



FTC Rulemaking on Noncompete Agreements

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Noncompete clauses in employment contracts (which, when they contain noncompete clauses, are called noncompete agreements) limit or fully prohibit current employees from competing with their current employer in the future. There are indications that the Federal Trade Commission (FTC) may promulgate a rule that would disallow or limit the use of noncompete agreements in employment contracts.¹ This policy brief explores economic and legal policy issues that would be raised by such a rule. After briefly highlighting economic concerns and questions regarding FTC rulemaking in general, it turns to the specifics of such a potential rule. It then suggests a possible approach the FTC might take, were the FTC to pursue rulemaking in this area, to avoid creating an overly broad and potentially welfare-inimical rule on noncompete agreements.

BACKGROUND

Noncompete agreements have been used in a wide variety of employment contracts throughout history in the United States. Their legal status has been governed by state laws that differ in approach, from total prohibition to case-by-case evaluation of reasonableness.² In recent years, several scholarly commentators and competition law enforcers have expressed concerns about the effects of such agreements on competition in labor markets and worker welfare.³ In 2020, the FTC held a one-day public workshop on noncompete agreements, exploring the economic and legal ramifications of such agreements and the possible role for federal law enforcement.⁴ Most recently, there have been press accounts regarding the possibility that the FTC will pursue a rulemaking dealing with noncompete agreements.⁵ The renewed attention to noncompete agreements should be seen in light of public concerns raised about alleged reductions in labor's share of national income and concerns about worker salaries, which have not risen despite the

growth in the US economy. Such concerns were raised most recently in President Joe Biden’s July 9 executive order, Promoting Competition in the American Economy, which directed the FTC to consider employing its statutory rulemaking authority “to curtail the unfair use of non-compete clauses and other clauses or agreements that may unfairly limit worker mobility.”⁶ Accordingly, an evaluation of the economic effects of noncompete agreements and of the public policy suitability of FTC rulemaking to deal with them is warranted.

ECONOMIC IMPACT OF NONCOMPETE AGREEMENTS

Evidence regarding the economic effects of noncompete agreements is mixed. Most, if not all, of the studies that involve noncompete agreements are centered around the enforceability of such agreements and use a natural experiment framework to determine the impact of such agreements on worker wages, investment, and innovation. These studies look at changes in state laws over time to develop an understanding of the impact of noncompete agreements on similar workers in different states. The researchers capitalize on changes in the enforceability of noncompete agreements to set up a natural experiment.⁷ In these cases, they estimate the effect of changes in the enforceability of noncompete agreements on mobility, wages, and entrepreneurship. By using this framework, the authors of these studies are tapping into an important aspect of these agreements—the credible threat of enforcing the contract.

Enforceability of a noncompete agreement depends on state law, given that no federal statutes determine the legality of noncompete agreements. Although state laws vary widely and, in some states, noncompete agreements are wholly unenforceable, the evidence shows only marginal decreases in incidence of noncompete agreements in non-enforcing states.⁸

In some instances, noncompete agreements are presented and signed in states where such agreements are unenforceable.⁹ Although there are a few reasons that this might happen, a discussion of the various incentives for signing an unenforceable contract is outside the scope of this policy brief.

Mobility

By definition, a noncompete agreement is designed to limit the movement of a worker after separating from a company. Given this limitation, it is not unreasonable to assume that noncompete agreements reduce worker mobility by some positive, nonzero factor.

One theory of the impact of reduced mobility is that reductions in mobility have the potential to put downward pressure on wages in the long term.¹⁰ Because workers subject to noncompete agreements are contractually bound not to compete directly with their former employer, firms competing within an industry are not permitted to attract workers from other firms by offering higher wages. As a result, firms may be unable to attract the best talent for each job. When an

employer demands a certain set of skills, it often must pay higher wages to gain those skills.¹¹ When noncompete agreements reduce mobility, the firm may be unable to gain (or have great difficulty gaining) these skills, regardless of the premium they are willing to pay.

This competition-limiting aspect of noncompete agreements, however, does not fully capture any job-specific training that is provided to employees once they begin the job. Whenever employees receive any training, the returns to noncompete agreements stemming from employee training could become positive in the long term.¹² Because employees bound by noncompete agreements tend to stay in their job for longer, they may become specialized in such a way that their skills are more valuable to the original employer than they would be to outside employers. In such cases, employees may have reduced competitive labor potential owing both to their specialized skills and the noncompete agreement, causing continued employment at the original firm to become the optimal employment solution.¹³

Wages

If one takes reduced labor mobility as given, the economic outcomes for workers bound by noncompete agreements are anything but generalizable. A review of studies conducted in the past two decades yields no uniform, replicable results as to whether such agreements benefit or harm workers. It does, however, suggest that harm in the form of reduced wages is more likely to be felt by low-wage workers than by highly skilled professionals. Indeed, the few studies of high-wage professionals suggest that they may benefit financially from being required to sign noncompete agreements.

Noncompete agreements disproportionately affect low-wage, low-education workers. Thirteen percent of low-wage workers (those making less than \$40,000 a year) are estimated to be bound by some sort of noncompete agreement.¹⁴ These include an estimated 30 percent of hair stylists and, up until 2016, all Jimmy John's employees in New York State.¹⁵ Additionally, an estimated 53 percent of noncompete agreement signers are classified as low-wage workers.¹⁶

Economists Michael Lipsitz and Evan Starr find that a 2008 ban on noncompete agreements in Oregon raised the hourly wage of workers both covered and not covered by noncompete agreements.¹⁷ The evidence shows that low-wage workers are driving the increase in wages associated with a ban, implying that low-wage workers are the ones primarily affected by noncompete agreements in states that do not ban their use.¹⁸

Furthermore, this evidence is mirrored in a study based on the 2015 ban of noncompete agreements in Hawaii specifically affecting the technology sector.¹⁹ In this case, worker mobility and hourly wages increased, and long-term outcomes for workers were better than in other states that enforce noncompete agreements.

Conversely, the aforementioned trend does not hold when considering higher-paid or more educated workers. When evaluating CEOs and physicians, studies show that those who sign noncompete agreements are paid more than similar workers who do not, regardless of the enforceability of the noncompete agreement.²⁰

Finally, transparency is an important consideration when determining the effect of a noncompete agreement. The difference between notifying the worker of a noncompete agreement before the worker has accepted the job and notifying the worker after the worker has accepted the job can change the economic outcome. Evidence shows when a noncompete agreement is given to a worker after the job is accepted, that worker will earn lower wages and have reduced mobility compared to similar workers who were notified before accepting the job.²¹

AUTHORITY FOR FTC RULEMAKING

An alternative to state law oversight of noncompete agreements is federal regulation. The federal agency with the broadest authority to target harmful noncompete agreements is the FTC.

The FTC may follow two alternative rulemaking procedures. The first is the informal rulemaking process under section 6(g) of the Federal Trade Commission Act.²² The second is the formal Magnuson-Moss (M-M) rulemaking process under section 18 of the act.²³ Both processes have costs and benefits to the agency, the public, and various stakeholders.

Under section 6(g) of the Federal Trade Commission Act, the FTC is authorized “to make rules and regulations for the purpose of carrying out the provisions of this subchapter.”²⁴ Any rule that is enacted under this section is subject to the “informal rulemaking” requirements of section 553 of the Administrative Procedure Act,²⁵ but no additional qualifications are necessary to enact rules under this method.

One appeals court decision, however, does define the scope of the FTC’s rulemaking authority under section 6(g). In *National Petroleum Refiners Ass’n*,²⁶ the US Court of Appeals for the DC Circuit upheld the FTC’s statutory authority to promulgate binding, substantive rules. The court rejected the argument that section 6(g) authorizes only nonsubstantive regulations concerning the other functions of the FTC, as spelled out elsewhere in section 6.²⁷

Two years after *National Petroleum Refiners Ass’n* was decided, Congress granted the FTC specific consumer-protection rulemaking authority through section 202 of the M-M Warranty Act.²⁸ This act added section 18 to the Federal Trade Commission Act, imposing strict, adjudicatory hearings and other formal procedures on the FTC. Though the section 18 process is stricter than the informal process under section 6(g), the FTC may seek civil penalties for violation of M-M rules. This remedy is notably absent from section 6(g) rulemaking authority.

There are, however, concerns over the statutory basis for section 6(g) rulemaking. According to the Antitrust Law Section of the American Bar Association,

[T]he Commission’s [section 6(g)] rulemaking authority is buried within an enumerated list of investigative powers, such as the power to require reports from corporations and partnerships, for example. Furthermore, the [Federal Trade Commission] Act fails to provide any sanctions for violating any rule adopted pursuant to Section 6(g). These two features strongly suggest that Congress did not intend to give the agency substantive rule-making powers when it passed the Federal Trade Commission Act.²⁹

In other words, the structure of the Federal Trade Commission Act indicates that section 6(g) rulemaking is best understood as a tool to aid the FTC’s investigative and procedural authority, not standalone substantive rulemaking authority in and of itself. Though it is true that *National Petroleum Refiners Ass’n* defended the substantive rulemaking interpretation, the decision came at a time of substantial deference to agency activism from the courts, and such an interpretation may no longer hold.

Evidence pointing in this direction comes from a recent Supreme Court decision in *AMG Capital Management*, where the court unanimously held that the FTC’s authority to seek a permanent injunction under section 13(b) of the Federal Trade Commission Act does not authorize the FTC to seek monetary damages.³⁰ The FTC argued that the historical understanding of a permanent injunction includes monetary relief, but the Supreme Court rejected such a reading on the basis of the statutory language of section 13(b). The court noted that the permanent injunction language was “buried” within a provision that discusses injunctive, not monetary, relief. Section 6(g) rule-making authority is similarly buried in a section discussing other topics.

Moreover, as previously noted, just two years after *National Petroleum Refiners Ass’n*, Congress added section 18 to the Federal Trade Commission Act,³¹ enumerating detailed, substantive rule-making provisions, and leaving section 6(g) unchanged. This preservation of section 6(g), in the face of significant additions to the FTC’s substantive rulemaking authority under section 18, leaves informal rulemaking on shaky ground. Informal rulemaking under section 6(g) is anything but settled law, and the FTC may face significant legal challenges by choosing to use this authority.

Furthermore, even if there are no challenges to the FTC’s authority to undertake wholesale rule-making under section 6(g), there still may be challenges to any specific rule that the FTC proposes. First, “unfair methods of competition” rulemaking may prove particularly difficult to survive legal scrutiny because of the nondelegation doctrine.³² Under that doctrine, if a court determines that the Federal Trade Commission Act’s general—and arguably vague—reference to “unfair methods of competition” does not include an “intelligible principle” guiding the FTC’s discretion in making competition rules,³³ then that court may not uphold competition rulemaking.

Second, a court may strike down an individual proposed rule as “arbitrary and capricious,”³⁴ should the court find that the FTC did not sufficiently consider procompetitive justifications for the condemned practice.

Finally, from an economic perspective, rulemaking has the potential to raise concerns about both error costs and economic welfare. Any cost-benefit calculation of FTC competition rulemaking should consider these economic policy concerns.

First, competition rulemaking has the potential to generate higher error costs than adjudications.³⁵ An adjudication under the antitrust “rule of reason” minimizes error costs by undertaking a case-specific analysis that weighs the potential benefits of the conduct against the harms. A rulemaking, however, seeks to paint with a broad brush, almost certainly condemning practices that have some procompetitive benefits.³⁶ By classifying a class of conduct as per se anticompetitive, a rulemaking will allow specific examples of such conduct that would have been procompetitive to be found to violate the rules.

Second, economic welfare could be reduced owing to asymmetric enforcement, given that an FTC rule would be confined to only one of the two federal antitrust enforcement agencies. Because the US Department of Justice also has jurisdiction over competition policy, but FTC rules would be enforced by only the FTC, businesses would be placed into a sort of competition policy limbo. Under a competition rule, conduct that would be deemed perfectly legal by the Department of Justice after an investigation might nevertheless be banned by the FTC. Such an inequality in treatment could engender uncertainty and lead to wasteful efforts focused on ensuring review of conduct by the Department of Justice rather than FTC. That would undermine the rule of law.

RULEMAKING PARTICULARS

Although section 6(g) informal competition rulemakings could likely face an uphill battle in the courts, a legally less problematic approach for the FTC might be to undertake unfair or deceptive acts or practices (UDAP) rulemakings. These rules are promulgated under the M-M legal framework.³⁷

Since the passage of the M-M Warranty Act in 1975, there have been several successful rulemaking procedures, giving the FTC substantial experience in navigating this regulatory path. Some of the rules promulgated under the M-M framework include the following:

- The Eyeglass Rule and the Eyeglass II Rule (1977 and 1989, respectively) requires optometrists and ophthalmologists to provide patients a copy of their eyeglasses prescription after an exam at no extra cost.³⁸
- The Franchise Rule (finalized in 1978, amended in 2011) gives potential franchisees the information they need to weigh the risks and benefits of franchise investment.³⁹

- The Used Car Rule (1976) requires car dealers to display a window sticker disclosing warranty information, terms, condition, and limitations.⁴⁰
- The Credit Practices Rule (1984) protects consumers from abusive collection activities.⁴¹

Throughout the M-M rulemaking process, the FTC must be mindful of several considerations to maximize its chances of success and reduce the likelihood of the rule being overturned on judicial review. The first of these considerations is consistency with section 5(n) of the Federal Trade Commission Act, which states,

The Commission shall have no authority . . . to declare unlawful an act or practice on the grounds that such an act or practice is unfair unless the act or practice causes or is likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition. In determining whether an act or practice is unfair, the Commission may consider established public policies as evidence to be considered with all other evidence. Such public policy considerations may not serve as a primary basis for such determination.⁴²

Section 5(n) codifies the meaning of unfair practices, and thereby bounds the FTC's application of rulemakings covering such practices. Section 5(n) subjects such practices to a well-defined cost-benefit framework. Accordingly, properly crafted UDAP rules directed at unfair acts avoid the problems of nondelegation and high error costs associated with rules over unfair methods of competition. Moreover, the problem of asymmetric enforcement raised by section 6(g) rules is prevented, because only the FTC enforces consumer protection law aimed at unfair acts or practices.

An FTC UDAP rulemaking directed at harmful noncompete agreements would proceed by characterizing specific noncompete clauses as unfair acts. Consistent with the language of section 5(n), the FTC would be required to account for the benefits of noncompete clauses for consumers and the competitive process, which include reduced cost or better quality for companies. Although some evidence shows that wages are lower with the presence of noncompete agreements, this evidence is not universal, and there may well be company-level procompetitive and proconsumer benefits stemming from noncompete agreements that outweigh the effect of lower wages.

For this reason, a broad rule banning noncompete agreements outright would most likely not pass judicial review, given its incompatibility with the text of section 5(n). Banning noncompete agreements for all workers ignores any benefits to companies, workers, or competition, and only accounts for the costs associated with harm to workers. In short, statutorily mandated calculations would fail to show universal and irredeemable net costs of noncompete agreements.

From the protection of intellectual property rights to the investment in human capital, businesses may have a multitude of justifications for their use of noncompete agreements. Even if workers

face lower wages when subject to noncompete agreements, these workers may gain specialized skills that are job specific, and subsequent specialization increases worker productivity in a particular job that may not apply to other positions.

A POSSIBLE ROAD FORWARD: A LIMITED INFORMATIONAL RULE

Although expansive UDAP rulemakings that broadly condemn noncompete agreements as unfair acts would likely fail cost-benefit muster, there nevertheless may be room for a targeted noncompete agreement rule that does not raise such difficulties. A UDAP rule requiring an employer to notify its employees of a noncompete agreement before employees accept the job is not only within the scope of the FTCs authority but is also likely to pass cost-benefit analysis.⁴³

When one considers the unfairness or deceptiveness of an action taken by a business—in this case, the employer who is enacting the noncompete agreement—statutory criteria must be assessed to determine the scope and scale of any harm as well as any beneficial consequences of the conduct. Under section 5(n), unfairness is considered on three grounds: substantial injury to the consumer, reasonableness of avoidance by the consumer, and possible benefits for the consumer or competition.

The first of these considerations is straightforward. When an employee is asked to sign a noncompete agreement and is notified about the existence of the agreement only after accepting the job, the individual is not able to assess the economic reality of the employment situation with all available information. If notified before accepting the job, the individual may choose not to work for the employer or may negotiate a higher salary to offset the risk of legally binding unemployment in the future.

The second criterion hinges on whether the consumer—in this case, the employee—can reasonably avoid the harm associated with the noncompete agreement if it is presented after the onset of employment. When a noncompete agreement, discussed previously as a cause of decreased mobility and potentially lower wages, is presented after employment has begun and as a condition of continued employment, new employees face a substantial loss of bargaining power compared to their preemployment situation. They must choose between their prenegotiated salary coupled with reduced job mobility (as compared to their reasonable expectations before entering their new job) or unemployment. At this point, many employees are unable to negotiate an increase in salary to compensate for the reduction in mobility in the future.

The final criterion is contingent on benefits to consumers (employees) and competition. First, some studies have determined the level of training that an employee receives when bound by a noncompete agreement versus when not bound by a noncompete agreement. The evidence is not uniform across populations or industries, but studies suggest that there is a slight increase in level of training offered by companies when a noncompete agreement is present, but that increase in

training comes with a decrease in wages and worse wage outcomes over time.⁴⁴ The implication of this finding is that, when wages and mobility decrease but training increases, the increase in training is not enough to offset the lower wage mobility and may lead to worse outcomes over time for workers bound by noncompete agreements. This may be the result of firm-specific training that is not generalizable across firms or industries.

Also, a small amount of evidence suggests that noncompete agreements may have a chilling effect on competition. Though much of the evidence is inconclusive and more studies need to be done to determine the full effect,⁴⁵ the theory is as follows: To be competitive, new companies need employees that have a baseline amount of skill and training in their industry. New companies have an incentive to pay higher-than-average wages to attract top talent and establish themselves as a competitive threat in the market. If highly talented employees, however, are bound by noncompete agreements, then they are unable to move to new competing companies, regardless of the wage premium new companies are willing to pay. The new company then has to rely on workers not bound by noncompete agreements, some of whom may not possess the optimal mix of skill and training, reducing the competitive effectiveness of that firm.

In light of all these considerations, a targeted rule begins to take shape: for a noncompete agreement to be fair (and, arguably, nondeceptive), the employer must proffer the noncompete agreement before or when the employment contract is signed. This formulation would combine all the beneficial aspects of noncompete agreements for employers and would have the potential to protect employees from the greatest harmful effects for two main reasons.

First, it would allow employers to continue to present noncompete agreements to the same employees in enforcing states and thereby preserve the benefits of noncompete agreements. Trade secrets, training expenditures, and intellectual property protections would all be maintained, just as they were in the absence of the targeted rule. Only the timing of the presentation of the noncompete agreement may change, such that the portion of bargaining power enjoyed by the employer owing to ex ante asymmetric information regarding the noncompete agreement would shift to the worker.

Second, employees would be able to consider the effects of noncompete clauses when deciding whether to accept an employment offer. If there is no scope for bargaining over a contract, then the proffered contract may not be signed. However, both sides have an incentive to bargain for the optimal outcome. The potential employee should be willing to take the job but may request higher compensation owing to the existence of a noncompete clause. On the other side, the employer reasonably would like to retain the employee for as little as possible but would see the increased value in the noncompete clause and would be willing to transfer some of the benefit of the noncompete clause to the employee. In this case, there would be no welfare loss because a mutually agreeable transfer of benefits would be reached at the bargaining table.

Any proposal rule set forth by the FTC could be modeled after the 2018 noncompete and trade secrets reform law passed by the Massachusetts Legislature.⁴⁶ The section of note in this law is 24L(b)(i), which states,

If the agreement is entered into in connection with the commencement of employment, it must be in writing and signed by both the employer and employee and expressly state that the employee has the right to consult with counsel prior to signing. The agreement must be provided to the employee by the earlier of a formal offer of employment or 10 business days before the commencement of the employee's employment.⁴⁷

Under an FTC rule modeled after this law, any noncompete agreement, to be deemed fair and nondeceptive under a future UDAP rule, would need to be offered to the employee, along with the employment contract, 10 days before employment begins.

One could imagine a variety of FTC UDAP rules that would impose greater limitations on the use of noncompete agreements. The more that noncompete agreements were to impinge on contractual freedom, however, the less likely they would be to meet the stringent cost-benefit standards of section 5(n).

CONCLUSION

There has been a growing chorus of public concerns regarding the supposed harm of noncompete agreements that limit workers' future employment options. A July 2021 presidential executive order encourages the FTC to pursue a rulemaking dealing with noncompete agreements. If the FTC does pursue such a rulemaking, however, it would be well-advised to rely on its firmly established consumer protection rulemaking authority to condemn specific unfair acts or practices. Invocation of its competition rulemaking authority to rein in unfair methods of competition would be far more problematic on legal and economic policy grounds. If the FTC does choose to go ahead with an unfair acts rule directed at noncompete agreements, it would be prudent for the FTC to employ a targeted approach that focuses upon requiring employers to inform prospective employees about noncompete agreements before employment offers are finalized. Such a targeted rule would be far more likely to pass statutory cost-benefit requirements (which also represent sound economic policy) than would more expansive regulatory proposals.

ABOUT THE AUTHORS

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NOTES

1. The FTC may heed President Joe Biden's call for rulemaking in this area: "To address agreements that may unduly limit workers' ability to change jobs . . . [the FTC] is encouraged to exercise [its] statutory rulemaking authority . . . to curtail the unfair use of non-compete clauses . . . that may limit worker mobility." Exec. Order No. 14036, 86 Fed. Reg. 36987 (July 14, 2021).
2. California, North Dakota, and Oklahoma broadly outlaw the enforcement of noncompete agreements. CAL. BUS. & PROF. CODE § 16600 (2021); N.D. CENT. CODE § 9-08-06 (2021); OKLA. STAT. tit. 15 § 15-219A (2021). Forty-seven states and the District of Columbia allow noncompete agreements in some shape or form. For example, see GA. CONST. art. III, § VI, pt. V(c); FLA. STAT. ANN. § 542.335 (West 2021); LA. STAT. ANN. § 23:921 (2021); WIS. STAT. ANN. § 103.465 (West 2021).
3. Evan Starr, *The Use, Abuse, and Enforceability of Non-compete and No-Poach Agreements* (Washington, DC: Economic Innovation Group, 2019); Camila Ringeling et al., "Noncompete Clauses Used in Employment Contracts Comment of the Global Antitrust Institute" (Law and Economics Research Paper Series No. 20-04, George Mason University, Arlington, VA, February 2020); American Bar Association Antitrust Law Section, *Comments of the Antitrust Law Section of the American Bar Association in Connection with the Federal Trade Commission Workshop on "Non-competes in the Workplace: Examining Antitrust and Consumer Protection Issues,"* April 24, 2020.
4. "Non-competes in the Workplace: Examining Antitrust and Consumer Protection Issues," Federal Trade Commission, January 9, 2020, <https://www.ftc.gov/news-events/events-calendar/non-competes-workplace-examining-antitrust-consumer-protection-issues>.
5. Carson H. Sullivan, Jennifer S. Baldocchi, and Jessica E. Mendelson, "Employers Take Note—Noncompete Times, They Are a-Changin'," *Bloomberg Law*, July 29, 2021; Greg Lacurci, "Biden Administration Aims to Rein in Abusive Non-compete Agreements," CNBC, July 22, 2021; Andrea Hsu, "Biden Moves to Restrict Noncompete Agreements, Saying They're Bad for Workers," NPR, July 9, 2020.
6. Exec. Order No. 14036, 86 Fed. Reg. 36987 (July 14, 2021).
7. A natural experiment is a type of experiment used when a researcher does not have any control over when, where, or to what extent a policy or law is changed. For a discussion of how natural experiments are used in research settings, see Scott T. Leatherdale, "Natural Experiment Methodology for Research: A Review of How Different Methods Can Support Real-World Research," *International Journal of Social Research Methodology* 22, no. 1 (2019): 19–35.

8. Alexander J. S. Colvin and Heidi Shierholz, *Noncompete Agreements: Ubiquitous, Harmful to Wages and Competition, and Part of a Growing Trend of Employers Requiring Workers to Sign Away Their Rights* (Washington, DC: Economic Policy Institute, 2017), 6, table 2. California, a state that does not enforce noncompete agreements, reports that 45.1 percent of workplaces have at least one worker subject to a noncompete agreement. Florida and Texas, some of the strictest noncompete agreement-enforcing states, report that 46.4 percent and 60.7 percent of workplaces, respectively, have at least one worker subject to a noncompete agreement.
9. For a discussion of the incentives to serve an employee a knowingly unenforceable noncompete contract, see Randall S. Thomas, Norman D. Bishara, and Kenneth J. Martin, "An Empirical Analysis of Noncompetition Clauses and Other Restrictive Postemployment Covenants," *Vanderbilt Law Review* 68, no. 1 (2015): 1-51; Sarath Sanga, "Incomplete Contracts: An Empirical Approach," *Journal of Law, Economics, and Organization* 34, no. 4 (2018): 650-79.
10. Robert H. Topel and Michael P. Ward, "Job Mobility and the Careers of Young Men" (NBER Working Paper No. 2649, National Bureau of Economic Research, Cambridge, MA, July 1988). The authors find the inverse, that a key upward driver of wages is significant mobility and short job tenure.
11. Ernest P. Goss and Joseph M. Phillips, "How Information Technology Affects Wages: Evidence Using Internet Usage as a Proxy for IT Skills," *Journal of Labor Research* 23, no. 3 (2002): 473. The authors discuss the wage premium for those with IT skills: "Findings show that the labor market rewards those with IT skills. Presumably, this is because these workers are more productive in the work force, and are not just being rewarded for personal characteristics."
12. Evidence shows increases in wages and productivity over time associated with increased on-the-job training. For a discussion of the productivity gains seen from general and specialized training, see Alan Barrett and Phillip J. O'Connell, "Does Training Generally Work? The Returns to In-Company Training," *Industrial and Labor Relations Review* 54, no. 3 (2001): 647-62; Priscilla Fialho, Glenda Quintini, and Marieke Vandeweyer, "Returns to Different Forms of Job Related Training: Factoring in Informal Learning" (OECD Social, Employment, and Migration Working Papers No. 231, OECD Publishing, Paris, May 31, 2019).
13. Matt Marx, Deborah Strumsky, and Lee Fleming, "Mobility, Skills, and the Michigan Non-compete Experiment," *Management Science* 55, no. 6 (2009): 878. The authors discuss the workforce opportunities for inventors: "To the extent that they have focused on firm-specific tasks or received firm-specific training, their skills may have become less relevant to other organizations. With fewer external opportunities, they will have less bargaining power."
14. Michael Lipsitz and Evan Starr, "Low-Wage Workers and the Enforceability of Non-compete Agreements" (working paper, 2019), 4.
15. Lipsitz and Starr, "Low-Wage Workers," 4; Sarah Whitten, "Jimmy John's Drops Noncompete Clauses Following Settlement," CNBC, June 22, 2016.
16. Lipsitz and Starr, "Low-Wage Workers," 4.
17. "The results herein, combined with the fact that more than 40 states do not currently have NCA bans for low-wage workers, make banning NCAs for low-wage workers an opportunity to improve the lives of the lowest earning workers." Lipsitz and Starr, 30.
18. "Our results show that Oregon's NCA ban for low-wage workers raised earnings and upward mobility for hourly workers One implication of these results for organizations is thus that firms can generally implement low-wage NCAs as a way to reduce labor and turnover costs." Lipsitz and Starr, 27-28.
19. Natarajan Balasubramanian et al., "Locked In? The Enforceability of Covenants Not to Compete and the Careers of High-Tech Workers" (Center for Economic Studies Working Paper No. CES 17-09, Census Bureau, Washington, DC, January 2017).
20. Kurt Lavetti, Carol Simon, and William D. White, "The Impacts of Restricting Mobility of Skilled Service Workers: Evidence from Physicians," *Journal of Human Resources* 55, no. 3 (2019): 1025-67; Omesh Kini, Ryan Williams, and David Yin, "Restrictions on CEO Mobility, Performance-Turnover Sensitivity, and Compensation: Evidence from Non-compete Agreements (working paper, May 2018).
21. "[L]ate notice of NCAs occurs approximately 1/3 of the time, and when it does those workers are worse off relative to those who have not signed an NCA. Combined with our finding that low-wage workers are severely disadvantaged in

terms of their bargaining power over NCAs . . . delayed notification and low bargaining power suggest that low-wage workers simply accept mobility-constraining NCAs without demanding a compensating differential.” Lipsitz and Starr, “Low-Wage Workers,” 28.

22. 15 U.S.C. § 46(g).
23. 15 U.S.C. § 57a; 15 U.S.C. § 2309.
24. 15 U.S.C. § 57a; 15 U.S.C. § 2309.
25. 15 U.S.C. § 553.
26. *National Petroleum Refiners Ass’n v. FTC*, 157 U.S. App. D.C. 83, 482 F.2d 672 (D.C. Cir. 1973).
27. 15 U.S.C. § 46. Section 6 of the Federal Trade Commission Act, codified at 15 U.S.C. § 46, is titled, “Additional powers of [the] Commission.” The 11 subsections of section 6 enumerate a variety of powers, including the power to gather information to carry out investigations; to require private parties to submit reports; to investigate compliance with antitrust decrees; to investigate violations of antitrust law; to make recommendations for “readjustments” in corporations to help ensure future compliance with antitrust law; to publish reports and make public certain information; to investigate foreign trade conditions; to investigate foreign antitrust law violations; to provide investigative assistance to foreign law enforcement agencies; to refer evidence for criminal proceedings to the attorney general; to classify corporations; and, in subsection (g), to “make rules and regulations for the purpose of carrying out the provisions [that describe the FTC’s powers].” The *National Petroleum Refiners Ass’n* decision rejected the not-unreasonable argument that 6(g) “rules and regulations,” in context, refer merely to the rules specifying the procedures the FTC must follow in carrying out the various investigative, reporting, and cooperative activities described in subsection (g).
28. 15 U.S.C. § 57a; 15 U.S.C. § 2309. This law enabled the FTC to promulgate trade regulation rules dealing with unfair and deceptive acts or practices. The application of the Magnuson-Moss procedure will be discussed in greater detail later in this section.
29. American Bar Association Antitrust Law Section, *Comments of the Antitrust Law Section*, 54.
30. *AMG Capital Management v. FTC*, 593 U.S. ____ (2021).
31. 15 U.S.C. § 57a.
32. For a discussion of the nondelegation doctrine, see C. Boyden Gray, “The Search for an Intelligible Principle: Cost-Benefit Analysis and the Nondelegation Doctrine,” *Texas Review of Law and Politics* 5, no. 1 (2000): 1–47.
33. Gray, “The Search for an Intelligible Principle.”
34. Todd Garvey, “A Brief Overview of Rulemaking and Judicial Review” (Report No. R41546, Congressional Research Service, Washington, DC, March 27, 2017), 14.
35. For a fuller examination of error costs in the competition context, see Thomas A. Lambert and Alden F. Abbott, “Recognizing the Limits of Antitrust: The Roberts Court versus the Enforcement Agencies,” *Journal of Competition Law and Economics* 11, no. 4 (2015): 791–853.
36. “Competition rules, however, inherently would be overbroad and would suffer from a very high rate of false positives. By characterizing certain practices as inherently anticompetitive without allowing for consideration of case-specific facts bearing on actual competitive effects, findings of rule violations inevitably would condemn some (perhaps many) efficient arrangements.” Alden F. Abbott, “FTC Competition Regulation: A Cost-Benefit Appraisal” (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, June 2021), 7; “[R]ulemaking will freeze the legal and economic analysis of any business conduct subject to a rule, preventing the nuanced inquiries that determine whether conduct *actually* harms consumers” (emphasis added). Christine S. Wilson, “Antitrust on the Antiques Roadshow: Appraising U.S. Antitrust Laws in a Modern Economy” (remarks, Defining the Digital Economy, Zoom, April 27, 2021), 12.
37. 16 C.F.R. §§ 1.7–1.20.
38. 16 C.F.R. pt. 456.

39. 16 C.F.R. pt. 436, 437.
40. 16 C.F.R. pt. 455.
41. 16 C.F.R. pt. 444.
42. 15 U.S.C. § 45(n).
43. FTC competition rules would be very different in nature from FTC consumer protection rules, which may improve the quality of information available to consumers. “At their best, our consumer protection rules strive to provide consumers with accurate information about products or sectors. . . . Competition rulemaking, in contrast, would ban a specific type of business practice across the economy. This approach is not compatible with current antitrust laws, which are fact-specific and evolve to embrace new economic learning.” Wilson, “Antitrust on the Antiques Roadshow,” 13.
44. “This study finds that if a non-enforcing state adopted mean enforceability policies, then the incidence of training would rise by 14%, but wages would fall by 4%. Enforceability also dampens the return to tenure and has the most negative effects on workers without advanced degrees.” Evan Starr, “Consider This: Training, Wages, and the Enforceability of Covenants Not to Compete,” *Industrial and Labor Relations Review* 72, no. 4 (2019): 814.
45. In this case, we are extrapolating competitive pressures from the existence of entrepreneurship and new firm creation. Evan Starr, Natarajan Balasubramanian, and Mariko Sakakibara, “Screening Spinouts? How Noncompete Enforceability Affects the Creation, Growth, and Survival of New Firms,” *Management Science* 64, no. 2 (2017): 552–72; Gerald A. Carlino, “Do Non-Compete Covenants Influence State Startup Activity? Evidence from the Michigan Experiment” (Working Paper No. 21-26, Federal Reserve Bank of Philadelphia, Philadelphia, July 2021). The author finds no effect on entrepreneurship from the enforceability of noncompete agreements.
46. MASS. GEN. LAWS ch. 149, § 24 L (2021).
47. MASS. GEN. LAWS ch. 149, § 24L(b)(i) (2021).