THE HAMILTON PROJECT

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Reforming Non-Competes to Support Workers

Matt Marx

MISSION STATEMENT

The Hamilton Project seeks to advance America's promise of opportunity, prosperity, and growth.

We believe that today's increasingly competitive global economy demands public policy ideas commensurate with the challenges of the 21st Century. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by fostering economic growth and broad participation in that growth, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments.

Our strategy calls for combining public investment, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers — based on credible evidence and experience, not ideology or doctrine — to introduce new and effective policy options into the national debate.

The Project is named after Alexander Hamilton, the nation's first Treasury Secretary, who laid the foundation for the modern American economy. Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that "prudent aids and encouragements on the part of government" are necessary to enhance and guide market forces. The guiding principles of the Project remain consistent with these views.

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Reforming Non-Competes to Support Workers

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BROOKINGS

Abstract

This report describes evidence from empirical research on non-compete agreements and recommends policies to balance the interests of firms and workers. Firms use non-competes widely in order to minimize recruiting costs, safeguard investments, and protect intellectual property more easily than is achieved via non-disclosure agreements. But these benefits come at a cost to workers, whose career flexibility is compromised—often without their informed consent.

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Introduction

The American Industrial Revolution arguably saw its inception in Pawtucket, Rhode Island, at the Slater Mill on the Blackstone River. This was the first place in the New World where cotton was spun into thread by machine. Samuel Slater, founder of the eponymous mill, had emigrated from England where he had worked on the Arkwright spinning machine (Simonds 1990). However, Slater's homeland had taken steps to prevent him from developing his business in the United States.

Among the reasons underlying England's rapid rise to industrial power was its aggressive policy of recruiting skilled laborers by granting national monopolies (i.e., an exclusive right to produce goods using a particular technology) to those who pirated technologies from other countries (Ben-Atar 2004). At the same time, England adopted restrictions that forbade skilled artisans—including those who had imported stolen technologies—from leaving the country. Essentially, Samuel Slater was subject to a ban on leaving the country to practice his profession in any other country: he was not allowed to *compete* against England. Fortunately for Slater, his slight stature enabled him to disguise himself as a young farm boy and slip past emigration controllers in 1789 to board a ship for the New World.

Although revered in the United States as the father of the American Industrial Revolution, Slater is often referred to in the United Kingdom as Slater the Traitor for having purloined British textile technology. Had England's restrictions successfully bound him to his home country, the American Industrial Revolution would surely have been delayed. The Slater story highlights several controversial aspects of laws that seek to prevent workers from leaving their current workplace to take their expertise elsewhere. Almost certainly, Slater would have led a less distinguished career if he had remained bound by England's prohibition against the departure of skilled artisans. Moreover, it seems that America's gain was England's loss.

When considering the state enforcement of barriers to the mobility of skilled workers, similar trade-offs apply today between the interests of workers, incumbent firms, and new or even not-yet-founded firms. The balance between these interests is not straightforward, which could explain why, at least in the United States, states have taken very different approaches regarding post-employment covenants not to compete (hereafter, non-competes).

WHAT ARE NON-COMPETES AND HOW OFTEN ARE THEY USED?

A non-compete is a section of an employment contract in which the worker pledges not to join or found a rival company for a certain period of time after leaving the company. The use of non-competes dates back to 1414, when a former apprentice was sued for having set up shop in the same city despite having promised not to do so after his training was complete. The judge in the case is said to have not only thrown out the lawsuit but also to have threatened the plaintiff with jail time. The recent decimation by bubonic plague of the northern England labor supply had motivated the passage of the Ordinance of Labourers, which essentially outlawed unemployment for the able-bodied (Marx and Fleming 2012). However, this legal approach did not last in most jurisdictions, and today non-competes are widely used in a variety of industries.

Non-compete agreements between employers and their employees limit workers' labor market opportunities after leaving a firm. Although the details of non-compete contracts—as well as their enforceability under state law—vary considerably, they generally prohibit exiting workers from either joining or founding a business that competes with the previous employer. This prohibition is time-limited, and is typically also limited by region and industry, though the scope of the contract is sometimes quite broad.

In an increasingly knowledge-based economy, the most important assets of firms are not property, plant, and equipment. Rather, they are lodged in the minds of workers who walk out the door every night. Firms must either win or force workers' loyalty, lest they incur the time and costs of replacing those workers. Moreover, ex-employees who found or join a rival firm pose additional problems for their former employer. If the former employer has in effect prescreened qualified workers who are then poached by rivals, those rivals have lowered the cost and risk of their own recruitment. To the extent that the former employer increased those workers' value by investing in their training, that investment is lost.

And if the ex-employee were granted access to confidential information, this information could leak to the new employer.

Today, non-competes are widely used in a variety of occupations, especially among knowledge workers and executives. Prescott, Bishara, and Starr (2016) estimate that 18 percent of respondents to an online survey across a broad set of occupations had signed a non-compete for their current job. Looking specifically at engineers, Marx (2011) finds that 43 percent of workers had signed a non-compete in the past 10 years. Executives were even more likely to have signed: Garmaise (2011) finds that at least 70 percent of senior executives in public companies were bound by a non-compete.

THE CHILLING EFFECT

Another way to study the role of non-competes is to count lawsuits. If one assumes that non-competes are meaningful only insofar as employers seek injunctive relief against ex-employees, then counts of lawsuits ought to be a useful metric for understanding their impact. Jay Shepherd of the Shepherd Law Group reports that there were 1,017 published non-compete decisions in 2009 (Shepherd 2010). The Bureau of Labor Statistics (BLS) reported that there were 154,142,000 workers in the United States in that same year (BLS 2009). If the effect of non-competes were limited to the courtroom, simple math would suggest that 0.0007 percent of workers were affected by non-competes, according to this definition. Given the high fraction of workers who are asked to sign non-competes, the effect of these contracts is unlikely to be limited to judicial proceedings alone.

Rather, non-competes exert a chilling effect on workers even in the absence of a lawsuit. None of the interviewees in Marx's (2011) study who altered their career direction due to a non-compete were sued. Some received threatening letters or phone calls from their ex-employers, however, including one woman whose former boss called her for months to ask where she was working. Others, even if they were not directly threatened, assumed that if they were sued, they would lose due to the expense of defending themselves. Additional evidence for a chilling effect can be found in the estimate from Prescott, Bishara, and Starr (2016) that non-compete agreements are signed at roughly the same rate in the few states where they are unenforceable as in states where they can be upheld in court. Although part of this pattern could be an artifact of standardized, nationwide human resource policies whereby multistate firms require every employee in any state to sign, it is also possible that single-state firms hope to capitalize on the chilling effect for their employees who are unaware of state policy.

SUMMARY OF POLICY RECOMMENDATIONS

The benefits of non-competes accrue primarily to employers and at the expense of employees. Moreover, the process by which these parties agree to such contracts only rarely includes a true negotiation. Rather, employees are routinely strong-armed into signing the contract without carefully considering its implications, suggesting five avenues for reform:

1. End abusive practices including ambushing employees by not informing them about the requirement to sign a non-compete until after they have accepted the job offer and possibly turned down other offers, thus losing their negotiation leverage.

2. End the widespread practice whereby firms are not required to compensate existing employees in any way for signing a new or revised non-compete. (Rather, continued employment is said to be sufficient consideration for the requirement to sign.) Workers should have the right to refuse to sign an updated contract without retaliation.

3. End the non-compete enforcement practice whereby, rather than rule that a non-compete is valid or invalid according to state law, a judge can rewrite an overbroad or egregious contract to bring it in line with state guidelines.

4. Empower state attorneys general via unfair-employment-practice statutes to obtain settlements with firms that require workers to sign predatory, unenforceable non-competes. This is particularly important given that much of the impact of non-competes is attributable not to lawsuits but instead to the chilling effect of both enforceable and unenforceable contracts.

5. Institute mechanisms to make non-disclosure agreements (NDAs) easier to enforce, allowing them to better substitute for non-competes.

The Challenge

EVIDENCE ON THE ANTECEDENTS AND CONSEQUENCES OF NON-COMPETE AGREEMENTS

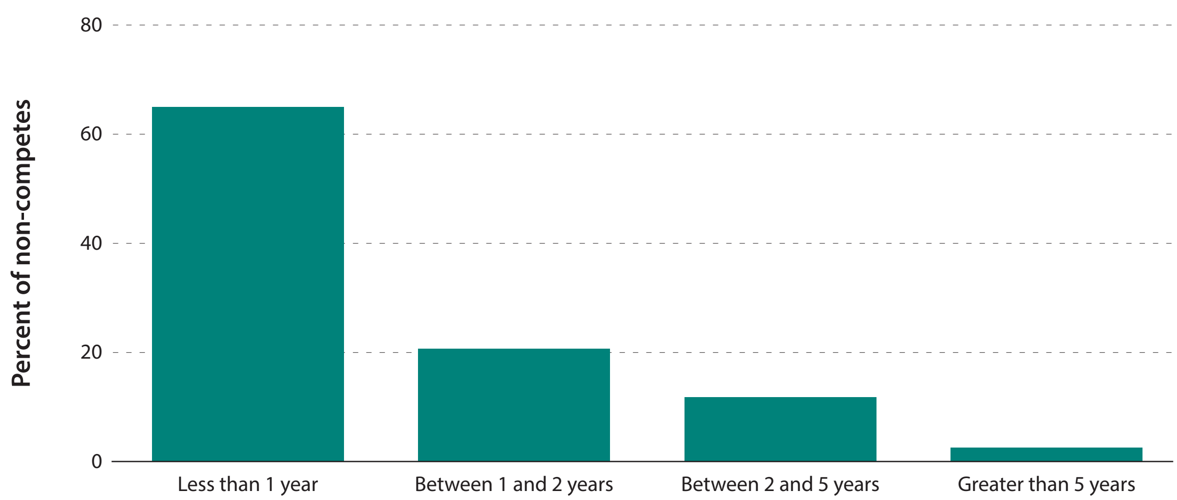
Although legal scholars have discussed the potential impacts of post-employment covenants not to compete, empirical work on the impacts of non-competes has been scarce until recently. In the past fifteen years several scholars have attempted to link non-competes to outcomes for workers, firms, and regions. Much of this work falls into two general categories:

1. Surveys that collect data on workers who have signed non-competes. These surveys offer insight into the prevalence of non-competes and the process by which employers get employees to sign them. Some studies take an additional step by providing correlations between presence of a non-compete and other outcomes of interest, although this analysis cannot identify the causal impact of non-competes on such outcomes. But an understanding of how non-competes are used is critical to assessing their costs and benefits, including implications of non-competes for the careers of individual workers and their effects on businesses.
2. Analyses based on state-level differences in whether and how non-competes are enforceable. These studies typically leverage changes over time in laws or court decisions. They do not incorporate survey data on who has or has not signed an agreement, data that are currently only available at a single point in time. However, these studies can help answer questions about the likely consequences of state policy reforms, including effects on regional productivity, entrepreneurship, and economic growth.

These types of studies have been conducted in four general areas. First, how and how often are non-competes used and among which types of employees; moreover, what is the process by which employee signatures are obtained? Second, what are the implications of non-competes for individual careers? Third, do firms benefit from non-competes? Fourth, and abstracting from employers and employees, what are the more general implications of non-competes for regional productivity, entrepreneurship, and economic growth?

FIGURE 1.

Share of Non-Compete Agreements, by Duration



Source: Marx 2011.

Note: Results are from a survey of the Institute of Electrical and Electronics Engineers with 1,029 respondents.

PREVALENCE AND PROCESS

Four papers have gathered data regarding the prevalence of non-compete agreements. First, Schwab and Thomas (2006) reviewed employment contracts from 865 respondents to a survey of chief executive officers (CEOs) from the S&P 500, S&P MidCap 400, and S&P SmallCap 600. Of those executives, 67.5 percent of respondents had a non-compete. The majority of those agreements were two years in duration (31.5 percent); 21.3 percent of them were one year. These results closely parallel the 70.2 percent rate of non-competes in the employment contracts of Execucomp executives found by Garmaise (2011).

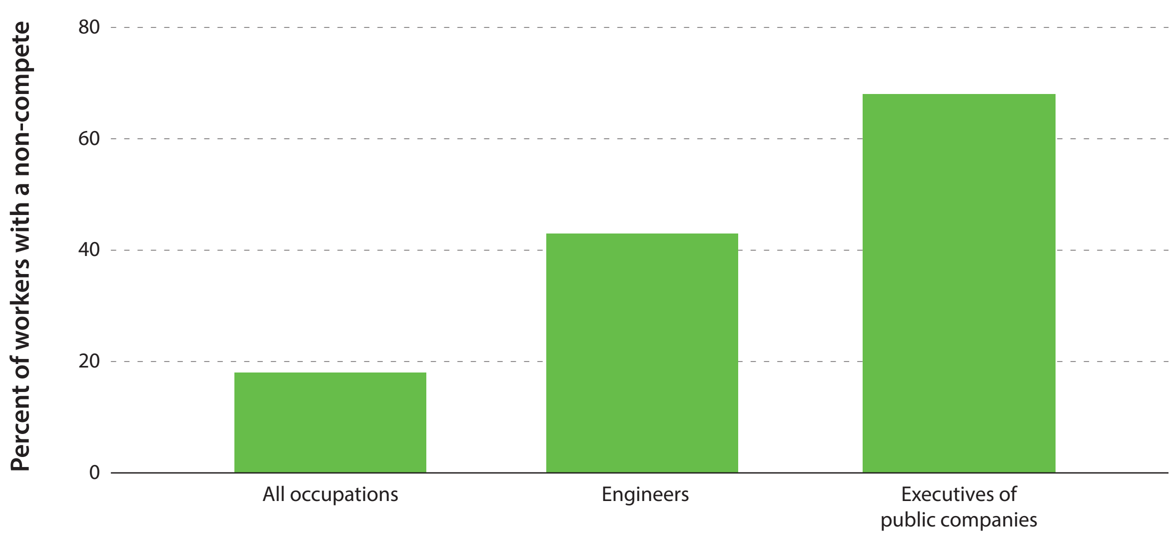
Of course, CEOs represent only a tiny segment of the labor market and are moreover a unique subset of employees. Marx (2011) conducted a broader survey of the Institute of Electrical and Electronics Engineers (IEEE), with 1,029 of 5,000 randomly selected members responding. Of these engineers working in several industries, 43.3 percent said that they had signed a non-compete within the past 10 years. Most survey respondents indicated that their non-compete lasted no longer than one year, but more than one-third of respondents claimed that the non-compete they signed was longer than one year (see figure 1).

Though more numerous than CEOs, engineers also constitute a small, highly educated segment of the labor market. In 2014 Prescott, Bishara, and Starr (2016) conducted an online survey of more than 700,000 people registered to fill out online surveys. Their 1.5 percent response rate yielded 11,505 responses. Approximately 15 percent of respondents replied that they were currently subject to a non-compete, and it is estimated that an additional 3 percent of respondents who were not sure whether they had signed a non-compete probably had, for a total of 18 percent of all workers. During their entire career, 43 percent said that they had signed one, similar to the result in Marx's survey, but for a much wider variety of occupations. These estimates are shown in figure 2.

For those workers who are bound by non-competes, the process by which employers obtain signatures from employees is potentially very important. One key finding is that this process bears little resemblance to "negotiat[ing] contracts of mutual benefit," as some have sought to portray it (Regan 2014). In Marx's (2011) survey of engineers, more than two-thirds of respondents who signed a non-compete (69.5 percent) reported that the request for them to sign a non-compete came after the offer letter. Note that after accepting an offer of employment (and turning down other offers, if any), the new hire loses negotiating leverage. Nearly one-quarter of respondents (24.5 percent) were asked to sign the non-compete on their first day at work (see figure 3). The lack of notice contributes to the fact that only one in ten (12.6 percent) of those who signed a non-compete sought legal advice before doing so; in fact, fewer than one in twenty (4.6 percent) of those who signed the non-compete on their first day of work sought legal advice. Of those who did not seek legal advice, nearly half reported that they felt time pressure to sign or that they were told the non-compete was nonnegotiable.

FIGURE 2.

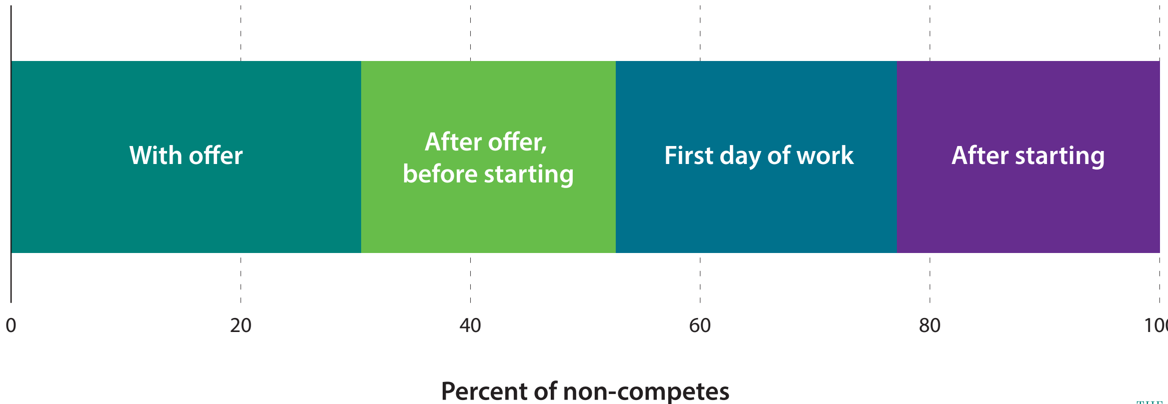
Share of Workers with a Non-Compete Agreement, Selected Occupations



Source: Marx 2011; Prescott, Bishara, and Starr 2016; Schwab and Thomas 2006.

FIGURE 3.

Share of Non-Compete Agreements, by Time of Signing



Source: Marx 2011.

Note: Results are from a survey of the Institute of Electrical and Electronics Engineers with 1,029 respondents and restricted to workers who have signed a non-compete agreement.

The disadvantages to workers during the signing process are exacerbated for those who are younger or less experienced. Younger workers are less than one-third as likely as their more-experienced counterparts to seek legal advice on their non-compete, perhaps due in part to the fact that they receive a non-compete with a job offer even less often than more-senior colleagues. They are less than half as likely to refuse to sign a non-compete, whether measured by age (11.2 percent of older workers refuse, compared with only 3.7 percent of younger workers) or years of experience (10.4 percent of more-experienced workers versus 5.0 percent of less-experienced workers).

WORKERS

Non-competes are common and the circumstances of their signing are often troubling. What effects do these non-competes have on workers? Three important questions include how non-competes affect mobility, wages, and on-the-job motivation.

Mobility

Perhaps the most well-established effect in the non-compete literature is that such employment agreements discourage workers from changing jobs. Fallick, Fleischman, and Rebitzer (2006) were the first to show suggestive evidence along these lines: they found much higher levels of job mobility among workers in the California computing industry. That said, the authors were careful to note that the correlations they noticed might be explained instead by differences in culture or other factors between California and other states. Other scholars have built on this work by exploiting state-level changes in non-compete policy—looking at the same places over time—to identify the causal effects of non-competes and non-compete enforceability on job-hopping.

Marx, Strumsky, and Fleming (2009) leverage an inadvertent change in Michigan's non-compete policy, showing that Michigan's unexpected switch from a California-style ban to allowing non-compete enforcement resulted in a drop in job mobility of 8.1 percent. Moreover, this result is not driven by Michigan's large automotive industry. Furthermore, non-competes have differential effects on workers, with larger impacts on those who have specialized skills.

Garmaise (2011) also finds non-competes to be a brake on mobility. He takes advantage of non-compete policy reversals in Florida, Louisiana, and Texas to show that executives at large, publicly traded corporations are materially less likely to change jobs when those states tighten enforcement of non-competes. When they do change jobs, moreover, they are more likely to move to a different industry.

Marx (2011) also finds evidence of such career detours among 52 randomly sampled interviewees in the speech recognition industry. During these career detours, interviewees reported lower compensation because they were unable to use some of their skills. One worker observed that the non-compete was particularly damaging to her because it precluded use not only of training from the firm where she signed the agreement, but also of all her prior relevant expertise: "I've been in this industry for 20 years. I have a PhD in the field. I walked in the door with an enormous amount of experience, and while I worked there for a year in a half they added maybe, what, 2 percent to that? And now they want to prevent me from using any of what I know?" (Marx 2011, 705).

To some extent, the findings regarding non-competes and mobility are unsurprising. If employers are asking employees to covenant not to join a rival after leaving the firm, the two principal implications of that request are that workers change jobs less often and, when they do, they tend to go to non-rivals. However, if one were to assume that non-competes have their impact primarily via lawsuits, the results are surprising: with only a small number of non-compete lawsuits, the observed mobility impact of non-competes should not occur. This observation reinforces the view that a non-compete chilling effect is important.

Wages

If non-compete agreements discourage workers from changing jobs, this restriction circumscribes the effective market for their skills. With fewer firms to bid for their labor, they might receive fewer and less-attractive job offers. Although workers bound by non-competes could be more valuable to their employer than other workers, whether their employer rewards them for that increased value might depend on the existence and credibility of external offers from other companies. Captive employees with limited outside options—even those with high value to their employers—might be paid less than others.

To date, the only published paper to investigate the impact of non-compete agreements on wages is Garmaise (2011). He finds that executives are paid less in states that have adopted stricter non-compete policies. Garmaise compares compensation in Florida, Louisiana, and Texas before and after non-compete policies were changed. Unfortunately, the literature currently has less evidence to offer on the impact of non-competes on the wages of lower-ranked employees. Although it would seem that similar arguments should apply to those who do not hold executive positions—perhaps more strongly, in fact—this is a topic of ongoing investigation.

Motivation

If non-compete agreements constrain mobility and wages—and if they do not provide clear benefits for workers—one might wonder whether such contracts adversely affect employee performance and/or motivation. That said, the potential effect is ambiguous. On the one hand, employees might be demoralized by the constraint represented by non-competes. On the other, if their only job option using their current skillset is with their existing employer, they could be highly motivated to perform well and avoid termination (especially because some non-compete agreements continue to bind workers who are fired).

These opposing effects might help to explain the results of Buenstorf et al. (2016). Recognizing that it is difficult to obtain data on employee motivation, they instead conduct a laboratory experiment in which two subjects are told that one will employ the other to work on an uncertain innovation project. In one treatment, the worker is not allowed to quit and take his or her skills to another firm; in the control, the worker is allowed to move to another firm. The experiment yields no difference in effort between the treatment and control, perhaps suggesting that non-competes do not influence workplace motivation. Of course, there could be substantial differences between the laboratory setting and the workplace.

FIRMS

Given the deleterious effects of non-competes on workers, it might follow that firms benefit from non-competes. Two papers indicate that this is the case. First, Younge and Marx (2016) examine how non-competes affect Tobin's q (i.e., the market value of assets divided by their replacement cost). They find that, compared to states where non-compete laws did not change, the ability to block employee mobility increased Tobin's q by 9.75 percent after Michigan abandoned its ban on non-compete agreements. The effect is larger in more highly competitive industries and is somewhat attenuated by patent protection.

Conti (2014) also finds that firms can profit from non-competes, as measured by the ability to pursue riskier research and development (R&D) projects. He finds that a 1996 tightening of non-compete laws in Florida increased both positive and negative extreme R&D outcomes (defined as patents with either zero forward citations or patents with citations in the top 1 percent), whereas the loosening of non-compete laws in Texas during 1994 decreased extreme outcomes.

Moreover, the ability to retain staff and pay them less, as described in the previous section, also benefits firms. One might claim that it is difficult to operate a business and invest in R&D without employee non-compete agreements, yet one need look no further than California's Silicon Valley or San Diego biotech cluster for counterexamples to the notion that a thriving innovation system cannot exist without non-competes. If non-competes were truly essential to R&D, one would have long since expected an exodus of technology firms from California. Furthermore, some of the most vigorous opponents of non-compete reform maintain extensive operations in California (Borchers 2014). Thus, although non-compete agreements may confer an advantage to existing firms, it certainly cannot be said that they are essential to the operation of firms.

REGIONS

Non-competes might have important implications for overall regional development, in addition to their effects on worker and firm outcomes. Key regional considerations include the flow of knowledge and talent as well as entrepreneurial activity. These channels potentially allow for substantial non-compete effects on overall economic growth.

Flows of Knowledge and Talent

As previously discussed, talent flows less *within* states with tighter non-compete laws. Researchers have also examined labor flows across states. Marx, Singh, and Fleming (2015) find that Michigan's rule change providing for enforcement of non-compete agreements resulted in a brain drain of talent out of the state. Specifically, technical workers left for other states with less-strict enforcement of non-competes.[1] Worse, this brain drain due to non-compete agreements is greater for the most highly skilled workers.

To the degree that knowledge is not always codified (as in a patent), but often resides in the minds of workers, it follows that circumscribed mobility of workers might likewise impede the flow of knowledge. Belenzon and Schankerman

(2013) analyze the diffusion of knowledge from the academy to industry, examining citations to both university patents and also to academic papers. Although their primary finding is that the diffusion of academic discoveries is constrained by state borders, they find that this is especially true in states that have tighter non-compete laws. This suggests that non-compete agreements may hamper the flow of information.

Although the restricted flow of talent and information likely serves the interests of existing firms, throttling information flow could have negative externalities for entrepreneurs and a negative impact on overall economic performance. For example, as discussed in the next section, it might be more difficult for business start-ups to emerge and succeed.

Entrepreneurship

Non-competes act as a brake on entrepreneurial activity, both by blocking the emergence of new companies and by making it harder for them to grow. To the former point, Stuart and Sorenson (2003) show that the spawning of new start-ups following events like IPOs or acquisitions is attenuated where non-competes are enforceable. Samila and Sorenson (2011) follow up this study to show that a dollar of venture capital goes further in creating start-ups, patents, and jobs when spent in states that do not strictly enforce non-compete agreements. Venture capital creates two to three times as much growth in regions where non-competes are unenforceable. Their finding is not just a Silicon Valley effect, but also holds when Silicon Valley is excluded entirely from the analysis. Starr, Balasubramanian, and Sakakibara (2017) likewise find that non-competes act as a brake on entrepreneurial entry, although this effect is limited to intra-industry spin-offs in which employees of one company leave to found a rival in the same industry. Workers founding start-ups in different industries are unaffected.

Non-competes not only make it more difficult to start a company, but also make it harder to grow a start-up. Once the company is incorporated, the founders must hire employees with relevant skills to expand the business. Unless sufficient workers can be found among fresh college graduates or the unemployed, existing firms are a primary source of potential hires—especially for firms with specific expertise needs. Yet start-ups could find themselves at a disadvantage in labor markets where non-competes are prevalent, both because they might lack the legal and financial resources to defend themselves and also because potential hires' mobility could be chilled by non-competes they have signed. One of the randomly selected interviewees with a non-compete in Marx's (2011) article stated that they were unlikely to accept a job offer at a small firm: "I consciously excluded small companies because I felt I couldn't burden them with the risk of being sued. [They] wouldn't necessarily be able to survive the lawsuit whereas a larger company would."

Ewens and Marx (2017) show the deleterious effect of non-competes on start-up performance. Investigating venture-capital-backed start-ups founded from 1995 through 2008 and tracking their performance through the first quarter of 2017, they find that the success of start-up companies often requires the hiring of new executives. Although some founders remain as the CEO for decades, in many cases founders are seen as incapable of leading the company as it scales beyond the start-up phase. Enforceable non-compete agreements make it more difficult to find replacement executives with relevant talent, which limits venture-capital-backed start-ups' ability to succeed.

Interestingly, there is one respect in which non-competes can facilitate the market for start-up acquisition. Younge, Tong, and Fleming (2015) show that acquisition activity was accelerated in Michigan after non-compete laws tightened. They credit this effect to the ability of acquiring firms to count on employees of the target firm to stay on, given that employment contracts are typically (but not always) acquired along with the purchase of the firm. If this effect on acquisitions also applies to smaller companies—which were not examined in this research—then non-competes might help start-ups through this channel.

Given these findings, it is not difficult to see why established companies generally implement non-competes when they are allowed to do so. Non-competes make it easier to retain employees and to pay them less, and they reduce the threat from new entrants within the industry. Moreover, when acquiring start-ups incumbent firms more easily hold on to talent. Yet these benefits to firms come at the expense of workers and start-ups.

A New Approach

The debate over employee non-compete agreements often centers around whether and how such contracts should be enforced. A starting point for these discussions is often California's longstanding refusal to enforce non-competes, based on its Business and Professions Code 16600: "Every contract by which anyone is restrained from engaging in a lawful profession, trade, or business of any kind is to that extent void" (Gilson 1999, 616). Michigan's Public Act 321 of 1905 instituted an enforcement regime similar to California's, which endured until March of 1985, when the state's policy became more aligned with most other states. Hawaii adopted a California-style policy in 2015 for the information technology industry, rendering non-competes unenforceable for that sector. Table 1 summarizes recent changes in state law.

Determining the ideal enforcement policy is hardly straightforward. Non-competes might help existing firms, but they do so at the expense of workers and would-be entrepreneurs. Thus policymakers are tasked with balancing the interests of these parties, some of whom are more vocal than others. In Massachusetts, for instance, firms as well as trade associations have spent nearly six figures lobbying state legislators against reforming non-compete governance (Borchers 2014). Workers, by contrast, do not have organized representation in these debates. Almost by definition, start-ups not yet founded do not have a voice, except perhaps to the extent that venture capitalists can advocate for their interests. Even with all interests represented in the policy discussion, different states could come to different conclusions regarding the ideal enforcement policy. States that choose to enforce non-competes can do so more or less strictly, as explained in box 1.

However, whether courts should enforce non-compete agreements is not the only—and not necessarily the most important—aspect of non-compete governance. Below, I propose a series of reforms to both the use and the enforcement of non-competes.

NOTICE AND NEGOTIATION

Apart from enforcement policy, the process by which employees sign non-competes deserves careful examination. Because a non-compete is a contract between an employer and an employee, employers must obtain signatures from employees. Ideally, workers would bargain over the terms of a potential non-compete with various potential employers at the same time

TABLE 1.

Selected Recent State-Level Policy Changes

State	Date	Details
Illinois	August 2016	The Illinois Freedom to Work Act bans the use of non-competes for workers earning less than the $13.50 minimum wage, and states that any such term in an employment agreement is void (Illinois Freedom to Work Act 2016).
Idaho	March 2016	House Bill 487 stipulates that key employees (among the 5 percent most highly paid) "must show that [they have] no ability to adversely affect the employer's legitimate business interests" or else a non-compete of up to 18 months in duration is presumptively enforceable (Idaho House Bill 487 2016, para. 5).
Utah	March 2016	The Utah Post-Employment Restrictions Act restricts non-competes to one year and requires an ex-employer whose non-compete suit is not upheld to pay its ex-employee's legal expenses (Utah Post-Employment Restrictions Act 2016).
Hawaii	June 2015	Hawaii Act 158 voids any "non-compete clause or a non-solicit clause in any employment contract relating to an employee of a technology business" (Hawaii Act 158 2015, sec. 2 (d)).

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BOX 1.

What Are the Different Ways Non-Competes Are Enforced?

Non-competes are enforced according to state laws—usually the common law but sometimes statutes—that vary considerably across states. Under the most stringent, business-friendly type of enforcement, courts can rewrite unreasonable provisions in a non-compete agreement so that the contract conforms to standards, then enforce the modified contract. A related enforcement doctrine allows courts to strike the unreasonable terms of a non-compete agreement and enforce the remainder of the contract. In either case, businesses have a diminished incentive to be cautious in the drafting of their non-competes, because they face little prospect of having an overly broad agreement invalidated during a legal proceeding.

So-called red-pencil doctrine is less strict from a worker's perspective. Courts implementing red-pencil doctrine will neither revise nor eliminate any provisions—rather, courts will nullify the entire non-compete agreement if any provision does not comply with state law. Under this standard, employers have a stronger incentive to write non-compete contracts so as to comply with state law and avoid overbroad provisions.

Of course, a few states do not enforce non-competes, generally speaking. California is the most notable example, having eliminated the enforcement of non-competes according to its Business and Professions Code 16600 in 1872 (Gilson 1999). Figure 4 shows how non-compete enforcement varies across the states.

that salaries and other terms of employment are negotiated. Workers would have access to the terms (or even text) of the proposed agreement and obtain the advice of legal counsel.

However, as described previously, the process by which employees covenant not to compete with their employers frequently resembles an ambush more than a negotiation. Most employees are not asked to sign until after they have accepted the job offer, and often not until they have started the job. Having already turned down other job offers, workers lack leverage by which they can productively negotiate the terms of their non-compete. They are frequently told that the contract is nonnegotiable or that they must sign quickly (thus not allowing time for legal review of a document they might not fully understand without counsel).

I propose that employers—in advance of hiring—be required to inform workers that they intend to seek a non-compete agreement as is currently required in Oregon. A reasonable amount of time must be provided for workers to adequately review the proposed contract.

COMPENSATION

A related issue with the timing and transparency of non-competes concerns their use with employees who have long since been hired. In some states it is permissible for employers to require existing employees to sign afterthought non-competes. That is, as a condition of retaining their existing job, employees must sign a (revised) non-compete without obtaining any compensation or other consideration for doing so. Although workers are free to quit their job rather than sign the new non-compete, doing so can be financially destabilizing, and it may be less advantageous to look for a new job once unemployed. All of these practices are contrary to the notion that employees should be bound by employment agreements that they enter into willingly and to mutual benefit.

I therefore propose that, in exchange for current employees signing a new or revised non-compete, firms be required to compensate those workers in some manner beyond simply continuing their employment. In addition, current employees should have the right to refuse to sign an updated contract without retaliation, including loss of employment.

JUDICIAL MODIFICATION

In the summer of 2010 citizens of Georgia were asked to vote on a constitutional amendment with the following wording: "Shall the Constitution of Georgia be amended so as to make Georgia more economically competitive by authorizing legislation to uphold reasonable competitive agreements?" (Georgia House Resolution 187 2010, section 2).

The proposed amendment passed with 68 percent of the popular vote.[2] Little did voters realize that they were voting to authorize a practice that gives firms additional control in their use of non-competes. Georgia's provision enables judges to *change* the terms of a non-compete contract, rather than invalidate it entirely, when the original terms are found to be unenforceable under state law.

For instance, if state law restricted non-competes to a duration of one year, and the contract in a particular case specified a two-year term, a judge would previously have been required to strike down the contract. Under Georgia's new enforcement regime, a court can simply rewrite the contract to be one year in duration and then enforce the modified contract. A majority of states (41 out of 50) currently allow some degree of modification by the courts, as shown in figure 4.

Modifying a non-compete might seem to be a boon for employees, but in fact the opposite is the case, for three reasons.

1. The practice of judicial modification enables non-competes to be enforced that would otherwise be struck down (albeit with reduced scope).
2. The ability of judges to fix non-competes could encourage negligence on the part of firms, which would otherwise be more careful in drafting non-competes that would be struck down if they do not conform to state law.
3. Firms might even intentionally draft non-compete contracts with broader scope than is permitted by law. Even if the non-compete is too broad—say, two years instead of one—the worst that can happen is that a judge could reduce the scope and then enforce the contract. But in the absence of a lawsuit, the employee might continue to believe that the non-compete would be enforced as written (even with its overbroad terms, the legality of which the employee might not fully comprehend).

I therefore propose that states abandon the practice of allowing judges to modify non-compete agreements. Under this doctrine, courts would throw out non-competes that contain one or more unenforceable provisions under state law.

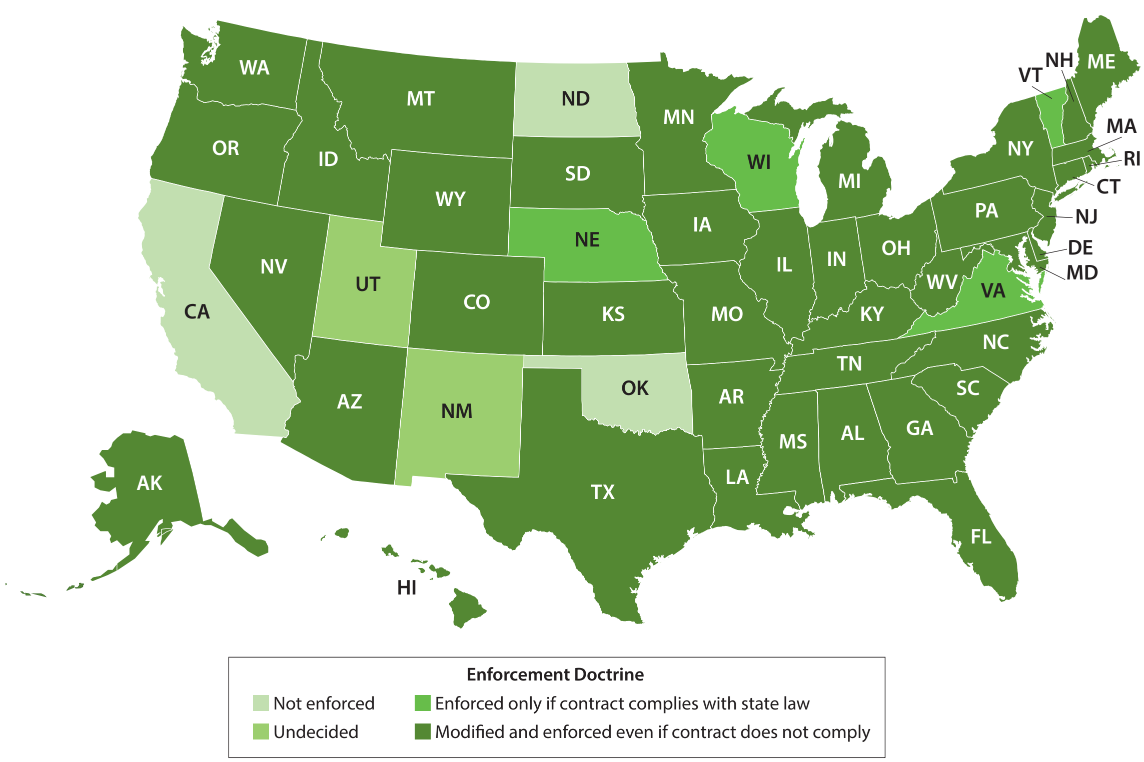
THE CHILLING EFFECT

The possibility for employer negligence and abuse afforded by courts' ability to modify and enforce non-competes is another opportunity for deployment of the chilling effect. As noted above, very few non-compete lawsuits are even filed. This suggests that the effect of non-competes is experienced less through the courtroom and more through workers' expectation that they might be sued. This chilling effect has been documented in interviews with workers who either remained in their jobs or took career detours due to a non-compete they had signed (Marx 2011).

If non-competes have a chilling effect even in the absence of a lawsuit, then non-compete reforms that only limit the behavior of a judge in a courtroom might have insufficient effect. Workers might avoid breaching their non-compete even if their employer were unlikely to sue them to enforce the

FIGURE 4.

Non-Compete Enforcement, by State



Source: Beck Reed Riden LLP 2017; author's calculations.

Note: The type of enforcement in which courts can rewrite terms of contracts is often called the rule of reformation. When courts can delete provisions but cannot insert new text, the enforcement doctrine is often called blue pencil. These two types of enforcement are combined in the figure category, "Modified and enforced even if contract does not comply."

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contract. For example, a worker might avoid pursuing a job opportunity at another company for fear that they might be sued, even if such an opportunity was not clearly in violation of the contract. Even in California, someone asked to sign a non-compete who does not know that the contract is unenforceable under state law might be reluctant to change jobs for fear of retaliation. As long as firms can *use* non-compete contracts, the chilling effect will obtain because there appears to be little downside to firms asking workers to sign non-competes.

In implementing its 2016 non-compete reform for low-wage workers, Illinois not only rendered such contracts unenforceable but also banned firms from using such contracts at all: "No employer shall enter into a covenant not to compete with any low-wage employee of the employer" (Illinois Freedom to Work Act 2016, sec. 10 (a)). The ban on using non-competes for low-wage workers, in combination with the state's Consumer Fraud and Deceptive Business Practices Act, empowered Attorney General Lisa Madigan to bring legal action against noncompliant firms that allegedly required low-wage workers without proprietary or confidential information to be bound by non-competes (Channick 2017).

Note that the Illinois provision does not ban all non-competes but rather those that are unenforceable on their face. Given this provision, workers can report violations (and can do so anonymously) for the state attorney general to investigate. Public investigations, declaratory judgments, injunctions, and civil penalties would surely reduce the abuse of non-compete agreements by firms. Currently, companies have little to lose by aggressively using non-competes, especially in states that allow modification and enforcement of overbroad non-competes.

I propose that state attorneys general be empowered through unfair-employment-practice statutes to eliminate non-competes that are unenforceable on their face. The threat of legal action could yield a reverse chilling effect to partially counteract the deleterious effects on workers.[3]

NON-DISCLOSURE AGREEMENTS

Non-competes are just one option that employers can pursue to protect their legitimate interests. Non-disclosure agreements (NDAs) are another option, but these agreements can be difficult and costly to enforce: the former employer must show that the ex-employee divulged trade secrets or other proprietary information. By comparison, it is much simpler to verify whether a non-compete has been violated: one need only establish that the ex-employee is working at a rival firm. From an employer's perspective, a non-compete is a less costly way of protecting confidential information. Moreover, an NDA cannot guard against the use of nonproprietary training, whereas a non-compete blocks the ex-employee from deploying that training elsewhere and thus increases the value of the investment to the employer. As the peer-reviewed literature shows, firms are advantaged by the ability to use non-competes (Conti 2014; Younge and Marx 2016).

At the same time, although an NDA does not specifically block the worker's career flexibility—only the sharing of proprietary information—a non-compete by definition limits subsequent career opportunities for the worker. Bound to their current employer, they might fail to capture the same compensation they would if they could test their value on the open market. Indeed, workers subject to non-competes are less likely to leave their employer; when they do leave, they tend to also leave their industry or their current geographic region (Garmaise 2011; Marx 2011; Marx, Singh, and Fleming 2015; Marx, Strumsky, and Fleming 2009).

Policymakers might therefore want to explore legal instruments for the protection of trade secrets that are at once more reliable than NDAs and less impactful on workers than non-competes. These instruments would be substitutes for non-competes and could diminish their harmful effects.

One possible approach is that adopted in the settlement of IBM's lawsuit to block ex-employee Mark Papermaster from joining Apple. The term of Papermaster's non-compete was reduced in exchange for his agreement to certify in writing at three-month intervals that he had abided by his NDA. In this way, IBM's trade secrets were more tightly protected without blocking Papermaster from taking a new job (Elmer-Dewitt 2009).

Questions and Concerns

1. Is trade secret litigation too slow and too costly to rely on as a replacement for non-competes?

Surely it is easier to prove violation of a non-compete ("Is the ex-employee now working at a rival?") than to prove violation of an NDA ("Did the ex-employee divulge trade secrets?"). But the non-compete is a blunt instrument with which to compel adherence to the spirit of an NDA. Non-competes have many negative implications for individual workers, including those workers who are abiding by their obligations regarding confidential information.

2. In general, mutually agreed-on contracts are considered beneficial. Why are non-competes different?

One might claim that government should refrain from interfering with contractual relations between consenting employers and employees and avoid artificially restricting the set of possible employment relationships. Brad MacDougall, vice president of government affairs at the Associated Industries of Massachusetts, gave voice to this perspective when he claimed, "The non-compete issue is really about choice for both individuals and employers, who should be free to negotiate contracts of mutual benefit" (Regan 2014).

However, the experience and analysis of non-competes suggests that non-competes are often not mutually agreed on. The research highlighted in this chapter shows that the process of getting workers to sign non-competes often resembles less a negotiation than it does an ambush. In addition, workers often cannot refuse to sign the non-compete lest they lose their job.

3. Are non-competes really an important issue outside of a few high-level executive jobs?

It is true that non-compete usage is highest among executives, but they are also widely used among nonexecutives. Nearly half of engineers have signed a non-compete, and about a fifth of workers in the overall population are currently subject to a non-compete. Moreover, non-competes are relatively common among both low-skilled and high-skilled workers.

Conclusion

Employee non-compete agreements remain a controversial topic, as evidenced by wildly varying policy across states. This policy variation could be due to differences in how state policymakers think about the interests of workers, existing firms, and would-be entrepreneurs. Research provides insight into these interests, suggesting that non-competes discourage mobility and depress wages among workers while promoting stock market performance among publicly traded firms. Non-competes make it harder to start new companies and also act as a brake on their performance by making it more difficult to attract experienced talent.

Balancing these interests is a delicate matter and probably rightfully left to states to decide. However, the process by which employers obtain signatures from employees should be standardized to ensure that workers are not ambushed but instead have the ability to negotiate such contracts and receive legal advice. Moreover, modifying and enforcing non-competes that were originally unenforceable only serves the interests of firms at the expense of workers. Given that non-competes rarely achieve their impact via lawsuits but much more often via a chilling effect, states should regulate not only enforceability in a courtroom but also whether firms are allowed to compel employee signatures. Finally, state attorneys general should be empowered to sanction firms that engage in abusive non-compete practices.

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Professor Marx previously worked as a software engineer and an executive at technology start-ups SpeechWorks and Tellme Networks, where he received six patents. He holds a BS in Symbolic Systems from Stanford University, a master's degree from the MIT Media Lab, and an MBA as well as a doctoral degree from Harvard Business School.

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Endnotes

1. This finding is not simply an artifact of the automotive industry or general westward migration; in fact, it is robust to a variety of tests including pretending that the policy change happened in Ohio or other nearby, mid-sized Midwestern states that would have been similarly affected by general migration patterns.
2. As described by Pardue (2011), the text summarizing a constitutional amendment in Georgia does not have to resemble the actual bill.
3. I am especially grateful to John Bauer of Lawson & Weitzen for discussions on this point.

References

Beck Reed Riden LLP. 2017. "Employee Noncompetes: A State by State Survey." Fair Competition Law, Boston, MA.

Belenzon, Sharon, and Mark Schankerman. 2013. "Spreading the Word: Geography, Policy, and Knowledge Spillovers." *Review of Economics and Statistics* 95 (3): 884–903.

Ben-Atar, Doron S. 2004. *Trade Secrets: Intellectual Piracy and the Origins of American Industrial Power.* New Haven, CT: Yale University Press.

Borchers, Callum. 2014, May 18. "Tactics Put the Spotlight on Noncompete Clauses." *Boston Globe.*

Buenstorf, Guido, Christoph Engel, Sven Fischer, and Werner Gueth. 2016. "Non-Compete Clauses, Employee Effort and Spin-Off Entrepreneurship: A Laboratory Experiment." *Research Policy* 45 (10): 2113–24.

Bureau of Labor Statistics (BLS). 2009. "Employment and Earnings." Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC.

Channick, Robert. 2017, October 26. "Illinois Sues Payday Lender Over Low-Wage Workers Forced to Sign Noncompete Agreements." *Chicago Tribune.*

Conti, Raffaele. 2014. "Do Non-Competition Agreements Lead Firms to Pursue Risky R&D Projects?" *Strategic Management Journal* 35 (8): 1230–48.

Elmer-Dewitt, Philip. 2009, January 28. "IBM Settles; Papermaster to Join Apple in April." *Fortune.*

Ewens, Michael, and Matt Marx. 2017, November. "Founder Replacement and Startup Performance." *Review of Financial Studies.*

Fallick, Bruce, Charles A. Fleischman, and James B. Rebitzer. 2006. "Job-Hopping in Silicon Valley: Some Evidence Concerning the Microfoundations of a High-Technology Cluster." *Review of Economics and Statistics* 88 (3): 472–81.

Garmaise, Mark J. 2011. "Ties that Truly Bind: Noncompetition Agreements, Executive Compensation, and Firm Investment." *Journal of Law, Economics, and Organization* 27 (2): 376–425.

Georgia House Resolution 187, 2009–2010 Gen. Sess., amend. Const. article III, section VI, paragraph V (2010).

Gilson, Ronald J. 1999. "The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete." *New York University Law Review* 74 (3): 575–629.

Hawaii Act 158, S.B.1227 H.D.2 CD1 (2015).

Idaho House Bill 487 63rd Leg. 2nd Sess., amend. Idaho Code 44-2704 (2016).

Illinois Freedom to Work Act 820 ILCS 90/ (2016).

Marx, Matt. 2011. "The Firm Strikes Back: Non-Compete Agreements and the Mobility of Technical Professionals." *American Sociological Review* 76 (5): 695–712.

Marx, Matt, and Lee Fleming. 2012. "Non-Compete Agreements: Barriers to Entry…and Exit?" In *Innovation Policy and the Economy*, vol. 12, ed. Josh Lerner and Scott Stern (39–64). Chicago, IL: University of Chicago Press.

Marx, Marx, Jasjit Singh, and Lee Fleming. 2015. "Regional Disadvantage? Employee Non-Compete Agreements and Brain Drain." *Research Policy* 44 (2): 394–404.

Marx, Matt, Deborah Strumsky, and Lee Fleming. 2009. "Mobility, Skills, and the Michigan Non-Compete Experiment." *Management Science* 55 (6): 875–89.

Pardue, David. 2011, March. "Failing to Trust the Public: The Process of Submission of the Enabling Amendment to the Georgia Constitution for the Restrictive Covenant Act Was Unconstitutional." http://tradesecretstoday.blogspot.com/2011/03/failing-to-trust-public-process-of.html.

Prescott, J. J., Norman D. Bishara, and Evan Starr. 2016. "Understanding Noncompetition Agreements: The 2014 Noncompete Survey Project." *Michigan State Law Review* 2016 (2): 369–464.

Regan, John. 2014, May. "Non-Compete Agreements Protect Innovation." *Associated Industries of Massachusetts* (blog).

Samila, Sampsa, and Olav Sorenson. 2011. "Noncompete Covenants: Incentives to Innovate or Impediments to Growth." *Management Science* 57 (3): 425–38.

Schwab, Stewart J., and Randall S. Thomas. 2006. "An Empirical Analysis of CEO Employment Contracts: What Do Top Executives Bargain For?" *Washington & Lee Law Review* 63 (1): 231–70.

Shepherd, Jay. 2010, December. Noncompete Cases Not Slowed by Economy, Legislation. *Gruntled Employees* (blog).

Simonds, Christopher. 1990. *Samuel Slater's Mill and the Industrial Revolution*. Parsippany, NJ: Silver Burdett Press.

Starr, Evan, Natarajan Balasubramanian, and Mariko Sakakibara. 2017, January. "Screening Spinouts? How Noncompete Enforceability Affects the Creation, Growth, and Survival of New Firms." *Management Science.*

Stuart, Toby E., and Olav Sorenson. 2003. "Liquidity Events and the Geographic Distribution of Entrepreneurial Activity." *Administrative Science Quarterly* 48 (2): 175–201.

Utah Post-Employment Restrictions Act, Chap. 153, 2016 Gen. Sess. (2016).

Younge, Kenneth A., and Matt Marx. 2016. "The Value of Employee Retention: Evidence from a Natural Experiment." *Journal of Economics & Management Strategy* 25 (3): 652–77.

Younge, Kenneth A., Tony W. Tong, and Lee Fleming. 2015. "How Anticipated Employee Mobility Affects Acquisition Likelihood: Evidence from a Natural Experiment." *Strategic Management Journal* 36 (5): 686–708.

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Highlights

Firms use non-competes widely in order to minimize recruiting costs, safeguard investments, and protect intellectual property more easily than is achieved via non-disclosure agreements. But these benefits come at a cost to workers, whose career flexibility is compromised—often without their informed consent. In this paper, Matt Marx describes evidence from empirical research on non-compete agreements and recommends policies to balance the interests of firms and workers.

The Proposal

Mandate that employers inform workers that they intend to seek a non-compete agreement in advance of hiring. Marx proposes that a reasonable amount of time be provided for workers to adequately review the proposed contract.

Require employers to compensate existing employees for signing a new or revised non-compete. Marx recommends that firms be required to compensate these workers in some manner beyond simply continuing their employment. Employees should retain the right to refuse to sign an updated contract without retaliation.

Prohibit judges from modifying non-compete agreements. Under this doctrine, courts would throw out non-competes that contain one or more unenforceable provisions under state law.

Empower state attorneys general through unfair-employment-practice statutes to eliminate non-competes that are unenforceable.

Institute mechanisms to make non-disclosure agreements easier to enforce. Marx suggests that non-disclosure agreements could substitute for non-competes and diminish the latter's harmful effects.

Benefits

The benefits of non-competes accrue primarily to employers and at the expense of employees. Moreover, the process by which these parties agree to such contracts only rarely includes a true negotiation. Rather, employees are routinely strong-armed into signing the contract without carefully considering its implications. The policies in this proposal would better balance the interests of firms and workers, limiting non-competes to instances in which they are more likely to be mutually beneficial.

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