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Articles

An Empirical Analysis of Noncompetition Clauses and Other Restrictive Postemployment Covenants

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Employment contracts for most employees are not publicly available, leaving researchers to speculate about whether they contain postemployment restrictions on employee mobility, and if so, what those provisions look like. Using a large sample of publicly available CEO employment contracts, we are able to examine these noncompetition covenants, including postemployment covenants not to compete ("CNCs" or "noncompetes"), nonsolicitation agreements ("NSAs"), and nondisclosure agreements ("NDAs"). What we found...
VANDERBILT LAW REVIEW confirms some long-held assumptions about restrictive covenants but also uncovers some surprises.

We begin by discussing why employers use restrictive covenants and examining how the courts have treated them. We then analyze an extensive sample of CEO employment contracts drawn from a large random sample of 500 S&P 1500 companies. We find that 80% of these employment contracts contain CNCs, often with a broad geographic scope, and that these generally last only one to two years. Similarly, we find that NSAs routinely appear in these contracts, barring solicitation of the firm's employees and customers or clients. We demonstrate that NDAs are prevalent and prohibit the CEOs from disclosing unspecified "confidential information." In addition, we note that there is a strong "California effect," whereby firms from that state are less likely to put CNCs in employment contracts.

Our research also uncovers several previously undocumented trends. First, increasingly more and more restrictive covenants are appearing over time, and they are appearing with increasingly expansive enforcement rights for the firm.. Second, there is clear path dependence for these clauses, with a prior CNC being a strong predictor of CNC use in future employment contracts. Third, long-term contracts are more likely to have CNC clauses than short-term contracts, probably because firms have more confidence in making investments in CEOs that are committed to staying for longer periods. We argue that this shows that for some firms the risk of harm from a departing executive may simply be more acute than for other firms.

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I. INTRODUCTION

A departing key employee can seriously harm a firm by leaving to work for the firm's competitors or by providing these competitors with the firm's confidential business information. Firms, therefore, have strong incentives to seek to impose broad covenants not to compete and other postemployment restrictive covenants on these employees. However, most employment contracts are not publicly available, leaving researchers to speculate on the prevalence of these restrictions and their contents. Fortunately, public companies must disclose their CEOs' employment contracts. This mandatory disclosure permits us to examine them to determine how frequently, and how broadly, employers use covenants not to compete ("CNCs" or "noncompetes"), nonsolicitation agreements ("NSAs"), and nondisclosure agreements ("NDAs").

In this paper, we first discuss what is currently known about the use and purpose of these restrictive covenants and why they remain controversial. We then analyze 874 CEO employment contracts initiated between 1996 and 2010 from a random sample of 500 S&P 1500 companies to develop the first comprehensive study of the prevalence and details of restrictive covenants in public company employment contracts. We find that 80% of these employment contracts contain CNCs that commonly last one to two years. Although 89% of the CNCs forbid CEOs from working for a competitor during the term of the CNC, only 25% prohibit CEOs from financing competitors. These covenants often have a broad geographic scope: for example, 38% bar the CEO from working in any jurisdiction where the company has operations.

We also find that NSAs and NDAs frequently show up in CEO employment contracts. NSAs routinely appear in CEO contracts with CNCs and typically restrict CEOs' behavior for a period of one to two years: 75.6% of these contracts bar solicitation of the firms' employees.

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1. We recognize that CEOs are the highest-level employees of these firms and that many commentators have claimed that their contracts are skewed to favor the executive at the expense of the employer, making it less likely that such postemployment restrictions will appear in their contracts in comparison to those of other lower-level employees. If this is true, then our results may underestimate the frequency and breadth of such restrictions imposed on other employees. Some scholars have concluded that agency problems abound in the realm of executive compensation with CEOs dominating boards when it comes to the terms of employment. See, e.g., LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION 23-44 (2004) (arguing that board and executive bargaining are not conducted at arm's length). But see John Core, Wayne Guay & Randall Thomas, Is U.S. CEO Compensation Inefficient Pay Without Performance?, 103 MICH. L. REV. 1142, 1158-60 (2005) (arguing against the managerial power theory of governance).
and 50.8% proscribe the solicitation of customers or clients. Additionally, this study reveals that NDAs are quite common as well: 87.1% of all contracts prohibit CEOs from disclosing unspecified "confidential information." Also, a host of other more detailed prohibitions are quite common and frequently last an indefinite period of time.

Interestingly, we also uncover strong evidence that employers add an increasing number of restrictive covenants to new contracts over time, so that today over 70% of CEO contracts contain three or four restrictive covenants. Furthermore, more than half of these covenants are triggered by any departure of the CEO from the firm, whether voluntary or involuntary. Finally, companies negotiate the express right to seek an injunction to enforce these provisions in 79.5% of the contracts. Plainly, firms are aggressively negotiating to include these covenants in their CEOs' employment agreements.

We also examine factors that indicate when CEOs will likely have CNC provisions in their contracts. First, our analysis shows that CEOs are more likely to have CNCs in their employment contracts if their contracts are being enforced in jurisdictions that permit strong CNC clauses. One important state that does not permit enforcement of CNCs is California. Accordingly, we find that CEO contracts in California are much less likely to include noncompete clauses. Second, there is a significant trend toward greater usage of CNC clauses in CEO employment contracts. This suggests that employers are more aware than ever of the importance of using CNC clauses and confirms other scholars' assumptions that, at least in the CEO context, employers increasingly use these clauses. Third, there is strong path dependence, or "stickiness," in the use of CNC clauses: if a company has used one in a prior employment contract, then it is much more likely to insist on one in a later contract. Next, long-term employment contracts are more likely to have CNC clauses than short-term contracts. This is likely because firms have more human capital investment in CEOs who are expected to stay for longer periods.

The Article proceeds as follows. In Part II, we contextualize the role of restrictive employment covenants such as CNCs, NSAs, and NDAs. Next, in Part III, we describe our data collection and study methodology. Part IV presents the empirical portion of the Article, where we analyze statistics on the presence, length, and scope of CNCs, NSAs, and NDAs. Finally, Part V discusses our findings and

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2. See infra notes 55–57 and accompanying text.
their policy implications, and offers some brief concluding remarks and recommendations for further research.

II. THE LAW AND USE OF RESTRICTIVE COVENANTS

Historically, ever since employers first began including covenants not to compete in employee contracts when the guild system began breaking down in early eighteenth-century London, competitive restrictions in employment contracts have been contentious.³ Restrictive covenants remain controversial today,⁴ even as they have seemingly proliferated among employers.⁵ Despite this long history of restrictive covenants in employment contracts, this area of law continues to evolve: the last decade saw the advent of new or revised state statutes⁶ and proposed legislation⁷ designed to refine how

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4. See Orly Lobel, Why Noncompetes May Give You the Least Desirable Employees, WALL ST. J. BLOG (Jan. 22, 2014, 4:30 PM), available at http://blogs.wsj.com/accelerators/2014/01/22/orly-lobel-why-non-competes-may-give-you-the-least-desirable-employees/ (asserting that noncompetes have potentially corrosive effects, including the retention of the least valuable employees). See generally ORLY LOBEL, TALENT WANTS TO BE FREE: WHY WE SHOULD LEARN TO LOVE LEAKS, RAIDS, AND FREE RIDING 7 (2013) (arguing for unfettered and noncompete-free policies to promote labor mobility; “We will discover that the default mentality of protectionism is frequently archaic and misguided. Counterintuitively, the way to gain is often by allowing tactical loss.”).


7. For example, in the last few years several states have seen the introduction of legislation limiting the situations or types of workers permissibley covered by employee CNCs or allowing for specific notice periods before a CNC can be requested from an employee. See H. 2293, 187th Gen. Ct. (Mass. 2011), available at http://www.massachusettennoncompetelaw.com/uploads/file/Noncompete%20Bill%20-%202011%20As%20File%201-20-2011.pdf, archived at
employers use these clauses to restrict employees' postemployment mobility and choices.

Restrictions such as CNCs\(^8\) are often criticized as contracts of adhesion arising out of a perceived inequality in bargaining power between employers and employees.\(^9\) Professor Cynthia Estlund has broadly stated this argument: "Most contract terms are offered by employers on a take-it-or-leave-it basis, and are set under the shadow of employment at will—the employer's presumptive power to fire employees for any reason at all, including refusal to accept the employer's proffered or modified terms of employment."\(^10\) In contrast,


8. In this Article, we focus on postemployment restrictions that limit employee mobility and competitive behavior. We do not discuss covenants not to compete that restrict the activities of a former owner of a business where such restrictions are intended to protect the goodwill of a business following a sale. The latter species of noncompete agreement are less controversial in that they are perhaps less subject to abuse and are clearly tailored to protect a legitimate business interest such that they are even permissible in California where employee noncompetes are virtually banned. See, e.g., Alliant Ins. Servs., Inc. v. Gaddy, 72 Cal. Rptr. 3d 259, 266–68 (2008) (discussing the sale of business goodwill exception to California's ban on noncompetes and enforcing a state-wide contractual prohibition on the seller's insurance brokerage activities).

9. Professor Rachel Arnow-Richman asserts that disparate bargaining positions make it "inappropriate to view noncompete terms as the product of reasoned reflection or as dispositive of the parties' rights and obligations." Rachel S. Arnow-Richman, Bargaining for Loyalty in the Information Age: A Reconsideration of the Role of Substantive Fairness in Enforcing Employee Noncompetes, 80 OR. L. REV. 1163, 1215 (2001). She argues that "[e]ven if a particular employee possesses valuable human capital that is in demand in the relevant market, . . . there are [substantive and procedural] reasons to distrust the quality of the bargain he or she reaches with the employer." Id. at 1214. These concerns include employees being asked to sign a noncompete on their first day to continue their employment, the lack of employee bargaining power, and limited information about the future implications of the noncompete. Id.


Skepticism about the bargaining power of employees has contributed to courts' willingness to intervene in the employment contract to redress abuses that offend public policy—for example, a discharge for refusing to violate the law or for exercising an employment-related right (e.g., filing a workers' compensation claim). Still, most terms of the employment relationship are governed not by external law or public policy but by the express or implied agreement of the parties.

Id. at 385. See also Christopher T. Wonnell, The Contractual Disempowerment of Employees, 46 STAN. L. REV. 87, 106 (1993) ("Employers often use these covenants to indirectly induce employees not to quit, and free labor proponents criticize these covenants on this ground.").
Professor Christopher Wonnell has argued for more judicial support for employees' right to bind themselves by contract, albeit while recognizing the potential drawbacks of employee noncompete contracts.\(^\text{11}\)^

Nonsolicitation agreements, which we group as a subcategory of CNCs, can come in various forms, such as temporary prohibitions on recruiting former coworkers (sometimes called poaching)\(^\text{12}\) or approaching former clients.\(^\text{13}\) In either case, the resulting agreement is designed to limit what would otherwise be permissible competitive behavior. Some scholars have deemed NSAs problematic because they can be both anticompetitive and limit the freedom of association of the former employee.\(^\text{14}\) Similarly, NDAs that restrict the use and transfer of knowledge in a business context are potentially anticompetitive, implicate issues of freedom of speech, and raise concerns "that many contracts between private parties can be highly coercive or unconscionable."\(^\text{15}\) Courts scrutinize all of these contractual

\(^{11}\) Wonnell, supra note 10, at 89:

The involuntary servitude argument does not wholly lack merit; indeed, the concerns that drive it are compelling in many contexts, and make it difficult to find a morally acceptable way to make employee promises binding. Still, the substantial economic harm to workers from their wholesale disempowerment justifies a critical exploration of the absence of contract remedies.

\(^{12}\) Id. at 106:

An employment contract, in comparison [to a noncompete agreement], may often be less harsh. It represents a promise to refrain from competition only as long as the employer remains willing to provide employment and imposes duties only during employment. A reasonable person might be willing to enter into a binding employment contract but refuse to enter into a covenant not to compete.

\(^{13}\) See Jin-Hyuk Kim, Employee Poaching, Predatory Hiring, and Covenants Not to Compete 24 (2007) (unpublished manuscript), available at https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=IIOC2008&paper_id=16, archived at http://perma.cc/FA2Q-BSKP (discussing instances, in light of noncompetes, in which a firm's behavior in poaching workers from its competitors can be either acceptable competition or a predatory act).


\(^{15}\) Id.

\(^{16}\) Daniel J. Solove & Neil M. Richards, Rethinking Free Speech and Civil Liability, 109 COLUM. L. REV. 1650, 1701 (2009) (adding that their approach to setting boundaries “between First Amendment law and contract law for private-sector speech restrictions” would not “prevent courts from invalidating such contracts based on duress, unconscionability, or contravention of public policy [and that] free speech effects of contracts could certainly be a valid public policy reason to render them unenforceable”; however, “[t]his would be an issue for contract law, not the First Amendment”).
restrictions on employee mobility because of their tendency to restrict otherwise lawful competition.\textsuperscript{17}

Whatever the merits of these claims in the context of rank-and-file employees, such concerns are largely absent for CEOs who accept restrictive covenants in their employment contracts.\textsuperscript{18} This is because CEOs enjoy substantial bargaining power and are routinely represented by legal counsel when they negotiate their employment contracts.\textsuperscript{19} It is also true that in the last decades companies have increased CEOs' compensation relative to other employees.\textsuperscript{20} In fact, in the context of CEO employment contracts, the disparity in bargaining power argument against allowing restrictive employment covenants is turned upside down if one believes some commentators' claims that CEOs virtually dictate contract terms that are most favorable to them.\textsuperscript{21} These commentators suggest that CEOs dominate their firms' boards of directors in high-stakes negotiations on issues

\textsuperscript{17} See e.g., BDO Seidman v. Hirshberg, 712 N.E.2d 1220, 1222–23 (N.Y. 1999) (discussing the state's approach to noncompete enforcement and the hesitancy to expand noncompete coverage).

\textsuperscript{18} Joann S. Lublin, Companies Loosen the Handcuffs on Non-Competes: Companies Are Making It Easier for Senior Managers to Jump Ship, Though It Can Be Costly, WALL ST. J. (Aug. 12, 2013 11:12 AM), available at http://online.wsj.com/news/articles/ SB10001424127887324085304579008592336383078 (discussing how some senior executives are able to negotiate with their former firms to avoid enforcement of a post-employment noncompete).


\textsuperscript{20} See LYNN STOUT, THE SHAREHOLDER VALUE MYTH: HOW PUTTING SHAREHOLDERS FIRST HARMS INVESTORS, CORPORATIONS, AND THE PUBLIC 20–21 (2012) (discussing how, since 1991, CEO pay outpaced average worker pay by a ratio of 140 times, with that ratio rising to about 500 times average worker pay by 2003); see also Jennifer Liberto, CEO Pay Is 380 Times Average Worker’s—AFL-CIO, CNNMONEY (Apr. 19, 2012 1:12PM), http://money.cnn.com/2012/04/19/news/economy/ceo-pay/index.htm, archived at http://perma.cc/W38G-7FU3 (citing recent labor union statistics that the average CEO at a top firm now earns a pay package that is 380 times that of the average worker and noting the CEO pay differential in 1980 was at 42 times the average worker salary).

\textsuperscript{21} For a leading articulation of the managerial power perspective, see generally BEBCHUK & FRIED, supra note 1, at 61–79.
such as managerial compensation and the terms of their employment relationships.

What exactly firms are trying to protect by using CNCs has been the subject of several theories by leading legal scholars. One theory is that CNCs are an important tool for creating incentives for employers to invest in key employee training and skills because the security of a tailored CNC gives the employer a limited quasi-property right in that human capital. In a similar vein, CNCs could be conceptualized as conditional waivers of employee rights that recognize that employers also have interests that can be protected at the expense of employee freedoms, as long as they are truly legitimate.

22. See David Larcker & Brian Tayan, Corporate Governance Matters: A Closer Look at Organizational Choices and Their Consequences 237 (2011):

Because of potential imbalances between supply and demand and the difficulty in evaluating the quality of candidates, it is not always easy for boards to identify the appropriate executive or the market wage necessary to attract [a qualified CEO]. Moreover, some board members might provide insufficient oversight (because of a lack of independence, insufficient engagement, or a lack of power relative to the CEO) during the compensation-setting process. These factors have the potential to distort executive compensation packages, in terms of both size and structure.

23. The potentially fraught contracting process between CEOs and their firms and some of its problems have been described as follows:

While contracting clearly is a significant source of governance rules for corporations, the contracting process is very costly. Take, for example, the issue of executive compensation. Many economists are of the view that the broadening gap between CEO and rank-and-file pay reflects a failure of corporate-governance practices to maintain a proper relationship between compensation and performance. The specific executive compensation arrangements that we actually observe, however, simply reflect the result of a bargaining process between shareholders’ elected representatives and managers. It would be possible for companies, especially companies selling shares to the public for the first time, to design more modest compensation packages. At a minimum, it would be possible for directors to have at least a basic understanding of the compensation arrangements they are reaching with top executives. In recent years, it has turned out that directors of corporate giants like Disney and United Health did not even comprehend how much their companies might be on the hook for the multimillion arrangements they reached with top corporate officers.


24. See the noncompete agreement discussion infra Part II.A.

interests.26 These and other perspectives such as freedom of contract,27 or even viewing CNCs as a business strategy tool for both “proprietary protection and strategic coercion.”28 offer potentially useful explanations for the presence of CNC clauses and other restrictive covenants in CEO employment contracts.

Despite the heated discussion of the pros and cons of restrictive employment covenants by academics, practitioners, and state legislatures, there are few empirical studies examining these agreements to provide evidence and guidance for businesses, employees, or policymakers.29 Specifically, we are the first to track the prevalence of these clauses by examining the terms of actual employment contracts.

The existing empirical studies on restrictive covenants in the management and economics literature are important to the discussion of CNCs and human capital investment.30 However, these previous studies have used the availability of CNC enforcement in a given jurisdiction as a surrogate for the likely presence of a CNC for certain types of employees31 or for a limited number of technology regions.32 In

26. Estlund, supra note 10, at 415–20; see also infra Part II.A (discussing the legitimate interests prong of the usual common-law analysis).

27. See, e.g., RESTATEMENT (SECOND) OF CONTRACTS ch. 8, topic 1, intro. note (1981) (stating the general proposition that “parties may contract as they wish, and courts will enforce their agreements without passing on their substance”).

28. Larry A. DiMatteo, Strategic Contracting: Contract Law as a Source of Competitive Advantage, 47 AM. BUS. L.J. 727, 765 (2010) (“The often litigated covenant not to compete in the employment setting serves two strategic purposes: proprietary protection and strategic coercion.”). Professor DiMatteo further argues that the first purpose for the employer noncompete enforcement “relates to the employer’s proprietary property that has been disclosed to the employee and that the employer seeks to protect” while the second purpose “seeks to deter employee movement to a competitor.” Id. He adds that the first intent:

[II]ts best served by drafting a covenant that is likely to be enforced by the courts... [such that an] employer shows that there is some proprietary interest—
trade secrets, know-how, client contacts, access to key employees, specialized training, databases, and compilations—that are susceptible to being harmed if used or disclosed to a new employer.

Id. For the second purpose he finds that it is an employer’s attempt to overreach and assert control of the employee. Id.

29. Notably, one of the authors’ previous research collected and analyzed some data on CEO noncompetes; however, that study focused on other aspects of the executives’ contracts. See Schwab & Thomas, supra note 19, at 254–57.


32. See, e.g., Bruce Fallick, Charles A. Fleischman & James B. Rebitzer, Job-Hopping in Silicon Valley: Some Evidence Concerning the Micro-Foundations of a High-Technology Cluster,
contrast, our large study utilizes a state-by-state enforcement index and includes many executives across all U.S. jurisdictions and many industries over a long period, thus providing a more comprehensive and accurate picture of restrictive covenant use.

A. Noncompetition Clauses

Employers seek to restrict the postemployment activities of their employees—regardless of their rank and status—in several ways. When a worker is still employed by a particular firm, the employee has default fiduciary duties that guard against unfair competition with the employer. These fiduciary duties, which continue to evolve, are found throughout corporate law and include the duty of care and, most crucially, the duty of loyalty. Specifically, the duty of loyalty helps ensure that employees will serve the firm’s interests and refrain from harmful competition with it during their employment. However, once they are terminated—for whatever reason—these duties end, and the departing employee is generally free to engage in any lawful competition. The employee’s valuable knowledge, skills, and relationships walk out the door when the employee leaves and begins to compete with his or her former


34. See Andrew Gold, The New Concept of Loyalty in Corporate Law, 43 U.C. DAVIS L. REV. 457, 461–64 (2009) (arguing that legal definitions of a duty of loyalty draw upon a common social understanding of loyalty, and discussing the historical expansion of fiduciary duties in U.S. corporate law to include the duty of good faith).


36. See Melvin Eisenberg, The Duty of Good Faith in Corporate Law, 31 DEL. J. CORP. L. 1, 3 (2006) (reiterating that the three core fiduciary duties of corporate directors and officers are the duties of loyalty, care, and good faith).

37. Muir & Schipani, supra note 33, at 444–57.

38. Wendi S. Lazar & Gary R. Siniscalco, Confidentiality, Trade Secrets, and Other Duties and Restrictive Covenants in a Global Economy, in RESTRICTIVE COVENANTS AND TRADE SECRETS IN EMPLOYMENT LAW: AN INTERNATIONAL SURVEY 19 (Wendi S. Lazar & Gary R. Siniscalco eds., 2010) (“In many U.S. states, in addition to the common law recognition of the duty of loyalty that prevents employees from ‘raiding’ employers’ clients during employment, nonsolicitation provisions post employment will generally be upheld as long as they are reasonable and necessary to protect an employer’s legitimate business interest.” (case citations omitted)).
firm, to the consternation of an employer that believes it owns the very knowledge, skills, and relationships at issue.\textsuperscript{39}

The employer's goal for restrictive postemployment covenants is to control the activities of a former employee after the usual employee-employer relationship ends, effectively retaining exclusive use of the information and competitive advantage by contract.\textsuperscript{40} In this way, the company may temporarily maintain the status quo that existed prior to the employee’s departure and avoid potentially serious losses.\textsuperscript{41} In the case of a CEO, there is a far greater risk of harm associated with losing that key employee to a competitor, which increases an employer's incentive to insist on postemployment restrictions. This is because CEOs typically help create or have knowledge of and unfettered access to all of a firm's trade secrets, supplier and customer information, strategic plans, strengths, and weaknesses.\textsuperscript{42}

There are several typical contract mechanisms employers use to restrict or penalize an employee's postemployment competition. These include general prohibitions on competition in the form of classic CNCs, NSAs related to pursuing clients and recruiting other employees, NDAs,\textsuperscript{43} repayment and forfeiture agreements,\textsuperscript{44} and even

\textsuperscript{39} See Norman D. Bishara & David Orozco, \textit{Using the Resource-Based Theory to Determine Covenant Not to Compete Legitimacy}, 87 IND. L.J. 979, 982–83 (2012) (acknowledging the potential “knowledge ownership dispute” between an employer and departing employee); see also Marx, supra note 32, at 697, explaining employee knowledge mobility as follows:

Inseparability of skills from individuals suggests that workers can use skills developed at (or prior to) one organization or firm when moving to another. Such reasoning underlies the notion that modern careers are not organizationally circumscribed but boundaryless: workers move from firm to firm, carrying their accumulated experience with them.

(citations omitted).

\textsuperscript{40} For a description of the use of contracts as a corporate governance mechanism and the gap-filling role of the underlying law related to fiduciary duties, see MACEY, supra note 23, at 22–23, where he explains:

The purpose of the various laws of business organizations is to facilitate the contracting process, not to displace the actual contracts reached by the parties. Business organizations need law, including fiduciary duties, because it simply is not possible for those who organize business to identify all of the potential problems and conflicts that inevitably will arise in a business. Specific issues and transactions invariably will present themselves that could not have been identified ex ante. Fiduciary duties exist to provide a framework for dealing with those issues.


"garden leave" clauses. This Section focuses on noncompete clauses, which are the broadest restrictive covenants. Employers craft CNCs to stop departing employees from competing with them in any manner. Thus, where permissible under a state's law and within the bounds of public policy, many employers will insist that their employees accept noncompete clauses in their employment contracts. In effect, the CNC allows the firm to control information and skills through the equity mechanism of an injunction prohibiting the employee from going to work with another employer.

Courts interpret these clauses with some suspicion because of their anticompetitive nature and likely adverse effects on the


45. The concept of garden leave is an alternative to a traditional CNC. The employee agrees to provide a relatively long notice-of-termination period, during which the individual remains an employee with all of the attendant fiduciary duties, is essentially paid not to come to work, and, accordingly, is prohibited from taking other employment with a competitor. See Bob Hepple, The Duty of Employee Loyalty in English Law, 20 COMP. LAB. L. & POL'Y J. 205, 214 (1999): [The employer] "pay[s] the employee's salary during this period without requiring the employee to come into work . . . on the assumption that the employee will have to stay home and work in the garden, but will be financially secure until the period of notice expires and he or she is then free to work for the competitor.

For a discussion of recent coverage of the garden leave concept in the academic literature, see Bishara & Westermann-Behaylo, supra note 41, at 25–27. See also Greg T. Lembrich, Note, Garden Leave: A Possible Solution to the Uncertain Enforceability of Restrictive Employment Covenants, 102 COLUM. L. REV. 2291, 2292 (2002) ("Garden leave may provide a solution to the prevailing uncertainty regarding the enforceability of restrictive covenants in the United States . . . however, American courts have not ruled on the legitimacy of garden leave provisions.").

46. See, e.g., Geoffrey P. Miller, Bargains Bicoastal: New Light on Contract Theory, 31 CARDozo L. REV. 1475, 1499 (2010) (comparing New York and California's treatments of contracts against public policy, noting that both "place limits on covenants not to compete and related clauses, but California is significantly more willing to reject agreements on this ground").

47. See, e.g., Gillian Lester & Elizabeth Ryan, Choice of Law and Employee Restrictive Covenants: An American Perspective, 31 COMP. LAB. L. & POL'Y J. 389, 389 (2009) (discussing a rise in noncompete litigation in the face of greater employee mobility and increased use of technology in the workplace, and concluding that greater movement of workers "is partly the result of technological change facilitating individual movement and communication, but also a result of corresponding changes in corporate organization to establish offices and interests in multiple jurisdictions" and that "[w]ith these developments, there has been a rise in litigation surrounding the enforcement of employee covenants not to compete when the parties or issues involved have connections to multiple jurisdictions").

48. For a discussion of the use of noncompetes to inhibit employee mobility, see Bishara & Westermann-Behaylo, supra note 41, at 2–3.

49. See, e.g., CORBIN ON CONTRACTS, § 80.15 (2013) ("Many courts are more suspect of restraints accompanying employment contracts than they are of restraints accompanying the
employee’s further employment prospects. However, these terms will generally be judicially evaluated using a balancing test that weighs the firm’s protectable business interest, the purpose of the restriction, the scope (in time and geography) of the restriction, and the potential harm to the employee and the public. Stated more formally, a typical articulation of the common-law reasonableness test is as follows:

(1) the employer must have a legally protected interest; (2) the restrictive covenant must be no wider in scope and duration than is reasonably necessary to protect the employer’s interest; (3) the covenant cannot impose an undue hardship on the employee; and (4) the covenant cannot violate public policy.

Despite their long history, these restrictions remain contentious among courts and policymakers, as well as with scholars. Perhaps the most active discussion regarding the propriety of CNCs relates to the well-known academic argument that the economic growth of Silicon Valley was made possible in part because of California’s ban on noncompetes. The state’s longstanding, strong

50. See, e.g., BDO Seidman v. Hirshberg, 712 N.E.2d 1220, 1223 (N.Y. 1999) (hesitating to enforce a restrictive covenant because of the anticompetitive nature of such restrictions).

51. The Illinois Supreme Court reiterated the importance of the “protection of a legitimate business interest” prong in Reliable Fire Equip. Co. v. Arredondo, 965 N.E.2d 393, 396 (Ill. 2011). There, the court concluded that:

Under some circumstances, “a promise to refrain from competition is a natural and reasonable means of protecting a legitimate interest of the promisee.” Restatement of Contracts, 2d, § 188 cmt. b (1981). In the case of a postemployment restraint, where the employer-promisee exacts from the employee a promise not to compete after termination of the employment, the restraint is usually justified on the ground that the employer has a legitimate business interest in restraining the employee from appropriating the employer’s (1) confidential trade information, or (2) customer relationships. Id. cmts. b, g.

Id. at 401 (citing Blake, supra note 3, at 651–74); see also Reed, Roberts Assocs., Inc. v. Strauman, 353 N.E.2d 590, 593 (N.Y. 1976) (acknowledging “the legitimate interest an employer has in safeguarding that which his business made successful and to protect himself against deliberate surreptitious commercial piracy”).

52. See generally Blake, supra note 3, at 631 (explaining the public policy concerns underlying the common-law origin of covenants not to compete).


54. See, e.g., Moffat, supra note 5, at 876.

55. See generally Ronald J. Gilson, The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete, 74 N.Y.U. L. Rev. 575, 577 (1999) (proposing that California’s ban on employee noncompetes and the resulting ease of employee mobility is part of an advantageous legal framework that has made Silicon Valley’s economy and high levels of technological innovation possible).
public policy of protecting worker freedom of mobility,\textsuperscript{56} its statutory ban on contractual restrictions on employee mobility,\textsuperscript{57} and the rise of the tech economy in the state have led to a burst of recent scholarship that attempts to test the effect, if any, of noncompete enforcement on various business outcomes—in other words, a so-called “California effect.”\textsuperscript{58} Scholars widely assume that, outside of California, firms often use postemployment restrictive covenants for employees,\textsuperscript{59} and recent research demonstrates that the majority of U.S. jurisdictions will allow some level of CNC enforcement.\textsuperscript{60}

Nonetheless, very little is understood about the actual deployment of CNCs and other postemployment restrictions on employee activities in modern business relationships. The extant legal literature focuses on litigated cases and emerging policy responses to contractual restrictions.\textsuperscript{61} In particular, legal researchers have studied the various uses and alleged abuses of noncompete clauses.\textsuperscript{62} This literature includes discussions of the general and specific human capital investment aspects of noncompetes,\textsuperscript{63} as well as how that understanding might be applied to a maximization of the positive spillovers of allowing CNCs in some employment situations and not

\textsuperscript{56} The California Supreme Court has most recently reiterated the state’s strong public policy against postemployment CNCs in \textit{Edwards v. Arthur Andersen, LLP}, 189 P.3d 285, 293 (Cal. 2008).

\textsuperscript{57} California’s anti–employee CNC statute is \textsc{Cal. Bus. \\& Prof. Code} § 16600 (West 2014) (“Except as provided in this chapter, every contract by which anyone is restrained from engaging in a lawful profession, trade, or business of any kind is to that extent void.”). For a detailed discussion of the serendipitous historical origins of California’s ban on employee noncompetes see Gilson, supra note 55, at 613–20.

\textsuperscript{58} See, e.g., Garmaise, supra note 30, at 376 (assessing the effects of tough noncompetition enforcement regimes on executive compensation and stability); Marx, et al., supra note 31, at 879–87 (examining the effects of a temporary repeal of covenant not to compete enforcement on patent-holding employees in Michigan); supra Part I (discussing this developing area of empirical research).

\textsuperscript{59} See, e.g., Lester, supra note 5, at 49 (finding that CNCs “are an increasingly common feature of employment”); see also Whitmore, supra note 5, at 494 n.67 (presenting evidence of a growth trend in appellate decisions involving CNCs, but not directly measuring the actual inclusion of CNCs in employee contracts).


\textsuperscript{62} See, e.g., Arnow-Richman, supra note 9, at 1214–15.

\textsuperscript{63} See Rubin & Shedd, supra note 25, at 93 (suggesting a distinction between general and specific human capital in covenant not to compete law).
others. Studies have also shown that the evolution of state enforcement of noncompetes is trending toward greater enforcement.

Are restrictive covenants for CEOs somehow different than those for other employees? The CEO is an often-discussed figure that is sometimes reviled and sometimes revered, depending on the observer's perspective. Much of the popular debate—as well as the policy and scholarly debates—surrounds the issue of executive compensation. Generally, the legal literature focuses on managerial agency costs and board capture, the fiduciary duties of the officers and directors, and executive compensation in the United States.


65. See Garrison & Wendt, supra note 61, at 164. However, Professors Garrison and Wendt also discuss how courts have seemingly scrutinized noncompete clauses more heavily in the last decades. Id.


67. Adam Davidson, C.E.O.'s Don't Need to Earn Less. They Need to Sweat More, N.Y. TIMES MAG., June 2, 2013, at 14 (describing how CEOs are difficult “to rein in” and “are often rewarded when they don't succeed but are not usually penalized enough when they do a lackluster job”). The author also refers to how boards of directors share a similar problem, and adds that:

Lucian Bebchuk, a professor at Harvard Law School and perhaps the leading academic voice for corporate reform, told me that the problem isn't (just) greed. It's the boards of directors . . . [which] are supposed to represent the stockholders' interests . . . [but] . . . most public firms, where C.E.O.'s can have considerable influence over board appointments, neuter those interests. They are structured so that a board tends to side with its chief.

Id.


69. Posner, supra note 66, at 1018. In his initial critique of CEO oversight, Judge Posner concludes that:

Of all the employees of a corporation, the CEO poses the greatest challenge to the control issue. His performance is especially difficult to evaluate because of the uncertainty that surrounds success in business. And his only "supervisor" is the board of directors because management's advantages in proxy fights prevent shareholders from influencing the compensation policies adopted by the board—and the board, as we shall see, is an unreliable agent of the principal (the shareholders). Even if the literature on performance-based evaluation of corporate executives yielded a reliable method of evaluating the performance of CEOs of large corporations, boards of directors would be unlikely to force it on the CEO.

Id.

70. See, e.g., Muir & Schipani, supra note 33, at 444–57 (focusing on the duty of loyalty to the firm); Randall S. Thomas & Harwell Wells, Executive Compensation in the Courts: Board Capture, Optimal Contracting, and Officers' Fiduciary Duties, 95 MINN. L. REV. 846, 849 (2011) (noting that "recent Delaware court decisions have given new life to officers' fiduciary duties");
and other countries. However, the actual duties and competitive restrictions contained in CEO contracts are less understood.

Nonetheless, a CEO’s central role in a public company must be appreciated to understand the importance of his or her employment contract to the firm. As the top officer of the firm, the CEO reports only to the board of directors and oversees the rest of the company’s employees. The CEO is a highly valuable employee and possesses sought-after skills that set him or her apart in a very competitive marketplace for managerial talent. This unique position at the top of the firm’s governance structure allows the CEO access to all of the firm’s proprietary information, trade secrets, customer and supplier relationships, product cost structures, research and development information, and strategic plans. While other key employees have knowledge of important corporate information, only the CEO will have unfettered access to nearly every aspect of the business and its strategic direction. As a result, the CEO is the employee who can most harm the company if he or she leaves the firm to work for a competitor. Accordingly, CEO and other executive employment contracts may contain a variety of sophisticated restrictive covenants designed to warn the executive about the consequences of any

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see also LARCKER & TAYAN, supra note 22, at 78–89 (explaining various legal obligations, particularly the fiduciary duties of the board and executives).


73. The notable exception is Schwab & Thomas, supra note 19, at 254–57.


75. See Bebchuk, Fried & Walker, supra note 42, at 762:

A successful CEO of a large public company undoubtedly possesses a rare combination of skills and instincts. The CEO must manage an organization with a large number of employees, provide the strategic direction for the firm, and decide when or whether the company should acquire other firms or be acquired. Individuals who possess the necessary attributes might be scarce and competition among firms, particularly for rising stars, might be intense. Of course, compensation is not the only factor in attracting and retaining talent at the very top of the corporate pyramid, but it is an important one.

(footnote omitted).

disloyalty during employment and to provide recourse for the firm should the CEO ever leave and wish to compete against it. 77

How valuable to firms are restrictive covenants in CEO employment agreements? One recent high-profile example illustrates how a company may incur great expense to ensure it faces no competition from a departing executive. In this situation, General Electric’s (“GE”) vice-chairman retired after nearly thirty years of service to the company and received a combined retirement and severance package from the company. 78 The executive’s combined package included an $89,000 per month payment for ten years, as well as stock options, a bonus, and other forthcoming pension benefits worth an estimated $28.3 million dollars. The compensation recognized both recognized the executive’s retirement and that he bargained for “an agreement not to join a GE competitor anywhere in the world for three years.” 79 A GE spokeswoman explained that the executive’s “retirement terms reflect his senior position, long service, and significant contribution to GE as well as our interest in receiving strong noncompete and nonsolicitation agreement protections.” 80 Thus, while it is difficult to break out the value of the competitive restrictions from the overall value of the executive’s retirement package, GE seems to have attached substantial value to controlling its information and human capital investments in the executive following his departure.

Overall, there are two realities about CEOs that we would expect to drive how and how often their employers negotiate CNCs. First, the CEO has greater bargaining power in the employment relationship than most employees. Because a CEO could likely reject any less-than-serious efforts by the company to impose a standard CNC clause, we would expect substantial variation in the presence, or absence, of these clauses in CEO contracts. On the other hand, the


79. Id.

80. Id.
company is more likely to bargain for a CNC in a CEO contract than in other employment contracts because the company fears greater economic harm from postemployment competition by a CEO than by other employees. With the CEO's bargaining power pitted against the company's enhanced desire for restrictive clauses, we would also expect to find significant contractual tradeoffs between CEOs and firms over the clauses' contents.81

B. Nondisclosure Agreements and Other Restrictions

In many employment contracts, the new employee may also find that along with a noncompete, the firm wants him or her to agree to other restrictions during and after the employment relationship. These promises are often related to confidentiality and nondisclosure of proprietary information, soliciting other employees to leave and compete, and working with or for former clients.82 Other mechanisms that serve as disincentives to leaving a firm for new employment opportunities with a competitor include agreements related to contingent compensation and benefits83 and, more recently, garden leave provisions. In addition, in all states, a duly protected and eligible business secret84 will give rise to trade secret protection, and,

81. See Capital One Fin. Corp. v. Kanas, 871 F. Supp. 2d 520, 533–34 (E.D. Va. 2012). In Kanas, two former bank executives had their CNCs enforced, in part because the court felt confident that concerns of equity and fairness in the bargaining process were not a bar to enforcement with these high-level employees. Id. at 538. The court discussed this issue as follows:

Defendants were executives of a publically traded company, responsible for growing North Fork from a small town bank to a corporate behemoth which they would sell to Capital One for $13.2 billion and net the Defendants upwards of $150 million. Beyond [Defendants'] business sophistication, they also received the advice of counsel while negotiating the Separation Agreement. Like their clients, the Defendants' counsel was at the pinnacle of sophistication. Counsel hailed from a preeminent law firm and specialized in executive compensation. Finally, there is no debate that the Defendants, unlike the typical employee, stood "on equal footing at the bargaining table" with their employer.

Id. at 530 (citation omitted).

82. See e.g., Stone, supra note 5, at 578.

83. See Abigail Shectman Nicandri, Comment, The Growing Disfavor of Non-Compete Agreements in the New Economy and Alternative Approaches for Protecting Employers' Proprietary Information and Trade Secrets, 13 U. PA. J. BUS. L. 1003, 1003–04 (2011) (cataloging the alternatives to CNCs as the doctrine of inevitable disclosure, the Uniform Trade Secrets Act, the Computer Fraud and Abuse Act, garden leave agreements, forfeiture-for-competition and the employee-choice doctrine, "no-poach" agreements, and no-fault poaching truces or "fair-poaching" agreements).

84. See, for example, M–I LLC v. Stelly, 733 F. Supp. 2d 759, 772–73 (S.D. Tex. 2010), where the court describes the Uniform Trade Secrets Act application in Texas law concerning the elements of a misappropriation of trade secrets claim, where a plaintiff must show:
in a handful of states, the doctrine of inevitable disclosure may provide further employer protection. Employers often reinforce these two default protections by including contractual language that the employee must overtly acknowledge.

Of these possible restrictive covenants and mobility disincentives beyond a CNC, perhaps the most important one is the nondisclosure agreement, also called a confidentiality agreement. Like CNCs, it is assumed that these secrecy clauses are widely and increasingly used in employment contracts of all types. Unlike a CNC, a standalone NDA does not necessarily restrict an employee’s mobility options. The employee can still move to a competitor, but the information remains exclusively with the last employer and cannot be disclosed or, theoretically, ever used despite being embedded in the employee’s memory.

Moreover, the relative ease of securing and enforcing an NDA brings additional advantages over a CNC, which tends to be more controversial even when CNCs are generally enforceable in a given jurisdiction. Professors Dworkin and Callahan discuss the advantages of NDAs for employers at length, finding that NDAs, in contrast to CNCs, “are enforceable even in states in which anti-

(1) a trade secret existed, (2) the trade secret was acquired through a breach of a confidential relationship or discovered by improper means, and (3) the defendant used the trade secret without authorization from the plaintiff. A trade secret is defined as a “formula, pattern, device or compilation of information used in a business, which gives the owner an opportunity to obtain an advantage over his competitors who do not know or use it.”

(citations and internal quotation marks omitted).


86. See Dworkin & Callahan, supra note 43, at 152–53 (noting that as these clauses seem to be increasingly used there is also a movement toward more employee disclosure through encouraging appropriate whistleblowing); see also James C. Bruno & David C. Hissong, Enforcement of Non-Disclosure Agreements: Does MCLA 445.1901 and Related Case Law Apply in Other States?, MICH. B.J., Jan. 2002, at 58, 58 (explaining how, pursuant to the Michigan Uniform Trade Secrets Act, “Michigan companies often propose NDAs that have no time, geographic, or scope limitations because Michigan law generally permits the complete prohibition on the disclosure of a party’s trade secrets by a third party”), available at http://www.michbar.org/journal/pdf/pdf4/article375.pdf., archived at http://perma.cc/8A3J-JA7J.

87. See Bishara & Westermann-Behaylo, supra note 41, at 13.

88. Dworkin & Callahan, supra note 43, at 156–58 (discussing the options for employers to protect their valuable information and concluding “the law well equips an employer who seeks to keep information about its affairs secure”).
competition clauses are prohibited.” Moreover, they find that “[c]oncerns regarding restraint of trade are much less directly implicated in this context; restrictions on access to information, rather than employee movement, are involved . . . [t]hus, the policy in favor of freedom of contract is given precedence.” Confidentiality agreements are also relatively easy to enforce in comparison to noncompetes, and NDAs have other advantages, such as being “an unambiguous declaration that the employer views firm matters as confidential” and an additional basis for a breach of contract claim.

NDAs are permissible even in states like California where employee noncompete agreements are banned or difficult to enforce. As a practical matter, state common law will prohibit an employee from disclosing an employer’s confidential information, even without a written NDA between the parties. Like in the case of CNC enforcement, states require that the restrictions in an NDA are reasonable in scope and tailored to protect legitimate business interests. In practice, restrictive covenants and their various prohibitions can also be jumbled together within a contract, essentially making the confidentiality agreements part of an employee’s general noncompete terms. Beyond determining if the contemplated confidential information addressed by the NDA is covered by a state’s trade-secret protections (in other words, if it is a trade secret pursuant to a state’s version of the Uniform Trade Secrets Act), some states will specifically evaluate NDAs under a CNC-like

89. Id. at 156–57.
90. Id. (citations omitted).
91. Id. at 157.
92. See Bruno & Hissong, supra note 86, at 58 (discussing California’s “strong public policy against [CNCs]” but enforcement of NDAs).
93. See, e.g., Laro Maint. Corp. v. Culkin, 700 N.Y.S.2d 490, 491–92 (App. Div. 1999); Royal Carbo Corp. v. Flameguard, Inc., 645 N.Y.S.2d 18, 19 (App. Div. 1996) (discussing New York’s common law on employee confidentiality and fair competition, including after the termination of employment). In addition, third parties, such as attorneys or other professionals, may have some liability for aiding an employee’s breach of an NDA. See Maura I. Strassberg, An Ethical Rabbit Hole: Model Rule 4.4, Intentional Interference with Former Employee Non-Disclosure Agreements and the Threat of Disqualification, Part II, 90 NEB. L. REV. 141, 182–83 (2011) (examining the issue of attorney disqualification in instances where counsel participates in the breach of a confidentiality agreement).
94. See, e.g., Revere Transducers, Inc. v. Deere & Co., 595 N.W.2d 751, 762–63 (Iowa 1999) (considering whether the NDA was “reasonably necessary for the protection of the employer’s business” or “unreasonably restrictive of the employee’s rights”).
reasonableness test, albeit with less concern on limiting the scope of the restriction. Nonetheless, NDAs are a useful contractual safeguard (much like CNCs) for an employer's confidential information, ostensibly supplementing noncontractual safeguards like existing state-level trade-secret protections and fiduciary duties to maintain confidentiality. In one sense, NDAs are useful from a human capital investment perspective because, like CNCs, they can encourage information sharing between principals and their agents. These agreements also need not have a stated time limit to be enforced in

96. See, e.g., Revere, 595 N.W.2d at 761-63. In Revere, the Iowa Supreme Court examined a confidentiality clause in an employment agreement as an issue of first impression and consequently reviewed other states’ approaches on the issue of NDAs. Id. at 761. The court concluded that:

[T]he following test should be applied in determining whether a nondisclosure-confidential or invention assignment agreement is enforceable:

(1) Is the restriction prohibiting disclosure reasonably necessary for the protection of the employer’s business;

(2) is the restriction unreasonably restrictive of the employee’s rights; and

(3) is the restriction prejudicial to the public interest?

Id. at 762.

Further, the court noted that “[t]his test is obviously the same as that used to determine the enforceability of a noncompete agreement.” Id. Nonetheless, “the absence of restrictions concerning time or geographic location do not render a nondisclosure-confidentiality, [sic] agreement presumptively unenforceable . . . because the inquiry whether the nondisclosure agreement unreasonably restricts the employee’s rights would address the breadth of the restrictions regarding disclosure.” Id.

97. See, for example, Coady v. Harpo, Inc., 719 N.E.2d 244, 250-51 (Ill. App. Ct. 1999), where the court enforced an NDA with an unlimited scope because it did not significantly hinder the employment activities of a former senior associate producer for the Oprah Winfrey Show. The court rejected arguments that the NDA was too broad in these circumstances because it “remains effective for all time and with no geographical boundaries”; the court stated that, “[w]hether for better or for worse, interest in a celebrity figure and his or her attendant business and personal ventures somehow seems to continue endlessly, even long after death, and often, as in the present case, extends over an international domain.” Id. The court further distinguished the NDA enforcement from other restrictive covenants:

Unlike the traditional line of restrictive covenant cases, the confidentiality agreement at issue in the instant case does not impose any of the typical restrictions commonly adjudicated in restrictive covenant cases. Defendant does not seek to restrain plaintiff’s future career. Plaintiff is free to choose her future occupation, the locale in which she may choose to work, and the time when she can commence her new career. Defendant does not object to plaintiff becoming a journalist, competing with defendant in the same venue and in any locale, including Chicago, and in beginning her new venture immediately. The confidentiality agreement does not restrict commerce and does not restrict plaintiff’s ability to work in any chosen career field, at any time. Instead, the 1995 confidentiality agreement restricts plaintiff’s ability to disseminate confidential information that she obtained or learned while in defendant’s employ.

Id. at 250.

98. See Dworkin & Callahan, supra note 43, at 157 (describing advantages of confidentiality agreements relative to “non-contractual safeguards”).
many states,99 but if the clause is not time limited, then some states will find the confidentiality agreement unenforceable with regard to information that is not otherwise a protectable trade secret.100 In effect, employers use NDAs to attempt to extend an employee’s duty of confidentiality related to information that would not otherwise be protected trade secrets. Examples of confidential information that might not qualify for trade secret protection include the names of a firm’s customers that are not otherwise publically available, suppliers, and strategic plans.101

It is understandable that a firm would want to protect its competitive advantage by limiting the use of its valuable business information by a former employee who moves to a competitor. NDAs are nonetheless subject to criticism. For example, some scholars argue that NDAs can be antithetical to good public policy when an employer uses the contract terms as a pretext to silence otherwise valid whistle-blowing activity.102 Others have suggested that increased workplace transparency can be a new source of protection for employees.103 These same scholars, by implication, disfavor the secrecy that comes with NDAs.

Many questions remain about the use and propriety of CNCs and NDAs: Are these restrictions on otherwise lawful free competition essential instruments for the protection and encouragement of an employer’s investment in the human capital of its employees and the protection of its hard-earned competitive advantage? Or, in contrast, are these agreements legal cover for an employer’s abusive overreaching through contracts of adhesion that seriously curtail employees’ freedom of choice and mobility, as well as harm competition, innovation, and entrepreneurial activity? If these restrictive covenants have a place in managing the employment

99. See, e.g., Coady, 719 N.E.2d at 250–51 (recognizing that a confidentiality agreement scheduled to remain effective indefinitely was reasonable and enforceable).
101. See, e.g., Coady, 719 N.E.2d at 250:
Postemployment restrictive covenants typically involve agreements by a past employee not to compete with the business of her former employer, not to solicit clients or customers of her former employer, and not to disseminate trade secrets of her former employer. The covenants in these typical cases are carefully scrutinized because Illinois courts abhor restraints on trade.
102. See Dworkin & Callahan, supra note 43, at 179–86 (discussing the public policy and practical reasons not to enforce an NDA in certain circumstances).
103. See Cynthia Estlund, Just the Facts: The Case for Workplace Transparency, 63 STAN. L. REV. 351, 364–66 (2010) (theorizing that mandatory disclosure of terms and conditions of employment provide additional protection beyond that of traditional employment contracts).
relationship, human capital investment, and business knowledge diffusion, should only certain types of key employees be allowed to bargain away their future freedom of mobility? When these restrictions are present, what do they tell us about a firm's valuable information and fear of competition?

Since employment contracts are not generally publicly available, researchers have been unable to examine these issues empirically. Taking advantage of the public availability of CEO employment contracts filed with the Securities and Exchange Commission, we turn next to an empirical analysis of their contents to inform the debate.

III. DATA COLLECTION, DESCRIPTION, AND METHODOLOGY

To create our sample, we began by randomly selecting a sample of 500 S&P 1500 public corporations. These companies are subject to the federal securities laws' periodic disclosure requirements and are required to disclose any employment contracts that they have entered into with their CEOs.104 As shown in Table 1 below, our initial sample of 500 firms had 2,109 potential CEO contracts over the time period running from January 1, 1996 to December 31, 2010.105 By potential CEO contracts, we mean that the sample companies had named CEOs in their disclosures that could have had, and in most cases did have, written employment contracts with their employers.

Each named CEO is counted as having at least one potential contract with the firm. There are more potential contracts than firms because over this fifteen-year period some firms had several CEOs and each CEO may or may not have had a contract with the firm.106 Furthermore, for CEOs that had contracts, some had an initial contract with their firm ("Initial Contract"), subsequently entered into a second contract amending the Initial Contract ("Contract Amendment"), and then later entered into a further contract that restated (and sometimes made additional amendments to) the terms of their Initial Contract ("Restated Contract"). Our initial sample counts each of these as a separate contract.

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105. We use the SEC’s EDGAR database for corporate disclosures as our basic source for all of these contracts. Beginning January 1, 1996, all registered U.S. corporations have been required to make electronic disclosures using the EDGAR database.

106. In a small number of cases, firms changed names during the sample period, but we continued to treat these successor firms as the original firms.
Table 1. Description of CEO Contracts in Initial Sample: 1996–2010

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial entries for potential CEO contracts</td>
<td>2,109</td>
</tr>
<tr>
<td>Less: &quot;Implicit&quot; contracts (entries for companies whose CEO does not have a written contract)</td>
<td>673</td>
</tr>
<tr>
<td>Less: Contract amendments</td>
<td>474</td>
</tr>
<tr>
<td>Less: Missing contracts</td>
<td>75</td>
</tr>
<tr>
<td>Less: Companies that could not be found on Compustat</td>
<td>13</td>
</tr>
<tr>
<td>Net usable explicit contracts</td>
<td>874</td>
</tr>
</tbody>
</table>

Having determined the total number of potential contracts (2,109), we subtracted from our sample several different categories of data that are not relevant to our study or which we were unable to collect. First, we set aside all 673 CEOs that potentially could have entered into, but did not enter into, an "explicit" employment contract with their firms for at least some portion of their employments. These potential and nonobservable contracts that we excluded are an interesting sample of "implicit" contracts, which is a category of agreements that other researchers have already examined to address the question of why some CEOs do not have explicit employment contracts with their firms. \(^{107}\) In contrast to the implicit contract examples, we define explicit contracts as the observable employment contract terms, expressed in written form, that contain any information on the negotiated relationship between the parties. \(^{108}\)

In this paper, we focus on examining CEOs that have explicit employment contracts of some sort and determining when those contracts include CNC clauses or other competitive restrictions. \(^{109}\) We

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108. Notably, our definition of what constitutes an explicit contract is seemingly broader—and thus more inclusive—than Gillan, et al.'s, because that study only includes written contracts that are deemed "comprehensive," which still excludes some contracts containing CNCs. See id. at 1629. In Gillan, et al., the contracts excluded "had either no written agreement at all or agreements that covered only limited aspects of their relationship with the CEO, such as change of control, nondisclosure, noncompete, or nonsolicitation agreements. These latter firms and their CEOs relied on implicit [employment agreements] through which the CEO was employed at will." Id. (emphasis in original).

109. Since we are concerned with the content of the contractual relationship, even if it is limited in scope, we capture written contracts that Gillan, et al. would have excluded as not "comprehensive" enough to provide useable evidence. In addition, we look at a sample of S&P 1500 companies, and the rates of usable contracts are comparable across both studies. Gillan, et al. report that only approximately 37% of their sample are usable explicit contracts. See id. at
study explicit contracts because these observable agreements are the only ones that we can code. By their nature, these written agreements provide evidence of the negotiations between the firms and CEOs that we are studying. In theory, we could treat the implicit contracts in the sample as lacking a CNC or any other restriction. However, the reasons that the parties did not memorialize the contract in writing are potentially so varied that relating that choice to some cognizable statement about the CEO’s freedom to engage in postemployment competition seems unsupported in the absence of other evidence.

We also chose to eliminate the Contract Amendments from the sample. These documents are amendments to an existing employment contract and do not restate the prior contract. They, almost universally, are very short documents that contain relatively minor changes to an existing contract, such as changing the specified base salary of the CEO. There were no Contract Amendments in our sample that affected the presence or absence of a CNC clause, so we decided that they did not add any pertinent information to our study. Next, we excluded from our sample all those contracts that companies stated they had entered into but that we could not find attached to any of the companies’ securities filings. Where companies disclosed the existence of a contract, we searched every filing within a two-year period after the date of the contract for contracts entered into after the effective date for mandatory EDGAR filings (January 1, 1996). Thus, we believe that most of the 75 cases where we did not find a contract are likely the result of the company failing to file the contract as required by law. In any event, the

1636–37. Our more inclusive sample finds that approximately 41% of CEO contracts across our entire period have explicit usable contracts. Moreover, Gillan, et al. find that approximately 64% of their explicit contracts had a CNC. Id. at 1639. This rate is lower than the rates that we report in Table 2. See infra Table 2.

110. Moreover, the absence of any evidence of a written employment agreement for a term is not necessarily dispositive of the absence of a noncompete. See, e.g., Tracy L. Staidl, The Enforceability of Noncompetition Agreements when Employment Is At-Will: Reformulating the Analysis, 2 EMP. RTS. & EMP. POL’Y J. 95, 101–08 (1998) (explaining the requirement of adequate consideration to support a CNC in many states).

111. We intend to analyze the reasons why some companies use explicit contracts while others prefer implicit contracts in later work.

112. This approach is consistent with two of the authors’ prior work. See Thomas, O’Hara, & Martin, supra note 104, at 978.

113. For future researchers’ interest, we note that companies are not required to attach these contracts to any particular filing. Therefore, finding them can be a time-consuming and difficult process. Most companies disclosed them as attachments to their Forms 10-K, but we also routinely found them as exhibits to a host of other securities filings.

114. To address this problem, the SEC should clarify its disclosure rules on this issue to specify where companies attach these contracts. Logically, they should be attached as an exhibit to the companies’ Form 10-K filings.
difficulty in finding these contracts seems a likely explanation for why few researchers have previously mined these sorts of documents for clues about the contractual relationships between executives and their employers.

Finally, in thirteen instances we were unable to locate the named company in the Compustat database, which we used to supply several important pieces of information about the sample companies. Accordingly, we excluded those contracts. This left us with a sample of 874 Initial Contracts and Restated Contracts for our analysis.

We next hand coded each of the contracts. We first identified the contracting parties and other aspects of the general employment contract, such as the contract's date of execution and its length. Next, we coded the agreements for the terms related to prohibitions on competition during and after employment. We also coded provisions relating to nonsolicitation of employees and clients, as well as all nondisclosure provisions. These are discussed further in Part IV below.

IV. EMPIRICAL ANALYSIS

Our empirical analysis started with a description of the contracts and the other variables that we compiled for our sample. Table 2 shows the year that each CEO contract was entered into for the 874 contracts. The table shows the total number of sample contracts per year, the number of initial versus restated contracts, and the number and percentage of contracts per year that contain CNC clauses.

115. The full coding manual we developed as a framework for this research is on file with the authors.


IBM requires over 1700 employees to sign noncompetition agreements. More than 300 IBM employees are required to sign a form noncompetition agreement identical to the one signed by Defendant. IBM did not negotiate the terms of these agreements, and historically the agreements were not modified. IBM's noncompetition program works in tandem with a "clawback" mechanism. If an employee violates the noncompetition agreement, IBM can choose to invoke the clawback mechanism and cancel all of that employee's unvested and unexercised equity grants. IBM can also require employees to repay IBM for the equity options the employee has exercised and redeemed within the last two years.

Id. (citations omitted).
Table 2. Time Series of Explicit CEO Contracts: 1996–2010 (\(N = 874\))

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Contracts</th>
<th>Initial Explicit Contracts</th>
<th>Restated Explicit Contracts</th>
<th>Explicit Contracts with CNC Clauses</th>
<th>Percent of Explicit Contracts with CNC Clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>66</td>
<td>51</td>
<td>15</td>
<td>50</td>
<td>75.8</td>
</tr>
<tr>
<td>1997</td>
<td>69</td>
<td>58</td>
<td>11</td>
<td>53</td>
<td>76.8</td>
</tr>
<tr>
<td>1998</td>
<td>89</td>
<td>66</td>
<td>23</td>
<td>72</td>
<td>80.9</td>
</tr>
<tr>
<td>1999</td>
<td>78</td>
<td>64</td>
<td>14</td>
<td>60</td>
<td>76.9</td>
</tr>
<tr>
<td>2000</td>
<td>69</td>
<td>53</td>
<td>16</td>
<td>50</td>
<td>72.5</td>
</tr>
<tr>
<td>2001</td>
<td>81</td>
<td>63</td>
<td>18</td>
<td>64</td>
<td>79.0</td>
</tr>
<tr>
<td>2002</td>
<td>53</td>
<td>45</td>
<td>8</td>
<td>42</td>
<td>79.2</td>
</tr>
<tr>
<td>2003</td>
<td>47</td>
<td>32</td>
<td>15</td>
<td>39</td>
<td>83.0</td>
</tr>
<tr>
<td>2004</td>
<td>42</td>
<td>38</td>
<td>4</td>
<td>32</td>
<td>76.2</td>
</tr>
<tr>
<td>2005</td>
<td>54</td>
<td>45</td>
<td>9</td>
<td>46</td>
<td>85.2</td>
</tr>
<tr>
<td>2006</td>
<td>43</td>
<td>35</td>
<td>8</td>
<td>36</td>
<td>83.7</td>
</tr>
<tr>
<td>2007</td>
<td>49</td>
<td>36</td>
<td>13</td>
<td>40</td>
<td>81.6</td>
</tr>
<tr>
<td>2008</td>
<td>72</td>
<td>32</td>
<td>40</td>
<td>64</td>
<td>88.9</td>
</tr>
<tr>
<td>2009</td>
<td>29</td>
<td>17</td>
<td>12</td>
<td>25</td>
<td>86.2</td>
</tr>
<tr>
<td>2010</td>
<td>33</td>
<td>24</td>
<td>9</td>
<td>26</td>
<td>78.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>874</strong></td>
<td><strong>659</strong></td>
<td><strong>215</strong></td>
<td><strong>699</strong></td>
<td><strong>80.0</strong></td>
</tr>
<tr>
<td><strong>1996–2000</strong></td>
<td><strong>371</strong></td>
<td><strong>292</strong></td>
<td><strong>79</strong></td>
<td><strong>285</strong></td>
<td><strong>76.8</strong></td>
</tr>
<tr>
<td><strong>2001–2010</strong></td>
<td><strong>503</strong></td>
<td><strong>367</strong></td>
<td><strong>136</strong></td>
<td><strong>414</strong></td>
<td><strong>82.3</strong></td>
</tr>
</tbody>
</table>

Overall, 80% of the contracts contain CNC clauses, although the annual average percentage ranged from 72.5% to 88.9%.\(^{117}\) We note that over time the proportion per year of contracts containing CNC clauses increased. To determine if there is a statistically significant increase over the sample period, we did a simple linear regression of the percent of contracts with CNC clauses against the year they were signed. The results indicate that the time trend is statistically significant.\(^{118}\) Moreover, as the bottom rows of the table

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117. Our findings are consistent with the approximately 72% of executive CNCs found by Garmaise, supra note 30, at 379, but they are more specific to CEOs, more discretely categorized by year, and coded for greater details as to the actual terms of the noncompete and other restrictive covenants.

118. The coefficient on the year variable has a t-statistic of 3.00, which is significant at the .001 level.
show, when we compare the 1996–2000 time period to the 2001–2010 decade, we see that a greater percentage of contracts contained CNCs in the last ten years.

We next looked more closely at the CNC clauses to see when they apply. In Table 3, we divide these results into three mutually exclusive categories: postemployment CNC clause only, CNC clause only during the period of the employment contract, and no CNC clause.

<table>
<thead>
<tr>
<th>Table 3. Explicit Contracts with CNC Clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Number of Explicit Contracts</td>
</tr>
<tr>
<td>Percent of Total Contracts</td>
</tr>
</tbody>
</table>

For the full sample of 874 contracts, Table 3 shows that almost 72% (628 contracts) have CNC clauses that restrict only the CEO's postemployment activities. By comparison, only 8.1% (71 contracts) have CNC clauses that act solely to restrict the CEOs activities during employment. Finally, 20% (175 contracts) do not include CNC clauses.

A. Why Do CEOs Have Competitive Restrictions in Their Contracts?

Theory suggests that the rational employer will seek the broadest protections allowable in its jurisdiction. Generally, what is protectable is defined by a common-law reasonableness test where courts scrutinize the terms of the restriction on anticompetitiveness grounds and balance the business interests at stake against the employee's interests. For instance, court records indicate the pervasiveness of restrictive covenant use in certain firms and for specific types of workers. The international cosmetics firm Estee Lauder brought a lawsuit against Shashi Batra, a highly compensated former executive. Estee Lauder accused Mr. Batra of moving to a

119. See Posner, Triantis & Triantis, supra note 25, at 3.
120. For discussion of noncompete enforcement, see supra Part II.A.
121. See, e.g., Visentin, 2011 U.S. Dist. LEXIS 15342, at *4 (noting that over 1,700 IBM employees were asked to sign some form of restrictive covenant).
competitor and soliciting other managers in violation of his multilayered restrictive covenants. The court record reveals that the firm paid a large signing bonus of $100,000 in consideration of the agreements and that Estee Lauder asks all its employees to sign similar restrictions. These records show that “the evidence demonstrates that restrictive covenants are common in the prestige cosmetics industry.” In this case, the court found that a twelve-month noncompete was reasonable and that “the risk of Batra’s loss of livelihood [was] entirely mitigated by the fact that Estee Lauder [would] continue to pay Batra his salary of $375,000 per year for the duration of the ‘sitting out’ period” and because he was also permitted to receive compensation from noncompeting employment during that period.

We begin by examining whether a prior CEO’s contract with the company, or the current CEO’s prior contract, included a CNC clause and how that relates to the inclusion of a CNC clause in a later contract. We undertake this analysis to determine all of the factors that may influence the company’s decision to include a noncompete clause in a subsequent CEO employment contract. One important reason may be path dependence: that is, that the company has included a CNC clause in prior CEO or other executive contracts or even all employees’ contracts—and therefore, the company subsequently includes such a clause in the new agreement.

123. Id. at 162-65.
124. Id. at 162. In explaining the facts of the case, the court summed up the underlying compensation in support of the employee’s contract terms:

At the commencement of his employment, Batra [the senior executive] signed an employment agreement with Estee Lauder, which contained confidentiality, non-solicitation, non-competition provisions. In return for signing the agreement (which all Estee Lauder employees are required to sign) Batra received a $100,000 signing bonus. In addition, Batra was provided with a compensation package of $300,000 per year, benefits, an automobile allowance, stock options, and bonus eligibility. On July 1, 2004, Batra’s base salary was increased to $325,000. In July, 2005, in conjunction with his new responsibilities for [a subsidiary], Estee Lauder increased Batra’s base salary to $375,000.

Id. (emphasis added) (citations to transcripts omitted).
125. Id. at 182.
126. Id.
127. For example, some companies have a blanket policy that all senior managers or high-level executives must agree to restrictive covenants. See, e.g., Int’l Bus. Machs. Corp. v. Visentin, No. 11 Civ. 399 (LAP), 2011 U.S. Dist. LEXIS 15342, at *5 (S.D.N.Y. Feb. 16, 2011), aff’d, 437 Fed. App’x 53 (2d Cir. 2011) (describing IBM’s noncompetition program).
128. In one reported example, a large international firm asks all of its employees—even when the employee is based in California—to sign a restrictive covenant. Batra, 430 F. Supp. 2d at 162.
129. As an example of why this would happen, one can imagine that if the company’s counsel drafts the initial version of the new contract, he or she would simply mark up the prior
To go beyond anecdotal evidence in reported cases about how companies use restrictive covenants for certain employees and to test for path dependence with these covenants, Table 4 separates out the 513 instances in which a company had at least two CEO contracts in our sample (regardless of whether the same CEO was party to multiple contracts).\textsuperscript{130}

### Table 4. CNC in Prior Explicit CEO Contract\textsuperscript{131}

<table>
<thead>
<tr>
<th></th>
<th>CNC in Prior Contract</th>
<th>No CNC in Prior Contract</th>
<th>Total (Percent of Grand Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNC in Subsequent Contract</td>
<td>385</td>
<td>38</td>
<td>423 (82.5)</td>
</tr>
<tr>
<td>No CNC in Subsequent Contract</td>
<td>25</td>
<td>65</td>
<td>90 (17.5)</td>
</tr>
<tr>
<td>Total (Percent of Grand Total)</td>
<td>410 (80.3)</td>
<td>103 (19.7)</td>
<td>513 (100.0)</td>
</tr>
</tbody>
</table>

We find both a CNC in the prior contract and a CNC in the subsequent contract in 385 cases. In another 38 cases where we had more than one contract for a company, the company did not have a CNC clause in a prior contract but did have a CNC clause in the later contract. Finally, of the remaining cases, 65 involved situations where there was no CNC in the prior contract or in the current contract. The final 25 companies included a CNC in an earlier contract but not a subsequent contract.

To determine if there is a statistical relationship between the presence of a CNC in a prior contract and its presence in a subsequent contract, we used a contingency table approach and calculated a chi-square statistic, 24.33, which is significantly different from zero at the .0001 level.\textsuperscript{132} In other words, this finding is consistent with our contract without changing an existing CNC clause. Subsequent renewal negotiations with the same CEO or with a new CEO candidate might not change the initial language sufficiently to remove the CNC clause.

\textsuperscript{130} Here we are examining the relationship across contracts with the same firm, not the individual CEOs, to better understand the path dependence of these particular contract terms.

\textsuperscript{131} This table includes only observations with at least two sample contracts per company but does not include the first contract.

\textsuperscript{132} To analyze count data, such as that in Table 4, we employ a contingency table approach. This approach tests the classification of data according to whether a CNC is in the prior contract and whether the sample contract that contains a CNC is independent. The appropriate test statistic for such a test is a chi-square test. If the p-value associated with the
hypothesis that the presence of a CNC in an earlier contract will lead to a CNC showing up in a subsequent contract at the same firm.

We next considered whether a contract's term is a significant predictor of a CNC. We hypothesized that contracts binding the parties for a longer period of time are more likely to include CNC clauses. Our reasoning is that the longer the CEO is expected to be with the firm, the more valuable knowledge that he or she will have acquired. This knowledge would be potentially harmful to the employer if the CEO were to go to work for a competing firm, hence the need for greater protection in the form of a CNC clause.

Table 5 breaks out the distribution of the length of the CEO contracts separately for the full sample of contracts and then for the subsample of contracts that contain a CNC clause. We include rows for contracts where the contract length is not mentioned or the relationship is at will, or is for an indefinite period (142 contracts); the contract expires when the CEO is terminated (59 contracts); the contract's length is tied to the CEO reaching retirement age or retiring (6 contracts); or where the contract states it is for a definite term but the length is actually unspecified (1 contract). We then grouped contracts with stated terms by their lengths in years. We selected year intervals to create a manageable number of rows.

chi-square test statistic is smaller than a critical level, say .10, then we reject the null hypothesis of independence between the classifications at that level of significance. WILLIAM MENDENHALL & JAMES E. REINMUTH, STATISTICS FOR MANAGEMENT AND ECONOMICS 471–85 (2d ed. 1974).

133. We recognize that the interpretation of contract length can be uncertain because contracts that are for even a lengthy term may be accompanied by liberal termination provisions elsewhere in the employment contract that give an employer wide discretion to end the employment at nearly any moment. See, e.g., Schwab & Thomas, supra note 19, at 246–48. On the other hand, contracts with no term or a relatively short term can still continue indefinitely in the sense that the parties are free to continue the employment relationship going forward. It is also the case that CEO contracts of any length are often renewed multiple times. Nonetheless, in the context of CEOs, the stated length of a contract is still credible evidence of the parties' intent at the conclusion of negotiations. We, therefore, use the stated length of the contract—or a lack of a stated term—as a useful variable to understand what the parties value and are willing to accept with regard to the CEO's expected tenure at the firm.

134. In each of these cases, the contract has an effective length of zero so we group them together.
Table 5. Length of Explicit CEO Contracts that Include CNC Clauses

<table>
<thead>
<tr>
<th>Contract Length</th>
<th>Total Number of Contracts</th>
<th>Number of Contracts with CNC Clause</th>
<th>Percent of Contracts with CNC Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length not mentioned/At-will/Indefinite period</td>
<td>142</td>
<td>92</td>
<td>64.8</td>
</tr>
<tr>
<td>Until CEO quits or is terminated</td>
<td>59</td>
<td>41</td>
<td>69.5</td>
</tr>
<tr>
<td>Until CEO reaches retirement age or retires</td>
<td>6</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Contract length missing</td>
<td>1</td>
<td>1</td>
<td>100.0</td>
</tr>
<tr>
<td>0 &lt; Length ≤ 1 year</td>
<td>71</td>
<td>53</td>
<td>74.7</td>
</tr>
<tr>
<td>1 &lt; Length ≤ 2 years</td>
<td>102</td>
<td>88</td>
<td>86.3</td>
</tr>
<tr>
<td>2 &lt; Length ≤ 3 years</td>
<td>288</td>
<td>248</td>
<td>86.1</td>
</tr>
<tr>
<td>3 &lt; Length ≤ 4 years</td>
<td>58</td>
<td>49</td>
<td>84.5</td>
</tr>
<tr>
<td>4 &lt; Length ≤ 5 years</td>
<td>110</td>
<td>94</td>
<td>85.5</td>
</tr>
<tr>
<td>Length &gt; 5 years</td>
<td>37</td>
<td>32</td>
<td>86.5</td>
</tr>
<tr>
<td>Total</td>
<td>874</td>
<td>699</td>
<td>80.0</td>
</tr>
</tbody>
</table>

These data suggest that longer employment contracts are more likely to include CNC clauses. For example, for short-term contracts that expire within one year, only roughly 74.7% have CNC clauses. Similarly, only 64.8% of indefinite length contracts, at-will contracts, and contracts that do not mention length—all of which have effective lengths of zero—have CNC clauses. In sum, 67.4% of all short or zero-term contracts have CNC clauses. By contrast, 85.9% of the longer term contracts, those that are more than one year in length, have CNC clauses. This is a statistically significant difference, which provides evidence of a positive relationship between the length of a contract and the existence of a CNC clause in the contract. The average length of contracts that contain a CNC clause is 30.56 months, whereas the average length is just 20.24 months in contracts lacking a CNC. The t-value, derived from a t-test of this difference, is 5.63, which is statistically significant at the .01 level.

Prior research has found that the enforceability of CNC clauses varies across states,135 which is an issue of keen importance to

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135. See generally Bishara, supra note 60, at 756–57 ("[S]tate law . . . related to noncompetes varies such that the enforceability of a post-employment restriction on an employee's mobility will be uncertain.").
We, therefore, hypothesized that a further factor that may influence the inclusion of a CNC clause is the state in which the contract will be enforced. For example, California is noted as being one of two states in which the courts do not enforce postemployment noncompete agreements. Thus, we hypothesize that companies with contracts that are likely to be contested in the state of California might be less likely to include CNC clauses. We test this hypothesis using our data, which are displayed in Table 6 below.

### Table 6. CNC Clauses and the California Effect in Explicit CEO Contracts

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Number of Contracts in Sample</th>
<th>Number in Sample with CNC Clause Present (%)</th>
<th>Number in Sample with No CNC Clause Present (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary location in California</td>
<td>162</td>
<td>101 (62.4)</td>
<td>61 (37.6)</td>
</tr>
<tr>
<td>Primary location not in California</td>
<td>712</td>
<td>598 (84.0)</td>
<td>114 (16.0)</td>
</tr>
<tr>
<td>Chi-square (p-value)</td>
<td>38.6 (&lt;0.0001)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows that 162 of the sample contracts came from firms headquartered in California. Of these contracts, only 62.4% (101 contracts) include CNC clauses. By comparison, we analyzed 712 contracts from firms that, according to Compustat, are primarily located outside California. For these contracts, 84% (598 contracts) have noncompete agreements. To see if this difference is statistically significant, we conducted a chi-square test. We found that the test statistic was 38.60, which is highly statistically significant, and consistent with our hypothesis that there is a strong California effect in our data.

136. For example, the American Bar Association sponsors a multi-volume treatise, now in its ninth edition, surveying aspects of noncompete law across all U.S. jurisdictions. See AM. BAR ASS’N SECTION OF LABOR & EMP’T LAW, COVENANTS NOT TO COMPETE: A STATE-BY-STATE SURVEY (Brian M. Malsberger et al. eds., 9th ed. 2013).

137. See supra text accompanying notes 55–57 for a discussion of California law related to the state’s ban on postemployment CNCs.

138. To code for enforcement state, we use the variable “Primary Location” as provided in the Compustat electronic database. Primary location correlates to a firm’s headquarters and, thus, where the CEO is likely to primarily work and where enforcement would logically be sought in the absence of an explicit choice-of-law provision.

139. We started by using Compustat’s primary location variable. If we did not have a value from that database, we used information from the sample on the state choice of law stated in the contract.
Rather than just focusing on one state’s lack of enforceability of CNC clauses, we also used a broader measure, an “enforceability index,” developed by one of the authors.\textsuperscript{140} The index weights various factors that impact how strictly an individual state will enforce a CNC clause in an employment contract.\textsuperscript{141} In untabulated results,\textsuperscript{142} we found that the mean of the enforceability index for the subsamples of contracts with CNC clauses is 307.6 (median = 350), while the contracts without CNC clauses have a mean enforceability value of 241.9 (median = 310). The t-statistic for the difference in means is 5.70, which is highly significant (at less than the .0001 level). However, the test for a difference in the medians is not statistically significant. In sum, these statistics provide some, but not definitive, evidence that the level of enforceability is an important factor in the presence of a CNC clause in a CEO’s employment contract.

\textbf{B. How Long Do These Competitive Restrictions Last and What Do They Say?}

We turn next to the question of how long CNCs and the other competitive restrictions last and what their provisions say. To better understand how these clauses are constructed and what they tell us, we categorized the scope of CNCs and other restrictive covenants, such as nondisclosure agreements in employment contracts, in two broad ways. First, we grouped these restrictions by the postemployment activities they prohibit, such as working for a competitor or soliciting coworkers to also leave the firm. Second, we collected information on how the contracts define these prohibitions, such as the length of the restriction on competition and the geographic area concerned. In addition, we gathered data on what events or activities trigger the firm’s right to enforce the restriction, and what enforcement mechanisms and penalties the firms negotiated into the contract.

Table 7 presents data on the length of the CNC restrictions in the contracts. The main problem with these data is that, while many contracts are not triggered by a specified reason for termination, a significant number of contracts have different provisions for different types of terminations, such as a termination by the firm for cause or

\begin{itemize}
  \item \textsuperscript{140} For a detailed description of this state-by-state enforcement index, see Bishara, \textit{supra} note 60, at 772–79.
  \item \textsuperscript{141} We determined the enforcement index for each CEO contract by that contract’s state choice-of-law variable. If the contract was missing such a clause, then we used the contract’s choice-of-forum clause. If that was also missing, then we used the company’s primary location.
  \item \textsuperscript{142} For further information about untabulated results, please contact the authors.
\end{itemize}
termination by the employee for good reason. We assigned such contracts a length based on the maximum specified CNC length for any termination.\footnote{143. The alternative was to produce a table with far too many rows with a small number of observations that would be very difficult to read. We do have the data for these different terms on file though, and a table presenting it can be made available upon request.}

### Table 7. Length of Restrictions Contained in CNC Clauses

<table>
<thead>
<tr>
<th>Length</th>
<th>Number of Contracts with CNC Clause with No Specified Reason for Termination</th>
<th>Maximum Specified CNC Length for Any Termination</th>
<th>Total Contracts with CNC Clause (Percent of Total Contracts Examined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length not mentioned</td>
<td>2</td>
<td>110</td>
<td>112 (16.0)</td>
</tr>
<tr>
<td>Other triggering event for the limit of the noncompete restriction</td>
<td>49</td>
<td>38</td>
<td>87 (12.5)</td>
</tr>
<tr>
<td>0 &lt; Length ≤ 1 year</td>
<td>154</td>
<td>75</td>
<td>229 (32.8)</td>
</tr>
<tr>
<td>1 &lt; Length ≤ 2 years</td>
<td>161</td>
<td>61</td>
<td>222 (31.8)</td>
</tr>
<tr>
<td>2 &lt; Length ≤ 3 years</td>
<td>11</td>
<td>27</td>
<td>38 (5.4)</td>
</tr>
<tr>
<td>Length &gt; 3 years</td>
<td>7</td>
<td>4</td>
<td>11 (1.6)</td>
</tr>
<tr>
<td>Situation best covered by another CNCTIME code</td>
<td>315</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>699</td>
<td>315</td>
<td>699 (100.0)</td>
</tr>
</tbody>
</table>

Using this methodology to assign restriction lengths, we found that the most common lengths are greater than zero, up to one year (32.8%) and greater than one, up to two years (31.8%). A small percentage of restrictions last up to three years (5.4%), and an even smaller group purports to bind a CEO for more than three years (1.6%).

If a CNC is in effect, how does it restrict a CEO's actions? In untabulated results, we found that there are several types of prohibited conduct. First, in approximately 80% of the contracts, the CNC prohibits the CEO from engaging in a number of activities with any competing company. These include managing, financing, or controlling a competitor, but exclude holding a nominal equity stake (usually in the 1% to 5% ownership range). At a majority of firms with CNCs, an additional set of prohibitions bar a CEO from taking a consulting role with a competing firm (54.8% of contracts).
More broadly, CNCs prohibit working for a competitor. In 89% of the agreements with CNCs, the CNCs forbid the CEO from working for either broad types of competing firms, specific firms, or just "competitors." Perhaps because many CEOs are close to the end of their careers and may want to use their expertise after their roles end, 54% of contracts specifically prohibit entering a consulting agreement with a competitor, even though consulting may already be covered by the general prohibitions on working for a competitor. Typically, when a trial court is asked to enforce a noncompete clause, a broad prohibition on "competition" concerning a protectable interest is not unreasonable per se. Rather, the court determines whether the terms of the restriction are narrowly tailored to serve the employer's legitimate protectable business interest and, on balance, whether enforcing the restriction is impermissibly harmful to the employee or injurious to the public.

Noncompete clauses have evolved to prohibit specific actions in addition to the broad, general restrictions against all forms of competition. Noncompetes are generally assumed to prohibit "poaching" a firm's employees and clients. The harm from poaching arises in several ways. The primary fear is that when the CEO leaves, he or she will skim the top talent from the firm. In that case, the former CEO might hire away the most valuable employees and effectively transfer that human capital and valuable knowledge to a competitor. Even where that competitor is a startup, the valuable employees give the new company an impressive edge in attaining a competitive advantage. In the case of a prohibition on the

144. See, e.g., BDO Seidman v. Hirshberg, 712 N.E.2d 1220, 1223 (N.Y. 1999) (holding that a restrictive employment covenant is subject to scrutiny, but not unreasonable per se).
145. Id.
146. In addition to the contractually agreed-upon restrictions on otherwise lawful competition contained in a CNC, it is common for an aggrieved employer to assert tortious interference with contractual relations against a competitor or former employee involved in the recruiting of the firm's employees who are under employment contracts, NDAs, or CNCs of their own. See, e.g., MCS Servs., Inc. v. Jones, No. WMN-10-1042, 2010 WL 3895380, at *5 (D. Md. Oct. 1, 2010). The Jones court identified the five elements a plaintiff must demonstrate to support a claim for tortious interference with contract: (1) the existence of a contract between the first employer and the employee; (2) the new employer's knowledge of that contract; (3) the new employer's "intentional interference with that contract"; (4) the employee's breach of that contract; and (5) damages accruing to the former employer. Id. In addition, "the contract breached must be valid and the interference must have been wrongful and without justification." Id. (citations omitted). See also Revere Transducers, Inc. v. Deere & Co., 595 N.W.2d 751, 764–66 (Iowa 1999) (approving a claim for tortious interference with an employment agreement containing various restrictive covenants).
147. Soliciting the business and services of former coworkers and clients is disparagingly known as "poaching." See Kim, supra note 13, at 2.
148. Id.
149. See, e.g., Bishara & Westermann-Behaylo, supra note 41, at 2, 8.
solicitation of a firm's customers or clients, the protected interest is even clearer: customers and clients are revenue sources, and those relationships, often cultivated at great expense over many years, can serve as a source of competitive advantage.150

Accordingly, to explore the use of these specific CNC terms, we coded a subset of restrictions related to the solicitation of current employees to leave the firm and the solicitation of clients and customers.151 Our results support assumptions about the widespread use of these two prohibitions on soliciting other employees and customers. We found, in untabulated results, that 75.6% of CNCs prohibit soliciting employees. Some clauses specified exceptions, such as permission for the CEOs to hire away their personal assistants.152

Even though customer and client solicitation seemingly has a more direct potential impact on a firm's finances, in untabulated results, we found that only 50.8% of CNCs prohibit it.153 This discrepancy seems to indicate that the estimated harm to the business from a departing CEO subsequently hiring away other valuable employees is greater than the prospect of a former CEO luring away customers and clients.

For either type of nonsolicitation clause to be enforceable, the contract must limit its scope to a reasonable length of time.154 Some states' noncompete statutes explicitly provide ranges of reasonable lengths for specific professions.155 Courts reviewing CNCs apply the traditional reasonableness test on a case-by-case basis, giving a court the discretion to decide the reasonable scope of each restriction.156


151. For a recent discussion of the boundaries of solicitation of former clients and customers by a departing employee or the new employer, see Bessemer Trust Co. v. Branin, 949 N.E.2d 462, 469-71 (2011).

152. In the remaining 24.5% of the contracts with a CNC clause, there is no nonsolicitation clause related to approaching or hiring other employees.

153. In the remaining 49.2% of contracts with CNC clauses, there is no nonsolicitation clause related to soliciting customers or clients.

154. See Johnson, supra note 14 and accompanying text.

155. For example, the State of Tennessee has a detailed framework of noncompete legislation that specifically discusses restrictive covenants for physicians and limits the restriction to a period of two years. TENN. CODE ANN. § 63-6-204 (2014); id. §§ 63-1-148, 63-6-603, 68-11-205 (2012).

156. See, for example, EarthWeb, Inc. v. Schlack, 71 F. Supp. 2d 299, 312 (S.D.N.Y. 1999), an oft-cited case representing an early application of the traditional reasonableness test to the restrictive covenants in the digital world in which the court considered how some high-tech knowledge will quickly become obsolete, and thus, the reasonableness of any restriction to protect such information will be judged in that context.
Generally, a court will deem a CNC length of two years or less an acceptable time restriction. The data in Table 8 shows that both types of restrictions are overwhelmingly limited to either a period of one year or less, or a period between one and two years. Further, when we combined those two time periods, the data indicated that 73.1% of employee nonsolicitation clauses and 72.6% of customer nonsolicitation clauses had a restrictive scope of two years or less. Interestingly, these are very similar to the lengths of the general CNC restrictions shown in Table 5.

Table 8. Number of Explicit Contracts by Restriction Length of Time for Nonsolicitation Clauses Prohibiting (1) Approaching or Hiring Other Employees and (2) Approaching or Otherwise Interacting with Customers or Clients of the Employer

<table>
<thead>
<tr>
<th>Clause Length</th>
<th>1. Number of Employee Nonsolicitation Clauses (Percent of Total)</th>
<th>2. Number of Customer or Client Nonsolicitation Clauses (Percent of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time is not specified</td>
<td>104 (18.3)</td>
<td>75 (20.2)</td>
</tr>
<tr>
<td>0 &lt; Length ≤ 1 year</td>
<td>221 (38.8)</td>
<td>128 (34.4)</td>
</tr>
<tr>
<td>1 &lt; Length ≤ 2 years</td>
<td>194 (34.1)</td>
<td>135 (36.3)</td>
</tr>
<tr>
<td>2 &lt; Length ≤ 3 years</td>
<td>26 (4.6)</td>
<td>15 (4.0)</td>
</tr>
<tr>
<td>&gt; 3 years</td>
<td>7 (1.2)</td>
<td>7 (1.9)</td>
</tr>
<tr>
<td>Length varies depending on the reason the CNC restriction is triggered</td>
<td>17 (3.0)</td>
<td>12 (3.2)</td>
</tr>
<tr>
<td>Total</td>
<td>569 (100.0)</td>
<td>372 (100.0)</td>
</tr>
</tbody>
</table>

These results indicate that contract negotiations often yield what would likely be a reasonable and enforceable time restriction. In contrast, relatively few contracts (approximately 15) have what courts would probably consider an unreasonable restriction lasting for over three years. In other words, the negotiated terms tend to

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157. For example, see statutes in Oregon, OR. REV. STAT. § 653.295 (2012) (stating that two years from termination is reasonable, while any additional time exceeding the two years is voidable and unenforceable), and South Dakota, S.D. CODIFIED LAWS § 53-9-8 to 53-9-12 (2012) (stating that two years from date of termination is presumptively reasonable).

158. See, e.g., USI Ins. Servs., LLC v. Miner, 801 F. Supp. 2d 175, 190–91 (S.D.N.Y. 2011) (reiterating New York’s recognition of nonsolicitation covenants in employment agreements when needed “to prevent a disclosure of trade secrets or confidential information or where an employee’s services are unique or extraordinary” and finding a two-year restriction not overly broad in light of previous cases cataloging insurance industry CNC standards).

159. When an agreement is challenged, the courts have discretion to determine the reasonable duration of a CNC restriction. See, e.g., EarthWeb, Inc. v. Schlack, 71 F. Supp. 2d at 313 (holding that, on the facts, even a one-year restriction was “too long given the dynamic
comply with the underlying noncompete enforcement principles applied to these contracts.

Table 9 provides data on the geographic scope of CNCs. Over 40% of these clauses are silent about their geographic scope; presumably, the parties to these contracts rely on preexisting common-law rules to set geographic limits. Generally speaking, courts will uphold geographic limitations if they are “reasonable” in scope. Additionally, in some circumstances, courts will uphold CNCs even when the geographic scope is worldwide.

Table 9 shows that if a CNC provides a geographic scope, that scope most frequently comprises any locations where the employer operates (38.3% of contracts). Most courts will uphold CNCs that are limited to areas where the employer operates so long as they are also reasonable in time. The remaining categories are much broader: about 10% of covenants cover the entire United States, another 5.3% purport to bar the employee from working anywhere in the world, and the remaining 4.3% are limited to an area smaller than the entire United States, but broader than the employer’s places of business. While courts have previously enforced relatively short global competition prohibitions, very broad geographic prohibitions that do not legitimately protect employer interests can be overly burdensome to employees without protecting legitimate employer interests.

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nature of [the] industry, its lack of geographical borders, and [the departing employee’s] former cutting-edge position”.


161. See id.


164. See, e.g., Schlack, 71 F. Supp. 2d at 313 (noting that an employer’s “wish[ ] to insulate himself from competition” should not overcome the “public policy which militate[s] against sanctioning” job loss); see also Wayne S. Moskowitz, Enforceable Covenants Not to Compete, FINDLAW (Mar. 26, 2008), http://corporate.findlaw.com/business-operations/enforceable-covenants-not-to-compete.html, archived at http://perma.cc/HL8J-TVWA (noting that, in determining enforceability of noncompete covenants, courts consider “whether the covenant is too broad and [thus] unduly burdensome” on an employee).
Table 9. Stated Geographic Scope of CNC Restrictions

<table>
<thead>
<tr>
<th>Geographic Restriction Scope</th>
<th>Number Within each Geographic Category (Percent of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No geographic scope stated</td>
<td>292 (41.8)</td>
</tr>
<tr>
<td>Within the U.S. but less than the entire U.S.</td>
<td>30 (4.3)</td>
</tr>
<tr>
<td>Covers the entire U.S.</td>
<td>71 (10.2)</td>
</tr>
<tr>
<td>Covers the entire world</td>
<td>37 (5.3)</td>
</tr>
<tr>
<td>Covers anywhere the employer operates</td>
<td>268 (38.3)</td>
</tr>
<tr>
<td>Missing</td>
<td>1 (0.1)</td>
</tr>
<tr>
<td>Total</td>
<td>699</td>
</tr>
</tbody>
</table>

In many of these contracts, we found agreements related to CEO use of valuable firm information, both during and after employment. NDAs, or confidentiality agreements, serve to restrict the use or sharing of information the firm wants to keep proprietary. These restrictive covenants are not CNCs because they do not prohibit postemployment competition per se and, as such, are generally permissible in all jurisdictions. 165 These covenants would be supplemented by a state’s trade secret laws even absent a contract clause covering the information. 166 While, again, the specific parameters of enforcement vary by state, some courts will treat NDAs as less onerous and problematic than CNCs and enforce them more readily than noncompetes, 167 perhaps because a CNC curtails the employee’s future employment itself and is more clearly anticompetitive. Also, while an NDA umbrella will cover information that may qualify as a trade secret, NDAs protect a firm’s information even if the information would otherwise not be a protectable trade secret. 168

Thus, we predict that the prevalence of NDAs would exceed the other restrictive covenants we observed. As Table 10 demonstrates,

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165. Again, jurisdictions vary in their approaches to enforcing confidentiality agreements, with some allowing wide enforcement of NDAs, while others will enforce them under the same reasonableness standard as a CNC, or treat them like CNCs, but with scrutiny on the scope of the restrictions. See, e.g., Chris Montville, Note, Reforming the Law of Proprietary Information, 56 DUKE L.J. 1159, 1180–83 (2007).

166. See, e.g., Hertz v. Luzenac Grp., 576 F.3d 1103, 1108–09 (10th Cir. 2009) (discussing the elements of a protectable trade secret).

167. See Courtroom Scis., Inc. v. Andrews, No. 3:09-CV-251-O, 2009 WL 1313274, at *10 (N.D. Tex. May 11, 2009) (“Nondisclosure agreements are not always seen as restraints of trade in Texas law. However, they are treated like non-compete agreements when the practical effect of the nondisclosure covenant prohibits the former employee from competing against the former employer and using the general knowledge acquired in that employment.”) (citations omitted).

93.4% of contracts with a CNC also included an NDA, while only 87.1% of all contracts in the full sample contained one. Table 10 also reveals that nearly 65% of these NDAs are intended to last indefinitely by their terms. Another 17% of these clauses do not mention length; thus, the parties presumably intended these provisions to potentially last indefinitely.

### Table 10. Length of Nondisclosure/Confidentiality Agreements

<table>
<thead>
<tr>
<th>Length of Nondisclosure/Confidentiality Agreements</th>
<th>Number (Percent of 699 contracts with a CNC)</th>
<th>Number (Percent of all 874 contracts in sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite length</td>
<td>452 (64.7)</td>
<td>517 (59.2)</td>
</tr>
<tr>
<td>Other triggering event for the termination of this restriction</td>
<td>23 (3.3)</td>
<td>25 (2.9)</td>
</tr>
<tr>
<td>The restriction remains only during employment and until employee quits or is terminated</td>
<td>4 (0.6)</td>
<td>6 (0.7)</td>
</tr>
<tr>
<td>Contract does not mention length</td>
<td>119 (17.0)</td>
<td>147 (16.8)</td>
</tr>
<tr>
<td>0 &lt; Length ≤ 1 year</td>
<td>5 (0.7)</td>
<td>8 (0.9)</td>
</tr>
<tr>
<td>1 &lt; Length ≤ 2 years</td>
<td>27 (3.9)</td>
<td>31 (3.5)</td>
</tr>
<tr>
<td>2 &lt; Length ≤ 3 years</td>
<td>11 (1.6)</td>
<td>12 (1.4)</td>
</tr>
<tr>
<td>Length &gt; 3 years</td>
<td>12 (1.7)</td>
<td>15 (0.6)</td>
</tr>
<tr>
<td>No NDA provision</td>
<td>46 (6.6)</td>
<td>113 (12.9)</td>
</tr>
<tr>
<td>Total</td>
<td>699 (100.0)</td>
<td>874 (100.0)</td>
</tr>
</tbody>
</table>

However, the choice of an indefinite and undefined NDA length is so pervasive that this trend may indicate that acquiescing to a strong NDA is a common signal from CEOs that they intend to be loyal and do not have plans to ever use their employers’ information or even hold other positions. This is likely because a CEO of a public company is usually nearing the end of his or her career when he or she joins the firm. In any event, the popularity of the indefinite restriction indicates that, at a minimum, firms prefer to have the strongest possible promises from their CEOs to protect confidential information. These findings are curious in light of U.S. courts’ tendency to disfavor unreasonably long noncompete provisions.\(^{169}\)

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\(^{169}\) See e.g., Schlack, 71 F. Supp. 2d at 313:

[Considerations such as the rapid deterioration of the value of technical knowledge] predominate here, making a one-year restrictive covenant unreasonably long. While courts may ‘blue pencil’ such provisions to make them shorter and hence enforceable, this Court would decline to exercise its discretion to do so in this case because, as discussed above, the employment agreement as a whole overreaches.

(citations omitted).
Next, we looked in greater depth at the specific restrictions in the NDAs for more evidence of what firms value in terms of the information they seek to withhold from outsiders. As expected, these agreements cover a variety of topics, with the choice of what to include likely related to the type of industry and what information the employer specifically considers valuable.\textsuperscript{170}

As with the NDA length variable, we found, in untabulated results, that the majority of firms will seek the broadest possible restrictions. This goal is evidenced by the 80% of NDAs that attempt to expansively cover “all confidential information” available to the CEO. The NDAs also often cover trade secrets and formulas (54.9% in this sample), which presumably would already qualify for protection under most jurisdictions’ trade secret laws. The inclusion of this somewhat redundant protection could be seen as proof that the firm highly values both the information and an employee’s acknowledgment that such information is protected. Nonetheless, the term is not so prevalent as to necessarily be a potentially meaningless boilerplate term.

Additionally, specific categories of prohibited disclosures that appear regularly in the agreements are customer lists (37.2% of agreements); proprietary processes, including confidential production methods and business plans (54.6% of agreements); marketing plans and strategies (43.5% of agreements); and inventions (17.9% of agreements).\textsuperscript{171} As with the redundant protection for trade secrets, these terms appear often, but not so often as to indicate that they are merely pro forma boilerplate that the CEOs blindly accept. Rather, the inclusion of these terms is likely driven by the nature of the valuable information that adds to the firm’s competitive advantage. Thus, the terms provide evidence of what the firm values enough to bargain for in the contract and the postemployment advantage a CEO is willing to give up in exchange for his or her privilege and lucrative leadership role.

In Table 11, we present data on the triggers contained in CNC clauses. We see that, far and away, the most common trigger is any termination by either party (56.8% of all contracts with CNCs). This is obviously very broad and will mean that, irrespective of the reason the


\textsuperscript{171} There were a wide variety of other restrictions of a miscellaneous nature in 63.2% of the contracts.
CEOs depart the company, the CNC clause will be effective. Conversely, a substantial number of the contracts are tailored to the reasons for the termination: voluntary termination without good reason by the employee (9.4%); any termination initiated by the employee (8.6%); any termination by the firm (8.4%); only terminations without cause by the firm (8.3%), only terminations with cause by the firm (7.6%); and terminations by the employee with good reason (5.4%).

Table 11. Number and Percent of Contracts Containing Various Types of Terminations Required to Trigger the Noncompete Restrictions

<table>
<thead>
<tr>
<th>Trigger</th>
<th>Number (Percent of 699 contracts with a CNC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any termination by either party</td>
<td>397 (56.8)</td>
</tr>
<tr>
<td>A change in control voids or modifies the noncompete</td>
<td>73 (10.4)</td>
</tr>
<tr>
<td>Voluntary termination by employee without good reason</td>
<td>66 (9.4)</td>
</tr>
<tr>
<td>Any termination by employee</td>
<td>60 (8.6)</td>
</tr>
<tr>
<td>Any termination by firm</td>
<td>59 (8.4)</td>
</tr>
<tr>
<td>Termination by firm without cause</td>
<td>58 (8.3)</td>
</tr>
<tr>
<td>Termination by firm with cause only</td>
<td>53 (7.6)</td>
</tr>
<tr>
<td>Contract doesn't mention a specific trigger</td>
<td>43 (6.2)</td>
</tr>
<tr>
<td>A change in control (such as a sale of a majority of the firm)</td>
<td>41 (5.9)</td>
</tr>
<tr>
<td>Termination by employee with good reason</td>
<td>38 (5.4)</td>
</tr>
<tr>
<td>During severance period</td>
<td>23 (3.3)</td>
</tr>
<tr>
<td>Other trigger provisions</td>
<td>4 (0.6)</td>
</tr>
</tbody>
</table>

Two interesting subcategories illustrate the effect of a change-of-control transaction: in 73 contracts (10.4% of the sample), a change of control voids or modifies the CNC, while in an additional 41 contracts (5.9% of the sample) a change of control acts as a trigger on the CNC so that the CEO is subject to the CNC's prohibitions. These triggers illustrate the competing interests of firms in change-of-control situations: some firms want to free the target company CEO to compete with the acquiring firm, while others choose to restrict his or her freedom.

172. Noncompete enforcement subsequent to a not-for-cause termination is controversial among scholars. See generally Staidl, supra note 110 (discussing the enforceability of noncompete agreements in the context of at-will employment).

173. There can be multiple triggers coded for the CNCs, so the percentages reported in the table sum to more than 100%.
What remedies does the firm have if the CEO breaches a CNC provision? First, in untabulated data, we found that only 69 of the contracts with CNCs (9.9%) impose a repayment obligation on the CEO if he or she breaches the CNC. In other words, over 90% of the time, the CEO does not have to repay any monies that he or she has already received from the company. However, as we see in Table 12, this does not leave the company without remedies.

Table 12. Postemployment Employee Forfeitures and Company's Ability to Seek Injunctive Relief

<table>
<thead>
<tr>
<th>Type of Forfeiture Provision</th>
<th>Number (Percent of 699 contracts with a CNC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No penalties mentioned in the event of a breach</td>
<td>77 (11.0)</td>
</tr>
<tr>
<td>Employee forfeits stock options</td>
<td>78 (11.2)</td>
</tr>
<tr>
<td>Employee forfeits retirement monetary benefits, such as a pension or other postemployment payments</td>
<td>51 (7.3)</td>
</tr>
<tr>
<td>Employee forfeits retirement nonmonetary benefits, such as access to corporate properties, travel allowances, or use of company staff or other resources</td>
<td>21 (3.0)</td>
</tr>
<tr>
<td>Employee pays legal fees and costs if breach is litigated and employee loses</td>
<td>203 (29.0)</td>
</tr>
<tr>
<td>Employee must repay or reimburse the employer for some stated expense or benefit</td>
<td>71 (10.2)</td>
</tr>
<tr>
<td>Other penalties to employee for a breach</td>
<td>405 (57.9)</td>
</tr>
<tr>
<td>Company may seek an injunction against employee's breach of CNC</td>
<td>556 (79.5)</td>
</tr>
</tbody>
</table>

In a significant number of the contracts, the company has the right to take away a variety of different types of future benefits from the CEO if he or she breaches his or her CNC. For example, upon breach, the CEO would forfeit monetary retirement benefits in 51 cases (7.3% of all contracts), stock options in 78 cases (11.2% of all companies), and nonmonetary retirement benefits in 21 instances (3.0% of all contracts).

174. Many employment contracts, including most CEO contracts, also contain arbitration clauses, which may impact the parties' ability to seek immediate injunctive relief from a court. See generally Thomas, O'Hara & Martin, supra note 104 (discussing the prevalence of arbitration provisions in executive contracts). The interplay of state restrictive covenant law and arbitration clauses was an issue in the only noncompete-related case to reach the U.S. Supreme Court in many years. See Nitro-Lift Techs., LLC v. Howard, 133 S. Ct. 500, 503-04 (2012) (reiterating strong support for the Federal Arbitration Act and arbitration clauses by ruling that, by contract, the interpretation of a noncompete rested with the arbitrator and not a state court's application of Oklahoma's CNC statute).
However, the most important remedy from the company's perspective is its ability to get an injunction to stop the alleged violation of the CNC. Here we found that almost 80% of the sample contracts expressly provide that the company can seek such an injunction. Including a provision for equitable relief is both logical and potentially curious. This is because seeking an injunction prohibiting the former employee's competitive actions, as agreed upon in the contract, is the normal initial default remedy for a breach and is a means of stopping any irreparable harm from the departing employee. In other words, the employer can always seek an injunction without the prior contractual consent. Essentially, the plaintiff-employer will argue that equitable relief is needed to stop the competitive harm because eventual money damages upon a full adjudication of the case will be inadequate. Nonetheless, the explicit provisions are likely included as a means of evidencing the employee's acknowledgment that an injunction is an appropriate remedy for a breach because of the difficulty in calculating the damage caused by the competition.

In Table 13, we bring together some of the results of the previous tables to determine how often companies impose multiple restrictions on their CEOs. For each CEO, we count whether he or she has a CNC clause, a nonsolicitation clause relating to customers or clients, a nonsolicitation clause relating to employees, and an NDA. For example, a CEO that has all four in his or her contract would be counted as having four restrictions.

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175. For a recent case discussing the movant's burden to support a preliminary injunction in a noncompete litigation, see Hyde v. KLS Prof'l Advisors Grp., LLC, 500 Fed. App'x 24, 26 (2d Cir. 2012) (vacating a district court's entry of a preliminary injunction).

176. Seeking a preliminary injunction remains the preferred method for halting an alleged irreparable harm in violation of a CNC. See, e.g., Synergy Advanced Pharmas., Inc. v. Capebio, LLC, No. 10 Civ. 1736(SAS), 2010 U.S. Dist. LEXIS 53252, at *18 (S.D.N.Y. June 1, 2010) (declining ultimately to issue an injunction after the CNC time period has expired, despite finding prior violations of the agreement).

177. See, e.g., Quaker Chem. Corp. v. Varga, 509 F. Supp. 2d 469, 478–79 (E.D. Pa. 2007). The court issued an injunction to enforce a noncompete covenant, noting that it is an acknowledged "extraordinary remedy." Id. at 478, 484. In doing so, the court restated the four preliminary factors that must be balanced:

(1) whether the movant has shown a reasonable probability of success on the merits;
(2) whether the movant will be irreparably injured by denial of the relief;
(3) whether granting preliminary relief will result in even greater harm to the nonmoving party; and
(4) whether granting the preliminary relief will be in the public interest.

Id. at 477.

178. See id. at 478–79.

179. See id.
Table 13. Time Series of the Density of Restrictions in CEO Contracts – Percent of Contracts in a Year with the Specified Number of Restrictions

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>12%</td>
<td>14%</td>
<td>32%</td>
<td>18%</td>
<td>24%</td>
<td>42%</td>
</tr>
<tr>
<td>1997</td>
<td>13%</td>
<td>10%</td>
<td>32%</td>
<td>23%</td>
<td>22%</td>
<td>45%</td>
</tr>
<tr>
<td>1998</td>
<td>8%</td>
<td>11%</td>
<td>18%</td>
<td>29%</td>
<td>34%</td>
<td>63%</td>
</tr>
<tr>
<td>1999</td>
<td>6%</td>
<td>15%</td>
<td>22%</td>
<td>22%</td>
<td>35%</td>
<td>56%</td>
</tr>
<tr>
<td>2000</td>
<td>7%</td>
<td>13%</td>
<td>20%</td>
<td>23%</td>
<td>36%</td>
<td>59%</td>
</tr>
<tr>
<td>2001</td>
<td>7%</td>
<td>12%</td>
<td>20%</td>
<td>27%</td>
<td>33%</td>
<td>60%</td>
</tr>
<tr>
<td>2002</td>
<td>6%</td>
<td>13%</td>
<td>15%</td>
<td>25%</td>
<td>42%</td>
<td>66%</td>
</tr>
<tr>
<td>2003</td>
<td>6%</td>
<td>13%</td>
<td>13%</td>
<td>19%</td>
<td>49%</td>
<td>68%</td>
</tr>
<tr>
<td>2004</td>
<td>2%</td>
<td>17%</td>
<td>10%</td>
<td>31%</td>
<td>40%</td>
<td>71%</td>
</tr>
<tr>
<td>2005</td>
<td>6%</td>
<td>11%</td>
<td>9%</td>
<td>26%</td>
<td>48%</td>
<td>74%</td>
</tr>
<tr>
<td>2006</td>
<td>9%</td>
<td>5%</td>
<td>21%</td>
<td>16%</td>
<td>49%</td>
<td>65%</td>
</tr>
<tr>
<td>2007</td>
<td>8%</td>
<td>4%</td>
<td>14%</td>
<td>16%</td>
<td>57%</td>
<td>73%</td>
</tr>
<tr>
<td>2008</td>
<td>7%</td>
<td>4%</td>
<td>14%</td>
<td>28%</td>
<td>47%</td>
<td>75%</td>
</tr>
<tr>
<td>2009</td>
<td>0%</td>
<td>10%</td>
<td>24%</td>
<td>24%</td>
<td>41%</td>
<td>66%</td>
</tr>
<tr>
<td>2010</td>
<td>12%</td>
<td>6%</td>
<td>15%</td>
<td>24%</td>
<td>42%</td>
<td>67%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8%</td>
<td>11%</td>
<td>19%</td>
<td>24%</td>
<td>39%</td>
</tr>
<tr>
<td>1996-2000</td>
<td>9%</td>
<td>13%</td>
<td>24%</td>
<td>23%</td>
<td>30%</td>
<td>54%</td>
</tr>
<tr>
<td>2001-2005</td>
<td>6%</td>
<td>13%</td>
<td>14%</td>
<td>26%</td>
<td>42%</td>
<td>67%</td>
</tr>
<tr>
<td>2006-2010</td>
<td>8%</td>
<td>5%</td>
<td>17%</td>
<td>22%</td>
<td>48%</td>
<td>70%</td>
</tr>
</tbody>
</table>

The data in Table 13 show that on average CEOs have either three restrictions (24%) or four restrictions (39%) in their employment contracts. Furthermore, the percentage with three or four restrictions is increasing over time: in 1996-2000, it was 54%; in 2001-2005, it increased to 67%; and in 2006-2010, it further increased to 70% of all employment contracts. In untabulated results, we ran a simple linear regression of the percent of contracts with three or four restrictive covenants against the years that they were signed. The results show that the time trend is statistically significant.\textsuperscript{181} This is consistent with the claim that CEO contracts have an increasing number of restrictive covenants in them, a trend evidenced in our data from 1996 to 2010.

\textsuperscript{180} Restrictions include CNC clause, nonsolicitation of employees, nonsolicitation of customers or clients, and nondisclosure agreement.

\textsuperscript{181} The coefficient on the year variable has a t-statistic of 4.45, which is significant at the .001 level.
V. SUMMARY OF FINDINGS AND POLICY IMPLICATIONS

To briefly summarize, our main findings are as follows: In 80% of CEO employment contracts from 1996-2010, we found CNCs. These restrictive covenants commonly last one to two years. For CEOs with CNCs, 89% are forbidden from working for a competitor during the term of the CNC, while 25% of contracts prohibit CEOs from financing competitors. These covenants often have a broad geographic scope.

NSAs routinely appear in CEO contracts with 75.6% of these contracts barring solicitation of the firm’s employees and 50.8% proscribing solicitation of customers or clients, each for a period of one to two years. We discover that NDAs are quite common as well: 87.1% of all contracts stop CEOs from disclosing confidential information. It is also common for NDAs to include a host of other more detailed prohibitions, often for an indefinite period of time.

Furthermore, more than half of all restrictive covenants are triggered by any departure of the CEO from the firm, whether voluntary or involuntary. If triggered, 79.5% of the contracts give the express right to seek injunctions to enforce these provisions. Finally, we found strong evidence that more and more restrictive covenants are appearing in these contracts over time, so that, today, over 70% contain three or four such covenants.

We also empirically examined factors that predict when CEOs are likely to have CNC provisions or other restrictive covenants, such as NDAs, in their contracts. Our findings show that CEOs are less likely to have CNCs in their employment contracts if the contracts are being enforced in jurisdictions that do not permit strong CNC clauses. For example, contracts that are likely to be enforced in California, because a firm is headquartered there, are much less likely to include noncompete clauses, as California state courts will not enforce the provisions.\textsuperscript{182} While this is consistent with our expectations, it is comforting to know that companies and their lawyers pay attention to legal doctrine.

Further, we find a statistically significant trend toward more noncompete clauses in CEO employment contracts over time. In part, this may reflect many jurisdictions’ increased tendency to enforce

\textsuperscript{182} Nonetheless, there are a significant number (about 65%) of California firms that still have CNCs in their CEO contracts when it is highly likely that both parties realize these clauses are not enforceable. The reasons why unenforceable terms may persist in these contracts are beyond the scope of this Article. However, possible explanations are that these clauses are costless to include in this context, and, therefore, the firms' lawyers include CNCs in case California law changes in the future or perhaps because having a CNC might be seen as a signal to other stakeholders, such as shareholders.
EMPIRICAL ANALYSIS OF NONCOMPETES

these provisions. However, it also suggests that employers are more aware than ever of the importance of using CNC clauses to protect against the loss of firm-specific investments and knowledge, thus lending some support to a rationalist, law-and-economics justification for CNCs—at least in the context of executives with relatively strong bargaining power.

Our study is also the first to provide reliable evidence to confirm widely held assumptions in the academic literature and from practitioners that noncompetes are being used more often in recent years. Unlike previous empirical papers that used the mere possibility of CNC enforceability regardless of the likelihood of enforcement, which is an imprecise variable, we demonstrate that this trend exists with evidence tied to the actual presence of these clauses in employee contracts.

Next, we demonstrate strong path dependence in the use of CNC clauses. Our results show that when companies use a noncompete clause in a CEO employment contract, they are much more likely to insist on including a noncompete in subsequent CEO employment contracts. Notably, this effect has not been picked up in any of the earlier literature on CNC clauses. In addition, this finding sheds light on the contract negotiation process between firms, who are the repeat players in these negotiations, and their top employees.

Fourth, our analysis shows that longer-term CEO contracts are more likely to have CNC clauses than short-term CEO contracts. This is likely because the companies have more firm-specific investments in CEOs that stay for longer periods. This finding also fits with some researchers’ predictions when discussing noncompetes in the context of human capital investments.

There are some potential policy implications to be drawn from what we have learned. First, this information may be useful to informing the debate over CEO dominance and executive compensation because it provides additional evidence that CEOs are

183. See generally Bishara, supra note 60, at 780.
184. See Lester, supra note 5, at 49; Moffat, supra note 5, at 876; Stone, supra note 5, at 577; Whitmore, supra note 5 and accompanying text.
185. See, e.g., Steven Greenhouse, Noncompete Clauses Increasingly Pop Up in Array of Jobs, N.Y. TIMES, June 9, 2014, at B1 (citing one practitioner who sees an increase in noncompete litigation and noted that “[c]ompanies are spending money, hiring lawyers, to go after people—just to put the fear of death in them”); see also Lublin, supra note 18 (discussing a Beck Reed Riden LLP study, which found that the “number of published U.S. court decisions involving non-compete agreements has risen 61% since 2002 to 760 last year . . . [and the] increase largely reflects the increased usage of non-compete arrangements among lower-level staffers—along with employees’ greater mobility and access to sensitive information”).
186. See, e.g., Rubin & Shedd, supra note 25, at 99.
willing to give up a future right of free mobility and because it goes against claims that CEOs ride roughshod over board decisionmaking related to CEO contract terms. Second, because our study is focused on CEOs and not average employees, who may be subject to employer overreaching and abuse, our findings provide future researchers with a glimpse into what competitive restrictions firms value enough to pay for at a premium. Third, our findings on the prevalence of CEO noncompetes and the connection to profitability may provide certain stakeholders, such as investors and analysts, with another piece of information about how firms interact with their single most influential employees and where the bargaining balance lies between CEO dominance and board-of-directors influence. Also, future researchers could use our findings about CEOs as a starting point to investigate to what extent executive employment terms match or influence the restrictions on other employees throughout the firm.

Finally, of particular note is our finding that long-term contracts are more likely to have noncompete clauses than short-term contracts. This is probably because firms are likely to invest more in CEOs who they believe will stay for relatively longer periods. This suggests that a firm that negotiates and enters into a longer-term employment relationship with a CEO will invest in this individual in part due to the added protection that a CNC provides for those investments. Thus, this situation is consistent with a law-and-economics justification for CNCs to facilitate investment in human capital that can perhaps lead to more stable executive leadership, which can also have an influence on firm profitability.

Overall, this evidence, in addition to our findings that CNC enforceability in a jurisdiction is correlated with the presence of a CNC, provides more information to state policymakers who are in the process of reviewing their noncompete enforcement policies. This is because our research demonstrates that there is value to allowing CNCs between executives and firms, despite the remaining fairness concerns with enforcing noncompetes for average employees with less bargaining power. Specifically, this research tends to support the recent state laws that treat employees with high-level supervisory or other management roles as a unique category of employees under CNC policy.\textsuperscript{187} Our findings also support the intuition of the legislators who are currently proposing statutes that render CNCs

\textsuperscript{187} This is consistent with, for instance, the Colorado restrictive covenant statute, which allows noncompete enforcement for executive-level employees, but not other workers. See COLO. REV. STAT. ANN. § 8-2-113 (West 2012).
enforceable against executive-level or high-earning employees only,\textsuperscript{188} instead of simply imposing a California-like ban on all employee noncompetes.

VI. CONCLUSION

The heated debate among scholars, legal practitioners, and policymakers over the impact and proper role, if any, of employee restrictive covenants is likely to persist for some time. Addressing these concerns systematically is important because human capital management is increasingly crucial to securing and maintaining a competitive advantage in a globalized knowledge economy. Thus, developing empirical research in the area of restrictive covenants is key to informing this debate.

Our study is an important step toward understanding the prevalence and deployment of CNCs, NDAs, and NSAs by employers over a significant length of time. By closely examining a large set of highly negotiated employment contracts, we have provided previously unavailable evidence of how employers are using restrictive covenants to impede the postemployment mobility of key employees. This evidence shows that there is an increase in the use and methodical layering of restrictive covenants for these employees over time and that the underlying legal rules have an impact on the use of these agreements. Our findings also illuminate the complex give-and-take bargaining environment for firms and their most powerful employees, where curtailing postemployment competition is a high priority for the employers. The growing prevalence of a portfolio of restrictions for executives also provides support for arguments that CEOs do not simply dominate their boards in the realm of employment contracting.

Further, this detailed picture of restrictive covenants in CEO contracts is a useful contribution to the discussion about how to enable or curtail employers’ use of restrictive covenants generally. Our study is a starting point for further research and can serve as a model for the scope and depth of inquiry required to develop a full understanding of how these controversial agreements impact other types of workers throughout individual firms and across the entire economy.
