

# A Survey of Recent Evidence on Boards of Directors and CEO Incentives

Finance Working Paper N° 652/2020

January 2020

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## Abstract

This article surveys the recent literature on boards of directors and the interplay between director incentives and CEO incentives. The primary focus is on how the incentives and other characteristics of directors, boards and CEOs interact to affect firm performance. The article reviews the recent evidence documenting a causal relationship between board independence and measures of firm performance. It also discusses the major limitations of the current measure of director independence. Finally, the article highlights how board independence provides strong incentives for CEOs to create firm value and examines the recent evidence on what other director characteristics improve board effectiveness.

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Keywords: Boards, Directors, CEO Incentives, Independent Directors

JEL Classifications: G34

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# **A Survey of Recent Evidence on Boards of Directors and CEO Incentives\***

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**Draft: January 28, 2020**

## **Abstract**

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\*This survey is based on my keynote address given on December 7, 2019 at the 14<sup>th</sup> International Conference on Asia-Pacific Financial Markets (CAFPM) in Seoul Korea. I want to thank Ying Dou, Lixiong Guo, Dalida Kadyrzhanova, Angie Low, Shawn Mobbs, Emma Zhang and especially Anzhela and Diana Knyazeva for their helpful comments and suggestions.

## 1. Overview on Corporate Governance

A fundamental property of publicly held firms is the separation of ownership and control. This concept captures the fact that managers have operating control of the firm, but they only hold a fraction of the residual cash flow rights of equity holders. This separation creates inherent conflicts of interest between managers and suppliers of capital to the firm, namely the shareholders and creditors. These conflicts of interest lead firms to make decisions that reduce firm value. This fundamental problem and its potential solutions are analyzed by agency theory and principal-agent models, e.g. see Jensen and Meckling (1976), Fama (1980), Fama and Jensen (1983) and Grossman and Hart (1977, 1983).

Over time, a number of approaches have been developed to mitigate these conflicts of interest and they come under the rubric of corporate governance mechanisms. These mechanisms are used to protect the suppliers of capital to the firm from value destruction and expropriation by management. They include financial contracting features to better align manager and shareholder interests such as performance-based compensation as well as methods of penalizing and replacing managers who destroy firm value. Effective corporate governance mechanisms improve a firm's access to external financing, lower its cost of capital and increase its market value.

Corporate governance mechanisms can be categorized into two broad categories, namely internal and external mechanisms. External governance mechanisms include competition in various market settings (including the capital market, product market, takeover market, and labor market) scrutiny by financial analysts and rating agencies as well as laws, regulations and standard practices. Importantly, external governance mechanisms are generally exogenously determined. In contrast, internal governance mechanisms are

selected at the corporate level. Consequently, internal governance mechanisms are firm-specific and most often endogenously determined. These governance mechanisms can also interact at the individual firm level (see, e.g., Chhaochharia, Grinstein, Gullon, and Michaely (2017)).

### **1.1 External Governance Mechanisms**

Major external corporate governance mechanisms are associated with the market for corporate control, the product market, the securities and capital markets and the managerial and directorship labor markets. The market for corporate control, often called the takeover market facilitates changes in shareholdings, shareholders, directors, and the board through tender offers, exchange offers, and associated director elections and proxy fights. Competition in the product market exerts pressure on inefficient and self-interested managers to improve the operating efficiency and lower costs in order to better compete on price and quality or else lose revenues and profits to more efficient competitors.

Securities and capital markets determine and disseminate the prices of firm securities and financial claims. These prices are based on the supply and demand for the firm's current and new securities and this market provides on-going exits for individual investors in a firm's publicly listed securities and its other financial claims. The process of raising new capital also entails investors scrutinizing a firm's current and past performance and its financial statements, which helps determine the cost and amount of new capital raising that is feasible. Labor market competition facilitates the evaluation of managers and directors, which affects the demand for their services, their compensation, their job opportunities and whether they are replaced by more reputable competitors.

## 1.2 Internal Governance Mechanisms

There are four major internal governance mechanisms. The most important of these mechanisms is the board of directors, which has extensive powers. Boards have initiation and approval rights over major corporate decisions. They have the power to hire and fire the firm's CEO. Finally, they determine the level and structure of CEO compensation and approve their employment contracts.

A second major internal governance mechanism is the level and structure of senior executive and director compensation and termination conditions. This can include CEO salary, bonuses, stock grants, option grants and long-term compensation such as pensions. These forms of compensation can be contingent on a minimum time in office or meeting specified performance benchmarks. Compensation can also include valuable perquisites.

The third major internal governance mechanism is the body of shareholder rights and their ownership distribution or structure of these rights. Shareholders have cash flow and voting rights. Their voting rights include the right to vote for directors annually or every three years. This gives them oversight power regarding a firm's board and its individual directors. Through their periodic voting rights, they can voice their opinions of the current directors and choose between competing slates of directors. Another important dimension of shareholder rights is their ownership distribution and whether there is a large blockholder with or without majority control of the votes. Other important ownership blocks are held by managers, founders, business groups, institutional owners, activist investors and employees.<sup>1</sup>

The last major internal governance mechanism is creditor rights and their ownership distribution or structure. Creditors have specific rights to interest and principal payments,

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<sup>1</sup> When some shareholders are also firm stakeholders such founders, debtholders or employees (see e.g., Masulis, Wang and Xie (2020)), conflicts of interests among shareholders can arise.

special covenant protections, and special contingent rights if the firm defaults on its promised payments or violates the debtholders' protective covenants. There can also be early repayment rights and stock conversion rights. The ownership structure of these rights is also important. This structure includes the types of investors holding these financial claims (retail and institutional investors, bank lenders and syndicate lenders) and form of these debt claims (i.e., bonds or loans). Given that creditors can effectively push a firm into bankruptcy if it violates a covenant by accelerating the debt's maturity, this gives creditors in these circumstances substantial power over the board's decisions and even board composition (see e.g., Ferreira, Ferreira and Mariano (2017) and Nini, Smith and Sufi (2012)).

### **1.3 Board of Directors Overview**

Boards of directors represent a critical internal governance mechanism that protects the interests of shareholders and other suppliers of capital to the firm. They initiate and approve all major corporate decisions (e.g., major investment, financing, acquisition, divestiture and liquidation decisions). Very crucially, they have control over other major internal governance mechanisms. For example, they determine the structure and level of CEO compensation. This includes pay-for-performance sensitivity, minimum stock holdings, option holdings, long-term performance measures, and golden hand cuffs. Further, boards have the power to hire and fire the CEO and other senior executives. Other board powers that are less often studied include how many other managerial roles a CEO can assume (such as president, COO and board chair). Boards can also impose a mandatory retirement age for senior executives. In addition to these substantial powers, they also advise senior management and act as gatekeepers of shareholder-initiated amendments to the corporate charter in some jurisdictions such as the U.S. Finally, boards select new directors and decide whether to



renominate existing directors and set their own mandatory retirement age and the compensation structure used for all outside directors.

While boards are very powerful, they vary greatly in their effectiveness. This finding as well as major scandals at large public corporations has highlighted corporate governance deficiencies, triggering extensive academic research trying to understand why some boards failed in their responsibilities to protect shareholders and creditors. However, these efforts to understand board functioning have faced some daunting methodological hurdles discussed below. This has meant that much of the earlier research lacks a causal interpretation.

## **2. Methodological Challenges in Undertaking Governance Research**

A serious reverse causality problem commonly exists where the fraction of independent directors (IDs) on the board is negatively related to firm performance. When a firm runs into difficulties, it is common to bring in more IDs. Recent research suggests that this often occurs after covenants violations that allow creditors to force the addition of more IDs (see e.g., Ferreira, Ferreira and Mariano (2017)). When a firm is doing well for a number of years, it is also common to add non-IDs since successful CEOs have more influence over nominations and boards want to retain these CEOs. These two patterns were observed by Hermalin and Weisbach (1998)). Recently, the two patterns were empirically documented by Graham, Kim and Leary (2019) using a long panel dataset covering the 1920-2011 period.

These patterns create a serious challenge for empirical researchers. If we simply correlate changes in the number of IDs and changes in firm performance, we find a *negative* correlation! However, the change in board composition did not cause the change in firm performance. It is just the reverse! This means that the association between board changes and firm performance is not evidence of a causal effect. Establishing causation is a major

empirical challenge. Not taking this reverse causality effect into account can cause empirical researchers to mistakenly find no evidence of a significant effect of board independence on many firm outcome variables. But this is because the experiment is mixing a positive economic effect of board independence with the negative reverse causality effect of firm performance on board composition. It is therefore not surprising that many earlier studies found insignificant or mixed results given that this reverse causality effect was ignored (see Bhagat and Black (2002) for a review of this earlier literature).

Hermalin and Weisbach (2003) argue that virtually all board research published at that time had failed to address the endogeneity in director selection. Thus, the early evidence provided correlations or partial correlation but could not establish causation. The decision process behind director selection and the objective function being optimized is also difficult to observe. Since the omitted variables that determine director selection can be correlated with most if not all major firm outcome variables typically being studied, the regression model estimates of board composition effects on performance are by their nature biased. The prior studies also fail to adequately account for the reverse causality effect on board independence, whose determinants include firm performance metrics and covenant violations. Only recently has convincing empirical evidence been published on a *causal* relation between changes in board independence and changes in the quality of board monitoring. This evidence is primarily based on quasi-natural experiments as discussed below.

Atanasov and Black (2015) argue that most evidence based on instrumental variables (IVs) is suspect given that the exclusion condition is generally unlikely to hold. They argue that exogenous shock-based studies are generally a more credible alternative approach. They also recommend not only testing for parallel trends condition, but also testing for covariate balance and the overlap conditions. One exception to their IV critique is director supply-based

IVs, which are clearly outside the control of the firm and which are unlikely to violate the exclusion condition (see e.g., Knyazeva, Knyazeva and Masulis (2013)).

Another important standard of evidence in this literature is an assessment of the potential economic channels that can help explain the valuation or performance effects of specific corporate governance mechanisms. Focusing on specific firm outcomes or board decisions, rather than overall firm performance, and when studying specific mechanisms can often mitigate some of the endogeneity concerns and makes addressing it more manageable. Some common channels include more reliable financial accounting statements, better CEO incentives and various disciplinary actions against the firm, management or directors. Stronger debt covenants, collateral requirements and shorter maturities and cross default clauses are also commonly used to better protect creditors and strengthen management performance incentives.

One further methodological consideration is that board of director studies should be limited to either widely held firms or closely held firms. Combining these two groups of firms in a single model is challenging since boards of closely held firms perform different functions and generally do not closely monitor and discipline senior management. Instead, controlling shareholders include their representatives on the senior management team or the board to accomplish these tasks. This means that studies that are focused on the functioning of widely held firm boards should exclude closely held firms (often founder- or family-controlled firms), firms controlled through business groups and firms with dual class share structures, where a controlling shareholder can directly monitor and discipline senior management.

### **3. Understanding Major Incentives of CEOs and Directors**

To better understand the dynamic forces behind the interaction of the CEO and board of directors, it is important to first understand the array of incentives that each of these two groups of key corporate agents face and their potential interplay. It is also important to understand the extent to which CEO incentives are aligned with those of outside shareholders since CEOs have a broad ability to extract private benefits of control from a firm's assets.

### **3.1 Major CEO Incentives**

Focusing first on CEO incentives, we begin by examining their major financial incentives. A typical CEO has three main sources of financial incentives, namely compensation (including deferred compensation and promised perquisites) interacted with the length of their expected remaining tenure, their various ownership claims in the firm, and their probabilities of being fired and the opportunity of being hired to a more attractive position. Earlier studies find that a CEO's termination probability is positively related to industry earnings volatility. Peters and Wagner (2014) exploit this firm characteristic to test whether firms with exogenously caused higher CEO turnover risk pay their CEOs more. They find credible evidence that the managerial labor market requires higher CEO pay as the forced turnover probability rises. In addition to financial incentives, being a CEO yields sizable reputation benefits as well as substantial power and prestige.

Both internal and external corporate governance mechanisms affect CEO financial incentives. Boards of directors determine a CEO's compensation and its structure and whether a CEO is fired or has his/her employment contract renewed. The board's decision also affects the likelihood of a change of control (e.g., by implementing various takeover defences). The external market for corporate control affects CEO compensation and its structure, the likelihood of a CEO being fired by facilitating a change in board composition

and share ownership. The structure of share ownership and the associated share voting rights are also very influential in strengthening the market for corporate control, especially in terms of the existence and size of outside blockholders and the size and concentration of institutional shareholders. While there is substantial analysis of the association of particular CEO financial incentives and firm outcomes and performance, much less is known about how the financial incentives of other senior executives affect firm outcomes and performance (see, e.g., Chava and Purnanandam (2010), Kim, Li, and Zhang (2011), Bebchuk, Cremers, and Peyer (2011) and Masulis and Zhang (2020)).

Beyond a CEO's direct financial incentives, there are also significant incentives created by a CEO's ability to extract private benefits over his/her tenure in the position. To the extent that these private benefits are fairly stable over time, this creates additional motives for a CEO to reduce their likelihood of being fired and to potentially follow more conservative investment and financial policies to reduce the chance of violating any debt covenants, which would give creditors some ability to force the CEO to retire. Since many of a CEO's pay-for-performance incentives only apply while the CEO holds the chief executive position, this makes for a much shorter horizon over which the CEO benefits from the efforts he or she exerts.

Given that CEO's hold substantial security and non-security claims on the firm, they are generally quite under-diversified, causing them to be more risk averse than other shareholders who can diversify away firm specific risk. Since the CEO's human capital is also closely correlated with the firm's performance and the CEO's reputation as a senior manager, this is likely to make a CEO even more risk averse. Gormley and Matsa (2016) present evidence consistent with this perspective.

Gormley and Matsa (2016) examine whether CEOs prefer to take actions that lower a firm's risk rather than seek to empire build or enjoy the "quiet life". They examine how CEOs react to an exogenous drop in the likelihood of a takeover bid. They find that CEOs choose to make more diversifying acquisitions primarily using equity financing. These acquisitions on average are unprofitable, but they lower the acquirer's stock volatility and the likelihood of financial distress. Such CEOs also appear to prefer targets with less leverage than the acquirers have and strong cash generating potential. These results appear to be driven by CEOs with above median stock ownership, and firms with above median leverage and below median cash flows. In a separate study, Dou, Masulis and Zein (2019) report evidence that insiders, including CEOs, become more risk averse after they pledge a large fraction of their stock in the firm for personal loans. They hypothesize that this reflects an insider's fear of losing the private benefits of control that a margin call on their loan could trigger if the stock price fell substantially and the insider was forced to sell their stock to meet the call for more collateral on their loan.

CEOs also benefit from the prestige that is associated with the position and the influence that they can wield more generally. In addition, CEOs benefit from access to industry and firm-specific proprietary information. CEOs can also have incentives to manage a firm's earnings and other financial metrics when firm performance is lagging, through discretionary accounting decisions as well as real accounting management decisions that improve ROA or EPS (e.g., when a firm's debt covenants or a CEO's performance evaluation is tied to a particular financial ratio).

### **3.2 Major Director Incentives**

We now turn to the incentives of corporate directors. Corporate directors have greatly varying incentives, especially due to whether they are executive directors, affiliated directors or independent directors. Independent directors and affiliated directors are two classes of outside directors who are treated alike when it comes to director compensation. Executive directors as firm employees receive no additional compensation for their board service. Executive directors, excluding the CEO, are highly knowledgeable about the firm, but they also face potential retaliation by the CEO if they fail to support the CEO in the boardroom, including missing promotions or raises and even being fired. As a consequence, these directors are not generally seen as useful monitors of firm or CEO performance. Affiliated directors have familial or financial ties to the firm or its senior executives. One implication of this is that a CEO is able to exert influence over these directors given these financial and familial ties. IDs are the directors on the board least influenced by the CEO, and thus the least conflicted in representing outside shareholders. However, they also tend to be the class of directors with the poorest access to proprietary firm-specific information and to have weak financial incentives to monitor the firm carefully or discipline managers aggressively.<sup>2</sup>

Besides the differing influence of a CEO over these three types of directors, their other incentives also vary substantially (see, e.g., Farrell, Friesen, and Hersch (2008), Dah and Frye (2017)). Outside director compensation varies widely in terms of its size and its form (e.g., cash, stock, options) and whether it is paid on an annual basis or determined by meeting a minimum vesting period or whether there is also one or more performance hurdles that must also be met. Director board duties also vary greatly across firms and within the firm depending on the board positions that a director holds. Directors also differ in other financial

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<sup>2</sup> See e.g. Ravina and Sapienza (2010) who find that outside directors trading in the firm's stock is less informative to the market than executive director trading.

incentives stemming from the directors' and their families' holdings of a firm's stock, debt and options. Directors can also have links to a major shareholder or creditor.

A director's desire to be renominated to the current board and to new boards will also differ by director characteristics and the varying costs of their time and effort required to be a board member combined with the other demands on their time and energy. These reputation benefits in the labor market for directors also vary with an individual director's career horizon and health. There is a large body of evidence from the directorship labor market that poor performance of current directors reduces their likelihood of being asked to join new boards and raises the likelihood of not being renominated to existing boards. A recent study that highlights the operation of this labor market is Field and Mkrtchyan (2017), where they document that directors with more positive prior acquisition experience lead to more profitable current acquisitions. They further find that directors in firms that make poor acquisitions are unlikely to gain new directorships, while directors that make profitable acquisitions are likely to gain new directorships. This is consistent with the director labor market rewarding directors for taking shareholder wealth maximizing actions.

Directors also gain varying degrees of prestige from being on the board of a particular firm, which may affect their ability to secure other board seats. Board positions can also provide directors with valuable information about the firm and the industry more generally. Of course, some of those information benefits are constrained by the enforcement of insider trading regulations and firm level restrictions on trading in the stock. Individual directors can also benefit personally from certain board decisions. Independent directors can also benefit from having the CEO take actions that benefit them personally, so as to co-opt their level of



independence. Finally, individual directors face varying fiduciary duties and legal liabilities such as class action lawsuits, which can vary with a director's board committee membership.<sup>3</sup>

#### **4. Independent Directors**

Most prior research focuses on independent directors, who are viewed as being in the best position to represent the interests of outside shareholders. Outside directors without close family ties to the firm's senior executives and that are not linked financially to senior management or the firm itself are defined as independent directors. For example, an outside director who is an executive of a major supplier or customer of the firm, an interlocking director (an officer of firm A is a director of firm B and an officer of firm B is a director of firm A), a non-profit executive receiving donations from the firm or a recently retired firm executive will not be considered an independent director, but rather an affiliated director. Interestingly, outside blockholder directors are not always considered independent, even if they meet all the exclusion criteria listed above. For example, both Singaporean and Australian law classify such directors as affiliated, even though they can have much more "skin in the game" than other directors.

##### **4.1 Other Valuable Director Traits**

While director independence is an important attribute, it is clearly not sufficient. For example, if independent directors (IDs) were incompetent, then the fact that they are independent of the influence of the CEO and senior management team is not going to help a firm create value for shareholders. Likewise, if an ID is sick or unhealthy or overly busy, then

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<sup>3</sup> These legal liabilities can affect a firm's ability to recruit high quality directors with particular skills or experience (see e.g., the evidence reported in Masulis, Shen and Zou (2020)).

their value to the firm and its shareholders is fairly limited at best. Directors also differ in their reputation incentives, knowledge and expertise, board and managerial experience and capabilities, gender, ethical standards, age and health, and career horizon and level of busyness. Each of these characteristics can have important implications for board decision making, see e.g., Masulis, Wang and Xie (2012) and Wang, Xie and Zhu (2015) and Masulis, Wang, Xie and Zhang (2019).

#### **4.2 Board Independence**

For a corporate board to be legally independent, a majority of its board of directors must be classified as independent. Until recently most corporate governance research has focused almost entirely on the effects or associations of board independence and firm or board decisions or outcomes. However, over the last 10 years, a rich array of other important questions is now being investigated, some conditioning on board independence and other director traits, some focusing on outside director traits or even on the portfolio of traits represented on the entire board.

The 2002 Sarbanes Oxley Act (US) and the earlier Cadbury Report (UK) assume that board independence benefits shareholders. But this conclusion is still controversial - both theoretically and empirically. Theorists observe that while IDs are less affiliated with CEOs, they have much poorer access to firm information and weaker financial incentives to perform than corporate officers do. Other researchers argue that CEO-friendly affiliated directors who gain a CEO's trust are more likely to be asked for their advice, see e.g., Adams and Ferreira (2007) and Harris and Raviv (2008). But affiliated directors cannot force a CEO to take their advice, especially given that they have a financial or family link to the CEO. IDs are much more

credible monitors, because they are more capable of disciplining CEOs who chose to ignore their advice.

Empirically, the correlations of board independence and firm performance metrics have until recently produced weak positive or mixed results as reviewed in Bhagat and Black (2002) and Hermalin and Weisbach (2003). This has led many studies to examine dimensions of governance quality after aggregating independent and affiliated outside directors. This is a questionable procedure if affiliated directors are weaker monitors than independent directors, which will then lead to estimating weaker empirical relationships.

#### **4.3 Does Board Independence Improve Firm Value?**

What explains the earlier findings of a weak empirical link between board independence and good firm performance? There are at least three potential explanations. First, the empirical tests are flawed due to endogeneity and reverse causality. Second, the empirical analysis is using a seriously incomplete measure of director independence. For example, social dependence between IDs and senior management is being ignore and this could be important. Third, the existing empirical analysis is omitting other economically important director and board attributes. In other words, independence is not enough to ensure effective directors or effective boards of directors. A last possibility is that board independence is simply irrelevant.

#### **4.4 Board Effectiveness**

Putting board independence aside, what else is needed to make a board of directors effective? This is a question that continues to elicit a great deal of attention. Having an effective board must include selecting the right kind of directors. But what makes for a good

director? Is it independence from the CEO? Does it mean not being co-opted by the CEO? Presumably it includes experience, expertise, keeping well informed, mental acuity, ethical standards and having the right incentives. Does it also include directors with large networks of business contacts or political connections or directors with key skills or training? Are foreign directors beneficial? Do these attributes substitute for director independence or are they complementary to director independence? Some researchers assume they are substitutes, while other researchers view them as complements.

Board effectiveness can also be strongly influenced by the structure of the board. Is the board independent and are its major committees fully independent? Is there an outside blockholder-director or an independent chair of the board? Is the majority of directors and crucially the majority of IDs - well motivated? Are there any non-CEO officer-directors on the board? What is the right portfolio of director skills and board committee skills? Is gender diversity on the board beneficial and under what circumstances? These are some of the many unanswered questions currently confronting us.

## **5. Inter-relationship of Director and CEO Characteristics and Incentives**

In considering the inter-relationship of board traits and CEO traits and incentives, we need to recognize that not only do boards exercise significant influence over CEO incentives, but CEOs can also exert strong influences over the board and its individual directors. As discussed earlier, boards select CEOs, determine the structure of their compensation, including pay for performance sensitivity and decide if early termination is necessary. Also, boards determine whether there is a mandatory retirement age for CEOs. In addition, they must approve the CEO holding other executive positions such as chair of the board, COO or president. Boards also can impose minimum shareholdings requirements on a CEO, limit

trading and hedging of firm stock, set firm codes of conduct, termination fees and post-employment restrictions. The board must also monitor the quality of firm financial statements that could mislead investors about firm and CEO performance. If revisions to financial accounting statements are required due to accounting standard violations, then the board can also impose clawback provisions on the CEO's compensation. Finally, the board has control over most takeover defenses both in terms of initiating and approving them, and in terms of rescinding them. This alters the potential discipline of the CEO by the market for corporate control. Clearly, the board wields a great deal of power over the CEO.

While these powers are very broad and can create strong incentives for the CEO, the CEO can in many cases exert substantial influence over the board. If the CEO is also the chair of the board, then he or she has the ability to set board meetings and agendas and to choose the composition of the board's committees, at least within the constraints imposed by exchange listing rules and state and federal corporation law. CEOs also can exert substantial influence over the selection of new directors and renomination of existing directors, which can provide leverage over IDs (see e.g., Coles, Daniel and Naveen (2014)). CEOs can use their powers over firm resources to co-opt IDs through support for firm donations to ID-linked charities, where it is implicit that without CEO support these donations are likely to stop (e.g. Masulis and Reza (2015)). CEOs can also invite IDs on private trips using corporate jets or provide access to sold out events at the firm's expense (see e.g., Yermack (2006) and Burrough and Heyar (1989)). CEOs also have strong and well recognized influence over gray directors and executive directors.

CEOs also have substantial influence over the information given to outside directors in advance of board meetings, especially if no other executive director is on the board. CEOs can also have considerable discretion over firm financial statements and public press releases.

These powers allow a CEO to influence the board's and outside investors' perceptions of firm and CEO performance. In addition, many IDs are employees of firms that would like to do business with the firm in the future or to receive certain benefits, which is likely to limit how aggressively they may question the CEO and firm decisions. Finally, many IDs can be socially connected to the CEO or other senior executives, which can again limit their willingness to aggressively question the CEO's decision and performance and limit their willingness to discipline the CEO for poor performance (e.g., Fracassi and Tate (2012)). Thus, there is a great deal of interdependence between the CEO and the IDs of a firm that can make ID monitoring and disciplining of CEOs problematic.

## **6. Causal Evidence on the Impacts of Board Independence on Firm Decisions**

In one important study, Guo and Masulis (2015) exploit exogenous shocks to board composition and board independence. Their study focuses on the causal effects of the post-Sarbanes Oxley (SOX) changes in NYSE and Nasdaq listing rules that required independent boards and fully independent major board committees (i.e. 100% of directors on these committees must be independent). They evaluate the causal impacts of these listing rule changes requiring board and committee independence on the sensitivity of forced CEO turnover to performance. They argue that a CEO forced turnover decision is one of the most important decisions that a board can make.

In the Guo and Masulis study, the effects of the board independence requirement are analyzed separately from the effects of the rule requiring full independence of the board's three major committees (audit, compensation and nominating). The focus is on the sensitivity of CEO forced turnover to performance, rather than on the probability of a forced turnover event. Guo and Masulis (2015) use a difference in differences approach where they match

non-compliant and compliant firms pre-SOX using a propensity score model based on existing board structure theories. The primary focus is on the board independence and the nominating committee independence rules, which they expect to increase the sensitivity of forced CEO turnover to performance. It is important to note that these rules affect only non-compliant firms and a firm can be compliant with any subset of the four board requirements (independence of the board and its three major committees) and the degree of non-compliance varies substantially across the non-compliant firm sample. In contrast, most other SOX-specific requirements applied equally to all publicly listed U.S. firms.

The major finding of Guo and Masulis (2015) is that board independence leads to greater sensitivity of forced CEO turnover to performance, even after controlling for the rules requiring the three major board committees to be fully independent. In addition, they find that having a fully independent nominating committee incrementally increases the sensitivity of turnover to performance beyond the effects of board independence. They interpret their results as not only showing that board independence improves CEO performance incentives, but that nominating committee composition and its full independence are also important. They suggest that this alleviates any potential concerns of IDs about not being re-nominated to the board if they ask tough questions or seek to discipline the CEO in any way. They also find that if the CEO is a member of the nominating committee, the sensitivity of CEO forced turnover to performance declines, consistent with weaker board oversight. Moreover, greater CEO forced turnover to performance should translate into greater shareholder wealth, provided that CEOs do not substantially reduce profitable risky projects. Accordingly, the nominating committee independence requirement has a larger impact on CEO turnover-

to-performance sensitivity among non-compliant firms where the CEO sat on the nominating committee.<sup>4</sup>

Another dimension along which IDs vary is their experience with forcing a CEO to resign and the subsequent search for and recruitment of a new CEO. Ellis, Guo and Mobbs (2020) study whether a current CEO is more likely to be forced to resign for poor performance if one or more IDs on the board has experience navigating such an event at another firm. They hypothesize that prior forced CEO turnover experience can help a board to respond more effectively to CEOs in poorly performing firms and thus, lead to higher CEO forced turnover-to-performance sensitivity and better replacement decisions.

Ellis, Guo and Mobbs (2020) find that CEO forced turnover-to-performance sensitivity rises when one or more IDs has prior forced turnover experience. This result even holds when the ID was initially appointed without this experience, but subsequently gains it at another firm since becoming a board member. Ellis et al (2020) also find that such ID experience is associated with better board meeting attendance by fellow IDs, a higher 25-month buy-and-hold abnormal stock return centered on the CEO turnover month, greater improvements in operating performance following the forced turnover and a greater likelihood of appointing an outsider as the new CEO.

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<sup>4</sup> Duchin, Matsusaka and Ozbas (2010) draw different conclusions based on the analysis of changes in board independence caused by the 1999 NYSE and Nasdaq listing rule changes requiring fully independent audit committees, which often necessitated more independent directors at non-compliant firms and they use an indicator for non-compliance with this listing rule as an IV for an exogenous increase in board independence. They report separated firms into more and less transparent (low information and high information cost) firms and find that board independence leads to an insignificant overall effect on both a firm's ROA & Tobin's Q. More importantly, board independence leads to improved performance for high transparency firms and surprisingly, it hurts performance for low transparency firms. Atanasov and Black (2016) challenge Duchin et al (2010)'s statistical analysis on two grounds. First, Duchin et al fail to require pre-shock balance between treatment and control firms with respect to the percentage of IDs, (they find little overlap in two samples), which when corrected, causes their IV's relevance in the first stage board independence estimation to fail. Second, Duchin et al's specification fails to include the IV itself in their second stage regressions, but only includes the interaction of the IV with a covariate. Atanasov and Black report that Duchin's second stage findings disappear after their IV specification is corrected. Beyond these two methodological problems, Duchin et al do not consider the potential impact of the change in audit committee independence per se on firm performance.



All the results are in general stronger if the ID acquired the prior experience at a firm similar to the firm in question, thus, making the ID's prior experience more relevant. It is noteworthy that unlike merger experience, CEO forced turnover experience does not appear to help IDs to gain more board seats relative to inexperienced directors. This may be partially explained by some of this study's other evidence that finds powerful CEOs are less likely to support nominations of directors with prior forced CEO turnover experience. However, compared to similar directors in poorly performing firms who retain their CEOs, the IDs with the forced turnover experience do fare better in the director labor market.

### **6.1 Supply of Independent Director Services**

One approach to evaluating the influence of IDs and independent boards is to explore the effects of changes in the supply of these services and in cross sectional variation in the availability of IDs and how it affects board composition. Nguyen and Nielson (2010) study sudden deaths of experienced IDs as one example of exogenous shocks to the supply of ID services. Their premise is that even if the ID is replaced by a new ID, the new ID will lack board experience and is unlikely to be a particularly effective for several years. Nguyen and Nielson (2010) find a significant negative return to announcements of ID sudden deaths, but no similar effect with sudden deaths of affiliated directors. This evidence indicates that shareholders value the services of IDs, but shareholders view affiliated directors as delivering little incremental value. More recent work explores the effects of IDs who are seriously distracted and again finds that the market values ID services, but not affiliated director services.

Falato, Kadyrzhanova and Lel (2014) study exogenous events that make IDs busier. Their approach is to study the effects of sudden deaths of CEOs or IDs which they conjecture will make the remaining IDs on the nominating committee or the deceased ID's committee

busier. The implicit assumption is that a replacement ID is unlikely to be very effective over the short run (e.g. the next year or two). The key element of their experimental design is a focus on IDs who also serve on a second board of directors. The hypothesis is that not only will IDs be busier after the loss of the CEO or ID on the same committee, but this same ID will be distracted from performing his/her duties effectively on the ID's other boards, where they are likely to reduce the time and energy they commit to their board responsibilities.

Falato et al (2014) then document that the stock prices of the other firms with a common ID also exhibit a negative announcement return to the death of an officer or director in the first firm. They also find longer-term evidence that these ID attention shocks lead to deterioration in earnings quality, reduction in leverage and an increase in CEO private benefit extraction in the interlocked firms. Unlike the prior evidence in Nguyen and Nielsen (2010) of a shock within the same firm, the attention shock on firms with the common director in Falato et al. (2014) is clearly exogenous and provides further evidence that IDs provide valuable services.

Masulis and Zhang (2019) study a large range of exogenous ID distractions. They test whether these ID distractions undercut the the effectiveness of their monitoring and whether this leads to weaker firm performance and poorer board decisions. The major types of distractions that they study are both personal distractions: serious illnesses and accidents as well as national or international awards and distractions from board duties at other firms that are more prestigious: serious illness or turnover of the CEO or another director on the same board committee, M&A activity, major divestitures, firm underperformance, financial distress or financial misconduct investigations. They then investigate whether these IDs exhibit behavior consistent with being distracted and document that these IDs have lower meeting

attendance, exhibit less trading in the firm's stock and are more apt to leave the boards of less prestigious firms after poor performance.

After documenting that distracted IDs behave differently, they turn their attention to firm behavior. In this firm level analysis, they compare treated firm performance metrics to peer firms that have no distracted IDs, but are drawn from the same industry, and are similar in terms of firm size, average number of directorships held by their IDs, board size and fraction of IDs holding three or more board seats. They document that firms with a higher proportion of distracted IDs have lower firm performance (measured by ROA and Tobin's Q), worse M&A performance (measured in terms of five day M&A announcement returns) and poorer accounting statement quality (measured by accruals based and real earnings management).

These negative performance effects are stronger when distracted IDs have important monitoring duties (i.e. committee chairs). Masulis and Zhang (2019) provide several other important takeaways. First, they find no similar effects when they investigate distracted affiliated (gray) directors, suggesting that they do not serve a valuable monitoring function. They also investigate whether individual types of ID distractions generate similar outcomes and they find that this is the case. Overall, their study provides further evidence of the value of IDs and how the varying supply of ID services affects major firm decisions.

As alternative approach to assessing the causal benefits of IDs that does not rely on exogenous shocks, focuses on local variation in the supply of potential director talent (Knyazeva, Knyazeva, and Masulis (2013)). They observe that director candidates are generally very talented and very time constrained. Thus, they are much more likely to accept an invitation to join the board of a local firm than one that will require long travel distances to attend board meetings. They test whether a larger local pool of ID candidates leads to a larger fraction of IDs on the board. The logic behind their test is that boards will generally

first seek out IDs if they are available. If not then they have some leverage to induce affiliated director candidates to accept a nomination and if this fails, then the board can always recruit a firm officer to join the board.

Knyazeva, et al. (2013) test this proposition by assuming that any S&P 1500 firm not in the same industry can potentially supply an ID where they define any firm with a headquarters within 100 mile or 100 kilometer radius to be a local firm.<sup>5</sup> They find that the depth of the local pool of director talent has significant power to explain cross sectional differences in the fraction of IDs on a firm's board, but it does not have significant power to explain differences in board size. They conclude that the local supply of potential IDs is a valuable trait of individual firms. They also explore whether the local supply of ID candidates with particular skills such as legal, financial and technical is predictive of board composition reflecting these skills and they find that it is. They clearly show the IV meets the relevance condition and since headquarters locations are generally selected early in a firm's life, there is no obvious economic reason why the exclusion requirement would not also hold.

Next, they use this supply-driven instrumental variable to model the fraction of IDs on the board to test for a causal effect of board independence on firm performance and CEO incentives. They document that the depth of the local pool of ID candidates is positively related to firm operating performance, measured by ROA and stock performance measured by Tobin's Q. They also find that the local pool of ID candidates strengthens two critical CEO incentives, namely CEO pay-for-performance sensitivity and forced turnover-to-performance sensitivity. Based on substantial prior research, we know that these two CEO incentives lead

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<sup>5</sup> In their tests, Knyazeva, Knyazeva and Masulis (2013) exclude firms in the top quartile of equity capitalization under the assumption that these particularly large and prestigious firms are likely to be able to attract directors from much further away. For robustness, they also exclude firms that change geographic location their headquarters to preclude endogeneity concerns.

to stronger firm performance (see, e.g., Coles and Li (2019); Jensen and Murphy (1990), Gao, Harford, and Li (2017)). In summary, Knyazeva, et al. (2013) provide further causal evidence that board independence leads to stronger CEO incentives and strong firm performance.

Masulis and Mobbs (2014) examine another dimension of the supply of independent director services. Their approach examines independent directors who sit on multiple boards. They hypothesize that these same individuals will treat their board responsibilities differently based on the relative prestige of each firm. They expect IDs to allocate more of their scarce time and energy to more prestigious firms. They measure firm and board prestige by a firm's equity capitalization. A board's relative prestige for an individual director sitting on multiple boards is based on the firm's relative equity capitalization across these firms. One of the key tests that they implement involves studying how the same IDs react to an exogenous rise in a firm's relative prestige when a second firm which previously had a higher equity capitalization falls substantially in value.<sup>6</sup> They employ a difference-in-differences analysis of these exogenous shocks to board prestige, after matching treatment and control directors. They find significant changes in ID behavior after the shock. In this difference-in-differences setting, they find that these IDs miss fewer meetings at the firms that become more prestigious. In additional analysis, they find IDs with stronger (weaker) reputation incentives are more (less) willing to join more time-consuming board committees and are less (more) likely to resign as these firms' performance levels decline.

Masulis and Mobbs (2014) then examine what happens to firm performance as the fraction of IDs with strong reputation incentives rises. They document that firm performance,

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<sup>6</sup> In addition, they restrict their analysis to treatment directors on boards of firms that did not experience an increase in market capitalization in the year by more than 10%. They also restrict treatment directors to those who did not gain or lose a directorship during the year, so that the focus is on changes in the relative ranking of existing directorships.

measured by either ROA or Tobin's Q improves. They also find that the sensitivity of forced CEO turnover-to-performance rises, consistent with a general improvement in CEO incentives. More recently, Masulis and Mobbs (2018, 2020) study how ID reputation incentives affect other important firm outcomes.

Masulis and Mobbs (2020) study CEO compensation and financial reporting quality. They show that stronger director reputation incentives at the board level are associated with greater equity-based compensation. Interestingly, they also find that reputation incentives can offset any disincentives to monitor that may arise from the greater use of equity-based compensation as is evident through their finding of stronger reputation incentives on a board are also associated with better financial reporting quality (less discretionary accruals and less real earnings management).

Masulis and Mobbs (2018) document that ID reputation incentives significantly affect several other firm outcomes such as exchange delistings, covenant violations, dividend payouts, shareholder class action lawsuits. Their findings highlight the importance of ID reputation in assess board effectiveness. They also document an important link between reputation incentives and the external labor market. They find that following a negative firm outcome, directors lose more directorships when the outcome occurs at one of their more prestigious directorships. This director reputation evidence shows that contrary to some of the literature on director busyness (e.g., Fich and Shivdasani (2006)), IDs with multiple board seats do not treat their directorship responsibilities equally, but instead allocate more of their valuable time and energy to their more prestigious boards.

## **6.2 Director Reputation and Proxy Voting**

It is well known that it is difficult to vote out a standing director without a proxy fight and the existence of an alternative director candidate. But negative director votes can still have consequences and hurt director reputation. Aggarwal, Dahiya and Prabhala (2019) study directors with a relatively high level of no votes at annual meetings (e.g. 10% no votes). Their major findings are striking. Such directors are more likely to leave the board within two years, move to less prominent board positions, if they remain on the board and experience a decline in the number of their other directorships. However, the effects of a high proportion of dissenting votes are weaker if the director plays an important role on the board. This evidence shows that director voting has a clear impact on ID reputation and affects their behavior and their subsequent directorships. But, is this a supply effect or a demand effect? Do these IDs choose to retire to avoid further embarrassment from future votes or does the board ask them not to stand for re-election? We don't know yet! There is another important question that is yet to be answered: Which shareholders' votes matter most? Is it outside blockholders, institutional shareholders or manager-shareholders?

### **6.3 Institutional Shareholder Distraction and Director and Board Performance**

Boards are often viewed as a key monitor of management. But directors are agents too! So, who monitors the monitor? Do particular groups of shareholders monitor director performance? Does institutional investor monitoring create stronger director reputation incentives to perform? Do institutional investors have incentives to monitor the board, especially given that they would generally have financial expertise or are many institutional investors conflicted because they also sell or want to sell services to these corporations? Little causal evidence exists as to whether shareholder monitoring improves board performance.

Kempf, Manconi and Spalt (2017) examine the effects of exogenous distractions to institutional shareholder attention using return shocks in *other* industries of their stock portfolios. They identify exogenous return shocks from industries *other than* a firm's own industry, and then aggregate these unrelated shocks using the weights of each shocked industry in an institutional investor's portfolio. To construct a firm-level institutional investor distraction measure, they sum all institutional investor-level distractions and weight them a second time using an institutional investor's percentage stake in the firm-in-question.

The first key finding of Kempf, et al. (2017) is that their institutional shareholder distraction measure is negatively related to how much attention each institutional shareholder allocates to monitoring the firm and its board based on its participation in conference calls about the firm and the initiation of governance-related proposals at the firm. Thus, they find evidence consistent with their institutional investor distraction measure affecting the institution's monitoring behavior.

Second, turning to individual firm behavior, they find that firms with more distracted institutional investors exhibit weaker governance and they are more likely to take actions that hurt shareholder value such as value-destroying acquisitions, dividend cuts and approval of opportunistically-timed CEO equity grants (back-dating options). These firms are also less likely to fire poorly performing CEOs. This evidence raises several interesting questions. Are there other adverse effects of institutional investor distraction on overall firm performance and what are the exact channels that lead to shareholder wealth destruction? How do boards react to weak institutional investor monitoring?

To answer some of these questions, Liu, Low, Masulis and Zhang (2020) re-visit the effects of distracted institutional shareholders through a different lens. They examine institutional shareholder voting on director nominations and board decisions after major



portfolio distractions hit some of their major institutional investors. Their first main finding is that when major institutional investor attention is diverted, these institutions are less likely to vote no in director elections to discipline outside directors who are ineffective monitors. This is based on examining individual mutual fund investor voting decisions, which provides an observable channel through which institutional investor distraction can significantly affect board governance.

Their second major finding is that directors in firms with distracted institutional investors hold fewer board meetings, IDs miss more board meetings, and IDs with poor voting outcomes are less likely to exit the board or to be removed from key committees in the next couple of years. In other words, director and board behaviour appears to deteriorate with weaker board monitoring by institutional shareholders. Their third key finding is that major institutional investor distractions lead to weaker boards that include appointments of more problematic IDs, who they define as IDs with CEO social ties or IDs who are overly busy, measured by having three or more board seats.

A fourth key finding is that firms with distracted institutional shareholders take a number of actions that can hurt shareholder interests. These firms exhibit more earnings management, and more frequently approve abnormally high CEO pay with weak CEO pay-for-performance sensitivity. These firms are also more likely to undertake M&A deals, especially diversifying deals, and to exhibit weaker firm performance measured by ROA and Tobin's Q. Such detrimental governance behavior in response to institutional shareholder distractions is only evident among firms with problematic IDs on the board of major committees, highlighting the importance of the board's incentives and the active monitoring and disciplining of directors. A major implication of this study is that distracted institutional

investors lead to poor corporate governance by voting to support weaker IDs, which leads to poorer board performance and decreased shareholder wealth.

#### **6.4 Are Independent Directors Really Independent?**

While directors may be legally independent, that still leaves a lot of scope for other types of dependence, especially with respect to various types of social connections. Another type of dependency may arise due to having a non-profit executive on the board. Even though the firm may have never made any contributions to the charity, nearly all charities are continuously looking to obtain new funding sources. This makes such an ID less likely to aggressively question or disagree with the CEO, who could help support future charitable contributions from the firm. Francis, Hasan and Wu (2015) examine IDs who are academics. They find that academic administrators, such as university presidents or deans, who are likely to be seeking corporate sponsorships, actually hurt firm performance, while other academic directors, who are less conflicted, significantly improve firm performance, measured by ROA and Tobin's Q. Masulis and Reza (2015) and Cai, Xu, and Yang (2019) examine agency conflicts and director co-option associated with corporate contributions to ID affiliated charities.

Another group of IDs with somewhat conflicted incentives are executives of firms that could become suppliers of products or services to the firm, although currently they are not. These directors will be considered independent even though they have incentives to cater to the CEO who could influence any future decisions to use these suppliers' products or services. Guner, Malmendier and Tate (2008) study the financial expertise of outside directors with commercial and investment bank affiliation. They find that commercial banker-directors improve firm access to loans, but at higher interest rates. There may be some survivorship bias since such directors tend to exit boards of financially weakened firms. They also find that

investment banker-directors are associated with larger bond issues and less profitable acquisitions. There is little evidence that they help raise share value. These results are consistent with some directors having serious conflicts of interests that lead to poorer board decisions and reduced shareholder value.

Even if directors start out as independent, it is still possible for CEOs and other top managers to make these directors more aligned with CEO interests through various co-option activities using firm resources under their control. Masulis and Reza (2015) study corporate charity contributions as one means for a CEO to extract significant private benefits through the donations to their preferred charities. They examine the market reaction to the news of such charitable donations by Fortune 100 firms. They document that a large fraction of these charities is directly linked to the CEO. They also find that the second most common link to these charities is IDs. Interestingly, few affiliated directors have links to these charities. Of course, affiliated directors do not need to be co-opted since they already have ties to the firm or its senior management team.

### **6.5 Independent Director Cooption and Selection of CEO-Friendly Individuals**

Masulis and Reza (2015) find that charitable giving does not appear to be beneficial to shareholder interests and that donations to ID-linked charities weaken their independence, (since if the charity loses the support of the CEO it is unlikely that continued corporate giving to this charity would occur). Not surprisingly, shareholders react negatively to announcements of new corporate giving, especially to CEO-linked and ID linked charities. They also find that excess CEO compensation rises with CEO-linked corporate giving, rather than acting as a substitute for CEO pay. Excess CEO compensation also rises with ID-linked donations, which is consistent with IDs being coopted by these corporate donations.

The study also examines the corporate reactions to the 2003 US dividend tax cut, which acts as an exogenous shock to charitable giving. The tax shock made dividend payments relatively more attractive and corporate giving relatively more expensive for all shareholders, including management-shareholders. Firms generally reacted to this tax shock by lowering corporate donations and raise cash dividend payments. The effects were stronger when the CEO held a larger fraction of the firm's shares. All this evidence is consistent with corporate giving providing CEOs with an opportunity to extract private benefits when corporate governance is weak.

As an alternative to seeking to coopt IDs, CEOs can try to influence the selection of IDs who are socially connected to either the CEO or other senior managers. Since new directors are generally selected by the board's nominating committee, the independence of this committee from the CEO is critical. Guo and Masulis (2015) find that the full independence of the board's nominating committee and especially the exclusion of the CEO from the committee lead to greater sensitivity of forced CEO turnover to performance. They suggest that CEOs on the nominating committee tend to select new directors who are socially connected to them.

Coles, Daniel and Naveen (2014) argue that any new directors nominated under the existing CEO are likely to be less than fully independent. They classify IDs into those selected before the current CEO took office and those selected after the CEO took office. They report that board monitoring weakens with the fraction of IDs appointed under the current CEO's watch. More specifically, CEO turnover-to-performance sensitivity declines, while CEO pay rises without any increase in pay-for-performance sensitivity. Finally, firm investment also rises, consistent with unchecked CEO empire building. Coles et al. (2014) conclude that not all IDs are equally effective and that the fraction of IDs appointed prior to the current CEO is

a better measure of board independence and more careful monitoring than the overall fraction of IDs on the board. While the evidence in this study is consistent with CEOs affecting director nominations, one important question is whether this effect is partly mitigated by the post-SOX NYSE and Nasdaq listing rules changes requiring the entire nominating committee to be independent or whether these changes were ineffective at precluding informal CEO influence over ID appointments.

Several other studies also explore the effects of having various types of socially dependent IDs on the board. Hwang and Kim (2009) study the degree of homophily (common values and experiences) between the CEO and IDs as a proxy for social ties. They use the same university, military service, regional origin, discipline, and industry experience as an indication of informal social ties between a director and the CEO. They define IDs without such a social tie as socially independent. They report that while 87% of boards are conventionally independent, only 62% are both conventionally and socially independent. Furthermore, firms whose boards are both conventionally and socially independent exhibit a significantly lower level of CEO compensation, stronger pay-for-performance sensitivity, and greater turnover-to-performance sensitivity than firms whose boards are only conventionally independent.

Cohen, Frazzini and Malloy (2012) study formerly overly optimistic sell-side analysts who are later appointed to the board as IDs. A key question is whether the CEO influences these appointments. They report that the board nominating committees that make these “cheerleader” appointments have a strikingly different composition than the typical listed firm with a smaller fraction of IDs, including a high likelihood of the CEO being a committee member. Cohen et al. (2012) find that earnings management and CEO compensation increase following these board appointments.

Fracassi and Tate (2012) find that more powerful CEOs, measured in terms of the Bebchuk, Cohen and Ferrell (2009) entrenchment index or the number of titles a CEO holds, are associated with appointments of IDs with network ties to the CEO. Using deaths and retirements of directors for identification, they find that CEO-director ties reduce firm value, particularly in the absence of other governance mechanisms that could substitute for board oversight. They also find that firms with more CEO-director ties engage in more value-destroying acquisitions.

Overall, these studies of IDs indicate that greater board social ties to or co-option by senior management is associated with weaker management oversight and poorer firm performance. Nevertheless, even with our imperfect measures of director independence, we find statistically significant relationships with a number of firm performance measures and CEO incentives. These two results strongly suggest that in most of the existing empirical tests of board independence, we are likely to be seriously underestimating the true effects.

## **7. When Are Gender Diverse Boards Beneficial?**

Studies of gender diversity on boards have uncovered mixed results for firm performance and valuation. Early studies by Ahern and Dittmar (2012), and Matsa and Miller (2013) exploited a 2002 law in Norway that required a substantial increase in representation by female directors on corporate boards. They reported evidence that gender diversity appears to hurt firm performance and shareholder wealth.<sup>7</sup> However more recent work by Kim and Starks (2017) and Bernile, Bhagwat and Yonker (2018) emphasizes the diverse skills offered by these new director appointments and the Eckbo, Nygaard and Thorburn (2019)

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<sup>7</sup> Adam and Ferreira (2009) also draw the same conclusion using U.S. data.

methodological critique of several of these early studies raises serious doubts about the reliability of the conclusion that adding gender diversity to boards has negative performance and valuation effects. Instead, these latter studies suggest that board gender diversity can actually have positive or at least valuation neutral effects.<sup>8</sup>

Banerjee, Masulis and Upadhyay (2020) study the effects of gender diverse boards conditional on the having an aggressive or overly optimistic CEO. Their basic hypothesis is that female directors can moderate the excessive risk-taking tendencies of overoptimistic CEOs. They focus on the firm's capital investment decisions, systematic and idiosyncratic risk taking and operating and stock performance measures. They also study market reactions to female director sudden deaths.

They find that firms with aggressive CEOs can on average create firm value, but these CEOs can also hurt firm value through excessive risk-taking. Strikingly, female IDs improve the performance of firms led by over-optimistic CEOs, but female executive directors or affiliated directors do not. Appointments of new male IDs exhibit no significant stock market effects. On the other hand, sudden deaths of female IDs have negative stock market reactions. They then go on to explore the channels that lead to these performance benefits.

In firms with aggressive CEOs, capital investments and risk taking is moderated by having one or more female IDs on the board. Interestingly, these effects are concentrated in the pre-Sarbanes-Oxley period before greater board independence was required by new NYSE and Nasdaq listing rules. These effects are actually concentrated in firms with aggressive CEOs that in the pre-SOX period did not comply with SOX related listing rule changes. Thus, female IDs appear to improve the performance of firms that did not comply with the post-

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<sup>8</sup> See Knyazeva, Knyazeva and Naveen (2020) for an extensive survey of board gender and attribute diversity.

SOX independent board and fully independent nominating committee requirements. Looking more closely at what types of female IDs appear to improve firm performance, Banerjee et al. (2020) find that it is primarily female IDs who have senior managerial experience and solid attendance records at board meetings.

## **8. Evidence on the Value of Executive Directors**

It is often presumed that shareholders are better off with fewer executive directors on the board. Indeed in recent years, many large U.S. firms have only a single executive director on the board, namely the CEO. However, executive directors have strong incentives to perform and they are generally well informed about the firm's operation, investment opportunities and strategies. So in these dimensions they are ideal directors. The major concern is that they are subordinates of the CEO and so if they disagree with the CEO or are not sufficiently supportive of CEO initiatives, they may fear damage to their careers, lower compensation or even being fired. As a consequence, these directors are often view as weak monitors who do not facilitate shareholder wealth maximization.

In contrast to this conventional view, Masulis and Mobbs (2011) identify at least one group of executive directors who appear to improve firm performance. These are executive directors who serve as IDs at other firms (which they term "certified inside directors"). They examine the association between firms having such certified inside director as executive directors and firm performance (measured by ROA and Tobin's Q). They find a significant positive relation between certified inside directors and board and firm performance, especially at firms that are more difficult to monitor. They also find that these firms' acquisitions are more profitable, they manage their cash holdings more efficiently and their overstate their earnings less frequently. Finally, they find that shareholders react positively



to a non-CEO executive director being appointed as an ID at another firm and shareholders react negatively to the departure of certified inside directors from the board. All of this evidence suggests that some executive directors can be extremely valuable to firms. So it is a concern that many large U.S. firms have eliminated all of these directors from their boards.

Why might these certified inside directors be so beneficial to firm performance? One explanation suggested by Masulis and Mobbs (2011) is that these directors have strong management reputations outside the firm, which gives them more career opportunities independent of the firm's CEO and thus, more concerned with preserving their reputations as effective directors, which represents an attractive secondary career opportunity for these managers. The result of having these additional incentives is that certified inside directors are likely to be more open to sharing proprietary firm information with outside board members at their home firms. Furthermore, by being experienced outside directors, the certified inside director is also likely to have greater credibility with the rest of the board. Consistent with these arguments, Mobbs (2013) finds that inside directors with outside board seats represent viable replacement threats to an incumbent CEO, which allows the board to make forced CEO turnover decisions that are more sensitive to firm performance and to write CEO compensation contracts that are more sensitive to firm stock performance.

## **9. International Evidence on the Benefits of Board Reforms**

An important question is what types of board reforms appear to improve firm value and do these results apply broadly across countries. Fauver, Hung, Li and Taboada (2017) examine corporate board reforms in 41 different countries. They use a difference-in-differences analysis of Tobin's Q in the five years before and after the board reforms that occur in a staggered fashion over the 1990-2012 period. They require industry and year

matching and control for a variety of variables that could contaminate their findings such as insider trading enforcement, takeover regulation and dividends and capital gains taxes and various time varying country level, industry-level and firm level variables.

The main findings of Fauver et al. (2017) is that board reforms in general improve firm value. More interestingly, when they decompose these reforms into major categories, they find that reforms that raise board and audit committee independence both improve shareholder value. On the other hand, reforms that separate the CEO and chair of the Board roles neither appear to improve, nor hurt shareholder value. They also find stronger valuation effects when the board is not independent before the reforms, but it becomes independent with the reforms. Also, they conclude that comply-or-explain rules appear more beneficial than rules that require full compliance, often called bright line rules.

## **10. Conclusions**

Boards of directors and executive incentives represent two key internal governance mechanisms. We observe that boards have strong incentive effects on CEOs, but also that CEOs can have strong incentive effects on directors. Various sources of endogeneity and especially reverse causality pose fundamental challenges for research on corporate boards and make it difficult to disentangle these effects. Indeed, much of the earlier empirical evidence reported statistically insignificant or directionally inconsistent results, leading many researchers to conclude that board independence does not matter (see e.g., Bhagat and Black (2002)).

Recent studies have employed two common approaches to obtain reliable causal inference on how boards influence firm performance: quasi-natural experiments and supply-

driven instrumental variables. These approaches also rely on careful matching of treatment and control firms or directors in a difference-in-differences framework. The recent evidence that addresses these endogeneity issues finds board independence significantly improves firm value. More specifically, board independence leads to better firm performance measured by ROA, Tobin's Q and M&A profitability.

Recent empirical studies have attributed the performance improvements associated with board independence to several channels including increased CEO pay-for-performance sensitivity and increased sensitivity of forced CEO turnover to performance, as well as more reliable earnings and financial statements. Together these three channels reinforce each other to strengthen CEO performance incentives, which explains at least a portion of these performance findings. There is also evidence that full independence of the board's nominating committee incrementally improves firm performance. Other evidence shows that IDs with stronger reputation incentives, IDs with fewer serious distractions and IDs, who are socially independent and not co-opted by the CEO, lead to better firm performance.

In contrast to the benefits of IDs, affiliated directors do not appear to add much to firm performance. On the other hand, non-CEO executive directors can lead to improved firm performance when they are IDs at other firms. This raises an interesting question as to why non-CEO executive directors appear to have largely disappeared from large U.S. public companies. Is this partially due to institutional investor pressure or post-SOX NYSE and Nasdaq listing rules changes requiring the major board committees to be fully independent?

One interesting question that has yet to be addressed is whether increasing the number of IDs on the board remains beneficial once the board is reliably independent and directors are well motivated. A key concern is that IDs generally have weak financial incentives to perform and more importantly, they have very limited access to unbiased proprietary

operating, financial investment and strategic information about the firm that is not filtered by the CEO. This information disadvantage may be a major reason why non-CEO executive directors often appear to lead to improved firm performance.

Another area that is only starting to be carefully studied is creditor corporate governance. For example, what is the relationship of boards and creditors? One piece of evidence addressing this question is the recent study by Ferreira, Ferreira and Mariano (2017) discussed earlier. Another recent study is by Xu (2020) examines the effects of losing takeover protection through the elimination of dual class shares. The study finds that while dual class shares can hurt shareholders, they can generally benefit creditors. More specifically, firms with dual class shares take less operating and financial risk, which may partially reflect their risk aversion to losing their private benefits of control. This reduced risk taking translates into lower interest rates on debt and less restrictive covenants generally. Chava, Fang, Kumar and Prabhat (2020) review the recent theoretical and empirical literature on debt covenants with an emphasis on creditor governance following covenant violations and its influence on major borrower policies. They also explore key trade-offs in covenant design. Creditor governance and their influence after covenant violation is a fast-developing research area.

One fundamental conclusion from the research surveyed above is that board independence matters for shareholder wealth creation, but at the same time, ID incentives, skills and experience among other attributes also matter for shareholder wealth creation. While other director characteristics matter, a basic theme in the recent stream of research discussed above is that researchers should carefully condition on director independence before analyzing the effects of these other director characteristics. Without director independence, it is unclear that these other director attributes will benefit shareholder interests. One important concern about IDs is how much of a disadvantage they face in terms

of access to proprietary firm information. What mechanisms exist to improve ID information access? Does having a non-CEO chair or an independent chair help improve outside director information access? Do some non-CEO executive directors help? These questions highlight some of key issues being explored in this important area of on-going research.<sup>9</sup>

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<sup>9</sup> For an alternative perspective on the corporate board literature, see Adams (2017).

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