Written Testimony for the Senate Committee on Small Business and Entrepreneurship
Hearing on "Noncompete Agreements and American Workers"

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Chairman Rubio, Ranking Member Cardin, and Members of the Committee:

Thank you for the opportunity to testify on the important topic of noncompete agreements and American workers. My name is Evan Starr and I am an Assistant Professor at the University of Maryland's Robert H. Smith School of Business.

If you are unfamiliar with noncompete agreements, they are employment provisions that prohibit departing workers from starting or joining another firm in the industry within particular time and geographic boundaries. Here is an example of one, signed by a temporarily-employed packer at Amazon in 2015:

> *During employment and for 18 months after the Separation Date, Employee will not, directly or indirectly, whether on Employee's own behalf or on behalf of any other entity (for example, as an employee, agent, partner, or consultant), engage in or support the development, manufacture, marketing, or sale of any product or service that competes or is intended to compete with any product or service sold, offered, or otherwise provided by Amazon (or intended to be sold, offered, or otherwise provided by Amazon in the future) that Employee worked on or supported, or about which Employee obtained or received Confidential Information.*[1]

The reason that noncompetes like this are important is because they can prevent workers from working where they want and earning what they could in a competitive market. In addition, recent evidence suggests that noncompetes may have negative spillover effects that reduce economic dynamism generally.

The last few years have seen a bevy of new laws seeking to ban noncompetes for all or a subset of workers, including in Massachusetts, Washington, Florida, New Hampshire, Illinois, Hawaii, New Jersey, my home state of Maryland, and across the whole United States.

In my research I have sought to understand how common noncompetes are, how they influence workers and firms, and what sort of effects banning them has on economic activity.

[*] This testimony represents my own views and not necessarily those of the University of Maryland or the Robert H. Smith School of Business.

[1] The text of this noncompete is provided by Spencer Woodman in his article "Exclusive: Amazon makes even temporary warehouse workers sign 18-month non-competes." The article is available at https://www.theverge.com/2015/3/26/8280309/amazon-warehouse-jobs-exclusive-noncompete-contracts. After this contract was made public, Amazon reportedly withdrew these provisions from hourly workers' contracts.

In my testimony today, I'd like to make the following points:

(1) Noncompetes are everywhere. They are found most frequently in high-wage jobs, but they are also found regularly in low-wage jobs.

(2) Noncompetes are rarely negotiated over, and are regularly presented to workers when they have limited outside options—to the worker's detriment.

(3) Despite reasonable arguments that noncompetes might benefit workers and firms, most research suggests that the use and enforceability of noncompetes reduces wages, entrepreneurship, and job-to-job mobility, making it harder for firms to hire, and creating negative spillovers in the market.

(4) Women and non-white workers appear to be particularly harmed by noncompetes.

(5) Noncompetes are still common in states that do not enforce them, and even unenforceable noncompetes appear to limit employee mobility.

(6) Other, less restrictive employment practices can often do the same jobs for the firm as noncompetes. The efficacy of noncompetes should be judged based on their relative value compared to these less restrictive alternatives.

(7) Recent research on other mobility-restricting employment practices, such as no-poach agreements and non-solicitation (of clients) agreements suggest that they too hurt workers.

Before I elaborate on each of these points, I'd like to make two additional comments. From a conceptual perspective, it is important to note that this is not a classic firm vs. worker issue because firms are on both sides of the equation: Firms would clearly not like their workers to leave for competitors, but they would like to hire from their competitors. It is also not a conservative vs. liberal issue, as we've seen several recent bills proposed by both Republicans and Democrats, including recently by Chairman Rubio, Senator Young, and Senator Murphy.

I will now elaborate on each of my main points:

Point 1. Noncompetes are everywhere. They are found most frequently in high-paid jobs, but they are also found regularly in low-wage jobs.

Doggy daycare workers, unpaid interns, volunteer coaches, janitors, yoga instructors, and hair stylists are just some of the types of jobs in which noncompetes have been found.[2] In a study of 11,500 US workers, my colleagues JJ Prescott, Norman Bishara, and I estimate that in 2014 approximately 1 in 5 private sector workers were bound by noncompetes, and that approximately

[2] See Greenhouse, Steven "*Noncompete Clauses Increasingly Pop Up in Array of Jobs," New York Times, June 8, 2014* at https://www.nytimes.com/2014/06/09/business/noncompete-clauses-increasingly-pop-up-in-array-of-jobs.html.

40% of labor force participants have ever signed one.[3] Noncompetes are most common among executives,[4] as one might expect. Yet, hourly-paid workers actually make up the majority of noncompete signers because they represent such a large part of the labor force.[5]

Point 2. Noncompetes are rarely negotiated over, and are regularly presented to workers when they have limited outside options—to the worker's detriment.

In my study with Prescott and Bishara, we find that only 10% of workers report negotiating over their noncompete or for other benefits in exchange for signing. Furthermore, 86% of workers report that they were not promised any benefits for agreeing not to compete.[6] These findings do not imply that noncompetes are bad for workers per se, since additional compensation might be baked into the initial employment offer. But they do suggest that workers generally sign noncompetes when they are asked without requiring additional compensation beyond what is offered.

Furthermore, evidence from two studies finds that approximately 33-45% of workers who have signed noncompetes are asked to sign them *after* the worker has accepted the job offer, but without a promotion, raise, or other change in responsibilities.[7] The issue of timing is important because noncompetes give the firm *future* product and labor market power. For example, if a worker gets a job offer from a competitor, or has an idea to start a new firm in the industry, the employer can use the noncompete as a shield to prevent the worker from taking those opportunities. Given that noncompetes operate in the future, a key question is whether workers are compensated for what they give up *when they agree to these provisions*. The delay of noncompetes until after the worker has accepted the job may erode worker bargaining power if, for example, workers have turned down other offers or have already made important investments in the new job. My research with Prescott and Bishara finds that workers are worse off under these delays relative to workers who receive noncompetes with the job offer.[8]

Point 3. Despite reasonable arguments that noncompetes might benefit workers and firms, most research suggests that the use and enforceability of noncompetes reduces wages, entrepreneurship, and job-to-job mobility, making it harder for firms to hire, and creating negative spillovers in the market.

While noncompetes appear to be prima facie anticompetitive in that they can be used as a shield to protect the firm from future labor and product market competition, there are reasonable

[3] This evidence is reported in Starr, Evan, James J. Prescott, and Norman Bishara. "Noncompetes in the US labor force." *U of Michigan Law & Econ Research Paper* 18-013 (2019).
[4] See, for example, Bishara, Norman, Kenneth J. Martin, and Randall S. Thomas. "When do CEOs have covenants not to compete in their employment contracts?." *Vanderbilt Law Review* 68, no. 1 (2015): 12-33. They find that 70% of executives sign noncompetes (See Table 3).
[5] See, Lipsitz, Michael, and Evan Starr. "Low-Wage Workers and the Enforceability of Non-Compete Agreements." *Available at SSRN 3452240* (2019), finding that 53% of noncompete signers are hourly workers.
[6] See Starr et al. (2019 at 3; Table 5 shows the negotiation propensities and Table B13 shows what workers report their employers promised them in exchange for signing ag noncompete.
[7] See Table 4 in Marx, Matt. "The firm strikes back: non-compete agreements and the mobility of technical professionals." *American Sociological Review* 76.5 (2011): 695-712.
[8] See Starr et al. (2019) at 3, Table 7.

justifications for their use. These justifications typically include encouraging firms to invest in the development of trade secrets or valuable worker skills that firms fear would otherwise end up subsidizing their competitors. Theoretically, workers would be willing to agree to these restrictions when they are better off relative to their outside option, which might occur if firms share the returns made from these investments.

Given that it's unclear whether noncompetes (or the laws that regulate them) will hurt or benefit workers, the question is ultimately empirical. Tests of these competing arguments tend to find that when states ban noncompetes (or relax enforcement), workers tend to benefit.[9] For example, a recent study of mine with Michael Lipsitz examines Oregon's 2008 low-wage ban on noncompetes. We find that hourly-worker wages rose up to 6% 5 years after the ban, while job-to-job mobility rose 12-18% on average. The fact that wages rose following a ban suggests that they were being held down by noncompetes.

Low-wage workers are unique, however, in that they likely do not have access to the traditionally protectable interests, and so may not be a great test of the investment theory. In another study, my coauthors and I examine a ban on noncompetes that Hawaii implemented in 2015 for *only* high-tech workers—an occupation in which the potential benefits of investment are more salient.[10] Yet similar to the low-wage study, we find that Hawaii's ban on noncompetes for high-tech workers raised quarterly earnings for new hires by 4% and increased job mobility by 11%.[11] That is, even in the precise jobs where the investment story ought to be most plausible, we still find that noncompetes were holding down worker wages and mobility.

Other studies recognize that noncompetes do not just prohibit moving to another firm within the industry, but also extend to *starting* a new firm within the industry as well. Most studies find that the vigorous enforcement of noncompetes reduces entrepreneurship and makes it difficult for new firms to hire.[12]

[9] In addition to the studies described herein, Starr, Evan. "Consider this: Training, wages, and the enforceability of covenants not to compete." *ILR Review* 72.4 (2019): 783-817, also finds that workers earn less in higher enforceability states. Johnson, Matthew S., Kurt Lavetti, and Michael Lipsitz. "The Labor Market Effects of Legal Restrictions on Worker Mobility," *Available at SSRN 3455381* (2019), finds similar results. For a broad overview see Starr, Evan. "The Use, Abuse, and Enforceability of Non-Compete and No-Poach Agreements." *Economic Innovation Group. February 2019* https://eig.org/noncompetesbrief.

[10] See, Balasubramanian, N., Chang, J. W., Sakakibara, M., Sivadasan, J., & Starr, E. (2018). Locked in? the enforceability of covenants not to compete and the careers of high-tech workers. *US Census Bureau Center for Economic Studies Paper No. CES-WP-17-09*.

[11] Early studies in this literature documented that enforcing noncompetes reduces and redirects inventor mobility. See Marx, Matt, Deborah Strumsky, and Lee Fleming. "Mobility, skills, and the Michigan non-compete experiment." *Management Science* 55.6 (2009): 875-889, and Marx, Matt, Jasjit Singh, and Lee Fleming. "Regional disadvantage? Employee non-compete agreements and brain drain." *Research Policy* 44.2 (2015): 394-404.

[12] On reductions in entrepreneurship and challenges in hiring, see Starr, Evan, Natarajan Balasubramanian, and Mariko Sakakibara. "Screening spinouts? How noncompete enforceability affects the creation, growth, and survival of new firms." *Management Science* 64.2 (2017): 552-572. See also Starr, Evan, Martin Ganco, and Benjamin A. Campbell. "Strategic human capital management in the context of cross-industry and within-industry mobility frictions." *Strategic Management Journal* 39.8 (2018): 2226-2254. See also Stuart, Toby E., and Olav Sorenson. "Liquidity events and the geographic distribution of entrepreneurial activity." *Administrative Science Quarterly* 48.2 (2003): 175-201. Finally, see Jeffers, Jessica. "The impact of restricting labor mobility on corporate investment and entrepreneurship." *Available at SSRN 3040393* (2019).

Taken together, these results are hard to square with theories that suggest workers should benefit from noncompetes.

It’s important to note that these studies do not generally have information on the use of noncompetes—rather, they examine differences in state law and average across those who are and are not bound by noncompetes. Accordingly, it may be the case that enforcing noncompetes results in negative spillovers in the market (i.e., the wage losses are borne not only by those bound by noncompetes but also by others in the market). A recent study of mine with Justin Frake and Rajshree Agarwal finds evidence consistent with negative spillovers: in state-industry combinations where noncompetes are used *en masse* and are vigorously enforced by courts, the whole labor market is less dynamic, with lower mobility and wages, even for those not bound by noncompetes.[13] Another recent study by Johnson, Lipsitz, and Lavetti finds similar evidence of negative externalities.[14]

It’s also important to note that not all studies in this literature find negative effects of noncompetes, and that this research stream is still reaching consensus on some points. For example, there is contrasting evidence on the effects of noncompetes for CEOs.[15] And there are two studies finding evidence that those bound by noncompetes have higher earnings, though both studies acknowledge that they are unable to determine whether it is the noncompete or some other aspect of the worker or firm that causes higher earnings.[16] Other studies look directly at the investment margin, and some do find evidence that firms invest in riskier innovation, more firm-sponsored training, or more investment, though again there is some dispute on these points.[17] Most notable among these points is that California banned noncompetes in 1872, and some scholars note that this may be an important reason why Silicon Valley came to be such a thriving technology hub.[18]

Point 4. Recent research also finds that noncompetes have particularly negative effects on women and on non-white workers.

13 Starr, Evan, Justin Frake, and Rajshree Agarwal. "Mobility Constraint Externalities." *Organization Science* 30.5 (2019): 961-980.

14 Johnson, Matthew S., Kurt Lavetti, and Michael Lipsitz. "The Labor Market Effects of Legal Restrictions on Worker Mobility," *Available at SSRN 3455381* (2019).

15 On the contrasting effects on executives, see Garmaise, Mark J. "Ties that truly bind: Noncompetition agreements, executive compensation, and firm investment." *The Journal of Law, Economics, and Organization* 27.2 (2011): 376-425. For the alternative result, see Kini, O., R. Williams, and D. Yin. *CEO Mobility, Performance-Turnover Sensitivity, and Compensation: Evidence from Non-Compete Agreements*. Working Paper, 2017.

16 Starr et al. (2019) at 3. And, Lavetti, Kurt, Carol Simon, and William D. White. "The impacts of restricting mobility of skilled service workers: Evidence from physicians." *Journal of Human Resources* (2019): 0617-8840R5.

17 On firm-sponsored training, see Starr, Evan. "Consider this: Training, wages, and the enforceability of covenants not to compete." *ILR Review* 72.4 (2019): 783-817. On investment, see Jeffers (2017) at 12, Garmaise (2011) at 15. On risky investments, see Conti, Raffaele. "Do non-competition agreements lead firms to pursue risky R&D projects?." *Strategic Management Journal* 35.8 (2014): 1230-1248. And on innovation outcomes, see Samila, Sampsa, and Olav Sorenson. "Noncompete covenants: Incentives to innovate or impediments to growth." *Management Science* 57.3 (2011): 425-438.

18 Gilson, Ronald J. "The legal infrastructure of high technology industrial districts: Silicon Valley, Route 128, and covenants not to compete." *NYUl Rev.* 74 (1999): 575.

With regards to gender, two recent studies find that when noncompetes are easier to enforce they have a more detrimental effect on the earnings of women relative to the earnings of men.[19] For example, in my study of low-wage workers with Michael Lipsitz, we find that after Oregon bans low-wage noncompete for hourly workers, the hourly wages of women rise by 3.5%, nearly double the effect for men. In another recent study, Matt Marx finds that when noncompetes are easier to enforce, women are particularly less likely to start new ventures.

With regards to racial differences in the effects of noncompete agreements, one recent study by Johnson, Lipsitz, and Lavetti finds that when it is easier to enforce a noncompete non-white workers' wages are held down approximately twice as much as the wages for white workers.

Point 5. Noncompetes are still common in states that do not enforce them, and even unenforceable noncompetes appear to limit employee mobility.

Many recent proposals seek to ban noncompetes, much like California did back in 1872. However, it is important to note that noncompetes are still quite common in California: 62% of CEOs in California have signed them, 31% of physicians, and 20% of hair salons use them; more generally, across states that do not enforce noncompetes, 19% of workers still sign them.[20] My recent research with JJ Prescott and Norman Bishara also suggests that workers are generally unaware of the laws governing noncompetes and that worker mobility is chilled simply by the existence of the contract.[21] Accordingly, any policy that seeks to reduce the effects of noncompetes would need consider ways to disincentivize their use.

Point 6. Other, less restrictive employment practices can often do the same jobs for the firm as noncompetes. The efficacy of noncompetes should be judged based on their relative value compared to these less restrictive alternatives.

Noncompetes may be the most effective at protecting firm interests because they stop workers from joining or starting competitors in the first place. But this bluntness also underlies their potential downsides, offering the firm perhaps more protection than they need—at the expense of workers who may forego better opportunities.

There are several alternative provisions that are more tightly coupled with the firm's protectable interests that do not dictate where a worker can or cannot move. For example, if the firm's goal is to protect investments in specialized training, they might consider a training repayment agreement which stipulates that the firm will invest a certain amount of money in training the

19 See, Lipsitz, Michael, and Evan Starr. "Low-Wage Workers and the Enforceability of Non-Compete Agreements." *Available at SSRN 3452240* (2019). See also Johnson, Matthew S., Kurt Lavetti, and Michael Lipsitz. "The Labor Market Effects of Legal Restrictions on Worker Mobility," *Available at SSRN 3455381* (2019).

20 On executives, see Bishara et al. (2015) at 4. On physicians, see Lavetti et al. (2019) at 15. On hair salons, see Johnson, Matthew S., and Michael Lipsitz. "Why are low-wage workers signing noncompete agreements." Working paper (2019). On the use of noncompetes in non-enforcing states, see Starr et al. (2019) at 3.

21 On what workers believe about the law related to noncompetes, see Prescott, J. J., and Evan Starr. *Subjective Beliefs about Contract Enforceability*. Working Paper, 2019. On the extent to which unenforceable noncompetes still influence employee mobility, see Starr, Evan, James J. Prescott, and Norman Bishara. "The *in terrorem* Effects of (Unenforceable) Contracts." *U of Michigan Law & Econ Research Paper* 16-032 (2019).

worker, a portion of which the worker would repay if they leave too soon. If the firm is worried about the departure of clients, it can use a non-solicitation agreement that prohibits workers from soliciting former clients. If the firm is worried about the disclosure of information, it can use a non-disclosure agreement, or rely on trade secret laws. And so on.

Whether noncompetes are efficacious depends on their relative value to these alternative provisions. What little research exists on these provisions suggests that firms already use these provisions in tandem.[22] Moreover, there may be important tradeoffs involved if noncompetes (or any other practice) are restricted. For example, while noncompetes may be associated with lower wages and economic dynamism, enforcing a non-disclosure agreement may engender larger legal fees and longer court cases. Whatever policy choices are made, policymakers should be cognizant of the ways that firms can and will substitute between these practices, thereby anticipating any unintended consequences.

7. Recent research on these other mobility-restricting provisions, such as no-poach agreements and non-solicitation (of clients) agreements suggest that they too hurt workers.

No-poach agreements are organizational level agreements (i.e., not agreed to by workers) not to poach each other's workers. Recent research in the fast food franchise sector found that they covered more than 60% of major franchises in the United States in 2016,[23] although this number has fallen dramatically following investigations by the Washington State Attorneys General.[24] Recent research by Matt Gibson examines whether such no-poach agreements hurt workers in the context of the Silicon Valley collusion between 2005 and 2009 (later investigated by the DOJ).[25] He finds that each no-poach agreement agreed to by these firms cost workers between 2.6% to 4% of their annual salary.

Notably, little research has examined contractual "no-recruit agreements," where workers agree not to leave and then poach their former co-workers. These provisions are similar to no-poach agreements in that they may be invisible to the worker. That is, one worker may have his options limited not by his own choice, but by the choice of a coworker.

Other recent research on financial brokers finds that when firms allow brokers to leave with their clients that broker mobility rises, incentivizing workers to take better care of their clients.[26]

[22] See Nunn, Ryan, and Evan Starr, "The Co-Adoption of Overlapping Restrictive Employment Provisions," (data work in progress). See also, Kryscynski, David and Evan Starr, "Examining Employment Practice Bundles: When Firms Adopt Value Creation and Value Protection Practices" on how firms bundle these provisions with other HR perks.

[23] Krueger, A. B., & Ashenfelter, O. (2018). *Theory and evidence on employer collusion in the franchise sector* (No. w24831). National Bureau of Economic Research.

[24] See https://www.atg.wa.gov/news/news-releases/ag-ferguson-s-initiative-ends-no-poach-clauses-eight-more-corporate-chains-more.

[25] Gibson, M. "Employer market power in Silicon Valley" (2019)

[26] See Clifford, Christopher P., and William Christopher Gerken. "Investment in human capital and labor mobility: Evidence from a shock to property rights." *Available at SSRN 3064204* (2017). See also, Gurun, Umit G., Noah Stoffman, and Scott E. Yonker. "Unlocking Clients: Non-compete Agreements in the Financial Advisory Industry." (2019). Working paper.