards. In particular, Fich and White (2005) document that among large companies in 1991, about one company in seven was in a relationship whereby the CEO of one company sat on a second company's board and the second company's CEO sat on the first company's board. They argue that these reciprocal CEO interlocks primarily benefit the CEOs rather than their shareholders. Nice directors may also be nice because they are distracted by other activities. Fich and Shivdasani (2006) show that firms with busy boards exhibit lower market-to-book ratios, weaker profitability, and lower sensitivity of CEO turnover to firm performance. Non-executive but busy boards display CEO turnover-performance sensitivities indistinguishable from those of inside-dominated boards. Similarly, Ferris, Jagannathan, and Pritchard (2003) argue that directors who serve larger firms and sit on larger boards are more likely to attract directorships but find no evidence that multiple directors are associated with a greater likelihood of securities fraud litigation.

Related to our research question on the characteristics of successful directors, a number of studies document the effect of board member personal characteristics, most notably gender, that affect their career prospects and performance on boards. Gul, Srinidhi, and Ng (2011) document that the stock prices of firms with gender-diverse boards reflect more firm-specific information. The relationship is stronger for firms with weak corporate governance leading them to argue that gender-diverse boards could act as a substitute mechanism for corporate governance. Farrell and Hersch (2005) show that the likelihood of a firm adding a woman to its board in a given year is negatively related to the number of women already on the board. The probability of adding a woman is materially increased when a female director departs the board. They also document insignificant abnormal returns on the announcement of a woman added to the board, which leads them to argue that the demand for women directors is not performance based, but a response to calls for diversity. Consistent with these results, Adams and Ferreira (2009) document that female directors have better attendance records than male directors in a sample of US firms, male directors have fewer attendance problems the more gender-diverse the board is, and women are more likely to join monitoring committees and argue that gender-diverse boards allocate more effort to monitoring. However, the average effect of gender diversity on firm performance is negative, a result driven by companies with fewer takeover defenses.

In addition to gender, a few other director-specific factors have been shown to affect their career prospects and performance on boards. Jeanjean and Stolowy (2009) report that firms with

more independent boards, higher ownership concentration, and institutional ownership employ directors with above average levels of financial expertise for a sample of French firms. Güner, Malmendier, and Tate (2008) show that this does not translate into improving shareholder value - when commercial bankers join boards, financing increases but goes to firms with good credit but poor investment opportunities. Similarly, investment bankers on boards are associated with larger bond issues but worse acquisitions. Maman (2000) reports that the social capital of the directors influences whether they will be asked to join additional boards for a sample of Israeli firms between 1974 and 1988.

Finally some studies examine how firm performance affects the career prospects of outside directors. For example, Kaplan and Reishaus (1990) examine the relation between a company's performance and its top executives' service on other boards of directors. They find that top executives of companies that reduce their dividends are significantly less likely to receive additional outside directorships than are top executives of companies that do not reduce their dividends. In addition, the probability that top executives resign from or lose outside directorships they already hold is negatively related to the performance of their own firms. Fich (2005) analyzes how the performance of the director's current employer affects the director's chances in getting other directorships. He finds that CEOs are more likely to obtain outside directorships when the companies they head perform well. In addition, well-performing CEOs are also more likely to gain directorships in organizations with growth opportunities. Fahlenbrach, Minton and Pan (2011) show that more successful and more powerful former CEOs are more likely to be reappointed to the board multiple times after they step down as CEOs.

3. Data and Methodology

3.1. Data

Our sample consists of all non-executive directors serving on the boards of U.S. publicly and privately listed firms between 1999 and 2011. We obtain our data on corporate directors from the BoardEx database of Management Diagnostics Limited, which collects biographical information, past education, and employment history for directors and senior company officers. The database details the past roles of each official in a company with starting and ending dates (or years). Though BoardEx reports data only from 1999, the information on each individual's personal information and employment history date back to the 1900s. Essentially, Boardex

collected information on surviving directors in 1999 and expanded the dataset backward to cover their full employment history. Thus there are individuals in our sample who became non-executive directors before 1999. For instance, the director with the longest employment history in our sample is Theodore "Ted" Rosenberg who was born in 1908. His father, Morris Rosenbeg, was the founder of ABM Industries Inc. Theodore Rosenberg started his career in the firm in 1928, and was named the president of the firm at the age of 26 when his father died. He subsequently relinquished his executive role in 1989, but remained as a director in the firm until 2008.

Since only the extant directors in 1999 are included in the sample, this raises the issue of survivorship bias. However, this is not a major issue in our sample. Only a small proportion of firms (816 over a total of 53,748 firm-year observations) and directors (2,207 over 289,364 director-year observations) are included in Boardex before 2000. In addition, in a robustness check, we exclude directors who enter the sample before 2000 and find broadly comparable results to the ones reported in the paper.

In addition to the board data, we obtain financial and segment-level data from Compustat, executive compensation data from Execucomp, stock return data from the Center for Research in Security Prices (CRSP), institutional holdings data from CDA/Spectrum Institutional 13F Holdings, governance data from RiskMetrics, analyst coverage data from I/B/E/S, accounting restatement data from Audit Analytics, class action lawsuit data from the Stanford Securities Class Action Clearinghouse, and macroeconomic data from Bureau of Labor Statistics, Bureau of Economic Analysis, and the National Bureau of Economic Research. Our final sample consists of 40,585 unique directors associated with 5,246 unique firms.

We identify two distinct points in the career path of each director: the point when a director gets his first non-executive directorship and the point he accumulates an additional *concurrent* non-executive directorship (second or more)². We track the directors' personal traits (education, age, social contacts, gender, work experience), firm characteristics (average Tobin's Q, average return on assets (ROA), ROA volatility, average return, return volatility), macroeconomic conditions (industry returns, unemployment rate, GDP growth) and governance characteristics (board size, excess pay awarded to managers, number of analysts following the firm, percentage of

¹ The median director in our sample is male. In fact, as we show in the sample descriptive statistics, of the 40,585 directors in the sample, 91% are male.

² If a director has given up a directorship when he obtains a second one, we treat them as independent observations.

institutional holdings) associated with the firms where the directors acquire their first directorships, and then compare them to firms where directors subsequently accumulate second or more directorships. In addition, we track whether a director has served on the board of a firm that restates its financial statements or faces class action suits, and analyze whether this affects the probability that the manager obtains a second directorship. Our Cox survival analyses model the time to the second directorship based on the information associated with the first firm. In the Cox analysis, a director enters the dataset in year t and is tracked either till he obtains a second directorship or till the end of the sample period. The data is left-censored by construction, and it can be also right-censored in that the majority of directors never obtain a second concurrent directorship. Proportional hazards models have, however, the methodological advantage of dealing with censoring issues by incorporating a positive probability that the event might never occur for cross-sectional units.

3.2. The sample of non-executive directors

We start our analysis by describing the sample of all non-executive independent directors in Tables 1 and 2. Panels A and B of Table 1 report descriptive characteristics of our sample of non-executive directors by calendar year and age group, respectively. The number of directors and firms are distributed almost evenly across years, with the exception of years before 2000 where, as we note, Boardex first started collecting data. The average number of directorships held by a non-executive director is 1.25 while the maximum number is 12. On average, 8.9% of directors hold multiple directorships. As we document, even at the 90th percentile, directors hold two concurrent directorships which justifies our analyses of the time to the second (as opposed to the third or higher) directorship. Both the average and maximum number of directorships appear to increase steadily over time, with 10.17% of the directors holding concurrent directorships in 2011.

Panel B reports the number and proportion of directorships by age group. The majority of non-executive directors are between 50 and 70 years old (68.63% of the total director-year observations). Non-executive directors also start accumulating directorships in their 40s, and reach the pinnacles of their careers in their 60s – both the number of directorships and the proportion of directors with multiple directorships reach a director's lifetime maximum in this period. In their 60s, directors hold an average of 1.75 directorships, and 40.77% of them hold multiple directorships.

[Insert Table 1 about Here]

4. Determinants of the Career Paths of Non-Executive Directors

In this section, we first report the descriptive statistics of each set of variables (director characteristics, firm characteristics, macroeconomic circumstances, and firm performance.) Subsequently, we run Cox proportional hazard models to analyze the impact of each set of variables on the probability for a director to obtain a second and subsequent non-executive directorship. Finally, we exclude variables that are highly correlated and run pooled Cox survival analyses on the time to obtain a second directorship using the remaining variables from all the four sets of variables.

4.1. Non-executive directors' characteristics and their career path

Panel A of Table 2 provides descriptive statistics for our first set of variables - director characteristics (age, salary, education level, experience (in years), position on the board (chairman, committee memberships), and other director specific variables. In Panel A1, we report director characteristics at the point when directors obtain their first directorships and in Panel A2, we report characteristics at the subsequent directorship.

[Insert Table 2 about Here]

The majority of non-executive directors have an undergraduate degree (84.50%), almost one-third of them have an MBA degree (31.40%), a minority holds a PhD degree (10.20%); and each of them holds 1.79 qualifications on average. The average non-executive director is aged 53 years, with 17 years of working experience and more than 5 years of experience as executive director. 91% of them are male. 36% of the directors in our sample have working experience at publicly listed firms, 50% in private firms, 7% work for the government, and 3% in universities. The average director is connected to 326 persons in the Boardex dataset, while the average number of school connections per educational institution is over 2,000. 35% of non-executive directors have been executives of another firm, 19% of them have worked for an S&P500 firm and 10% are CEOs. A little over half of them serve on the audit committee during their first directorship, 46% on the compensation committee, 39% on nomination committee, and 37% on the governance committee.

Panel A2 reports directors' characteristics at the time of their subsequent directorship. The last column reports a means test of the difference between variables associated with the first directorship, and the ones with the second and concurrent directorship. Directors who gain a second concurrent directorship have a significantly greater number of educational qualifications than directors who stay with one directorship. Similarly, the age is higher – on average, it takes a director 3.84 years more to obtain a second concurrent directorship. Women are less likely to obtain a second directorship. Second directors are also significantly more likely to be connected, both in terms of their network connections and school connections, than the average director. They are also significantly more likely to have served on audit committees and governance committees but not on the compensation or nomination committees.

There is some evidence in the extant literature that directors' personal characteristics affect their performance, risk-taking behavior, and their careers (See, for example, Adams and Ferreira (2009), Farrell et al. (2005) among others.) We extensively explore whether and which director characteristics impact their career path, more specifically, the likelihood they obtain a second directorship. In the subsequent Cox regression, we analyze the complete set of variables from our univariate analyses in Panel A. Panel B summarizes our results.

Column 1 and 2 test whether director educational backgrounds impact a director's career path. Our control variables are indicators for whether a director has a MBA, a PhD, a law, or a medical degree, a graduate degree, a degree from an Ivy League university, and the number of qualifications. We find that, taken separately, having a MBA degree, a graduate degree, or a degree from an Ivy League university significantly increases the probability that a director obtains a second concurrent directorship, while the PhD degree does not have an impact. In contrast, a law or medical degree decreases the probability of having a second directorship. We obtain a positive and highly significant estimate coefficient on the number of qualifications, indicating that a higher number of qualifications such as CFA and CPA improve the chances of obtaining more outside directorships.

Column 3 repeats the same regression on personal characteristics such as age and gender. We find that the age of the director at his first directorship is positively and significantly related to the probability of him holding a second and concurrent non-executive directorship. Non-executive directors appear thus to be more likely to obtain a second directorship when they are already

senior directors. This result is consistent with Table 1 which shows that the number of cumulated non-executive directorships peaks when directors are around 63-66 year old. In contrast, the coefficient on our director gender dummy is negative and significant at the 1% level. This result indicates that female directors are significantly less likely to obtain a second directorship.

Columns 4 to 6 report results on the impact of prior director experience. Our independent variables include the length of director experience, indicator variables for whether a director has prior work experience in a government body, in a university, in a listed firm, in a private firm, and indicator for whether a director has prior experience as a CEO, a top executive, and in a S&P500 firm. We find that coefficients on all these variables are positive and significant at the 1% level. It is interesting to note that working for the government does not reduce the probability of obtaining a second directorship as compared to say, working for a listed firm. This may be due to these directors being valued for their political connections. Being a CEO of another firm, an executive, or working for a large S&P 500 firm all increase the likelihood for a director of obtaining a second and concurrent directorship. We also find positive and highly significant coefficients on variables representing the total number of years of experience. Experienced directors are thus more likely to obtain a second directorship.

We next explore if the presence of social connections impacts a director's career. Column 7 reports positive and significant coefficients for our social network proxy – the logarithm of the number of social connections a director has through his school or university – implying that the number of social ties enhances the ability of a director to obtain a second directorship.

Column 8 report results on board experience. We create dummies for whether a director, when he serves his first directorship, sits in important committees such as the audit committee, the compensation committee, or the nomination committee. We find negative and highly significant coefficients on these dummy variables, suggesting that serving on important committees does not appear to increase the probability of achieving a second directorship. Alternatively, it could be that directors on these committees are so busy that they do not have the time to take on a second directorship.

In columns 9 and 10, we run regressions that pool all many of the variables in prior columns. We exclude similar or highly correlated variables to avoid multi-collinearity issues. Our results stay broadly similar.

Among the education variables, only the MBA, the Ivy League, and the number of qualification effects remain positive and significant, whereas other education degrees show no significant impact, or negative impact (medical degree). It is thus more likely for a non-executive director to achieve a second board seat if he/she is a MBA or an Ivy League graduate, has a significant number of qualifications, or belongs to large social networks.

Age remains significantly positively and gender (female) remains significantly and negatively related to the probability of obtaining a second directorship in columns 9 and 10. In addition, the magnitude of the coefficients is very similar to what we find in column 3. Non-executive directors are thus more likely to have a second directorship if they are relatively at an advanced age, while it is much harder for a female director to obtain a second board seat.

Many of the positive coefficients of director professional experience and board experience we find in prior columns remain significant in the pooled regressions in columns 9 and 10. Being a CEO, or an executive, in particular being an executive in a S&P500 firm, and having long work experience aid the director in achieving a second directorship (in a shorter period of time or in the probability of obtaining a second directorship). In contrast, experience in serving on audit, compensation, or nomination committees, does not appear to help a director in achieving a second directorship.

In summary, Table 2 shows that a number of personal characteristics of directors determine whether they will obtain a second directorship and how long it takes them to do so. Being a female director or serving on important board committees do not seem to increase this probability. In contrast, being relatively senior in age, graduating with a MBA degree or from an Ivy League university, belonging to large social networks, or having experience as a CEO, as a top executive or an executive in a large firm appears to facilitate the director's career.

4.2. Firm Characteristics and the career paths of directors

The second family of variables that might determine the career path of a director is firm characteristics, including firm performance. Panel A of Table 3 reports descriptive statistics for firms associated with a director's first directorship and for firms associated with his subsequent directorship.

[Insert Table 3 about Here]

Panel A1 reports an extensive set of characteristics for firms associated with a director's first directorship: firm size (the logarithm of total assets), industry-adjusted leverage, industry-adjusted research and development expenditure, industry-adjusted asset tangibility, industry-adjusted Tobin's Q, industry-adjusted cash reserve ratio, prior performance (stock returns and operating performance), industry competition (Herfindahl index based on industry assets), firm complexity (the total number of segments), firm uncertainty (stock return volatility and ROA volatility), firm visibility (total number of analyst following), managerial entrenchment (the presence of dual-class shares, Bebchuk et. al. (2009) managerial entrenchment index), corporate governance characteristics (average institutional ownership, fraction of outside directors, and board size), managerial compensation (dummy for whether the firm's compensation is beyond industry's median, and the ratio of CEO pay over the next best executive pay). Panel A1 provides some stylized facts on the governance of firms associated with the first directorship. For example, 8.89% of them are dual-class share companies; the average board size is 9.40; the average number of analysts following is 7.2; the average ratio of CEO pay over the next highest pay is 2.20; and 45.4% of firms pays the CEO in excess of the median of industry pay.

Panel A2 reports similar variables for the director's subsequent directorship. The last column reports a means test of the difference between variables associated with the first directorship, and the ones with the second and concurrent directorship. In comparison to firms associated with a non-executive director's first directorship, firms that offer directors a second concurrent non-executive directorship appear to be older (3.20 years older), and larger (\$1.7 billion larger in market capitalization). They have significantly better operating performance, are more levered, more complex, and in less competitive industry. Firms associated with a director's second directorship are more visible and followed by more analysts. They experience a higher degree of volatility of stock and accounting returns. Related to corporate governance, we notice significant differences between the governance of firms associated with the first directorship and the governance of firms associated with the subsequent directorship. The later shows a higher level of management entrenchment, have a larger board, a greater institutional ownership level, and a larger fraction of independent directors. They are also more likely to pay their CEO beyond the industry's median level. All these changes are consistent with the hypothesis that successful directors are more likely to join larger, more profitable and more visible firms later in their careers. We test this conjecture more formally below.

Similar to our setup in Table 2, we investigate whether the first directorship's firm characteristics impact the likelihood a director will obtain a second and concurrent non-executive directorship in a multivariate framework using the above mentioned variables. Panel B of Table 3 reports our results.

Column 1 reports regression results on firm size (logarithm of total assets), industry-adjusted market leverage ratio, R&D ratio, asset tangibility, and valuation (industry-adjusted Tobin's Q), and cash reserve ratio. We find that the estimated coefficients on these variables, except leverage, are positive and significant. Larger firms or firms with high R&D expense, higher asset tangibility, better valuation, and high cash reserve level provide their outside directors with better career prospects.

As shown in Column 2, we do not find a significant relationship between the performance of firms associated with the first directorship and the probability of obtaining a second directorship.

We report results on market competition in Columns 3 and 4 by including Herfindahl indices based on asset value and the number of firm segments, respectively. We find positive and significant coefficients on the Herfindahl index and on the number of firm segments. This indicates that a non-executive director holding his seat in a more complex firm and in a firm operating in a less competitive industry is more likely to have better career prospects.

We investigate the impact of stock return and accounting result volatility in column 5. We do not find any significant relationship between the stock return and accounting result volatility of firms associated with the first directorship and the probability of obtaining a second directorship.

Columns 6 and 7 study the impact of firm governance. Our governance variables include the number of analysts following the firm, dummies for whether a firm has dual class share, the percentage of institutional holdings, the fraction of non-executive directors over the board size, board size, the ratio of CEO pay over the next best pay, and indicator for whether a firm pays its CEO beyond the industry average. In particular, we find a positive and significant coefficient on the CEO excess pay dummy. Thus directors serving on "nice" boards are more likely to obtain more non-executive directorships in the future. The coefficient on board size is negative and significant at the 1% level, suggesting that serving on a small board offers better career prospects for directors. The estimated coefficient on the number of analysts following the firm is positive

and highly significant. It is thus more likely for non-executive directors to succeed in firms that are more transparent and more followed by the market. Not surprisingly, these firms tend to be large and in important industries. None of the other governance variables are consistently significant.

In columns 8 to 11 of Panel B of Table 3, we run pooled regressions that include the above mentioned variables (if they are not strongly correlated). As before, most of our results continue to hold. Firm size, asset tangibility, industry concentration, excess pay, and number of analysts following the firm are positively and significantly associated with the probability that a non-executive director will obtain a second directorship. Holding a non-executive directorship in a dual class share company appears to reduce the chance of having a second and concurrent directorship.

Overall, Table 3 shows that only some firm characteristics seem to affect the career path of non-executive directors. They are firm size, asset tangibility, industry concentration, CEO excess compensation, board size, dual class share, and number of analysts following the firm. These are all consistent with the hypothesis that directors of large firms with high visibility obtain second directorships. Interestingly, managerial compensation and governance factors seem to matter. There is also some evidence that nice directors are more likely to obtain second directorships.

4.3. Macroeconomic factors and the career paths of directors

A director might enjoy a more successful career, not because of his/her performance, but because of luck. To put it differently, macroeconomic conditions might impact the directors' career path. To our knowledge, there have been no studies on how macroeconomic impact the labor market for non-executive directors. We draw on Oyer (2008) who shows that macroeconomic factors determine whether a MBA graduate become an investment banker, and extend our analysis to potential macroeconomic determinants of the director's career. We investigate the impact on macroeconomic factors on the career paths of outside directors and report results in Table 4.

Panel A of Table 4 reports descriptive statistics of macroeconomic factors that might impact directors' career path associated with a director's first directorship and with his second one directorship.

[Insert Table 4 about here]

Panel A1 reports macroeconomic factors associated with a director's first directorship: stock market returns prior to the first directorship, industry stock market returns prior to the first directorship, market and industry volatility prior to the first directorship, a dummy for recession based on the NBER index, GDP growth rate, and a dummy for the post-Sarbanes-Oxley period. Panel A2 reports the same macroeconomic factors associated with a director's second directorship.

The macroeconomic conditions surrounding the first and the subsequent directorship are quite different. For the second directorship, market returns are lower, while market volatility is higher. The fraction of directors gaining a second directorship during a recession is higher than the fraction of directors obtaining their first directorship during a recession (28.61% against 26.12%). The GDP growth rate is lower when directors obtain the second directorship than when they obtain the first one (2.42% against 2.63%). The fraction of directors gaining a second directorship in the post-Sarbanes-Oxley period is higher than the fraction of directors obtaining their first directorship in the period before (61.51% against 54.64%).

In panel B of Table 4, we replicate our Cox proportional hazard models in Table 3 on the set of variables that represent market and industry conditions (returns and volatility) and macroeconomic factors (growth, recession, and indicator for the post Sarbanes-Oxley period) as described in Panel A.

Columns 1 and 2 show that one-year lagged- and three-year lagged-cumulative market returns are positively related to the probability of directors to obtain a second directorship. The effects are significant at the 1% and 5% levels, respectively. Columns 3 and 4 report results on prior industry returns. Similarly, we find positive and significant impact of one-year lagged-industry returns is positive, but insignificant.

Columns 5 to 8 report the impact of the prior market and industry return volatility. We do not find any significant impact of market return volatility. The prior industry return volatility, by contrast, is positively and significantly (at the 1% level) related to the likelihood of obtaining a second directorship. Being a director in an industry with highly volatile returns thus enhances the director's career path. One reason for this finding is that in industries with highly volatile returns, it is relatively more difficult for an external firm to disentangle the director's performance from the firm's performance.

Columns 9 to 12 report the impact of other macroeconomic indices such as the GDP growth rate in the year when an individual first becomes an non-executive director, and a dummy for whether the economy in that year is in recession based on the definition provided by the National Bureau of Economic Research. The estimated coefficients on growth rate are positive and significant at the 1% level, suggesting that favorable macroeconomic conditions increase the likelihood that a non-executive director will obtain a second directorship. The coefficient on the recession dummy is negative and significant at the 1% level. An economic recession appears to reduce the likelihood a director will obtain a second directorship. Similarly, we obtain consistently negative and significant (at the 1% level) coefficients on the post Sarbanes-Oxley indicator. This indicates that it is more difficult for outside directors to obtain second directorships after the Sarbanes-Oxley act of 2002.

In sum, Table 4 shows that macroeconomic factors related to the first directorship impacts the chance that a director will accumulate a second directorship. A non-executive director is less likely to obtain a second directorship if the economy was in recession when he first becomes a non-executive director. In contrast, a director is more likely to accumulate a second directorship if his first directorship is in an industry which performs well, and whose return volatility is high.

4.4. Firm reputation and the career paths of directors

Another set of variables that might determine a director's success in career is the reputation of the firms they serve. Jensen (1993) hypothesizes that reputation matters for non-executive directors incentivizing them to manage the firm on behalf of shareholders. If this reputational effect holds, non-executive directors from firms that perform well should have better director career paths. We investigate the relation between firm reputation and second directorship accumulation in this sub-section.

Our reputation variables include dummy for whether a firm has an accounting re-statement between the first and second directorship, and dummy for whether the firm encounters a class—action between the first and second directorship. In addition, since reputation is also related to its financial performance, which in turn drives the willingness of investors to buy its shares, we include the logarithm of average raw stock return from the first to the second (or to the exit) directorship, average industry-adjusted return on asset from the first to the second (or to the exit) directorship, and average industry-adjusted Tobin's Q the first to the second (or to the exit)

directorship, stock return and ROA volatility from the first to the second (or to the exit) directorship. Table 5 reports our results.

[Insert Table 5 about Here]

Column 1 reports the relationship between an accounting re-statement and the probability that one of its non-executive directors obtains a second concurrent directorship. We find negative and highly significant coefficients on the indicator for whether the non-executive director's firm has an accounting re-statement between his first and second directorships. Column 2 relates the event of class-action against a firm to the likelihood that one of its non-executive directors obtains a second concurrent directorship. Again, we find a negative and highly significant coefficient on the dummy for whether a class-action occurs between the first and second directorships. Results in columns 1 to 2 appear to confirm Jensen (1993) reputation hypothesis: a non-executive director in a firm that is involved in either an accounting re-statement or a class-action law suit is less likely to succeed in his career.

We next relate several measures of average firm performance from the year of first directorship to the year of second directorship, or the year when the director exits our sample (average industry-adjusted return on asset, average industry-adjusted Tobin's Q, and logarithm of average raw stock return) to the likelihood of obtaining a second directorship in columns 3 to 5. We find positive and significant estimate coefficients on average industry-adjusted ROA, Tobin's Q, and annual stock return. These results indicate that better firm performance and valuation improve the chance that non-executive directors obtain a second and subsequent directorship.

Column (6) and (7) study the impact of the first firm stock return volatility and ROA volatility, respectively, on the likelihood of obtaining a second directorship. We find a positive and significant impact of stock return volatility and negative and significant impact of return on assets.

Columns 8 to 12 report regressions in which we pool all these variables together, except those which are highly correlated. We find a consistently negative and significant impact of accounting re-statements and class-actions, and consistently positive and significant impact of industry-adjusted Tobin's Q and logarithm of average annual return.

In sum, results from Table 5 show that firm reputation (accounting re-statements and class-actions), performance (logarithm of average annual return), and valuation (industry-adjusted Tobin's Q) also impact the career path of non-executive directors. These results seem to support Jensen's hypothesis that reputation matters for non-executive directors.

4.5. Determinants of the career paths of directors

Tables 2 to 5 provide evidence that, taken separately, several families of characteristics that represent director characteristics, firm characteristics, macroeconomic factors, and firm performance impact the probability that directors will obtain more concurrent directorships in the future. In this sub-section, we empirically test whether these determinants of the career path of non-executive directors remain consistent in pooled regressions. We exclude only variables that are strongly correlated with other variables. We use the same Cox proportional model framework as in previous tables. Table 6 summarizes our combined results.

[Insert Table 6 about Here]

Among the proxies for personal characteristics of non-executive directors, columns 1 to 8 show a consistent and positive effect of director age and MBA degree. Relatively senior directors and directors with a MBA degree are more likely to be successful in obtaining a second directorship. We also find a consistent and positive impact of the size of director social network on director career. Directors belonging to a larger social network appear to be more likely to be successful in their career. By contrast, directors with a PhD degree are significantly less likely to obtain other directorships. We do not find any significant impact of other degrees and of the number of qualifications. Though still negative, the robust gender effect we found in Table 2 loses significance in our pooled regression.

Related to director experience, the impact of working experience in government bodies, CEO position, S&P500 position remains consistently positive and significant. In other words, having experience in the government, as a CEO, and as an executive in a large firm appear to boost a director career. We no longer find any consistent effects with regards to experience in boards of directors. For example, serving in important board committees such as compensation, nomination, and audit committees seem not to wield significant influence on the career path of a director.

Moving on to firm characteristics, the most consistent effects we find are related to firm size, tangibility, leverage, market competition, firm complexity, and dual-class share. Coefficient estimates on firm size, asset tangibility ratio, leverage, Herfindahl index are positive and highly significant across different specifications. Thus, holding a directorship in a large firm, in a firm with a high level of asset tangibility, and in a firm operating in a concentrated and less competitive industry increases the chance of obtaining a second directorship in another firm. In contrast, we find negative and significant coefficients on the number of segments and on the dual-class share indicator. This indicates that directors from more complex firms and firms with a dual-class share structure are less likely in obtaining a second concurrent directorship. We do not find significant impact of our governance proxies on director. For example, the estimate coefficient on CEO excess pay is positive, but not always significant at conventional levels. The impact of other firm characteristics is either not significant or inconsistently significant across the specifications.

Among the macroeconomic factors, we find a consistently negative and significant impact of the 2002 Sarbanes-Oxley act on the career of non-executive directors. The estimate coefficient on post Sarbanes-Oxley period is negative and highly significant. This result suggests that it has been more difficult for a non-executive director to obtain a second directorship after the Sarbanes-Oxley act was passed. This might be explained by the fact that Sarbanes-Oxley act requires more qualifications and experience in finance and accounting from non-executive directors. It is thus more difficult to be employed as a non-executive director after the passage of the act. We also find a consistent impact of a recession on the career of a non-executive director similar to our findings in Table 4. The estimated coefficient is negative and highly significant across different specifications. Thus, directors who hold a first directorship during a recession are significantly less likely to be successful in achieving a second directorship. Our results are similar to findings by Oyer (2008) who shows that MBA graduating during a crisis period are less likely to be an investment banker. The industry stock return volatility appears also to determine a director's career path. We find positive estimate coefficients on prior industry volatility. However, the effect is only significant for the three-year lagged industry stick return volatility. Holding a directorship in a highly volatile industry appears to be a positive factor in a director's career. We do not find significant impact of other proxies for macroeconomic conditions such as market and industry returns and volatility on director career.

On our set of variables representing firm performance, we find consistent effects of accounting re-statements and class-action law suits similar to results in our Table 5. The likelihood that a firm restates its earnings or a class-action lawsuit announced against the firm is significantly negatively related to the probability that one of its non-executive directors obtains a second concurrent directorship. The effect of annual average return volatility of stock return is also consistently negative and significant. This indicates that a high level of stock return volatility renders an accumulation of directorship less likely. By contrast, the positive and significant impact of stock returns and Tobin's Q remain consistent across different specifications. Directors from firms with better valuation and better performance seem to be more likely to succeed in the market for non-executive directorships.

5. Firm and Board Characteristics of the First and Second Directorships

We have so far analyzed factors that might impact the career of an outside director from the perspective of the directors (his/her personal characteristics, and performance and characteristics of the firm associated with the first directorship) and macroeconomic factors. Our analysis has therefore been on the supply side of the labor market of outside directors. In this section, we complete our analysis by exploring the career paths of outside directors from the perspective of the firms that offer subsequent directorships to directors. Our analysis thus moves to the demand side of the market for outside directors.

Our first step is to compare firm and board characteristics of firms associated with the first directorship and the second directorship at the time of the second directorship. In doing so, we expect to see the match between the two firms in which a non-executive director holds concurrent directorships. This match is likely to be informative about the demand for outside directors. Table 7 summarizes our results.

Panel A1 of Table 7 reports director personal characteristics (education level, age, and social connections), and the characteristics of the firms in which these directors serve their first non-executive directorship in the year of their second directorship. Panel A2 reports descriptive statistics for the average board characteristics of the second firm (education level, age, and social connections), and the characteristics of the firm of the second directorship in the year of second directorship. The last column reports a means test of the difference between variables associated with the first directorship, and the second and concurrent directorship.

Starting with personal characteristics of the new board member relative to the other members of the second board, we find that firms tend to offer a second outside directorship to directors who are more educated relative to the current members of the board. The fraction of directors with an undergraduate and a MBA degree is significantly higher in the first directorship's firm than in the second's directorship firm. Second, firms look for directors who belong to a larger social network. As the last column of Table 7 shows, the difference between the size of social network of a director and that of the average director in the second directorship's firm is positive and highly significant.

Comparing firm characteristics of the new director's first and second firms also reveals some interesting patterns. First, firms associated with the second directorship are younger (by around 2.2 years on average), smaller (in terms of assets), less complex (with around 4% fewer business segments), and less transparent (less followed by analysts) than firms associated with the first directorship. This indicates that firms tend to offer a second directorship to directors from more established, larger, more complex, and more transparent companies. Second, it appears that firms look for directors from firms with better governance standards. The last column of Table 7 shows that firms offers a second and concurrent directorships to directors whose current firms are not likely to over pay the CEO, have higher levels of institutional ownership, greater fraction of independent directors, and a smaller board size. Third, companies seem to offer a second directorship to directors from firms which do not necessarily perform well. Indeed, we find that firms associated with the first directorship have a lower Tobin's Q, smaller cash reserves, and lower stock return volatility. In other words, it does not seem that firms are unable to distinguish between firm performance and director performance. In fact, the market seems to be able to distinguish between firm performance and director performance, and to reward good directors, even in poorly performing firms.

In summary, Table 7 provides some stylized facts on the demand side of the market for outside directors. Corporations look for directors who are better educated and networked, and who are from more established, larger, more complex, more transparent, and better governed companies. In the same time, they do not necessarily look for directors from a firm with higher valuations, better performance, or higher return volatility.

6. Conclusions

This paper analyzes the career paths of non-executive using a large sample of 40,585 unique directors associated with 5,246 unique US listed firms in the BoardEx database. We first document several stylized facts on the career paths of non-executive directors. The majority of non-executive directors hold an undergraduate degree, with almost one-third of them going on to obtain an MBA degree. However expertise in the form of post-graduate education does not matter with only a minority of non-executive directors holding a PhD. Each director typically holds more than one qualification. The average non-executive director is aged 53 years, with 17 years of working experience and 5 years of experience as executive director. Nearly all of them are male. Social connections are important - the average director is connected to 326 persons in the Boardex dataset, while the average number of school connections per educational institution is over 2,000.

Using Cox survival analyses to model the time to the second (and subsequent) concurrent directorship, we investigate whether individual director characteristics, firm performance, firm characteristics, macroeconomic circumstances, and the size of director social networks between the first and the subsequent directorship impact director careers. We find, first, that personal characteristics of non-executive directors, such as director age, MBA degree, social network size, and prior experience, determine their career path. Belonging to large social networks, holding a MBA degree, having experience in the government, as a CEO, a top executive, or an executive in a S&P firm appear to enhance the chance of a successful director career. Second, macroeconomic economic factors surrounding the first directorship and a few years later also shape a director career. It is less likely for an non-executive director to obtain a second directorship after the Sarbanes-Oxley act of 2002, or when he obtains his first directorship during a recession. Third, a few firm characteristics and firm performance impact the career success of directors. Holding a directorship in large firms, firms with better valuation, or firms with higher return volatility enhance the chance to obtain a second directorship in another firm. Directors in firms which experience accounting re-statements and encounter class-action suits are less likely to obtain a second concurrent directorship. In addition, being "nice" to management does not appear to influence the probability of obtaining a second board seat – being a director of a firm that pays its CEO above average pay for example, is not consistently related to the probability of obtaining a second board seat.

Our paper provides some stylized facts on the demand of the market for outside directors. We find that corporations look for directors who are better educated and networked, and who are from more established, larger, more complex, more transparent, better governed companies. In the same time, they do not necessarily look for directors from a firm with higher valuation, better performance, or higher return volatility. This might indicate that firms might take into account other factors in their decision to hire an outside director.

Overall, our paper contributes to our understanding of the characteristics of non-executive directors and sheds light on the determinants of their career paths.

References

Adams, Renée B., and Daniel Ferreira, 2009, Women in the boardroom and their impact on governance and performance, *Journal of Financial Economics* 94, 291-309.

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

Ashraf, Rasha, Rajesh Chakrabarti, Richard Fu, and Narayanan Jayaraman, 2010, Takeover immunity, takeovers, and the market for nonexecutive directors, *Financial Management* 39, 83-127.

Bebchuk, Lucian, and Jesse Fried, 2004. Pay without performance: The unfulfilled promise of executive compensation (Harvard University Press, Cambridge).

Bouwman, Christa H. S., 2011, Corporate governance propagation through overlapping directors, *Review of Financial Studies* 24, 2358-2394.

Brown, Stephen J., William N. Goetzmann, and James Park, 2001, Careers and survival: Competition and risk in the hedge fund and CTA industry, *Journal of Finance* 56, 1869-1886.

Burke, Ronald J., 1997, Women directors: Selection, acceptance and benefits of board membership, *Corporate Governance* 5, 118-125.

Chevalier, Judith, and Glenn Ellison, 1999, Career concerns of mutual fund managers, *Quarterly Journal of Economics* 114, 389-432.

Coles, Jeffrey L., and Chun Keung Hoi, 2003, New evidence on the market for directors: Board membership and Pennsylvania senate bill 1310, *Journal of Finance* 58, 197-230.

Core, John E., Robert W. Holthausen, and David F. Larcker, 1999, Corporate governance, chief executive officer compensation, and firm performance, *Journal of Financial Economics* 51, 371-406.

Dahya, Jay, John J. McConnell, and Nickolaos G. Travlos, 2002, The Cadbury committee, corporate performance, and top management turnover, *Journal of Finance* 57, 461-483.

Ertimur, Yonca, Fabrizio Ferri, and Stephen R. Stubben, 2010, Board of directors' responsiveness to shareholders: Evidence from shareholder proposals, *Journal of Corporate Finance* 16, 53-72.

Fahlenbrach, Rüdiger, Bernadette A. Minton, and Carrie H. Pan, 2011, Former CEO directors: Lingering CEOs or valuable resources?, *Review of Financial Studies* 24, 3486-3518.

Farrell, Kathleen A., and Philip L. Hersch, 2005, Additions to corporate boards: The effect of gender, *Journal of Corporate Finance* 11, 85-106.

Fee, C. Edward, and Charles J. Hadlock, 2003, Raids, rewards, and reputations in the market for managerial talent, *Review of Financial Studies* 16, 1315-1357.

Ferris, Stephen P., Murali Jagannathan, and A.C. Pritchard, 2003, Too busy to mind the business? Monitoring by directors with multiple board appointments, *Journal of Finance* 58, 1087-1111.

Fich, Eliezer M., 2005, Are some outside directors better than others? Evidence from director appointments by Fortune 1000 firms, *Journal of Business* 78, 1943-1972.

Fich, Eliezer M., and Lawrence J. White, 2005, Why do CEOs reciprocally sit on each other's boards?, *Journal of Corporate Finance* 11, 175-195.

Fich, Eliezer M., and Anil Shivdasani, 2006, Are busy boards effective monitors?, *Journal of Finance* 61, 689-724.

Gul, Ferdinand A., Bin Srinidhi, and Anthony C. Ng, 2011, Does board gender diversity improve the informativeness of stock prices?, *Journal of Accounting and Economics* 51, 314-338.

Güner, A. Burak, Ulrike Malmendier, and Geoffrey Tate, 2008, Financial expertise of directors, *Journal of Financial Economics* 88, 323-354.

Jeanjean, Thomas, and Hervé Stolowy, 2009, Determinants of board members' financial expertise - Empirical evidence from France, *International Journal of Accounting* 44, 378-402.

Jensen, Michael C., 1993, The modern industrial revolution, exit, and the failure of internal control systems, *Journal of Finance* 48, 831-880.

Kaplan, Steven N., and D. Reishaus, 1990, Outside directorships and corporate performance, *Journal of Financial Economics* 27, 389-410.

Maman, Daniel, 2000, Who accumulates directorships of big business firms in Israel? Organizational structure, social capital, and human capital, *Human Relations* 53, 603-629.

Marshall, Cassandra D., 2010, Are dissenting directors rewarded?, unpublished working paper, University of Richmond.

Nelson, Teresa, and Laurie L. Levesque, 2007, The status of women in corporate governance in high-growth, high-potential firms, *Entrepreneurship: Theory and Practice* 31, 209-232.

Oyer, Paul, 2008, The making of an investment banker: Macroeconomic shocks, career choice, and lifetime income, *Journal of Finance* 63, 2601-2628.

Shivdasani, Anil, 1993, Board composition, ownership structure and hostile takeovers, *Journal of Accounting and Economics* 16, 167-198.

Singh, Val, Siri Terjesen, and Susan Vinnicombe, 2008, Newly appointed directors in the boardroom: How do women and men differ?, *European Management Journal* 26, 48-58.

Wu, Joanna Shuang, and Amy Y. Zang, 2009, What determine financial analysts' career outcomes during mergers?, *Journal of Accounting and Economics* 47, 59-86.

Wu, YiLin, 2004, The impact of public opinion on board structure changes, director career progression, and CEO turnover: Evidence from CalPERS' corporate governance program, *Journal of Corporate Finance* 10, 199-227.

Table 1 Summary Statistics

This table reports characteristics of our sample of non-executive directors. Panel A shows the distribution of non-executive directors by year. Panel B reports the distribution of non-executive directors by age. All non-executive directors are from the BoardEx dataset for the period before and after 2000.

Panel A: Number and Proportion of Directorship by Calendar Year

				# Boards/Di	rector		% Multiple
Year	Firms	Directors	Mean	90pct	99pct	Max	Directorships
<2000	816	2,207	1.06	1	2	3	7.55%
2000	3,934	17,881	1.25	2	4	9	7.80%
2001	4,059	19,708	1.25	2	4	10	8.05%
2002	4,182	21,168	1.24	2	4	10	8.27%
2003	4,291	22,984	1.24	2	4	10	8.48%
2004	4,458	24,985	1.25	2	4	10	8.69%
2005	4,592	26,262	1.26	2	4	11	8.90%
2006	4,718	27,307	1.26	2	4	11	9.11%
2007	4,887	28,305	1.27	2	4	11	9.33%
2008	4,858	27,985	1.28	2	4	12	9.55%
2009	4,561	25,732	1.28	2	4	12	9.76%
2010	4,348	23,594	1.28	2	4	11	9.97%
2011	4,044	21,246	1.27	2	4	11	10.17%
Total (N)	53,478	289,364					
Mean	4,134	22,259	1.25	2	4	10	8.90%
Unique	5,246	40,585	-	-		-	

Panel B: Number and Proportion of Directorship by Age Group

A ===	Directors		# Boards	/Director		0/ Multiple Directorships
Age	Directors	Mean	90pct	99pct	Max	% Multiple Directorships
20s	120	1.08	1.20	2.00	2.40	8.15%
30s	1,670	1.20	1.90	4.00	5.10	14.17%
40s	7,605	1.30	2.00	4.10	9.20	19.65%
50s	16,672	1.48	2.60	5.00	10.20	29.19%
60s	18,371	1.75	3.00	5.80	10.60	40.77%
70s	5,923	1.53	2.60	5.40	8.80	30.20%
80s	699	1.25	2.00	4.00	4.60	16.20%

Table 2: Non-Executive Directors' Characteristics and their Career Path

Panel A: Descriptive Statistics

This panel reports descriptive statistics of the evolution of the careers of non-executive directors. Panel A1 reports directors' characteristics when they first become a director: education level, age, gender, their work experience before they become a director, experience (in years), total number of school connections, and function in the board (committee memberships). Panel A2 reports directors' characteristics when they accumulate their second directorship: education level, age, gender, their work experience before they accumulate the next directorship, experience (in years), total number of school connections, and function in the board (committee memberships). The last column reports means tests of the difference between variables associated with the first directorship, and the ones with the second and concurrent directorship. Our dataset include all directors from public firms provided by BoardEx of Management Diagnostics.

	Panel A	A1: First D	irectors	ship	Panel A	2: Second	Directo	rship	D:ec	
Variable		Obs=41,9	63			Obs=930)1		Differ	ence
	(A) Mean	Median	Min	Max	(B) Mean	Median	Min	Max	(B) -	(A)
Education										
Undergrad. deg. dum.	0.850	1	0	1	0.905	1	0	1	0.055	***
MBA deg. dum.	0.314	0	0	1	0.374	0	0	1	0.060	***
Medical deg. dum.	0.033	0	0	1	0.023	0	0	1	-0.010	***
Graduate deg. dum.	0.192	0	0	1	0.200	0	0	1	0.008	
PhD deg. dum.	0.102	0	0	1	0.111	0	0	1	0.009	***
Law deg. dum.	0.135	0	0	1	0.134	0	0	1	-0.001	
Nb. of qualifications	1.786	2	0	14	1.895	2	0	11	0.108	***
Ivy league deg. dum.	0.149	0	0	1	0.220	0	0	1	0.071	***
Personal characteristics										
Director age	52.508	53	17	96	56.351	57	20	86	3.843	***
Director gender dum.	0.911	1	0	1	0.897	1	0	1	-0.013	***
Work experience										
Work exp. (years)	16.997	16	0	65	23.539	23	1	62	6.542	***
Exec. directors exp. (years)	5.192	0	0	61	6.718	0	0	58	1.526	***
Work exp. gov. dum.	0.071	0	0	1	0.101	0	0	1	0.030	***
Work exp. pvt. dum.	0.500	1	0	1	0.451	0	0	1	-0.049	***
Work exp. pub.dum.	0.363	0	0	1	0.383	0	0	1	0.020	***
Work exp. uni. dum.	0.030	0	0	1	0.036	0	0	1	0.006	***
Work exp. CEO dum.	0.102	0	0	1	0.140	0	0	1	0.038	***
Work exp. S&P500 dum.	0.190	0	0	1	0.284	0	0	1	0.094	***
Connections										
Nb. of Board Seats	1.050	1	0	10	2.220	2	1	10	1.170	***
Log(School connection size)	6.734	6.943	0	9.781	6.967	7.123	0	9.722	0.233	***
Corporate governance										
Audit comm.	0.507	1	0	1	0.527	1	0	1	0.020	***
Compensation comm.	0.460	0	0	1	0.457	0	0	1	-0.003	
Nomination comm.	0.392	0	0	1	0.393	0	0	1	0.001	
Governance comm.	0.369	0	0	1	0.413	0	0	1	0.045	***

Panel B: Cox Proportional Hazard models

This table reports results from Cox proportional hazards regressions for the probability that an outside director obtains a second outside directorship based on director personal characteristics. Our sample includes all individuals in the BoardEx dataset with at least an outside directorship. Director characteristics include directors' age, gender, work experience, education, career backgrounds, and board experience. Column (1) to (2) study the impact of education and social connections with dummies for various degrees (MBA, PhD, law, medical, graduate, and Ivy League), and the total number of qualifications. Column (3) reports results on director age, squared director age, and male director dummy. Column (4) reports results on experience in number of years, and squared number of years of experience. Column (5) shows regression results on director career backgrounds with indicator variables for whether a director worked for the government, a university, a private company, or a publicly listed company. Column (6) show regression results on director career backgrounds with indicator variables for whether the director is a CEO of another firm, or an executive in a S&P500 firm. Column 7 studies the impact of the logarithm of the number of education social ties. Column 8 reports the results on dummy variables for whether the non-executive director serves on important board committees (audit, compensation, nomination). Columns (9) and (10) report regressions in which we pool all these variables together, except those which are highly correlated. Robust standard errors are estimated following Lin and Wei (1989). T-statistics are reported in brackets. *, ** and *** denote statistical significance at 10%, 5% and 1%, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Education										
MBA deg. dum.	0.327***								0.194***	
	(11.068)								(5.700)	
PhD deg. dum.	-0.043								-0.027	
	(-0.960)								(-0.534)	
Law deg. dum.	-0.075*								-0.061	
	(-1.839)								(-1.338)	
Medical deg. dum.	-0.369***								-0.198**	
	(-4.050)								(-2.118)	
Graduate deg. dum.	0.156***								0.049	
	(4.444)								(1.253)	
Ivy league deg. dum.	0.203***	0.221***							0.103***	0.114***
	(6.381)	(7.017)							(2.874)	(3.198)
Nb. of qualifications		0.118***								0.067***
		(9.359)								(4.346)
Personal char.										
Director age			0.169***						0.135***	0.134***
			(14.754)						(7.252)	(7.206)
Director age squared			-0.002***						-0.001***	-0.001***
			(-15.421)						(-7.511)	(-7.536)
Director gender dum.			-0.115***						-0.161***	-0.151***
			(-3.058)						(-3.572)	(-3.359)
Work experience										
Work exp. (years)				0.070***					0.033***	0.033***
				(20.736)					(7.023)	(7.082)
Work exp. squared				-0.001***						-0.001***
				(-15.744)					(-4.698)	(-4.721)
Work exp. gov. dum.					0.720***				0.222***	0.164***
					(15.671)				(4.000)	(2.981)
Work exp. uni. dum.					0.429***				-0.037	-0.153*
					(6.013)				(-0.456)	(-1.942)
Work exp. pvt. dum.					0.304***				-0.013	-0.014
					(10.208)				(-0.374)	(-0.384)
Work exp. pub.dum.					0.428***					
					(13.883)					
Work exp. CEO dum.						0.620***			0.492***	0.507***
						(16.853)			(11.068)	(11.419)
Work exp. S&P500 dum	l .					0.710***			0.427***	0.446***
						(24.300)			(11.195)	(11.758)

Connections										
Log(sch. conn. size)							0.079***		0.103***	0.063***
_							(9.307)		(2.874)	(6.324)
Corp. gov.										
Audit comm.								-0.121***	-0.123***	-0.101***
								(-4.706)	(-4.119)	(-3.374)
Compensation comm.								-0.064**	-0.111***	-0.104***
-								(-2.419)	(-3.703)	(-3.495)
Nomination comm.								-0.138***	-0.110***	-0.118***
								(-5.095)	(-3.590)	(-3.840)
Wald Chi-Square	267.8	168.7	277.6	559.7	235.8	1221	86.61	325.2	976.1	947.8
Prob. > Chi-Square	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observations	24,810	24,810	39,384	30,446	39,384	30,452	20,824	39,384	20,824	20,824
Pseudo R ²	0.0023	0.0014	0.002	0.005	0.0014	0.008	0.001	0.002	0.011	0.012

Table 3: Firm Characteristics and the Career Path of Directors

Panel A: Descriptive Statistics

This panel reports descriptive statistics of firms associated with a director's first directorship and of firms associated with his second directorship. Panel A1 reports characteristics of the firms associated with a director's first directorship: firm size (the logarithm of total assets), industry-adjusted leverage, industry-adjusted research and development expenditure, industry-adjusted asset tangibility, industry-adjusted Tobin's Q, industry-adjusted cash reserve ratio, prior performance (stock returns and operating performance), industry competition (Herfindahl index based on industry assets), firm complexity (the total number of segments), firm uncertainty (stock return volatility and ROA volatility), firm visibility (total number of analyst following), managerial entrenchment (the presence of dual-class shares, Bebchuk et. Al. (2009) managerial entrenchment index), corporate governance characteristics (average institutional ownership, fraction of outside directors, and board size), managerial compensation (dummy for whether the firm's compensation is beyond industry's median, and the ratio of CEO pay over the next best executive pay). Panel A2 reports the same set of characteristics of the firms associated with a director's second directorship. The last column reports a means test of the difference between variables associated with the first directorship, and the ones with the second and concurrent directorship. Our dataset include all directors from public firms provided by Boardex of Management Diagnostics.

Variable	A		Directorship 41,963)	A2	2. Second 1 Obs=	Directorsh 9301	ip	Differ	ence
	(A) Mean		Min	Max	(B) Mean		Min	Max	(B) -	(A)
Firm age (years)	12.78	9.00	0.00	61.00	15.98	11.00	0.00	60.00	3.20	***
Log(total assets)	6.11	6.12	-2.31	14.62	6.85	6.79	0.20	14.63	0.74	***
Leverage					0.05		0.20	11.05	0.71	
Ind. adj. leverage	0.021	-0.004	-0.816	0.997	0.034	0.000	-0.717	0.970	0.01	***
Growth opp.					0.05		0.717	0.570	0.01	
Ind. adj. R&D	0.05	0.00	-0.48	28.84	0.06	0.00	-0.45	28.84	0.01	
Ind. adj. tangibility	0.01	0.00	-0.83	0.98	0.01	0.00	-0.81	0.89	0.00	
Ind. adj. tobinQ	0.59	0.02	-11.33	172.84	0.64	0.05	-2.86	103.49	0.06	
Liquidity					0.0.		2.00	10011)	0.00	
Ind. adj.cash res. rat.	0.04	0.00	-0.99	0.98	0.04	0.00	-0.67	0.98	0.00	
Stock performance					***			****		
Cum.1-yr lag.ret.	0.17	0.06	-0.99	23.40	0.16	0.07	-0.98	14.64	0.00	
Cum. 2-yr lag. ret.	0.36	0.13	-0.99	55.12	0.34	0.13	-0.99	54.47	-0.01	
Cum. 3-yr lag. ret.	0.54	0.21	-1.00	121.00	0.46	0.15	-0.99	70.08	-0.08	***
Operating performance										
Ind. adj. net income	51.2	0.8	-31695.8	13504.1	108.1	5.3	-46124.7	17168.5	57.0	***
Ind. adj. ROA	-0.04	0.00	-30.44	24.33	-0.04	0.00	-30.44	4.44	0.01	
Competition										
Ind. nb. Firms	109.7	34.0	1.0	652.0	84.5	29.0	1.0	652.0	-25.21	***
Ind. HHI (Asset)	0.226	0.165	0.013	1.000	0.245	0.176	0.013	1.000	0.02	***
Complexity										
nb. Segments	2.5	1.0	1.0	22.0	2.8	2.0	1.0	22.0	0.34	***
Uncertainty										
1-yr lag. ret. vol.	0.030	0.012	0.000	9.394	0.028	0.011	0.000	1.308	0.00	**
2-yr lag. ret. vol.	0.030	0.013	0.000	4.712	0.028	0.013	0.000	2.679	0.00	***
3-yr lag. ret. vol.	0.030	0.014	0.000	3.245	0.027	0.013	0.000	3.245	0.00	***
ROA volatility	0.997	0.001	0.000	3190.6	2.129	0.001	0.000	3198.6	1.13	
Firm visibility										
nb. analyst following	7.2	5.0	1.0	45.0	9.2	7.0	1.0	48.0	1.99	***
Mgr. entrenchment										
Dual-class shr. dum.	0.089	0.000	0.000	1.000	0.081	0.000	0.000	1.000	-0.01	
Entrenchment index	2.473	3.000	0.000	6.000	2.548	3.000	0.000	6.000	0.08	***
Corp. gov.										
Mean inst. own.	0.42	0.39	0.00	3.67	0.54	0.57	0.00	3.67	0.12	***
% of indpt. dir.	0.70	0.71	0.00	1.00	0.72	0.75	0.00	1.00	0.02	***
Board size	9.40	9.00	2.00	33.00	9.55	9.00	3.00	33.00	0.14	***
Man. compensation										
CEO pay/next best pay	2.20	1.75	0.73	154.03	2.30	1.84	1.00	154.03	0.10	
Excess pay dum.	0.454	0.000	0.000	1.000	0.538	1.000	0.000	1.000	0.08	***

Panel B: Cox proportional hazards models

This panel reports results from Cox proportional hazards regressions for the probability that an outside director obtains a second outside directorship based on first directorship's firm characteristics. Our sample includes all individuals in the Boardex dataset with at least a non-executive directorship. Firm characteristics include firm size, leverage, growth opportunities, liquidity, firm prior performance, market competition, firm complexity, firm uncertainty, firm visibility, and firm governance characteristics. Column (1) reports results on firm size (the logarithm of total assets), leverage (industry-adjusted debt/asset ratio), growth opportunities (industry-adjusted Tobin's Q, industry-adjusted research and development expenditure, and industry-adjusted asset tangibility), and liquidity (industry-adjusted cash reserve ratio). Column (2) reports results on prior stock market and operating performance. Column (3) and (4) studies the impact of industry competition by including Herfindahl index based on industry assets, and firm complexity by including the total number of the firm's segments, respectively. Column (5) studies the impact of firm uncertainty (firm stock return volatility and ROA volatility). Column (6) and (7) study the impact of firm governance. Our governance variables include dummies for whether it is a firm with dual class share, and for whether a firm pays its CEO beyond the industry median, the percentage of institutional holdings, the total number of analyst following, board size, the fraction of outside directors over the board size, and the ratio of CEO pay over the next best executive pay. Columns (8) to (11) report regressions in which we pool all these variables together, except those which are highly correlated. Robust standard errors are estimated following Lin and Wei (1989). T-statistics are reported in brackets. *, ** and *** denote statistical significance at 10%, 5% and 1%, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Firm characteristics											
Log(total assets)	0.184***							0.144***	0.166***	0.085***	0.063***
	(21.496)							(19.831)	(21.059)	(5.862)	(3.765)
Ind. adj. leverage	-0.004							0.103	0.046	0.149	0.039
	(-0.043)							(1.348)	(0.571)	(1.173)	(0.265)
Ind. adj. R&D	0.034*										
	(1.667)										
Ind. adj. tangibility	0.229*							0.238**	0.136	0.371**	0.488***
	(1.775)							(2.261)	(1.395)	(2.340)	(2.651)
Ind. adj. tobinQ	0.016***							0.040***	0.031***	0.028	0.017
	(6.153)							(4.308)	(3.260)	(1.468)	(0.808)
Ind. adj.cash res. rat.	0.394***							0.086	0.122	-0.107	-0.175
	(3.357)							(0.666)	(0.975)	(-0.585)	(-0.859)
Performance											
Cum. 1-yr lag. ret.		0.005						-0.001	0.002	-0.008	-0.003
		(0.261)						(-0.033)	(0.066)	(-0.188)	(-0.062)
Ind. adj. ROA		0.046									
		(1.285)									
Competition											
Ind. HHI (Asset)			0.550***						0.170**	0.373***	0.354***
			(10.479)						(2.309)	(3.753)	(3.109)
Complexity											
nb. Segments				0.052***					-0.009	-0.011	-0.010
				(8.801)					(-1.149)	(-1.139)	(-1.002)
Uncertainty				, ,					,		, ,

1-yr lag. ret. vol.					-0.329			0.066	0.001	0.069	-0.470
					(-1.253)			(0.756)	(0.012)	(0.085)	(-0.506)
ROA volatility					-0.027			-0.028	-0.022	-0.010	-0.052
					(-1.016)			(-0.910)	(-0.799)	(-0.130)	(-0.721)
Corp. gov. char.											
nb. analyst following						0.029***					
						(6.036)					
Dual-class shr. dum.						-0.082				-0.287***	-0.360***
						(-0.664)				(-3.313)	(-3.400)
Mean inst. own.						0.014				0.291***	0.162
						(0.108)				(2.962)	(1.397)
% of indpt. dir.						-0.264					
						(-1.116)					
Board size						-0.037***	:				
						(-3.791)					
Man. Compensation											
CEO pay/next best pay							0.006				0.007
							(0.889)				(0.476)
Excess pay dum.							0.289***				0.180***
							(6.879)				(3.380)
Wald Chi-Square	483.4	1.737	109.8	77.46	2.812	48.02	50.29	416.8	519.6	85.93	77.28
Prob. > Chi-Square	0.000	0.420	0.000	0.000	0.245	0.000	0.000	0.000	0.000	0.000	0.000
Observations	11,549	23,588	30,284	25,215	19,191	3,866	8,679	18,477	15,959	6,879	5,780
Pseudo R ²	0.009	0.000	0.001	0.001	0.000	0.003	0.001	0.005	0.007	0.003	0.003

Table 4: Macroeconomic Factors and the Career Path of Directors

Panel A: Descriptive Statistics

This panel reports descriptive statistics of macroeconomic factors associated with a director's first directorship and second directorship. Panel A1 reports macroeconomic factors associated with a director's first directorship: cumulative stock market and industry returns prior to the first directorship, stock market and industry volatility prior to the first directorship, dummy for recession based on the NBER, GDP growth rate, and dummy for post-Sarbanes-Oxley period. Panel B reports the same macroeconomic factors associated with the director's second directorship. The last column reports a means test of the difference between variables associated with the first directorship, and the ones with the second and concurrent directorship. Our dataset include all directors from public firms provided by BoardEx of Management Diagnostics.

	I	A1. First D	irectorship)	A	2. Second I	Directorshi	р	Differe	maa
Variable		Obs=41,963	3			Obs=9301			Differe	ence
	(A) Mean	Median	Min	Max	(B) Mean	Median	Min	Max	(B) - (A)	
Market and industry	performan	ce								
Cum.1-yr lag.mkt. ret.	0.0929	0.1300	-0.3830	0.3736	0.0886	0.1300	-0.3830	0.3736	-0.0043	*
Cum.2-yr lag.mkt. ret.	0.2065	0.2470	-0.4145	0.7413	0.1988	0.2470	-0.4145	0.7413	-0.0077	**
Cum.3-yr lag.mkt. ret.	0.3304	0.3620	-0.3754	1.1424	0.2948	0.3383	-0.3754	1.1424	-0.0356	***
Cum.1-yr lag. ind. ret.	0.0580	-0.0437	-0.9920	15.8135	0.0704	-0.0443	-0.9920	11.1474	0.0123	
Cum.2-yr lag. ind. ret.	0.1264	-0.0828	-0.9949	31.2512	0.1404	-0.0723	-0.9949	23.3237	0.0140	
Cum.3-yr lag. Ind. ret.	0.1791	-0.1081	-0.9966	43.0956	0.1116	-0.1089	-0.9966	43.0956	-0.0675	***
1-yr lag. mkt. ret. vol.	0.0019	0.0011	0.0001	0.0078	0.0020	0.0011	0.0002	0.0078	0.0001	***
2-yr lag. mkt. ret. vol.	0.0019	0.0018	0.0004	0.0052	0.0020	0.0024	0.0004	0.0052	0.0001	***
3-yr lag. mkt. ret. vol.	0.0019	0.0019	0.0005	0.0045	0.0020	0.0023	0.0005	0.0045	0.0001	***
1-yr lag. ind. ret. vol.	0.0287	0.0098	0.0000	3.6172	0.0291	0.0098	0.0000	3.3492	0.0005	
2-yr lag. ind. ret. vol.	0.0294	0.0113	0.0000	1.9259	0.0301	0.0115	0.0001	1.7265	0.0007	
3-yr lag. ind. ret. vol.	0.0297	0.0122	0.0001	1.2868	0.0317	0.0125	0.0001	1.1580	0.0019	**
Macro-economic fact	ors									
Recession dum.	0.2612	0.0000	0.0000	1.0000	0.2861	0.0000	0.0000	1.0000	0.0249	***
GDP growth rt.	0.0263	0.0290	-0.0350	0.0720	0.0242	0.0270	-0.0350	0.0720	-0.0021	***
Post Sarbox dum.	0.5464	1.0000	0.0000	1.0000	0.6151	1.0000	0.0000	1.0000	0.0687	***

Panel B: Cox proportional hazards models

This table reports results from Cox proportional hazards regressions for the probability that a non-executive director obtains a second non-executive directorship based on macroeconomic conditions. Our sample includes all individuals in the Boardex dataset with at least a non-executive directorship. Macroeconomic conditions include variables that represent financial market conditions (returns and volatility), industry returns, and macroeconomic factors (GDP growth and dummy indicating recession year). Columns (1) and (2) report results on prior stock market returns. Columns (3) to (4) report results on prior industry returns. Columns (5) to (8) study the impact of market and industry return volatility. Columns (9) and (10) show regression results on macroeconomic indices (GDP growth rate and dummy indicating recession year). Columns (11) and (12) report regressions in which we pool all these variables together, except those which are highly correlated. Robust standard errors are estimated following Lin and Wei (1989). T-statistics are reported in brackets. *, ** and *** denote statistical significance at 10%, 5% and 1%, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Cum. 1-yr lag mkt. ret.	0.245***	:									0.137	
Cum. 1 yr rag mac. rec.	(3.414)										(1.630)	
Cum. 3-yr lag.mkt. ret.		0.073**										
		(2.164)										
Cum. 1-yr lag. ind. ret.			0.051***									0.041**
			(3.223)									(2.487)
Cum. 3-yr lag. Ind. ret.				0.004								
				(0.604)	0.555						4.050	
1-yr lag. mkt. ret. vol.					-9.555						-4.950 (-0.515)	
3-yr lag. mkt. ret. vol.					(-1.160)	7.837					(-0.313)	
5-yr rag. mkt. ret. vor.						(0.628)						
1-yr lag. ind. ret. vol.						(0.020)	0.259***	k				0.144
							(2.695)					(1.356)
3-yr lag. ind. ret. vol.								0.769**	k			
								(4.999)				
GDP growth rt.									1.947**			
									(2.408)			
Recession dum.												-0.094***
Deat Contract down										(-4.201)	(-2.056)	(-2.869) -0.145***
Post Sarbox dum.												·-0.145*** (-4.996)
											(-4.434)	(-4.990)
Wald Chi-Square	11.66	4.683	10.39	0.365	1.345	0.394	7.261	24.99	5.796	17.65	37.89	48.83
Prob. > Chi-Square	0.001	0.031	0.0013	0.546	0.246	0.530	0.007	0.000	0.016	0.000	0.000	0.000
Observations	30,452	30,452	29,434	28,916	30,452	30,452	29,430	28,914	30,452	39,384	30,452	29,430
Pseudo R ²	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 5: Firm Performance and the Career Path of Directors

This table reports results from Cox proportional hazards regressions for the probability that a non-executive director obtains a second non-executive directorship based on the director's firm performance. Our sample includes all individuals in the Boardex dataset with at least a non-executive directorship. Firm performance variables include dummies for whether a firm has an accounting re-statement between the first and second directorship, and whether the firm encounters a class action lawsuit between the first and second directorship, the logarithm of average raw stock return, average industry-adjusted return on asset, and average industry-adjusted Tobin's Q between the first and second directorship. Column (1) reports the relationship between the event of a firm's accounting re-statement and the probability that one of its non-executive directors obtains a second concurrent directorship. Column (2) studies the impact of a class action lawsuit. In columns (3) to (5), we relate several measure of average firm performance between the year of first directorship and the year of second directorship or the year when the director exits the firm (or our sample) to the likelihood of obtaining a second directorship. Column (6) and (7) study the impact of the first firm stock return volatility and ROA volatility, respectively, on the likelihood of obtaining a second directorship. Columns (8) to (12) report regressions in which we pool all these variables together, except those which are highly correlated. Robust standard errors are estimated following Lin and Wei (1989). T-statistics are reported in brackets. *, ** and *** denote statistical significance at 10%, 5% and 1%, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Acc. restate. dum.	1 010***	:						0.041***	: 0.045***	0.000***	. 0.006***	-0.928***
										*****	*****	***
	(-13.824)							,	(-12.522)	` ′	,	,
Class action dum.		-0.423***						-0.357***	-0.365***	-0.443***	-0.441***	-0.336***
		(-3.910)						(-3.043)	(-3.142)	(-3.537)	(-3.513)	(-2.862)
Ave.ind. adj. ROA			0.078*					0.063				0.024
			(1.957)					(1.560)				(0.386)
Ave.ind. adj.tobinq				0.033***					0.034***			
				(6.397)					(6.125)			
Log(ave. stk. ret.)					0.343***					0.345***	0.353***	
					(16.105)					(16.248)	(14.223)	
Ret. volatility						0.101*					-0.300	
						(1.817)					(-0.667)	
ROA volatility							-0.008*					-0.013
							(-1.741)					(-1.580)
Wald Chi-Square	191.1	16.03	15.28	0.988	3.829	3.301	3.030	40.92	152.7	3.301	396.9	162.6
Prob. > Chi-Square	0.000	0.000	0.000	0.320	0.050	0.069	0.082	0.000	0.000	0.069	0.000	0.000
Observations	39,384	39,384	30,597	30,898	29,714	37,835	34,170	30,597	30,898	29,714	29,667	28,975
Pseudo R ²	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.006	0.002

Table 6: Cox Regression for the Probability of a Second Non-Executive Directorship

This table reports results from Cox proportional hazards regressions for the probability that a non-executive director obtains a second non-executive directorship. Our sample includes all individuals in the BoardEx dataset with at least a non-executive directorship. We include variables representing director characteristics, firm characteristics, macroeconomic factors, and firm performance in pooled regressions. Director characteristics include directors' education backgrounds, age, gender, work experience, connections, and board experience. Firm characteristics include firm size, firm growth opportunity, firm liquidity, firm prior stock and operating performance, market competition, firm complexity, firm uncertainty, firm visibility, managerial entrenchment, firm corporate governance, and managerial compensation. Macroeconomic conditions include variables that represent financial market conditions (market and industry past returns and volatility), and macroeconomic factors (GDP growth and recession). Robust standard errors are estimated following Lin and Wei (1989). T-statistics are reported in brackets. *, ** and *** denote statistical significance at 10%, 5% and 1%, respectively.

	(1)	(2)	(2)	(4)	(5)	(6)	(7)	(0)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Personal Characteristics	0.004	0.040444	0.000	0.00 (1.1.1.1.	0.04.04.4.4	0.000	0.040444	0.040000
Director age	0.234***	0.243***	0.228***	0.236***	0.218***	0.228***	0.210***	0.219***
	(4.761)	(4.890)	(4.654)	(4.773)	(4.115)	(4.252)	(3.987)	(4.118)
Director age squared	-0.002***	-0.002***	-0.002***	-0.002***	-0.002***	-0.002***	-0.002***	-0.002***
	(-4.949)	(-5.065)	(-4.869)	(-4.975)	(-4.227)	(-4.356)	(-4.126)	(-4.247)
Director gender dum.	-0.058	-0.078	-0.047	-0.067	-0.062	-0.078	-0.051	-0.068
	(-0.830)	(-1.106)	(-0.671)	(-0.951)	(-0.808)	(-1.020)	(-0.664)	(-0.885)
MBA deg. dum.	0.117**	0.107*			0.138**	0.121*		
	(1.989)	(1.823)			(2.137)	(1.880)		
PhD deg. dum.	-0.192**	-0.185*			-0.205**	-0.193*		
	(-2.029)	(-1.949)			(-1.977)	(-1.865)		
Law deg. dum.	-0.051	-0.057			-0.024	-0.030		
	(-0.584)	(-0.651)			(-0.252)	(-0.320)		
Medical deg. dum.	-0.004	-0.013			-0.001	0.003		
	(-0.019)	(-0.069)			(-0.006)	(0.015)		
Graduate deg. dum.	-0.021	-0.054			0.024	-0.011		
	(-0.316)	(-0.800)			(0.327)	(-0.152)		
Nb. of qualifications			0.018	0.007			0.043	0.031
			(0.632)	(0.244)			(1.414)	(1.034)
Ivy league degree dum.	-0.052	-0.052	-0.032	-0.031	-0.082	-0.081	-0.063	-0.062
	(-0.798)	(-0.797)	(-0.497)	(-0.481)	(-1.161)	(-1.142)	(-0.912)	(-0.893)
Log(sch. conn. size)	0.057***	0.062***	0.058***	0.063***	0.058***	0.062***	0.059***	0.063***
	(3.080)	(3.282)	(3.150)	(3.356)	(2.922)	(3.095)	(2.979)	(3.134)
Work exp. gov. dum.	0.370***	0.364***	0.331***	0.326***	0.333***	0.336***	0.295***	0.298***
	(4.187)	(4.113)	(3.832)	(3.764)	(3.456)	(3.486)	(3.117)	(3.158)
Work exp. pvt. (dum.)	0.111*	0.107*	0.113*	0.109*	0.155**	0.156**	0.158**	0.160**
	(1.872)	(1.797)	(1.906)	(1.840)	(2.375)	(2.383)	(2.449)	(2.462)
Work exp. uni. dum.	0.092	0.086	-0.058	-0.055	0.084	0.078	-0.093	-0.085
	(0.590)	(0.551)	(-0.388)	(-0.375)	(0.487)	(0.458)	(-0.573)	(-0.523)
Work exp. CEO dum.	0.364***	0.376***	0.378***	0.390***	0.355***	0.360***	0.370***	0.373***
	(5.320)	(5.479)	(5.510)	(5.663)	(4.712)	(4.747)	(4.888)	(4.915)
Work exp. S&P500 dum.	0.327***	0.316***	0.346***	0.335***	0.400***	0.393***	0.421***	0.412***
	(5.498)	(5.290)	(5.849)	(5.625)	(6.143)	(5.994)	(6.484)	(6.308)
Audit comm.	0.015	0.010	0.034	0.030	-0.001	-0.001	0.018	0.018
	(0.287)	(0.196)	(0.642)	(0.562)	(-0.010)	(-0.022)	(0.314)	(0.305)
Compensation comm.	0.001	-0.003	0.007	0.004	-0.036	-0.038	-0.029	-0.030
	(0.025)	(-0.058)	(0.135)	(0.076)	(-0.613)	(-0.646)	(-0.505)	(-0.516)
Nomination comm.	-0.074	-0.064	-0.078	-0.069	-0.039	-0.033	-0.045	-0.038
	(-1.332)	(-1.151)	(-1.406)	(-1.241)	(-0.657)	(-0.538)	(-0.742)	(-0.631)

Firm Characteristics								
Log(total assets)	0.066***	0.068***	0.063***	0.066***	0.091***	0.093***	0.087***	0.090***
_	(3.402)	(3.489)	(3.235)	(3.354)	(3.901)	(4.004)	(3.754)	(3.878)
Ind. adj. tangibility	0.411**	0.393**	0.426**	0.409**	0.326	0.312	0.344*	0.329
	(2.154)	(2.053)	(2.223)	(2.121)	(1.603)	(1.520)	(1.680)	(1.595)
Ind. adj. leverage	0.376**	0.369**	0.388**	0.381**	0.360**	0.355**	0.368**	0.364**
	(2.442)	(2.380)	(2.516)	(2.455)	(2.018)	(1.978)	(2.060)	(2.024)
Ind. HHI (Asset)	0.203*	0.240*	0.197	0.235*	0.280**	0.315**	0.275**	0.312**
	(1.654)	(1.950)	(1.603)	(1.908)	(2.138)	(2.399)	(2.092)	(2.369)
nb. Segments	-0.024**	-0.025**	-0.023**	-0.024**	-0.026**	-0.027**	-0.026**	-0.027**
	(-2.188)	(-2.272)	(-2.122)	(-2.198)	(-2.172)	(-2.249)	(-2.132)	(-2.208)
Mean inst. own.	0.167	0.144	0.173	0.149	0.168	0.148	0.175	0.154
	(1.461)	(1.242)	(1.501)	(1.274)	(1.319)	(1.144)	(1.363)	(1.184)
Dual-class shr. dum.	-0.232**	-0.217*	-0.219*	-0.202*	-0.134	-0.128	-0.117	-0.111
	(-1.969)	(-1.845)	(-1.858)	(-1.727)	(-1.068)	(-1.032)	(-0.932)	(-0.892)
CEO pay/next best pay	0.010	0.010	0.009	0.009	-0.001	-0.002	-0.003	-0.004
	(0.665)	(0.619)	(0.593)	(0.580)	(-0.060)	(-0.139)	(-0.184)	(-0.230)
Excess pay dum.	0.090	0.097*	0.088	0.093*	0.030	0.034	0.030	0.034
	(1.612)	(1.719)	(1.570)	(1.660)	(0.487)	(0.555)	(0.487)	(0.545)
Macroeconomic factors								
Cum. 1-yr lag. ind. ret.	-0.000		0.003		-0.006		-0.001	
-	(-0.007)		(0.065)		(-0.108)		(-0.019)	
1-yr lag. ind. ret. vol.	0.296		0.323		0.369		0.389*	
, ,	(1.424)		(1.547)		(1.591)		(1.668)	
Cum. 3-yr lag. Ind. ret.		-0.036		-0.037		-0.049		-0.049
-		(-1.317)		(-1.318)		(-1.575)		(-1.564)
3-yr lag. ind. ret. vol.		1.004***		1.045***		1.111***		1.150***
•		(2.737)		(2.830)		(2.885)		(2.978)
Post Sarbox dum.	-0.222***	-0.211***	-0.210***	-0.200***	-0.204***	-0.189***	-0.190***	-0.176***
	(-3.802)	(-3.584)	(-3.588)	(-3.389)	(-3.184)	(-2.921)	(-2.954)	(-2.708)
Recession dum.	-0.229***	-0.225***	-0.227***	-0.223***	-0.356***	-0.348***	-0.352***	-0.345***
	(-3.058)	(-2.997)	(-3.029)	(-2.971)	(-4.048)	(-3.970)	(-4.004)	(-3.929)
Firm Performance								
Acc. restate. dum.	-0.656***	-0.654***	-0.655***	-0.652***	-0.712***	-0.716***	-0.710***	-0.713***
	(-4.552)	(-4.545)	(-4.557)	(-4.548)	(-4.301)	(-4.327)	(-4.304)	(-4.326)
Class action dum.	-1.037***	-1.062***	-1.043***	-1.068***	-1.008***	-1.036***	-1.010***	-1.039***
	(-4.784)	(-4.872)	(-4.783)	(-4.872)	(-3.965)	(-4.029)	(-3.923)	(-3.988)
Ave. ind. adj. ROA	-0.169	-0.134	-0.206	-0.172				
	(-0.439)	(-0.356)	(-0.543)	(-0.467)				
ROA volatility	-1.630	-1.622	-1.692	-1.687				
	(-1.406)	(-1.441)	(-1.408)	(-1.449)				
Ret. Volatility					-5.662**	-5.527**	-5.666**	-5.566**
					(-2.365)	(-2.335)	(-2.339)	(-2.321)
Log(ave. stk. ret.)					0.181***	0.175***	0.177***	0.172***
					(3.459)	(3.330)	(3.385)	(3.280)
Ave. ind. adj. tobinq	0.113***	0.107***	0.114***	0.108***	0.096***	0.091***	0.096***	0.090***
	(3.413)	(3.248)	(3.496)	(3.325)	(3.355)	(3.136)	(3.367)	(3.130)
Wald Chi-Square	352.9	353.9	338.9	338.7	349.4	346.4	330.3	326.7
Prob. > Chi-Square	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observations	4,579	4,540	4,579	4,540	3,854	3,819	3,854	3,819
Pseudo R ²	0.014	0.014	0.013	0.014	0.017	0.017	0.017	0.016

Table 7: The differences in firm and board characteristics between the first and second directorship

This table reports descriptive statistics of the differences in the firm and board characteristics between the first and second non-executive directorships when directors get their second non-executive directorships. Panel A1 reports director personal characteristics (education level, age, and social connections), and the characteristics of the firms in which these directors serve their first non-executive directorship in the year of their second directorship. Panel A2 reports descriptive statistics for the average board characteristics of the second firm (education level, age, and social connections), and the characteristics of the firm of the second directorship in the year of second directorship. The last column reports a means test of the difference between variables associated with the first directorship, and the second and concurrent directorship. Our dataset include all directors from public firms provided by BoardEx of Management Diagnostics.

	A1. First Directorship Obs=9301				A2. Second Directorship Obs=9301				TD: 66	
Variable									Difference	
	(A) Mean	Median	Min	Max	(B) Mean	Median	Min	Max	(A) - (B)	
Personal Characteristics										
MBA deg. dum.	0.386	0	0	2	0.348	0	0	2	0.038	***
Medical deg. dum.	0.027	0	0	2	0.032	0	0	1	-0.005	***
Graduate deg. dum.	0.213	0	0	3	0.207	0	0	2	0.006	
Law deg. dum.	0.151	0	0	5	0.155	0	0	3	-0.003	
Undergrad. deg. dum.	0.986	1	0	7	0.955	1	0	3	0.031	***
Ivy league deg. dum.	0.349	0	0	3	0.340	0	0	3	0.009	
Director's age	56.512	57	20	86	56.556	57	22	82	-0.044	
$log(School\ connection\ size)$	6.623	6.818	0.000	9.284	6.448	6.505	0.000	9.091	0.175	***
Firm characteristics										
Firm age (years)	18.297	14	0	60	16.060	11	0	60	2.237	***
Log(total assets)	6.945	6.924	0.736	14.525	6.876	6.830	0.199	14.633	0.068	*
Ind. adj. leverage	0.033	0.000	-0.776	0.901	0.036	0.000	-0.717	0.970	-0.003	
Ind. adj. R&D	0.039	0.000	-0.454	28.842	0.061	0.000	-0.454	28.843	-0.022	
Ind. adj. tangibility	0.014	0.001	-0.813	0.887	0.014	0.000	-0.806	0.893	-0.001	
Ind. adj. tobinq	0.451	0.054	-3.079	74.667	0.627	0.046	-2.855	103.485	-0.176	***
Ind. adj.cash res. rat.	0.026	-0.001	-0.980	0.848	0.039	0.000	-0.672	0.977	-0.013	***
Ind. adj. ROA	-0.013	0.006	-30.442	1.733	-0.039	0.003	-30.442	4.438	0.026	***
Cum.1-yr lag ret.	0.166	0.082	-0.983	15.081	0.159	0.067	-0.982	14.635	0.007	
Cum. 2-yr lag. ret.	0.368	0.174	-0.988	39.222	0.337	0.113	-0.987	54.473	0.031	
Cum. 3-yr lag. ret.	0.532	0.235	-0.996	65.745	0.450	0.138	-0.988	70.075	0.082	**
Ind. nb. Firms	89.216	27	1	652	88.142	29	1	652	1.074	
Ind. HHI (Asset)	0.250	0.185	0.013	1.000	0.247	0.176	0.013	1.000	0.003	
nb. Segments	2.954	2	1	20	2.855	2	1	22	0.099	***
1-yr lag. ret. vol.	0.025	0.010	0.000	4.226	0.027	0.011	0.000	1.308	-0.002	**
2-yr lag. ret. vol.	0.025	0.012	0.000	1.876	0.027	0.012	0.000	2.679	-0.002	*
3-yr lag. ret. vol.	0.025	0.012	0.000	1.261	0.027	0.013	0.000	3.245	-0.002	*
ROA volatility	0.140	0.001	0.000	186.309	2.021	0.001	0.000	3198.600	-1.881	*
nb. analyst following	9.629	7.000	1.000	45.000	9.174	7.000	1.000	48.000	0.456	***
Dual-class shr. dum.	0.074	0	0	1	0.082	0	0	1	-0.008	
Entrenchment index	2.572	3.000	0.000	6.000	2.544	3.000	0.000	6.000	0.028	
Mean inst. own.	0.575	0.608	0.000	1.683	0.542	0.568	0.000	3.672	0.033	***
% of indpt. dir.	0.731	0.750	0.000	1.000	0.724	0.750	0.000	1.000	0.007	**
Board size	9.421	9.000	3.000	32.000	9.561	9.000	3.000	33.000	-0.140	**
CEO pay/next best pay	2.212	1.861	1.000	41.137	2.303	1.838	1.000	154.031	-0.092	
Excess pay dum.	0.523	1	0	1	0.542	1	0	1	-0.019	*

Appendix A: Variable Definitions and Construction

Variable Name	Variable Definitions and Construction	Source of Data
Undergrad. deg. dum.	Dummy variable takes value of one if the individual has undergraduate degree, and zero otherwise	BoardEx
MBA deg. dum.	Dummy variable takes value of one if the individual has an MBA, and zero otherwise	BoardEx
Medical deg. dum.	Dummy variable takes value of one if the individual has a medical degree, and zero otherwise	BoardEx
Graduate deg. dum.	Dummy variable takes value of one if the individual has a graduate degree, and zero otherwise	BoardEx
PhD deg. dum.	Dummy variable takes value of one if the individual has a PhD, and zero otherwise	BoardEx
Law deg. dum.	Dummy variable takes value of one if the individual has a law degree, and zero otherwise	BoardEx
Nb. of qualifications	The total number of qualifications for each individual	BoardEx
Ivy league deg. dum.	Dummy variable takes value of one if the individual graduates from an Ivy League, and zero otherwise	BoardEx
Director age	The individual's age	BoardEx
Director age squared	The square term of the individual's age	BoardEx
Director gender dum.	Dummy variable takes value of one if the individual is a male, and zero otherwise	BoardEx
Work exp. (years)	Number of years since the individual first starts work	BoardEx
Work exp. squared	The square term of the individual's working experience	BoardEx
Work exp. gov. (dum.)	Dummy variable takes value of one if the individual's job is in the government sector, and zero otherwise	BoardEx
Work exp. pvt. (dum.)	Dummy variable takes value of one if the individual's job is in the private firm, and zero otherwise	BoardEx
Work exp. pub.(dum.)	Dummy variable takes value of one if the individual's job is in the public firm, and zero otherwise	BoardEx
Work exp. uni. (dum.)	Dummy variable takes value of one if the individual's job is in a university, and zero otherwise	BoardEx
	Dummy variable takes value of one if the individual was a CEO of a listed firm in the United States prior to	D 1E
Work exp. CEO	his/her first directorship, and zero otherwise	BoardEx
Western Essentia	Dummy variable takes value of one if the individual was an executive director of a listed firm in the United	D 4E
Work exp. Executive	States prior to his/her first directorship, and zero otherwise	BoardEx
W C. P. P. C. O.	Dummy variable takes value of one if the individual was an executive director of a firm listed in the S&P	D IE
Work exp. S&P500	500 index prior to his/her first directorship, and zero otherwise	BoardEx
Nb. of Board Seats	The total number of concurrent board seats the individual has	BoardEx

School connection size The number of school connections between the individual and all executives/directors BoardEx Audit comm. Dummy variable takes value of one if the individual serves on the audit committee, and zero otherwise botherwise BoardEx Romination comm. Dummy variable takes value of one if the individual serves on the compensation committee, and zero otherwise BoardEx Romination comm. Dummy variable takes value of one if the individual serves on the governance committee, and zero otherwise BoardEx Firm age (years) Dummy variable takes value of one if the individual serves on the governance committee, and zero otherwise Compustat Includity (all controlled) Dummy variable takes value of one if the individual serves on the governance committee, and zero otherwise SoardEx Firm age (years) Dummy variable takes value of one if the individual serves on the governance committee, and zero otherwise Compustat Includity and the firm's controlled takes value of one if the individual serves on the nomination committee, and zero otherwise Compustat Includity and the firm's to all acts value of one if the individual serves on the nomination committee, and zero otherwise Compustat Includity and the firm's total acts value of one if the individual serves on the nomination committee, and zero otherwise Compustat Includity and the firm's total acts value of o					
Compensation comm. Dummy variable takes value of one if the individual serves on the compensation committee, and zero otherwise BoardEx Romination comm. Dummy variable takes value of one if the individual serves on the nomination committee, and zero otherwise BoardEx Governance comm. Dummy variable takes value of one if the individual serves on the governance committee, and zero otherwise BoardEx Firm age (years) The firm's age in years Compustat Log(total assets) Logarithm of the firm's total assets (t) Compustat Ind. adj. leverage The firm's leverage less its industry's median [(dle + dltt)/(dle + dltt)/(dl	School connection size	The number of school connections between the individual and all executives/directors	BoardEx		
Compensation comm. Otherwise BoardEx Nomination comm. Dummy variable takes value of one if the individual serves on the nomination committee, and zero otherwise BoardEx Governance comm. Dummy variable takes value of one if the individual serves on the governance committee, and zero otherwise BoardEx Firm age (years) The firm's age in years Compustat Log(total assets) Logarithm of the firm's total assets (t) Compustat Ind. adj. leverage The firm's leverage less its industry's median [(dlc + dltt)/(dlc + dltt + csho * prcc_f)] (t). See Lie and Lie (2002) for details on the calculation of industry ratio. Compustat Ind. adj. R&D The firm's research and development expenditure less its industry's median [xrd/at (t-1)]. See Lie and Lie (2002) for details on the calculation of industry ratio. Compustat Ind. adj. tangibility The firm's tangibility less its industry's median [ppent/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Compustat Ind. adj. tobinq The firm's Tobin's Q less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Compustat Cum.1-yr lag ret. The firm's cumulative past 12-month raw return CRSP Cum.2-yr lag. ret. The firm's cumulative past 24-month raw return CRSP <	Audit comm.	Dummy variable takes value of one if the individual serves on the audit committee, and zero otherwise	BoardEx		
Nomination comm. otherwise BoardEx Governance comm. Dummy variable takes value of one if the individual serves on the governance committee, and zero otherwise BoardEx Firm age (years) The firm's age in years Compustat Log(total assets) Logarithm of the firm's total assets (t) Compustat Ind. adj. leverage The firm's leverage less its industry's median [(dlc + dltt)/(dlc + dltt + csho * proc_D)] (t). See Lie and Lie (2002) for details on the calculation of industry ratio. Compustat Ind. adj. R&D The firm's research and development expenditure less its industry's median [xrd/at (t-1)]. See Lie and Lie (2002) for details on the calculation of industry ratio. Compustat Ind. adj. tangibility The firm's tangibility less its industry's median [ppent/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Compustat Ind. adj. tobinq The firm's Cabin's Q less its industry's median [(at - seq + csho * proc_D/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Compustat Loun.1-yr lag ret. The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio CRSP Cum. 2-yr lag ret. The firm's cumulative past 24-month raw return CRSP Cum. 3-yr lag ret. The firm's cumulative p	Compensation comm.		BoardEx		
formance comm. otherwise Firm age (years) The firm's age in years Logarithm of the firm's total assets (t) The firm's leverage less its industry's median [(dlc + dltt)/(dlc + dltt + csho * prec_f)] (t). See Lie and Lie (2002) for details on the calculation of industry ratio. The firm's research and development expenditure less its industry's median [xrd/at (t-1)]. See Lie and Lie (2002) for details on the calculation of industry ratio. Ind. adj. tangibility The firm's tangibility less its industry's median [ppent/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Ind. adj. tobinq The firm's Tobin's Q less its industry's median [pent/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio The firm's tangibility less its industry's median [(at - seq + csho * prec_f)/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Cum.1-yr lag ret. The firm's cumulative past 12-month raw return Cum.2-yr lag. ret. The firm's cumulative past 24-month raw return CRSP Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return The firm's cumulative past 36-month raw return The firm's net income less its industry's median adjusted for inflation The firm's return on asset less its industry's median [ib/at (t-1)] The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat Compustat	Nomination comm.	·	BoardEx		
Log(total assets)Logarithm of the firm's total assets (t)CompustatInd. adj. leverageThe firm's leverage less its industry's median [(dlc + dltt)/(dlc + dltt + csho * prcc_f)] (t). See Lie and Lie (2002) for details on the calculation of industry ratio.CompustatInd. adj. R&DThe firm's research and development expenditure less its industry's median [xrd/at (t-1)]. See Lie and Lie (2002) for details on the calculation of industry ratio.CompustatInd. adj. tangibilityThe firm's tangibility less its industry's median [ppent/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratioCompustatInd. adj. tobinqThe firm's Tobin's Q less its industry's median [(at - seq + csho * prcc_f)/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratioCompustatInd. adj. cash res. rat.The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratioCompustatCum. 1-yr lag ret.The firm's cumulative past 12-month raw returnCRSPCum. 2-yr lag. ret.The firm's cumulative past 24-month raw returnCRSPCum. 3-yr lag. ret.The firm's cumulative past 36-month raw returnCRSPInd. adj. net incomeThe firm's net income less its industry's median adjusted for inflationCompustat/BLSInd. adj. ROAThe firm's return on asset less its industry's median [ib/at (t-1)]CompustatInd. hHI (Asset)The degree of product market competition, as measured by Herfindahl Index based on firms' total asset inCompustat	Governance comm.	•			
The firm's leverage less its industry's median [(dlc + dltt)/(dlc + dltt + csho * prcc_f)] (t). See Lie and Lie (2002) for details on the calculation of industry ratio. Ind. adj. R&D The firm's research and development expenditure less its industry's median [xrd/at (t-1)]. See Lie and Lie (2002) for details on the calculation of industry ratio. The firm's tangibility less its industry's median [ppent/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Ind. adj. tobinq The firm's Tobin's Q less its industry's median [(at - seq + csho * prcc_f)/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Cum.1-yr lag ret. The firm's cumulative past 12-month raw return CRSP Cum. 2-yr lag. ret. The firm's cumulative past 24-month raw return CRSP Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return CRSP Ind. adj. net income The firm's net income less its industry's median adjusted for inflation The firm's return on asset less its industry's median [ib/at (t-1)] Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat Compustat	Firm age (years)	The firm's age in years	Compustat		
Ind. adj. R&D The firm's research and development expenditure less its industry's median [xrd/at (t-1)]. See Lie and Lie (2002) for details on the calculation of industry ratio. The firm's tangibility less its industry's median [ppent/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio The firm's Tobin's Q less its industry's median [(at - seq + csho * prcc_f)/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Cum.1-yr lag ret. The firm's cumulative past 12-month raw return CRSP Cum. 2-yr lag. ret. The firm's cumulative past 24-month raw return CRSP Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return CRSP Lind. adj. ROA The firm's net income less its industry's median adjusted for inflation Total total number of firms in an industry, where the industry classification is SIC4 The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat Compustat Compustat Compustat Compustat	Log(total assets)	Logarithm of the firm's total assets (t)	Compustat		
Ind. adj. R&D (2002) for details on the calculation of industry ratio. The firm's tangibility less its industry's median [ppent/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Ind. adj. tobinq The firm's Tobin's Q less its industry's median [(at - seq + csho * prcc_f)/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Ind. adj. cash res. rat. The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Cum.1-yr lag ret. The firm's cumulative past 12-month raw return CRSP Cum. 2-yr lag. ret. The firm's cumulative past 24-month raw return CRSP Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return CRSP Ind. adj. net income The firm's return on asset less its industry's median adjusted for inflation The firm's return on asset less its industry's median [ib/at (t-1)] Compustat Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat	Ind. adj. leverage		Compustat		
Ind. adj. tangibility Ind. adj. tobinq The firm's Tobin's Q less its industry's median [(at - seq + csho * prcc_f)/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Cum.1-yr lag ret. Cum. 2-yr lag. ret. The firm's cumulative past 12-month raw return CRSP Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return CRSP Ind. adj. net income The firm's net income less its industry's median adjusted for inflation The firm's return on asset less its industry's median fib/at (t-1)] Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat Compustat	Ind. adj. R&D		Compustat		
Ind. adj. tobinq The firm's cash reserve ratio less its industry's median [che/at] (t). See Lie and Lie (2002) for details on the calculation of industry ratio Cum.1-yr lag ret. The firm's cumulative past 12-month raw return CRSP Cum. 2-yr lag. ret. The firm's cumulative past 24-month raw return CRSP Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return CRSP Ind. adj. net income The firm's net income less its industry's median adjusted for inflation The firm's return on asset less its industry's median [ib/at (t-1)] Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat Compustat	Ind. adj. tangibility		Compustat		
Ind. adj. cash res. rat. Cum.1-yr lag ret. The firm's cumulative past 12-month raw return CRSP Cum. 2-yr lag. ret. The firm's cumulative past 24-month raw return CRSP Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return CRSP Ind. adj. net income The firm's net income less its industry's median adjusted for inflation The firm's return on asset less its industry's median [ib/at (t-1)] Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat Compustat Compustat	Ind. adj. tobinq		Compustat		
Cum. 2-yr lag. ret. The firm's cumulative past 24-month raw return CRSP Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return CRSP Ind. adj. net income The firm's net income less its industry's median adjusted for inflation Compustat/BLS Ind. adj. ROA The firm's return on asset less its industry's median [ib/at (t-1)] Compustat Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat Compustat	Ind. adj.cash res. rat.	•	Compustat		
Cum. 3-yr lag. ret. The firm's cumulative past 36-month raw return CRSP Ind. adj. net income The firm's net income less its industry's median adjusted for inflation Compustat/BLS Ind. adj. ROA The firm's return on asset less its industry's median [ib/at (t-1)] Compustat Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 Compustat The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat	Cum.1-yr lag ret.	The firm's cumulative past 12-month raw return	CRSP		
Ind. adj. net income The firm's net income less its industry's median adjusted for inflation Compustat/BLS Ind. adj. ROA The firm's return on asset less its industry's median [ib/at (t-1)] Compustat Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 Compustat The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat	Cum. 2-yr lag. ret.	The firm's cumulative past 24-month raw return	CRSP		
Ind. adj. ROA The firm's return on asset less its industry's median [ib/at (t-1)] Compustat Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 Compustat The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat	Cum. 3-yr lag. ret.	The firm's cumulative past 36-month raw return	CRSP		
Ind. nb. Firms Total total number of firms in an industry, where the industry classification is SIC4 Compustat The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Compustat	Ind. adj. net income	The firm's net income less its industry's median adjusted for inflation	Compustat/BLS		
The degree of product market competition, as measured by Herfindahl Index based on firms' total asset in Ind. HHI (Asset) Compustat	Ind. adj. ROA	The firm's return on asset less its industry's median [ib/at (t-1)]	Compustat		
Ind. HHI (Asset)	Ind. nb. Firms	Total total number of firms in an industry, where the industry classification is SIC4	Compustat		
	Ind. HHI (Asset)		Compustat		

nb. Segments	Total total number of segments the firm has	Compustat
1-yr lag. ret. vol.	The firm's raw return volatility past 12 months	CRSP
2-yr lag. ret. vol.	The firm's raw return volatility past 24 months	CRSP
3-yr lag. ret. vol.	The firm's raw return volatility past 36 months	CRSP
ROA volatility	The firm's return on asset volatility past 5 years	Compustat
nb. analyst following	The total number of analysts following the firm	I/B/E/S
Dual-class shr. dum.	Dummy variable takes value of one if the firm has dual-class share, zero otherwise	Risk Metrics
Entrenchment index	Managerial entrenchment index. See Bebchuk et. al. (2009) for details.	Risk Metrics
Mean inst. own.	The average institutional shareholding in a calendar year	CDA/Spectrum
% of indpt. dir.	Fraction of independent directors	BoardEx
Board size	Board size	BoardEx
CEO pay/next best pay	Power structure, The ratio of the CEO pay relative to the next highest (TDC1).	EXECUCOMP
Excess pay dum.	Dummy variable takes value of one if the firm's CEO is paid more than the median pay of its peers in the industry (TDC1).	EXECUCOMP
Cum. 1-yr lag mkt. ret.	The market's cumulative past 12-month raw return	CRSP
Cum. 2-yr lag mkt. ret.	The market's cumulative past 24-month raw return	CRSP
Cum. 3-yr lag mkt. ret.	The market's cumulative past 36-month raw return	CRSP
Cum. 1-yr lag. ind. ret.	The industry's cumulative past 12-month market-adjusted return, where the industry classification is SIC4	CRSP
Cum. 2-yr lag. ind. ret.	The industry's cumulative past 24-month market-adjusted return, where the industry classification is SIC4	CRSP
Cum. 3-yr lag. Ind. ret.	The industry's cumulative past 36-month market-adjusted return, where the industry classification is SIC4	CRSP
1-yr lag. mkt. ret. vol.	The market's return volatility past 12 months	CRSP
2-yr lag. mkt. ret. vol.	The market's return volatility past 24 months	CRSP
3-yr lag. mkt. ret. vol.	The market's return volatility past 36 months	CRSP
1-yr lag. ind. ret. vol.	The industry's return volatility past 12 months, where the industry classification is SIC4	CRSP
2-yr lag. ind. ret. vol.	The industry's return volatility past 24 months, where the industry classification is SIC4	CRSP
3-yr lag. ind. ret. vol.	The industry's return volatility past 36 months, where the industry classification is SIC4	CRSP
Recession dum.	Equal 1 if Recession, 0 otherwise. Classification follows National Bureau of Economic Research	NBER

	GDP growth rt.	Real GDP growth rate	BEA	
	Post Sarbox dum.	Dummy variable takes value of one if Post-Sarbox period, zero otherwise	CRSP	
		Dummy variable takes the value of one if the firm that the individual first gets directorship restates its		
	Acc. restate. dum.	accounts between his/her first and second directorship or between his/her first and exit from the first firm	Audit Analytics	
		(or end of our sample), zero otherwise		
		Dummy variable takes the value of one if the firm that the individual first gets directorship is involved in	Stanford Securities Class	
	Class action dum.	class action lawsuit between his/her first and second directorship or between his/her first and exit from the	Action Clearinghouse	
		first firm (or end of our sample), zero otherwise	Action Clearinghouse	
Log	Log(ove oth met)	Logarithm of the average raw return for the first firm during the period between the first and second	CRSP	
	Log(ave. stk. ret.)	directorship or between the first and the exit from the first firm (or end of our sample)	CKSF	
Ret. Volat	D . W 1	The raw stock return volatility during the period between the first and second directorship or between the	CDCD	
	Ret. Volatility	first and the exit from the first firm (or end of our sample)	CRSP	
Ave.		The average return on asset for the first firm during the period between the first and second directorship or	_	
	Ave. ROA	between the first and the exit from the first firm (or end of our sample)	Compustat	
		The return on asset volatility during the period between the first and second directorship or between the first		
	ROA volatility	and the exit from the first firm (or end of our sample)	Compustat	