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Seven Gaping Holes in Our Knowledge of Corporate Governance

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Abstract

In Closer Look, we highlight significant “holes” in our knowledge of corporate governance. These are central issues where insufficient or inadequate study has left us unable to answer basic questions, and where key assumptions relied upon by experts have not been verified or validated. While the concepts we review are not exhaustive, each is critical to our understanding of the proper functioning of governance, including board oversight, the recruitment of CEO talent, the size and structure of CEO pay, and the advancement of shareholder and stakeholder welfare.

Keywords: Corporate governance, board quality, board structure, board of directors, independence, labor market for CEO talent, CEO succession, succession planning, CEO compensation, pay levels, executive pay, pay for performance, pay mix, shareholder base, activist shareholders, index funds, passive sharehold

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SEVEN GAPING HOLES

IN OUR KNOWLEDGE OF CORPORATE GOVERNANCE

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INTRODUCTION

Nine decades after Berle and Means proposed a theory of corporate governance, our knowledge of its "best practices" remains woefully incomplete.[1] Corporate governance is a social science, which means that while the factors that determine its effectiveness are complex, they are at their core subject to theory, measurement, and analysis. From the conversation today, however, one would hardly recognize this fact. Instead, the dialogue about corporate governance is dominated by rhetoric, assertions, and opinions that—while strongly held—are not necessarily supported by either applicable theory or empirical evidence. Having to choose between the results of the scientific record and their gut, many "experts" prefer their gut.

While some of the blame for this state of affairs lies with these experts, the academic and institutional research literature itself is not above reproach. Although many aspects of governance have been the subject of empirical study, our knowledge of its central characteristics is incomplete. Organizations are complex entities, and the ability of social scientists to distill their effectiveness to prescriptive best practices is limited. Many studies involve large samples of data. Large samples enable a researcher to identify patterns across many companies, but generally do not tell us how corporate governance choices would impact a specific company. Case studies or field studies can help answer firm-specific questions, but the results tend to be highly contextual and difficult to generalize. Most observational social science studies suffer from the challenges of measuring variables and demonstrating causality based on data. Empirical tests can identify associations and correlations between variables, but it is exceedingly difficult to prove that a variable caused an outcome. And in the case of corporate governance, many important variables are not publicly observable to outside researchers—forcing them to develop proxies to estimate the variable they want to measure. It is extremely difficult to produce high-quality, fundamental insights into corporate governance because of these limitations.

In this Closer Look, we highlight significant "holes" in the knowledge of corporate governance. These are central issues where insufficient or inadequate study has left us unable to answer basic questions, and where key assumptions relied upon by experts have not been verified or validated. While the concepts we review are not exhaustive, each is critical to our understanding of the proper functioning of governance, including board oversight, the recruitment of CEO talent, the size and structure of CEO pay, and the advancement of shareholder and stakeholder welfare. The formulation of best practices (or should we say "better practices") would improve greatly from careful research into these topics.

#1. EFFECTIVE BOARDS

The first major hole in our knowledge of corporate governance is understanding what attributes (composition, structure, or practices) make a board effective. One would think, based on the volume of research that has been dedicated to boards across the accounting, economics, finance, management, and strategy disciplines, that the opposite would be true, but this is not the case.

A significant portion of the research on boards of directors examines their structural attributes to identify any correlations with outcomes. This has resulted in a mountain of research, evaluating such elements as CEO/chair duality, board classification, board tenure, diversity, busy directors, board size, director age, professional qualifications, active or retired CEOs, etc. While too extensive to summarize here, the vast majority of this research finds that most of these attributes are not associated or only loosely associated with outcomes (with the possible exception of busy boards, which appear to be an impediment to board effectiveness).[2] Despite the widespread assumption that the structural attributes of a board must be causal of board quality, there is little convincing evidence on the point.

We also have little understanding of how board practices contribute to board effectiveness. One promising area of study is to understand the practices that make for effective board leadership. This includes the qualities of the individuals who

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direct the board (regardless of whether they also serve as CEO or are an independent director) and the skill they demonstrate in agenda setting, inviting full participation, directing thoughtful discussion, and guiding toward a decision. How do variations in these practices affect board effectiveness? Very little careful study has been made of the differences in board leadership across companies, and whether effective board leaders share common backgrounds, skills, or approaches.[3] Our understanding of individual director contribution is similarly limited.

Furthermore, we have little insight into board practices such as information flow, performance oversight, and risk detection. Legal standards allow boards (absent any red flags) to rely on information provided by management, but we know little about the practices board members and management engage in to improve the quality of this information. Isolated examples exist of boards that have dramatically restructured the information they receive from management either via board books or informal communication, but to our knowledge there has been no systematic study on whether and how changes to the data provided to the board impacts the quality of their decision making and company performance.[4]

Similarly, we know (only after the fact) that certain prominent corporate failures result in part from a stunning lack of awareness at the board level of major breakdowns in risk controls. Examples include Wells Fargo where the board was not provided accurate information about the extent and systemic nature of its cross-selling violations and Boeing where the board was unaware of design flaws in the development of the 737MAX and the lack of candor employee representatives demonstrated in their interaction with federal regulators.[5] We do not know how breakdowns of this magnitude could occur in a modern setting with professional board members and sophisticated communication systems, how to prevent them, or how oversight practices vary across companies.

#2. INDEPENDENCE

A second hole in our understanding of corporate governance are the factors that contribute to board independence. Independent oversight is critical to the fair representation of shareholder and stakeholder interests and arms-length negotiation with management in areas such as strategy, succession planning, performance measurement, compensation, risk management, and review of corporate actions. Public company stock exchanges in the United States establish independence standards to ensure that directors are not compromised by a financial or working relationship with the company. These criteria generally exclude individuals who have worked for the company in the previous three years, receive compensation (apart from director fees) from the company in excess of $120,000, derive material income through a business relationship with the company, or are affiliated with the company's auditor.[6]

Proxy advisory firms, such as Institutional Shareholder Services (ISS) and Glass Lewis, add restrictions on top of these legal criteria and recommend against the election of directors that violate their self-determined "higher" standards.[7] One of the most famous examples of this occurred in 2004 when ISS recommended against the reelection of Warren Buffett to the board of The Coca-Cola Company, despite his significant ownership of the company's stock, because Buffett served on the audit committee while two Berkshire Hathaway subsidiaries distributed Coca-Cola products. In a convoluted explanation, ISS said, "It's not that we distrust Buffett. We want him on the board." At the same time, ISS defended its "zero tolerance" policy as avoiding a "slippery slope… when you start to make exceptions."[8]

Most studies find very modest or no relation between independence and corporate outcomes, calling into question the reliability and validity of these common standards.[9] At the same time, research has shown that factors different from the independence standards of stock exchanges and proxy advisory firms can compromise the independence of directors. For example, studies have found that social connections between the board and insiders can impair the "independent" judgement of directors.[10] Similarly, the power of the CEO relative to individual board members can also compromise independence.[11] And we have observed in recent years, that the directors of many special purpose acquisition companies (SPACs)—"blank check" companies taken public with the sole purpose of subsequently acquiring an existing company—were independent by listing standards but had personal relations with the sponsor and significant financial incentive to close a merger without regard to the economic quality of that merger.[12]

Recognizing the shortcomings of NYSE standards, the Delaware courts have begun to take social connections into account in their evaluation of director independence.[13] Beyond these, it is likely that other factors that we have not measured—such as the financial wealth of directors, personal qualities, and character—influence their ability to maintain an independent perspective in boardroom deliberations. Our understanding of board quality would greatly improve through a deeper understanding of the factors that foster true independence of thought among board members.

#3. CEO LABOR MARKET EFFICIENCY

The efficiency of the labor market for CEO talent is a third area where our knowledge is inadequate. An efficient labor market

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is one in which the supply and demand for talent are roughly in balance, information on the requirements of the job and the qualification of candidates is available, and, through a matching process, candidates select into a job suitable to their talents and are compensated an appropriate amount for their labor. If the match turns out not to be a good fit, either party can terminate the relation and a new matching process takes place. The labor market for many middle and lower-level positions (such as those in operations, finance, legal, marketing, administration, etc.) appear to be largely efficient.

The labor market for CEO talent, however, does not appear to fit this description. Research shows that companies are slow to terminate an underperforming CEO, are slow to hire a successor, commonly have inadequate succession plans, and the candidate pool for large companies appears to be incredibly small and fragmented (see Exhibit 1).[14] Precise information on the quality and attributes of internal and external CEO candidates and their fit with the corporate culture is difficult to assess.

The efficiency of the labor market has important implications for CEO recruitment and oversight. If this market is inefficient, distortions can arise in the balance of power between the CEO and the board. Management will face less pressure to perform, with the board unwilling to terminate an underperforming CEO for fear that an adequate replacement might not be available. A tight labor market would also explain high compensation levels. It is reasonable that a board would offer large sums of money to recruit a candidate whose skills are necessary but considered to be in short supply. An inefficient labor market might also explain why some companies find it difficult to compare the relative qualifications of internal talent (whose track record is well known) and external talent (whose financial performance is known but whose organization fit is more uncertain).

Our understanding of CEO recruitment, performance evaluation, and succession planning would greatly benefit from thoughtful insights into how the CEO labor market actually works.

#4. CEO COMPENSATION LEVELS

CEO compensation among large U.S. companies is high and controversial. Criticism of pay tends to emphasize the gaps between CEO pay and that of the average worker, and between CEO pay and executives one level down (C+1 level).[15] Companies are also criticized for issuing mega-grants (one-time grants purportedly covering multiple years) that can be valued at hundreds of millions of dollars (see Exhibit 2).[16] Despite the very large amounts paid to the CEOs of the largest U.S. companies, we simply do not know the value of the CEO to an organization and what pay levels are appropriate for this employee.

Various methods have been used to determine CEO value. Some researchers compare CEO pay with the pay of other highly paid professionals (hedge fund managers, private equity, venture capital, and even professions farther afield such as entertainers and athletes).[17] While the change in CEO pay over time has mirrored that of these other occupations, it still does not tell us whether CEOs (or these other professionals, for that matter) are "fairly" compensated. Similarly, researchers have shown that growth in CEO pay can be explained by growth in the size of the average corporation, but this correlation too does not tell us whether pay levels themselves are correct.[18]

In theory, we could settle the issue by calculating the total dollar value created by the CEO and agreeing to the share of value that should be paid as compensation for his or her efforts. However, there are vastly differing views on how much value the CEO can be credited with generating—with some research attributing to the CEO as little as 3 percent of value creation and others as high as 40 percent.[19] Research needs to substantially narrow this gap before a consensus on CEO pay will be reached.

Furthermore, one's view of the value of a CEO depends in part on whether one ascribes to the "rent extraction view" of pay (in which management is seen as entrenching itself in the organization and extracting pay beyond what is economically merited) or the "pay-for-performance view" (in which the board negotiates an appropriate compensation structure through an arms-length process to encourage value creation, with monitoring mechanisms in place to prevent rent extraction). Research evidence exists to support both views, even though they are somewhat contradictory.[20] Other studies have looked around the periphery of these issues—considering whether companies manipulate the choice of peer groups to increase pay, or whether compensation consultants are used to inflate pay. At the most basic level, however, we do not know the "correct" amount that should be offered to a CEO for their labor.[21]

#5. PAY FOR PERFORMANCE

Another hole in our knowledge of corporate governance is how best to align pay and performance. This question is complementary to the question of determining pay levels, and involves choices about how to tie pay to the achievement of outcomes important to the board, shareholders, and stakeholders. The compensation committee is faced with a variety of choices in this area, such as the form of payment, the metrics upon which payment is conditioned, the time period over which performance should be measured, and

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other restrictions that should be placed on awards.

An obvious decision is the mix between cash (whose value is fixed) and equity (whose value changes with stock price). An executive might prefer to receive cash because of the certainty it offers, but this approach does not provide incentive to perform. In contrast, an equity or bonus award can be seen as "tying" the executive's financial results to that of shareholders, but it does so by imposing risk on a risk-averse executive. Equity awards can take the form of restricted shares or performance units (whose values correlate with stock price changes) or stock options (whose value changes with stock price volatility). These choices (cash versus equity, and form of equity) have a direct bearing on the incentives and risk premium in the compensation level of the individual.[22] Over time, we have seen a shift away from stock options toward performance units and options with performance-based vesting.

Another decision is the time horizon over which payments should be made (without regard to whether they are cash or equity) and the conditions that must be achieved in order for them to be earned. Currently, a typical company offers a mix of approximately 40 percent short-term (annual) awards and 60 percent long-term (multi-year) awards. The largest companies offer a smaller mix of short-term awards (30 percent or less), perhaps because their salaries and bonuses are sufficient for personal spending (see Exhibit 3). Long-term awards typically vest over 3 to 5 years, although we do observe some firms (such as Netflix) where equity vests immediately.

Beyond these "high-level" choices, boards must decide whether to make awards contingent on the achievement of performance metrics. Many companies use a mix of financial metrics (revenue, earnings, cash flow, relative stock-price performance, etc.) and nonfinancial metrics (innovation, employee or customer satisfaction, safety, ESG-objectives, etc.).[23] These metrics are weighted by the board based on the importance of each metric for motivating the CEO to accomplish strategic corporate objectives. If severe economic or market disruptions prevent the executive from meeting their objectives, the board must decide whether to offer a discretionary bonus to reward the CEO for their efforts or to withhold a bonus so that the executive "suffers" alongside common shareholders.

Other pay decisions include the use of clawback provisions (which allow the company to reclaim the award if the board determines the executive received it in part through a violation of company policy), hedging restrictions (which prohibit the executive from fixing out the value of equity awards), and pledging policies (which specify whether the executive can borrow against their equity holdings).[24]

The result of all of this is that the modern compensation contract is a hodge-podge of choices across multiple dimensions. Few experts have taken a step back to ask the basic questions of whether compensation contracts need to be this complex, whether complexity increases or possibly decreases the incentive to perform, whether complex pay programs strengthen or weaken the alignment between executives and shareholders, or even how to measure compensation when its design is this complex (expected, earned, realized, etc.).[25]

At the same time, research has shown the unintended consequences of current practices. Complexity has led to a significant lengthening of disclosure, copy-cat behavior across firms (whereby executives see what peers have received and demand to receive it themselves), and an increase in investor confusion.[26]

Executive compensation would benefit from clearer methods for aligning pay and performance and for communicating to this relation to shareholders. Given the controversy surrounding CEO compensation, this would be a good time to uncover how pay is actually set and why it is set in this manner.[27]

#6. IMPORTANCE OF SHAREHOLDER BASE

A sixth hole in our knowledge of governance is whether certain shareholders are "better" for a corporation than others. Companies pay considerable attention to the composition of their shareholder base and employ investor relations departments to manage these. Our knowledge of the impact of a shareholder base on corporate decisions and performance, however, is incomplete.

Shareholders differ in time horizon, activeness, objectives, and engagement. These differences can influence their preferences for use of capital (distributions versus investment), their interest in company-specific governance choices, and their willingness to engage on corporate policy. However, we do not know what impact these differences have, if any, on the decisions a company actually makes.

Research has shown that companies believe their stock price would trade higher if they could attract their "ideal" shareholder base; overwhelmingly, these would be comprised of "long-term" investors.[28] Bushee (2004) finds some evidence that companies with a high percentage of "transient" (short-term) investors have higher stock price volatility than companies with long-term (index) investors.[29] Borochin and Yang (2017) find modest evidence that firms with a dedicated investor base are less likely to be misvalued, and Cunningham (2021) explores whether "quality" shareholders (those with both a long-term orientation and an interest in individual company policy) exhibit superior

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performance and governance choices.[30]

The hurdles that researchers face on this topic are that it is not clear how to identify the most relevant shareholder attributes and how to categorize investors according to these criteria. One question researchers have explored is whether passive investors (those who simply want to match an index return over time) care about the governance choices of individual firms. Some studies find that passive ownership—while "long-term oriented"—is associated with decreased monitoring and deference to management.[31] Activists, on the other hand, are seen as combatting management complacency and challenging boards that are overly compliant. However, these are also accused of being short-term oriented, discouraging long-term investment, and encouraging a sale to realize short-term gains.[32] At the same time, quiet activists exist—investors that take a significant minority stake in the firm, join the board, and engage with the company in a constructive, analytical, and advisory capacity.[33] Can these investors bring new knowledge to a company that its board and management have not already considered? Finally, we have seen that companies with engaged founders or families of founders serving on the board can shepherd the culture and direct investment; however, we also see breakdowns of these over time, situations where they use their influence for self-interested gain.[34] For this reason, founders who retain voting rights in excess of their ownership percentage (dual-class shares) are subject to criticism, but we know little about the circumstances under which dual-class ownership is favorable or unfavorable.[35]

Despite extensive study, our knowledge of the impact that shareholders have on the corporation is highly incomplete, and we do not know whether the composition of a shareholder base substantively matters to corporate outcomes.

#7. ROLE OF STAKEHOLDERS

Finally, we do not know the role that stakeholder interests should play in governance or how these should be prioritized relative to shareholder interests. Historically, governance models in the U.S. and United Kingdom have been seen as shareholder-oriented with a primary focus on stock-price appreciation, while the models employed in European and Asian countries are said to be more stakeholder-oriented. With the rise of ESG (environmental, social, and governance), the U.S.—at least superficially—has been shifting toward a more stakeholder-oriented approach.[36]

The ESG movement is at least partially driven by an assumption that companies with a strict focus on shareholder returns create externalities—environmental and social costs—that are ultimately borne by society, as opposed to shareholders in the company that created the externality. Shareholder-centered companies are also criticized for being too short-term oriented, underinvesting in operations, infrastructure, and supply chain with the result that long-term risk is heightened.[37] The validity of these assertions is an almost completely open question. Some research shows that companies take actions to meet quarterly earnings guidance and that these actions can have the effect of delaying investment.[38] Other studies have looked at investment on a macro (economy-wide) basis and do not find evidence of a short-term investment problem.[39] Field research also does not find that corporate executives (CEOs and CFOs) manage their companies on a short-term basis.[40]

To some degree, U.S. companies have always incorporated stakeholder needs into their strategic planning—considering the welfare of their employees, the stability of suppliers, the reliability of products, and the company's reputation in society as part of the business planning process. The question is whether companies have done so *to a sufficient degree* and whether a higher level of investment to satisfy stakeholder objectives is required. We do not know the economic ramifications of higher stakeholder investment, including how much more should be spent, the impact this would have on productivity and value creation, and how the costs and benefits would be distributed across society. Existing research on the economic impact of ESG is highly mixed.[41]

The potential also exists that a reorientation toward stakeholder interests might weaken management discipline. Bebchuk and Tallarita (2020) argue that a dual mandate to serve both shareholders and stakeholders allows management to sidestep accountability to either, with the potential to increase costs on shareholders and stakeholders alike—counterproductive to the very objective of advancing the broader set of interests that ESG advocates embrace.[42]

We truly do not know the impact of ESG on stakeholders or shareholders, relative to the benefits they enjoy under current practices.

WHY THIS MATTERS

1. Despite extensive research efforts, our knowledge of corporate governance remains deficient in many important areas, including practices that improve board effectiveness, the correct size and structure of CEO compensation, the efficiency of the CEO labor market, and the role that shareholders and stakeholders can and should play in setting corporate objectives and investment. What new methods should researchers employ to answer these questions? How can greater collaboration between researchers and corporate practitioners free up

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the data and information needed for rigorous study of these topics? Do companies view the legal and compliance issues associated with this type of research too large for such research to succeed?

2. Most of the research on board structure finds little evidence that structural attributes contribute to governance quality. At the same time, the issue of how to improve board effectiveness remains a significant unanswered question. What practices—in terms of board leadership, meeting management, and information flow—are most likely to improve board quality? How can these be measured and demonstrated in a rigorous manner? Is it possible to study the social interactions among board members to understand how they contribute to board success or failure?
3. CEO compensation remains a highly controversial topic, in part because central questions regarding pay have not been answered. How should we measure the level and incentive value of CEO compensation? How much impact do the efforts of an individual CEO have on the performance of an organization overall? How much value is the CEO directly responsible for creating? How scarce is CEO talent, and how difficult is it to identify the most qualified individuals in terms of skill, experience, and fit? What steps can be taken to improve the matching process between candidates and companies?
4. The ESG movement has compelled corporate leaders to reconsider the shareholder-centric model that has guided investment and corporate decision making through much of our country's history. Central to this movement are criticisms that companies today are too short-term oriented, exposing themselves to long-term risk and generating externalities that are harmful to society. How valid are these claims? How much investment would be required to improve stakeholder outcomes? What would be the costs and benefits of this investment, and how should the costs be distributed through society? Would any of this improve outcomes for shareholders or society relative to what they currently enjoy? ■

[1] Berle and Means (1932) argued that when separation exists between the ownership of a company and its management, self-interested executives have the opportunity to take actions that benefit themselves, with shareholders and stakeholders bearing the cost of these actions. This scenario is typically referred to as the agency problem, with the costs resulting from this problem described as agency costs. Executives make investment, financing, and operating decisions that better themselves at the expense of other parties related to the firm. To lessen agency costs, some type of control or monitoring system is put in place in the organization. That system of checks and balances is called "corporate governance." See Adolph Berle and Gardiner Means, *The Modern Corporation and Private Property* (New York: Harcourt, Brace, and World, 1932).

[2] For an extensive review see, David F. Larcker and Brian Tayan, *Corporate Governance Matters: A Closer Look at Organizational Choices and Their Consequences*, 3rd Edition (Pearson: 2021). Research summaries are also available at: Stanford Graduate School of Business, Corporate Governance Research Initiative, Quick Guide Series, available at https://www.gsb.stanford.edu/faculty-research/centers-initiatives/cgri/research/quick-guides.

[3] Survey data indicates significant variability in board management and boardroom dynamics across companies. For example, a study by The Miles Group and the Rock Center for Corporate Governance at Stanford University finds that many boards do not leverage the skills of all directors, allow a subset of directors to have an outsized influence on decisions, and have ineffective mechanisms for providing feedback to directors. This study, as well as ones from PricewaterhouseCoopers, also finds that a significant percentage of directors believe one or more of their colleagues on the board should be removed because of ineffectiveness. See The Miles Group and the Rock Center for Corporate Governance at Stanford University, "Board of Directors Evaluation and Effectiveness," (2016), available at: https://www.gsb.stanford.edu/faculty-research/publications/2016-survey-board-director-evaluation-effectiveness; and PwC, "Annual Corporate Directors Survey," (2019).

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[5] See Brian Tayan, "The Wells Fargo Cross-Selling Scandal," Stanford Closer Look Series (January 2019).

[6] Corporate Governance Standards, "Listed Company Manual Section 303A.02(a)(i), Independence Tests," NYSE (2019).

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[24] See Securities and Exchange Commission, "Listing Standards for Recovery of Erroneously Awarded Compensation," Release Nos. 33-11126; 34-96159 (October 26, 2022), available at: https://www.sec.gov/rules/final/2022/33-11126.pdf.

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[26] In response to persistent criticism from stakeholders, the Securities and Exchange Commission updated disclosure requirements in 2022 to provide a clearer (although not necessarily more accurate) description of the relation between CEO pay and performance. Whether this new disclosure improves our understanding of pay and performance remains to be seen. See Securities and Exchange Commission, "Pay for Performance," 17 CFR Parts 229, 232, and 240, Release Nos. 34-95607, File No. S7-07-15 (effective October 11, 2022), available at: https://www.sec.gov/rules/final/2022/34-95607.pdf. See also Eric W. Hilfers, Jonathan J. Katz and Michael L. Arnold, "SEC's New Pay Versus Performance Disclosure Rule: Important Things To Know," Harvard Law School Forum on Corporate Governance (October 28, 2022); Erik Beucler and Jack Dolmat-Connell, "Pay Disclosure Rules: Has More Become Less?" *Corporate Board* (2007); RR Donnelly, Equilar, and the Rock Center for Corporate Governance at Stanford University, "2015 Investor Survey: Deconstructing Proxies— What Matters to Investors" (2015), available at: https://www.gsb.stanford.edu/faculty-research/publications/2015-investor-survey-deconstructing-proxy-statements-what-matters; and Yaniv Grinstein, David Weinbaum, and Nir Yehuda, "The Economic Consequences of Perk Disclosure," *Social Science Research Network* (2010), available at: http://ssrn.com/abstract=1108707.

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[35] David F. Larcker and Brian Tayan, "Dual-Class Shares: Research Spotlight," Stanford Quick Guide Series (2019), available at: https://www.gsb.stanford.edu/faculty-research/publications/dual-class-shares.

[36] For a review of ESG principles and their implications, see David F. Larcker, Brian Tayan, and Edward M. Watts, "Seven Myths of ESG," Stanford Closer Look Series (November 4, 2021).

[37] This theme is expressed through the annual letters that Larry Fink, CEO of BlackRock, writes to the CEOs of companies in BlackRock's investment portfolios. It is also explained Alex Edmans in the book Grow the Pie. See Alex Edmans, Grow the Pie: How Great Companies Deliver Both Purpose and Profit, (Cambridge University Press, 2020); for Fink's current and historical letters, see BlackRock, "Larry Fink's Letters to CEOs," available at: https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter.

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[39] David J. Denis, "Is Managerial Myopia a Persistent Governance Problem?" *Journal of Applied Corporate Finance* (2019).

[40] Rock Center for Corporate Governance at Stanford University, "2019 Survey on Shareholder Versus Stakeholder Interests," (July 2019), available at: https://www.gsb.stanford.edu/faculty-research/publications/2019-survey-shareholder-versus-stakeholder-interests.

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The Stanford Closer Look Series is dedicated to the memory of our colleague Nicholas Donatiello and to the retirement of our colleague Michelle E. Gutman.

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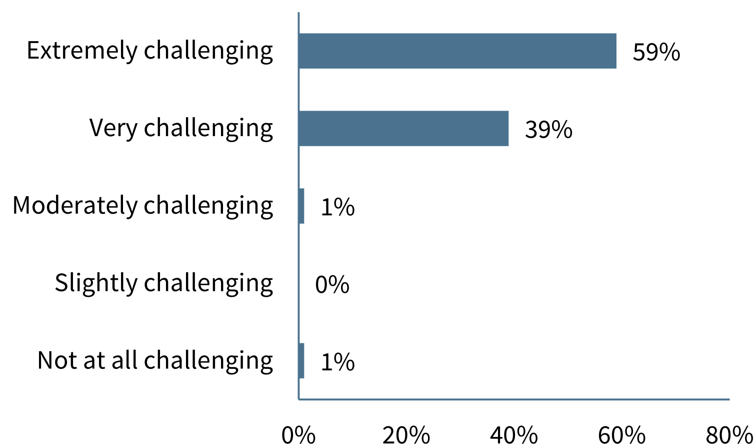
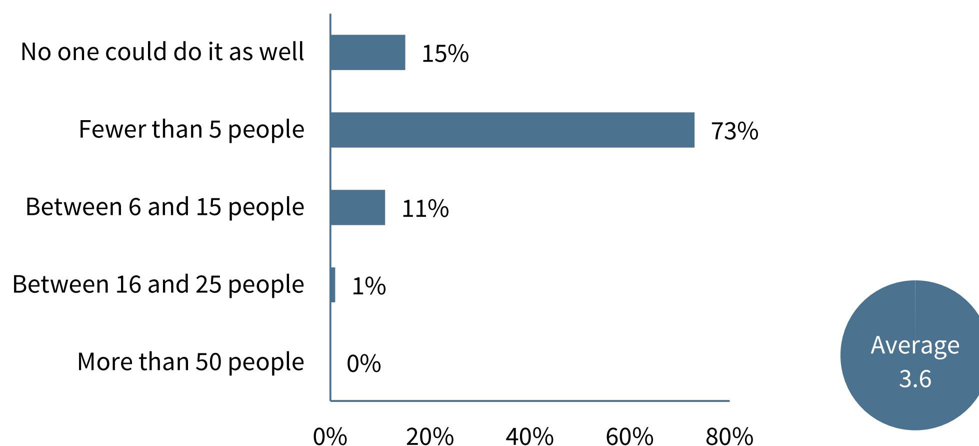
EXHIBIT 1 — DIRECTOR VIEW OF CEO LABOR POOL AMONG FORTUNE 250 COMPANIES

IN GENERAL, HOW CHALLENGING IS THE JOB OF CEO AT YOUR COMPANY?



ROUGHLY HOW MANY PEOPLE, INCLUDING THOSE BOTH INSIDE AND OUTSIDE YOUR COMPANY, ARE CAPABLE OF STEPPING INTO THE CEO ROLE AT YOUR COMPANY TODAY AND DOING AT LEAST AS WELL AS YOUR CURRENT CEO?



Average
3.6

Source: Stanford Graduate School of Business and the Rock Center for Corporate Governance at Stanford University, "CEO Talent: America's Scarcest Resource? 2017 CEO Talent Survey," (2017).

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EXHIBIT 2 — CEO COMPENSATION: SUMMARY STATISTICS (2021-2022)

COMPENSATION PAID TO CEOS IN THE UNITED STATES

Firms (Grouped by Size)	Median Total Expected CEO Compensation (rounded)	Median Market Value ($ millions)
Top 100	22,610,000	160,151
101 to 500	13,042,000	26,548
501 to 1,000	7,975,000	5,473
1,001 to 1,500	5,395,000	1,745
1,501 to 1,700	3,459,000	430
1 to 1,700	7,696,000	4,440

EXAMPLES OF MEGA-GRANTS

Company	CEO	Year	Size of Grant	# Years
Tesla	Elon Musk	2018	$2.284 billion	10
Snap	Evan Spiegel	2017	$637 million	5
Trade Desk	Jeff Green	2021	$828 million	10
Robinhood Markets	Vladimir Tenev	2021	$794 million	7
Lucid Group	Peter Rawlinson	2021	$556 million	5
Qualtrics International	Zig Serafin	2021	$540 million	4
Rivian Automotive	Robert Scaringe	2021	$421 million	5
Gingko Bioworks	Jason Kelly	2021	$380 million	7
Apple	Tim Cook	2011	$376 million	10
Expedia Group	Peter Kern	2021	$295 million	7
Endeavor Group Holdings	Ariel Emanuel	2021	$294 million	10
Coty	Sue Nabi	2021	$280 million	3
Alphabet	Sundar Pichai	2019	$277 million	3

Source: Compensation data from Compustat for fiscal year ending 2021-2022, as reported in the summary compensation table of Form DEF-14A; calculations by the authors. Mega-grant data from SEC filings.

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EXHIBIT 3 — CEO PAY MIX: SUMMARY STATISTICS (2021-2022)

COMPENSATION MIX PAID TO CEOS IN THE UNITED STATES

Firms (Grouped by Size)	Salary	Bonus	Stock Awards	Option	Non-equity Incentive	Change in Pension	Other
Top 100	7.5%	2.7%	51.4%	15.3%	15.6%	1.9%	5.7%
101 to 500	9.9%	1.3%	51.4%	10.8%	21.5%	1.9%	3.2%
501 to 1,000	13.7%	1.9%	51.6%	6.7%	22.2%	1.2%	2.7%
1,001 to 1,500	18.1%	4.0%	48.5%	5.9%	20.1%	0.7%	2.9%
1,501 to 1,700	25.1%	4.8%	43.3%	7.1%	16.5%	0.1%	3.1%
1 to 1,700	15.1%	2.7%	49.7%	8.0%	20.3%	1.1%	3.1%

Note: A number of companies report the amount paid to the CEO under their annual cash bonus programs in the column "non-equity incentive plans."

Source: Compensation data from Compustat for fiscal year ending 2021-2022, as reported in the summary compensation table of Form DEF-14A; calculations by the authors. See Exhibit 2 for the median market capitalization of each group of firms.

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