

## Increasing Employment for Individuals with Criminal Records

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## 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.





# Increasing Employment for Individuals with Criminal Records

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NOTE: This policy memo is a proposal from the author. As emphasized in The Hamilton Project's original strategy paper, the Project was designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project's broad goals of promoting economic growth, broad-based participation in growth, and economic security. The author is invited to express her own ideas in policy memos, whether or not the Project's staff or advisory council agrees with the specific proposals. This policy memo is offered in that spirit.

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# Abstract

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Workers with criminal records, in particular black and Hispanic males with criminal records, face many labor market challenges—over and above the challenges faced by the larger population of low-skilled workers. Finding ways to improve employment outcomes for individuals with criminal records is an urgent priority with implications for public safety, the economy, and families of those with records.

New evidence documenting unintended negative consequences of one recent attempt to address this concern—Ban the Box laws that delay employer access to information about applicants—should be considered as the policy discussion moves forward. As policymakers continue efforts to address employment among workers with criminal records, it is imperative that they begin with an understanding of how employers interact with job applicants who have criminal records. Accordingly, a multi-pronged approach—inclusive of effective policies aimed at building workers' skills, communicating their work-readiness to employers, and promoting robust labor markets for low-skilled workers—is necessary for improving employment outcomes for workers with criminal records.

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# CHAPTER 1. Introduction

Employment has benefits that go beyond the obvious. Work—or the loss of work—has been shown to have impacts on mortality (Sullivan and Von Wachter 2009), happiness (Blanchflower and Oswald 2004), criminal activity (Heller 2014; Schnepel forthcoming; Yang 2016), and even the subsequent earnings and social assistance accrued by workers’ children (Oreopoulos, Page, and Stevens 2008).

Unfortunately, the labor market in the United States can often be a difficult and inequitable environment for workers from a variety of demographic groups: those with limited education, black and Hispanic workers, and individuals with criminal records. All of these groups face distinct challenges. Understanding the magnitude and the nature of these challenges is essential to crafting effective policy solutions—and may prevent harm induced by well-intentioned but potentially counterproductive policies.

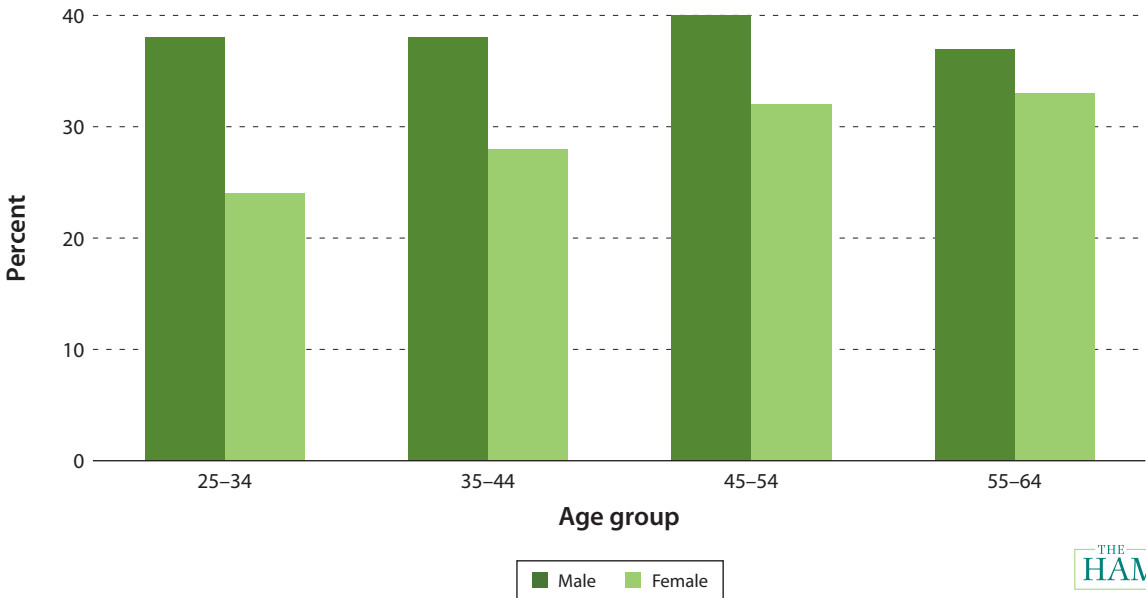
Many individuals are engaged in the low-skill labor market: 43 million workers—34 percent of the prime-age labor force—have only a high school degree or less. Whereas

younger women are less likely to be low skilled than their older counterparts, low-skilled men comprise between 35 and 40 percent of the workforce within each age bracket (see figure 1). Low-skilled workers receive much lower wages and are employed at lower rates than are high-skilled workers.

Black and Hispanic workers make up a larger share of low-skilled workers. Although the fraction of the black and Hispanic prime-age labor force with four-year degrees or more doubled from 1980 to 2015—increasing more quickly than it did for white workers—their shares remain much smaller: in 2015 43.2 percent of white prime-age workers had a college education, compared with 29.2 percent of black workers and 18.7 percent of Hispanic workers. Due to a wide range of factors—including lack of access to quality schools—black and Hispanic workers are also 1.7 times as likely to have less than a high school education than are white workers.

In addition to the challenges of navigating a labor market that increasingly disfavors low-skilled workers, many black and Hispanic workers experience well-documented racial

FIGURE 1. Percent of Adults in Labor Force with a High School Degree or Less, by Age Group



Sources: U.S. Census Bureau (Census) and Bureau of Labor Statistics (BLS) 2015; author’s calculations.  
Note: Limited to ages 25 to 64. High school degree includes high school diploma and GED.

discrimination in hiring even after educational and other differences are taken into account. Legal prohibitions of such discrimination can be challenging to enforce, resulting in low-skilled black and Hispanic workers additionally contending with the separate disadvantages conferred by lower levels of education and racial discrimination.

In addition—as is the focus of this document—workers with criminal records are penalized in the labor market. This discrimination occurs for a number of reasons, but many researchers have specifically examined the possibility that employers use criminal record information to make inferences about the employability of a given worker. Even conditional on educational attainment, workers' productivity varies greatly. Individuals with criminal records may be systematically different than their counterparts with the same education level; that is, for some employers having a record is correlated—not in every case, but on average—with a variety of negative traits that reduce individuals' work readiness. Employers have a strong incentive to hire only the applicants who they perceive will have a highly productive

match to the firm, given that it is time consuming and costly to employ workers who turn out to be ill-suited for the job. Information about criminal records can, in the view of many employers, help them to learn which applicants are and are not employable.

In this policy memo I lay out five principles that, if effectively implemented, can guide efforts to improve outcomes for workers with criminal records. First, it is important to increase availability of jobs for low-skilled workers. Building and communicating work readiness is also of primary importance. In addition, reducing the perceived cost of hiring a worker with a criminal record by insulating employers from legal liability can be helpful. Finally, recent research suggests that it is necessary to carefully weigh the unintended consequences of regulations, such as Ban the Box (BTB) legislation, that restrict collection of criminal record information about potential employees. For firms that desire such information, these regulations may harm younger black and Hispanic low-skilled male workers.



## CHAPTER 2.

# Challenges in the Low-Skilled Labor Market

### A DIFFICULT LABOR MARKET FOR LOW-SKILLED WORKERS

The labor market experience of low-skilled workers is often a challenging one. Over the last few decades, it has become more so, with wage inequality rising considerably (Clemens 2016; Council of Economic Advisers [CEA] 2016). While the causes of this development are debated—reflecting the effects of technological innovation (Acemoglu and Autor 2010; Autor, Katz, and Kearney 2008), offshoring and globalization (Autor, Dorn, and Hanson 2013, 2016), and declining unionization (Lee and Mas 2012), among other possibilities—it can be largely understood as a shift in the economy’s demand for labor away from low-skilled workers (CEA 2016). Regardless of the causes, low-skilled workers (those with relatively little education) have suffered as a consequence. While high-skilled workers have experienced rising wages, male workers with only a high school education saw their inflation adjusted earnings drop 13 percent from 1979 to 2015.

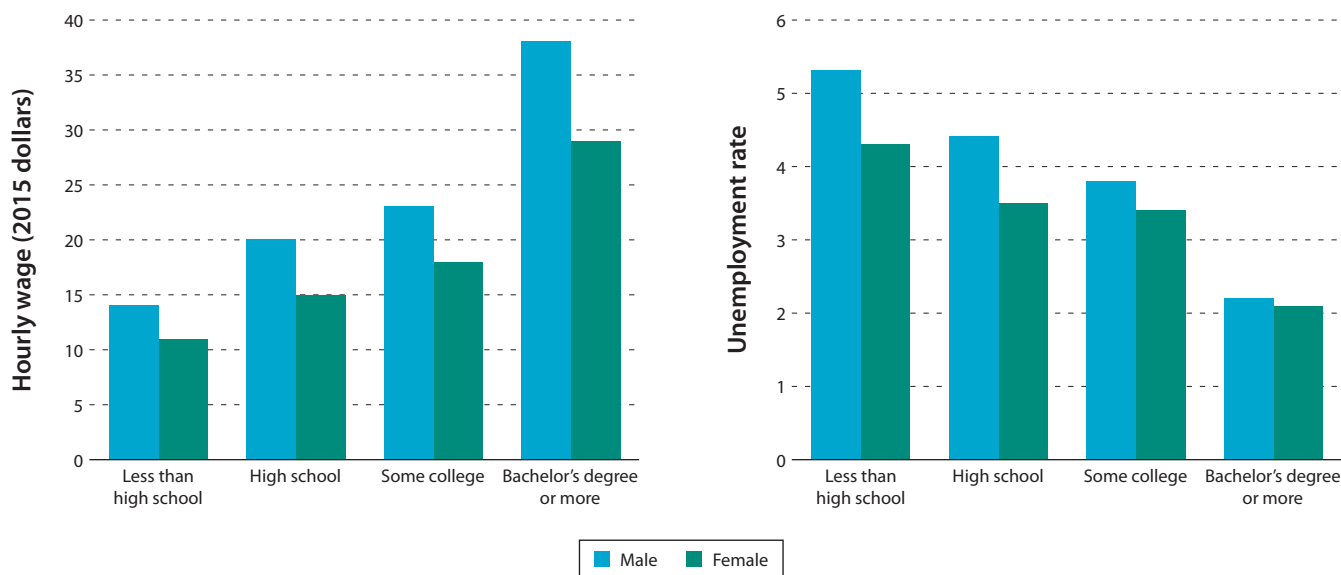
As shown in figure 2, low-skilled workers have weak labor market outcomes, with low wage levels and high rates of unemployment.

However, differences in unemployment rates do not reflect the fact that a declining share of the low-skilled population is participating in the labor market (CEA 2016). Men with only a high school education have experienced a 5.4 percentage point decline in their employment-to-population ratio from 2007 to 2015, compared with a 1.3 percentage point decline for men with at least a four-year degree over the same period.<sup>1</sup> Today, among working-age men, fewer than three-quarters of those with a high school degree and two-thirds of those without a high school degree are employed (figure 3).

The low-skilled worker population also suffers disproportionately from economic downturns. Hoynes, Miller, and Schaller (2012) examined the effects of changes

FIGURE 2.

### Hourly Wage and Unemployment Rate, by Education Level and Gender

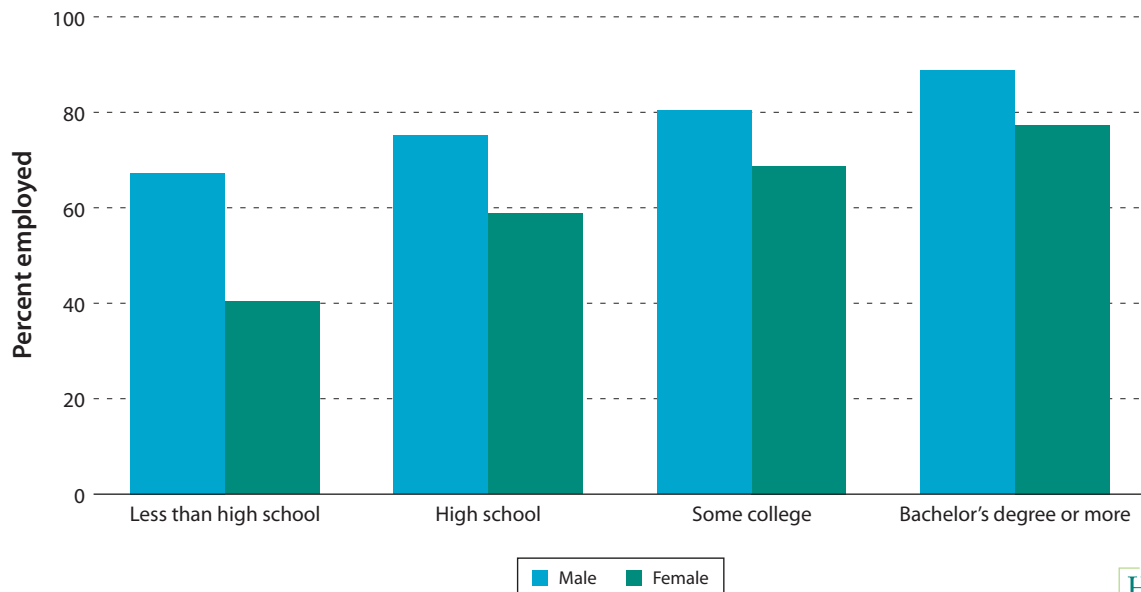


Sources: U.S. Census and BLS 2015; author's calculations.

Note: Limited to ages 25 to 64. The high school education level includes high school diploma and GED.

FIGURE 3.

## Employment-to-Population Ratio, by Education Level and Gender



Sources: U.S. Census and BLS 2015; author's calculations.

Note: Limited to ages 25 to 64. The high school education level includes high school diploma and GED.

in the business cycle on employment among various demographic groups and found that low-skilled workers—along with black or Hispanic, young, or male workers—are more likely than other workers to become unemployed during a downturn.

Furthermore, to the extent that low-skilled workers have lower incomes, they tend to be disproportionately impacted by changes in the business cycle. Recent work shows that lower-income households are more likely than higher-income households to experience a fall in their incomes when the unemployment rate increases. The converse is also true, however: as the labor market improves and the unemployment rate falls, lower-income households are more likely to experience an increase in their incomes than are higher income households. Interestingly, this finding holds across racial and ethnic groups. Furthermore, the disproportionate impact on lower-income households might have worsened over time: lower-income households were more adversely affected by rising unemployment during the Great Recession than they were during the booms and busts of the 1980s (Bitler and Hoynes 2015).

Unfortunately, even the dismal combination of wage stagnation, low employment rates, and disproportionate harm from recessions paint too rosy a picture. Official

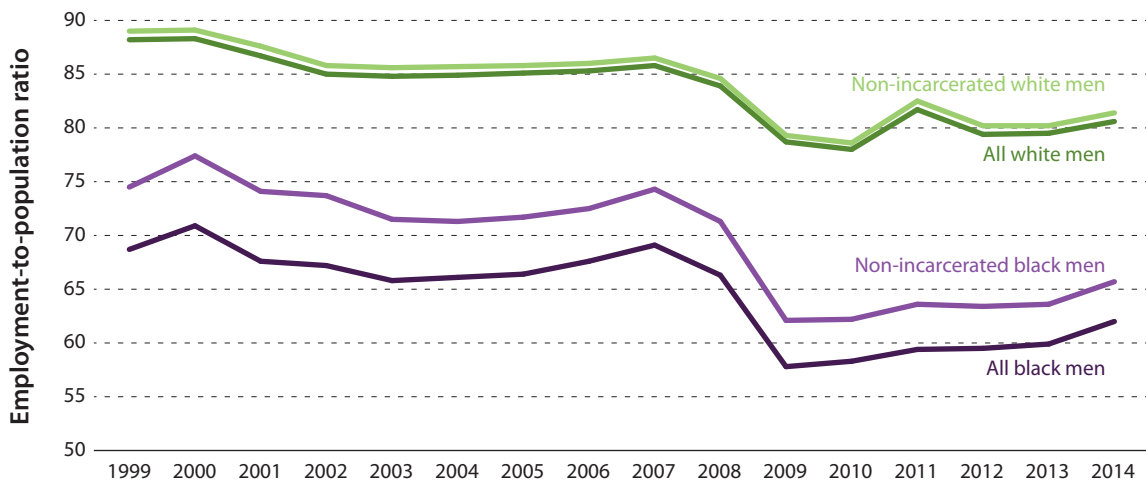
U.S. labor market statistics calculated from the Current Population Survey (U.S. Census and BLS 2015) exclude those who are incarcerated. While this exclusion is sensible for many purposes such as calculating wages, it leads to an overestimate of the fraction of the population that is employed, particularly for certain demographic groups. To give a sense of how economically significant the omission of the incarcerated is for understanding the labor market, figure 4 compares the official employment-to-population ratios for black and white men aged 20–39 with adjusted versions that include the incarcerated. For younger white men, the impact of including the incarcerated is fairly minimal. For younger black men, including the incarcerated lowers their employment-to-population ratio by almost 4 percentage points in 2014, suggesting that traditional calculations substantially overestimate the actual employment experience of young black men.

### HOW EMPLOYERS THINK ABOUT HIRING

Having examined the overall labor market picture for low-skilled workers, it is now useful to think through the employer side of the labor market. An understanding of employers' incentives during the hiring process is helpful in thinking through the consequences of policy related to low-skilled workers and those with criminal records.

FIGURE 4.

## Employment-to-Population Ratio, 1999–2014, by Race With and Without Adjustments for the Incarcerated Population



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Sources: U.S. Census and BLS 2015; Bureau of Justice Statistics n.d.; U.S. Census Bureau n.d.; author's calculations.

Note: Conventional labor force statistics exclude the incarcerated population. Limited to men ages 20–39.

A key goal for an employer is to hire workers who are well suited to a given job. Of course, individual workers are not perfectly interchangeable and, from an employer's perspective, vary tremendously in their suitability for a given job. To some extent, hiring is a matter of finding the right fit between the job's requirements and the worker's skills and preferences. One worker could be a great fit for job X while simultaneously being an unsatisfactory prospect for job Y.

However, workers also differ in ways that affect their employability for a broad range of jobs. For example, conscientiousness and punctuality are likely valuable qualities in most jobs, leading firms to prefer workers with these characteristics. Likewise, firms will generally prefer applicants who perform well on tests of skills or intelligence to those who perform poorly. In these cases, it is less a question of the job-specific match and more a matter of a worker's general productivity level.

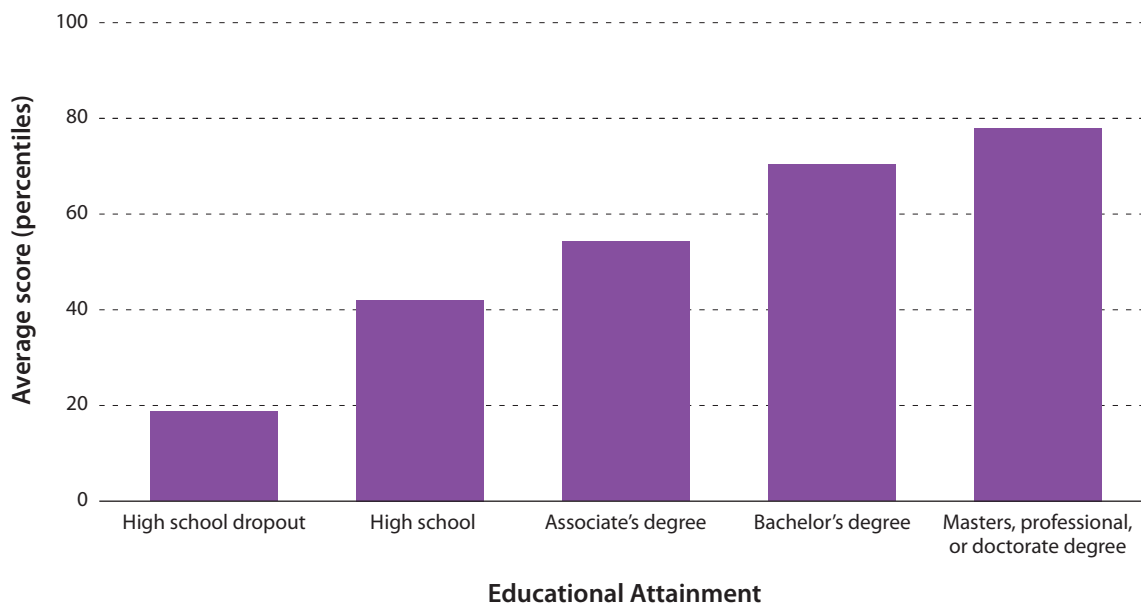
Unfortunately for employers, most of these characteristics are not readily observable. Instead, employers use other observable measures that correlate with, albeit imperfectly, the underlying qualities they value. This is referred to in the economics literature as “statistical discrimination.”

Consider, for example, the case of a prospective worker's educational attainment. Imagine that an employer wants to hire a worker with a high skill level in math and reading. One way to screen for these skills would be for an employer to give all applicants a skills test. Another way—one that is less costly to the employer—is to screen workers based on a characteristic that is easy to observe and is highly correlated with skill level: educational attainment. In other words, as long as workers with higher levels of education tend to have higher skill levels, a firm that is looking for high-skilled workers will value the educational credential as a signal of the quality of a potential worker's true skill level.

Of course, test scores are closely related to educational attainment. Figure 5 shows mean scores on a commonly used skills test, the Armed Forces Qualification Test (AFQT), expressed as percentiles, by level of education. Individuals with less than a high school degree and those with only a high school degree scored in the 19th and 41st percentiles, respectively, while individuals with only a four-year college degree scored in the 70th percentile. If an employer is looking for a worker who scores at least in the 60th percentile on the test, requiring a bachelor's degree for applicants would be an effective screening mechanism.

FIGURE 5.

## Average AFQT Percentile Score, by Educational Attainment



Sources: U.S. Bureau of Labor Statistics n.d.; author's calculations.

Note: High school includes high school diploma and GED.



Employers are particularly reliant on educational attainment when a potential employee does not have a lot of labor market experience (Altonji and Pierret 2001), but as workers gain more experience employers can also use information such as prior work history to make more precise inferences about quality.

It is important to stress that education, like most observable characteristics, is only a rough measure of underlying skill. For example, even within the group of individuals with four-year college degrees, there is considerable variation in test scores; figure 6 displays the mean test score along with the 25th and 75th percentile by educational attainment. Whereas individuals with a four-year degree will have a higher score on average than those with only a high school degree, there is also a range of scores within each educational category. As a result, there are some individuals with a four-year degree who score lower than some individuals with only a high school education. In other words, although educational attainment is a strong predictor of skill level, it is an imperfect one.

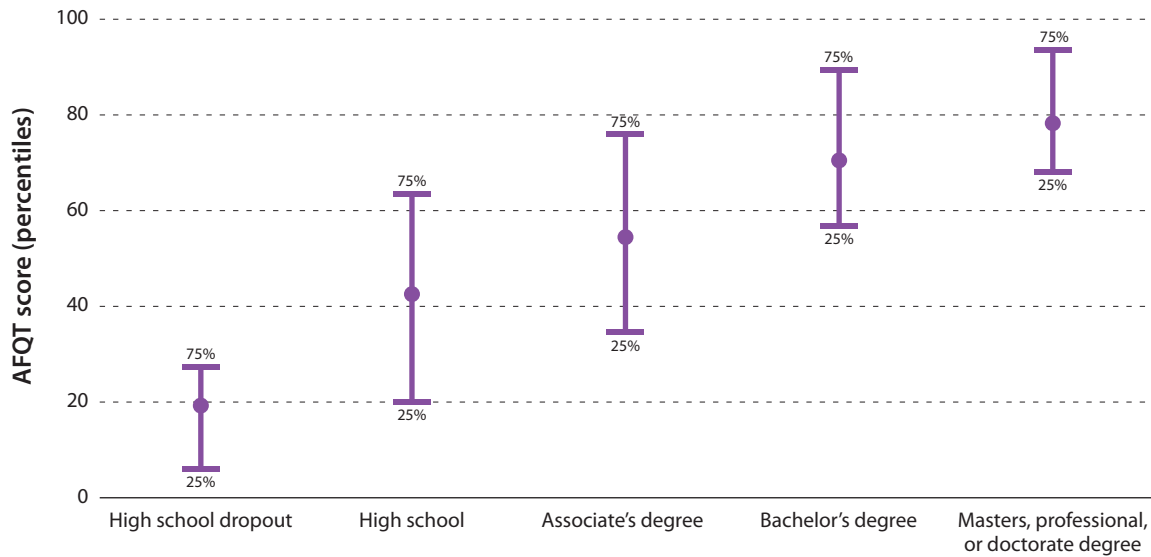
Of course, educational attainment is not the only observable measure that firms can use to learn about the productivity and employability of workers. A wide variety of other signals

are useful to firms. Participation in extracurricular activities could indicate an ability to get along with others. Completion of an employment-based reentry program might signal that a worker with a criminal record is motivated and diligent (Bushway and Apel 2012). When an employer observes that an applicant is married, the employer might infer that the applicant is above average in conscientiousness and productivity (Cohen and Haberfeld 1991).

Another potentially valuable signal is a worker's criminal record. When an employer desires this information and it is available, criminal history can provide information about various hard-to-observe applicant qualities. Of course, those with criminal records are not a random sample of the population: in addition to having less education, individuals with criminal records may disproportionately suffer from higher rates of mental illness, substance abuse, and emotional trauma than the average worker (Raphael 2011). In addition, for some workers, criminal convictions might indicate that an individual is less honest or trustworthy, or has violent tendencies—particularly if those convictions were recent. Again, any generalization or inference that an employer makes can only be true on average, and could be inaccurate for any specific worker. It is important to note that it may also

FIGURE 6.

## AFQT Scores, by Educational Attainment



Sources: U.S. Bureau of Labor Statistics n.d.; author's calculations.

Note: The figure shows the mean, 25th percentile, and 75th percentile of AFQT scores by educational attainment in the National Longitudinal Survey of Youth 1997 (NLSY97) (U.S. Bureau of Labor Statistics n.d.). High school includes high school diploma and GED.



fail to take into account the successful rehabilitation of many individuals with criminal records. Unfortunately, as with educational attainment and other observable characteristics, some employers may still be motivated to use information about criminal records as an imperfect substitute for direct knowledge of hard-to-observe underlying worker qualities.

There is evidence that some employers consider a worker's race during the hiring process—a practice that raises serious moral concerns and that is illegal under the Civil Rights Act of 1964. Nonetheless, it can be quite difficult to enforce the law, and unfortunately such discrimination appears to be common: some research suggests an employer propensity to discriminate against black and Hispanic job seekers.

Some of the most powerful evidence for racial discrimination in the labor market comes from audit studies (Bertrand and Duflo 2016; Bertrand and Mullainathan 2004; Neumark 2016). Audit studies are a powerful and increasingly common way to observe market behavior because they have some of the features of randomized controlled trials. In one type of audit study approach, researchers send a large number of résumés to employers, holding relevant job seeker characteristics (e.g., previous work experience) fixed, while allowing some

characteristic of interest (e.g., race) to vary across résumés. Differences in employer behavior on real-world job search dimensions, like the rate at which employers ask applicants to come in for an interview (known as the callback rate), are then calculated for the different groups. These studies have typically found substantially worse outcomes for non-white applicants.

Another type of audit study involves the actual deployment of coached applicants to job interviews. This research design moves beyond the résumé sending of the previous group of studies, allowing for the examination of face-to-face interactions with employers. This design has some additional drawbacks relative to the studies that exclusively use résumés, notably that applicants are aware of the research design and might adjust their behavior to conform to expectations about the results. Such research also finds racial discrimination in outcomes (Pager, Western, and Bonikowski 2009).

In many instances, racial discrimination occurs without the injured worker's knowledge, making antidiscrimination enforcement difficult. Even when a worker recognizes the discrimination and files charges alleging race-based discrimination, it can sometimes be difficult to prove such

discrimination. More generally, though some studies have found that enforcement of the employment provision of antidiscrimination law had beneficial effects on the employment of black workers (Beller 1978; Leonard 1990), it has been difficult for researchers to reach firm conclusions about the impact of antidiscrimination enforcement (Heckman and Payner 1989). In addition, much of the relevant research was conducted prior to the Civil Rights Act of 1991, which substantially changed antidiscrimination enforcement.

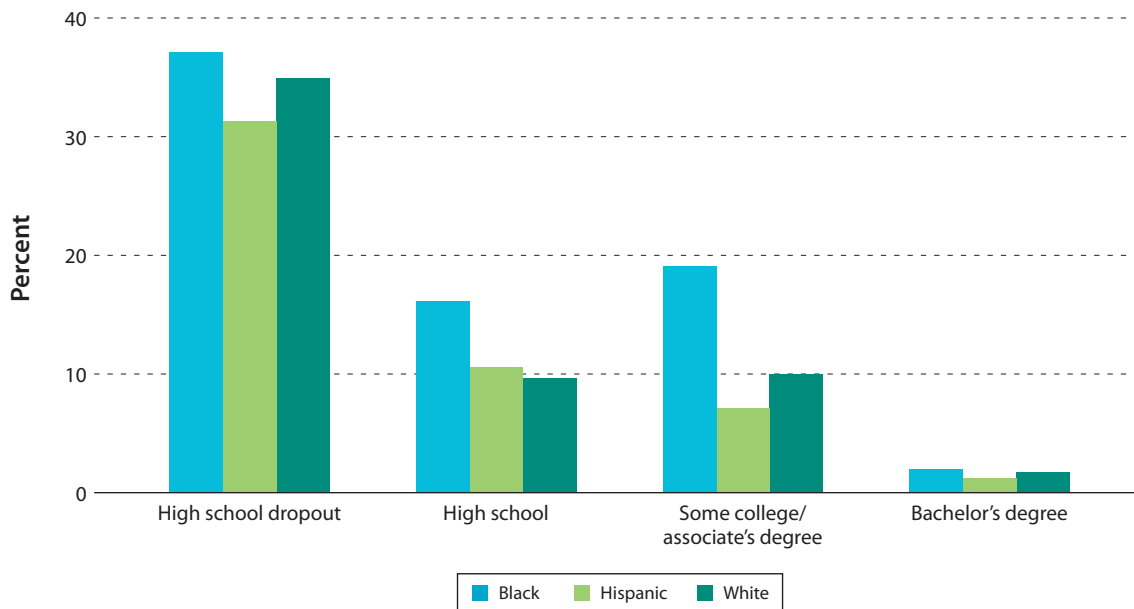
Furthermore, racial discrimination is not always due to employers' choices: field experiments find evidence of racial discrimination by customers. In a year-long field experiment Doleac and Stein (2013) sold iPods online, randomly varying the photo in the advertisement to show a dark- or light-skinned hand, which signaled the race of the seller. Black sellers received substantially fewer offers, and the average offer price they received was lower. Because buyers expected to meet sellers in person, these findings suggest customers prefer to interact with white sellers. These results help explain how a worker's race can affect her labor market outcomes by reducing her apparent performance on the job, even if employers are unbiased.

While some recent studies found that overt bias against racial minorities may be declining (Lang and Lehmann 2012), subtler forms of bias remain. In experimental settings, implicit or subconscious racist sentiments appear to be related to hiring decisions (Bertrand, Chugh, and Mullainathan 2005; Rooth 2007; Ziegert and Hanges 2005), leading researchers to suspect that those sentiments could be playing a role in the actual labor market.

One reason that discrimination against black workers occurs is statistical discrimination: employers use an applicant's race to infer other characteristics about the individual in a manner similar to their use of education and other characteristics described above. Note that while statistical discrimination based on race is illegal, it can be difficult for enforcement agencies to detect and prosecute such behavior; such discrimination might provide an explanation for the disparate employment patterns observed in the audit studies described above. Unfortunately, this may result in an increased tendency for some employers to use race as a proxy for characteristics such as criminal history if they cannot directly observe those characteristics.

Figure 7 shows the percent of men, by race and educational attainment, who report ever having been incarcerated.

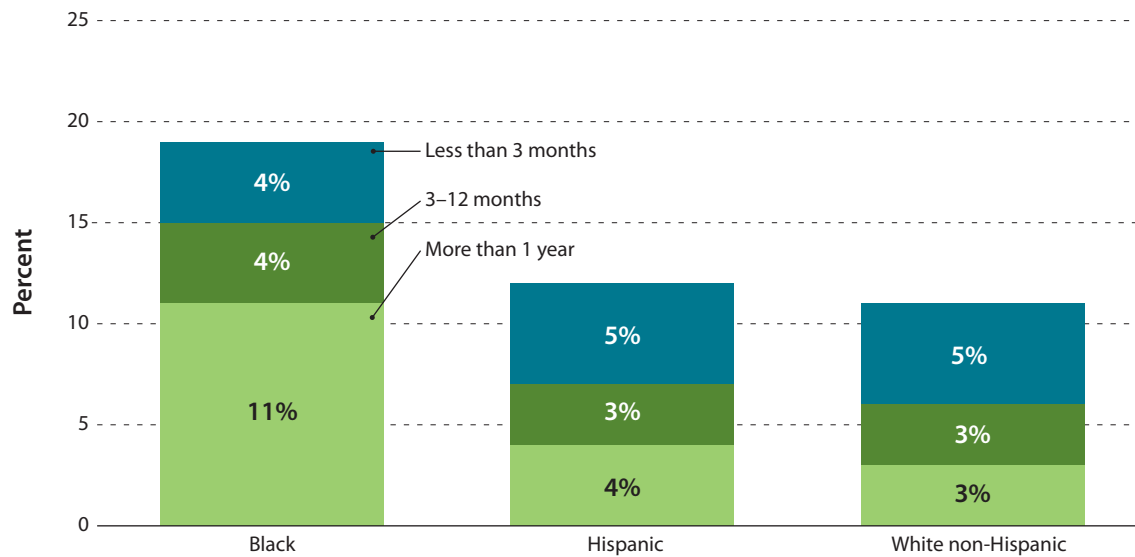
FIGURE 7.  
Percent Ever Incarcerated, by Race/Ethnicity and Educational Attainment



Sources: U.S. Bureau of Labor Statistics n.d.; author's calculations.  
Note: Limited to men. High school excludes GED.

FIGURE 8.

## Percent Incarcerated, by Race/Ethnicity and Duration of Incarceration



Sources: U.S. Bureau of Labor Statistics n.d.; author's calculations.

Note: Limited to men.

Importantly, criminal records are not uniform across races, even within a given educational group. For instance, black men with only a high school education are about 50 percent more likely than their white counterparts to report having ever been incarcerated.

Suppose that it is not possible for employers to observe criminal records. An employer that is concerned about an applicant's criminal record might be inclined to engage in the discriminatory practice of using race, or race and educational attainment together, to infer the likelihood of a criminal record, because these characteristics provide information about that likelihood (though often imperfect or even completely inaccurate). On the other hand, if it is possible for an employer to directly observe criminal history, then her desire to make a prediction based on race or other characteristics is eliminated. In general, statistical discrimination will be reduced if additional information about those underlying characteristics is revealed.

Note also that among individuals with a criminal record there is considerable variation in the experience of incarceration. Figure 8 depicts the varying durations of incarceration by race and/or ethnicity. Black men are particularly likely to have been incarcerated for more than a year, whereas white men are more likely to have been incarcerated for less than

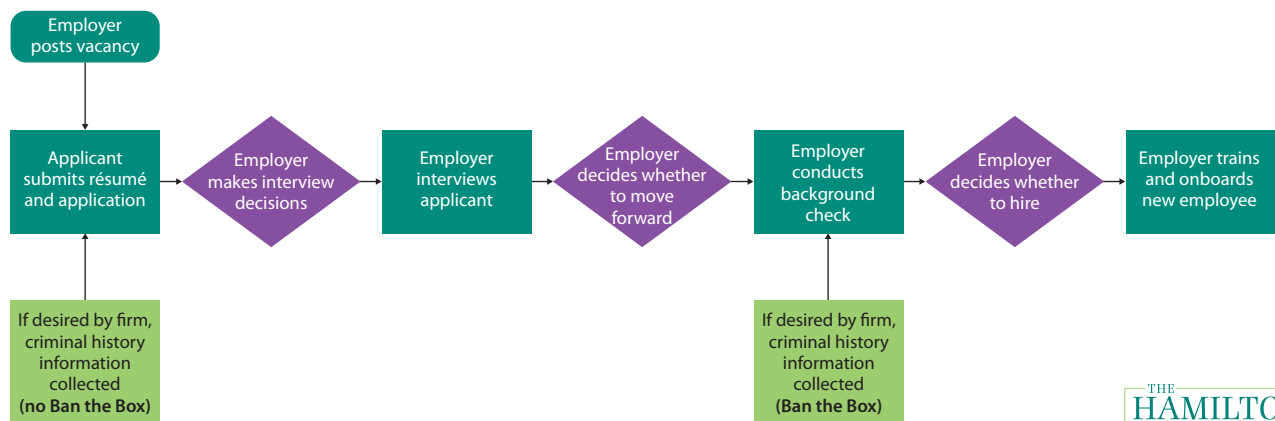
three months. If employers are concerned not only about criminal history, but also about time spent incarcerated—which could reduce work readiness if it impairs interpersonal skills or expands individuals' criminal networks—they might use race/ethnicity to proxy for time incarcerated when they cannot observe the criminal history directly.<sup>2</sup>

### THE HIRING PROCESS

Why do firms take the time to sift through job applicants rather than hiring at random from applicants and firing those workers who turn out not to be good fits? Employers incur costs at each point of the interviewing, hiring, and training processes—and additional costs if they decide to fire a worker—costs they would like to minimize. To the extent that a firm hires workers who are not well matched to the job, and who subsequently quit or must be fired, these costs increase still further when the firm has to go through the process again with a new candidate. As a result, it is worthwhile for an employer to invest in finding candidates who are good matches before hiring them. Also, because there are distinct costs at every stage of the hiring process, employers have an incentive to make each step efficient. For example, because interviewing candidates is costly, firms screen applicants based on résumés or applications before deciding which candidates to interview.

FIGURE 9.

## Hiring Sequence, With and Without Ban The Box



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Similarly, it is worth some cost of interviewing, checking references, and doing other pre-hiring tasks before extending an offer to a candidate, because the extra information gathered at this stage is expected to improve the match quality between the candidate and the job.

The hiring process is multistage, with costs that vary by stage. Details vary across firms, because firms decide on their own (subject to legal regulations) what information is important to them in the hiring process, and generally can decide when and whether to collect desired information. Nonetheless, it is useful to characterize the process in a general way so that we can consider the impacts of changing the information available to a firm at different stages. First, an employer solicits applications by posting a job vacancy. Second, typically after waiting to receive a sufficient number of applications, an employer reviews applications and decides who to contact regarding an initial interview. Following this first contact and interview, the employer either schedules additional rounds of interviews or makes a hiring decision. The employer can, in principle, request and evaluate additional information about applicants (e.g., criminal records, personality tests, drug tests) at any stage. Finally, following hiring, the new employer must train the employee during the initial weeks and months of employment. Figure 9 depicts this sequence.

Whenever an employer seeks to hire a new employee, it faces substantial costs: in addition to the costs of training, there are opportunity costs such as the time and resources spent interviewing and recruiting potential staff as well as disruption to ordinary firm activities. In anticipation of these

costs, employers are motivated to selectively hire workers who they expect to be more productive; in other words, employers are willing to pay the upfront costs associated with hiring if those costs are matched by a corresponding future payoff from a productive new employee. Firing costs work similarly: firms are motivated to avoid ill-suited hires in order to avoid the necessity of discharging a low-productivity worker.

Recent research using European data suggests that hiring costs are substantial. For a middle-skilled worker, the average expense of bringing on a new employee is the equivalent of 16 weeks of wages (Muhlemann and Leiser 2015). The costs associated with hiring a low-skilled worker are somewhat lower but still substantial. Another study, focusing on a different set of costs measured in different data, found that the average overall expense was three to five weeks of wages (Dube, Freeman, and Reich 2010).

The timing of information also matters for firms' behavior. Suppose a firm is convinced that no worker with a criminal record is a good fit for a particular position. If criminal background is revealed at the application stage, then the firm can screen such applicants out before the interview process. If the information is not revealed until just before an offer is made, in some cases the firm will have wasted resources on recruitment and interviewing, as well as on being understaffed by the time that the employer discovers the criminal record information. If information on criminal history is not available until the end of the process, these costs give employers an incentive to avoid interviewing applicants they believe are likely to possess criminal records. On the



other hand, if a firm typically statistically discriminates against applicants with criminal records, then it may be the case that delaying access to criminal history leads the firm to hire some work-ready individuals with criminal records. When a firm gathers more information during the hiring process—for example, in face-to-face interviews—applicants with criminal records may have a chance to signal their work-readiness, and distinguish themselves from the average person with a criminal record. In this way, some applicants with criminal records may be hired who would not have been if the information were revealed earlier in the process (see further discussion in Pager, Western and Sugie, 2009).

### EMPLOYMENT EFFECTS OF INFORMATION AVAILABLE DURING HIRING

Over the past few decades, various sources of information relevant to hiring have gradually become available. Researchers have found that employers adopted innovations like personality tests, drug tests, credit checks, and criminal record checks once they became cost-effective, and—because some labor market discrimination is in fact statistical discrimination—these practices reduced racial discrimination in hiring. When more-precise information is available, employers may be less inclined to engage in discriminatory hiring or screening practices (i.e., by using race a proxy for underlying work readiness); as a result, statistical discrimination based on race falls as it becomes easier for an employer to assess the suitability of an individual

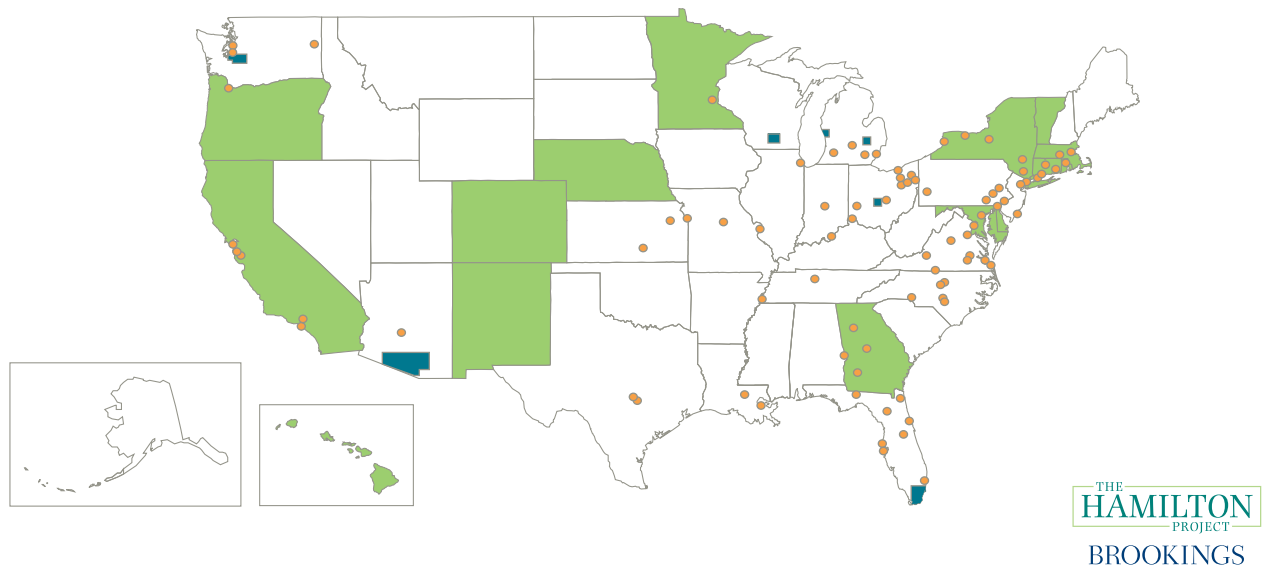
applicant. The new practices helped employers to screen potential employees with greater accuracy, thereby avoiding hiring and firing costs associated with unsuitable hires.

Research on the impacts of drug testing is consistent with this theory. Wozniak (2015) considered the effects of laws that prohibited or encouraged drug testing by employers, finding that when employers were able to administer drug tests, they were more likely to hire low-skilled black men, and black employment increased by 7–30 percent.

Bartik and Nelson (2016) conducted analogous research regarding the availability of credit checks. They found that when credit checks were banned, black job seekers were 7–16 percent less likely to find a job, indicating that allowing credit checks helped to reduce discrimination based on race.<sup>3</sup> Criminal background checks are another means of obtaining information about applicants. Holzer, Raphael, and Stoll (2006) considered whether a firm’s use of criminal background checks increased the likelihood that it hires black workers. Among firms that stated they were unwilling to hire ex-offenders, firms that conducted criminal background checks were more likely to hire black workers.

Checking criminal records became much less costly during the 1990s as database technology improved and Internet access grew. This development provided an opportunity to test the effect of adding criminal history information to the job application process. Using data on young adults from

FIGURE 10.  
Map of Cities, Counties, and States That Have Enacted BTB Policies,  
as of December 2015



Source: Doleac and Hansen 2016.

Note: Jurisdictions with BTB policies at the state, county, and city level are indicated in green, blue, and orange, respectively.

the NLSY, which includes self-reported criminal history information as well as labor market outcomes, Finlay (2009) found that making criminal records available reduced employment for people with criminal records. He also found suggestive evidence that employment outcomes improved for non-offenders from highly offending groups. These results are consistent with a previous analysis by Bushway (2004), using cross-sectional data on access to criminal records.

Considered as a whole, the evidence on information availability and labor market discrimination suggests that the ability of firms to request more information—not less—has the potential to mitigate racial discrimination and increase employment among disadvantaged groups, specifically low-skilled black or Hispanic men. When job applicants credibly and directly reveal information on their criminal history, drug use, or credit history, employers have less need to use race or other broad demographic information as a proxy for these underlying worker characteristics.

#### CASE STUDY: BANNING THE BOX

Ban-the-Box policies, which seek to increase employment opportunities for people with records, have enjoyed widespread support among community, political, and business leaders across the political spectrum. Such policies are known as Ban the Box (BTB) because they seek to remove the box that applicants are asked to check if they have ever been convicted of a crime. Many governments, businesses, and institutions of higher education have voluntarily agreed to stop asking about criminal history at the point of job application, and over 100 organizations have joined the White House’s “Fair Chance Pledge” to reduce barriers to employment among those with criminal records (White House 2015). Supporters of these efforts believe that they are having a favorable impact on actual hiring practices, citing increases in hiring of individuals with criminal records in jurisdictions such as the District of Columbia and Durham, North Carolina.

Beyond encouraging firms to voluntarily ban the box on employment applications (see box 1), many state and local governments across the country have restricted when it is permissible for employers to ask about job applicants’ criminal histories. The first BTB policy was passed by Hawaii in 1998, and jurisdictions across 34 states and the District of Columbia have enacted a BTB policy in some form since then (Rodriguez and Avery 2016). Figure 10 shows the cities, counties, and states with BTB policies as of December 2015. Depending on the details of the policy, BTB can apply to public employers (at the level of government at which it was enacted), private firms with government contracts, and/or all private firms. Many are government administrative policies rather than laws, though governments’ actions on this issue—

along with public pressure—often encourage local private businesses to voluntarily follow suit, even when they are not legally required to do so.

During the same period, the EEOC issued guidelines about how employers are permitted to use criminal history information during the hiring process. In particular, it is illegal for employers to have a blanket policy against hiring anyone with a criminal record. Instead, they are to consider a job applicant’s record as it relates to the requirements of the job.

#### BOX 1.

### Voluntary Ban the Box Policies

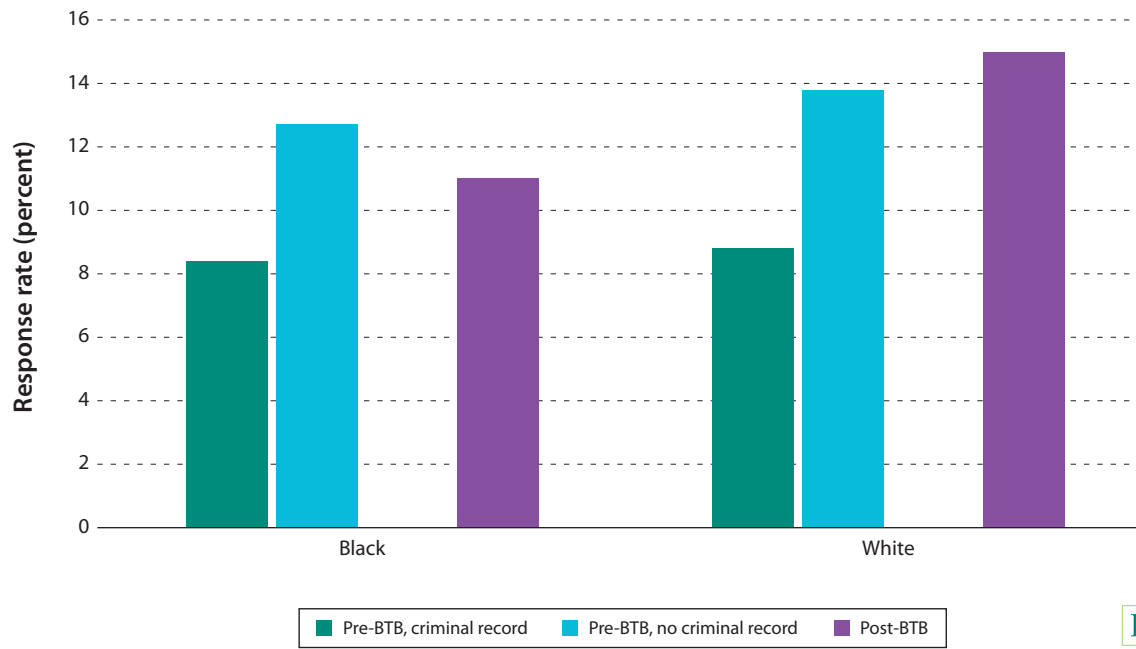
A number of private employers have voluntarily reduced or delayed their use of criminal record information throughout the hiring process. The White House recently urged private employers to “eliminate unnecessary hiring barriers for individuals with criminal records” (White House 2015). Those employers who answer the call are not drawn at random from the business world; they likely have attitudes towards workers with criminal records that are relatively positive. When these employers take up Ban the Box policies, the unintended consequences discussed in Agan and Starr (2016), Doleac and Hansen (2016), and similar research are less likely to occur. In other words, when employers choose not to ask about applicants’ criminal histories because they have decided that criminal records are uninformative about an applicant’s work readiness, this should have unambiguously positive impacts for workers with records as well as demographic groups with high rates of criminal records.

As discussed, removing precise information about applicants’ work readiness when it is desired by firms may increase statistical discrimination against disadvantaged groups. Indeed, two new studies suggest that eliminating or delaying the availability of criminal history information through BTB policies may increase statistical discrimination against groups that are more likely to have recent convictions—in particular, young, low-skilled, black or Hispanic men.

Amanda Agan and Sonja Starr (2016) conducted a field experiment in which they submitted thousands of job applications before BTB laws went into effect in New Jersey and New York City. The applications were all from young, low-skilled men, but they randomized the applicant’s race (indicated by stereotypically white and black names), the duration of gaps in employment history, and whether they had a criminal record (a property or drug conviction). They then observed which “applicants” received callbacks from

FIGURE 11.

## Criminal Records and Response Rates, before and after Ban the Box, by Race



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Source: Agan and Starr 2016.

Note: Callback rates are compared within businesses before and after a BTB policy went into effect.

employers requesting an interview. Before BTB, applicants with criminal records received substantially fewer callbacks than those without criminal records. Callback rates were slightly higher for white applicants than black applicants in each category, but the racial gaps were small. After BTB, when criminal records were not observable, black applicants were called back at a rate in between the black ex-offender and non-offender rates from before BTB. White applicants, meanwhile, were called back at rates slightly higher than the white non-offender rate from before BTB (see figure 11). That is, employers appeared to assume that black applicants were a mix of ex-offenders and non-offenders, but that white applicants were all non-offenders.

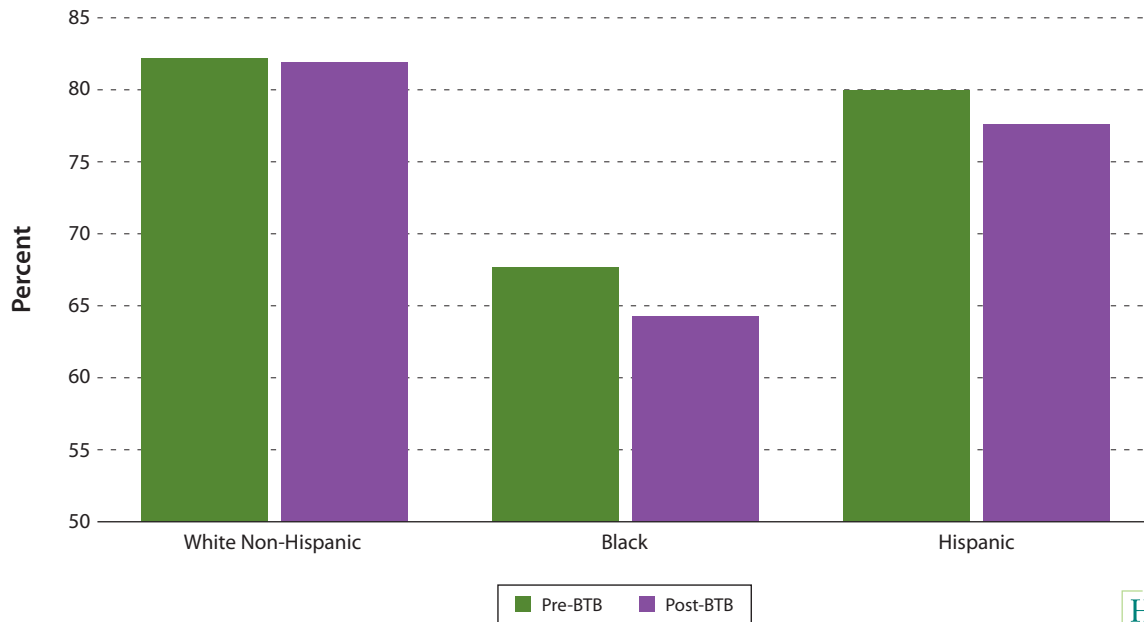
This experiment allowed the authors to carefully control for the effect of race and criminal history, but the drawback of an audit study is that fictional applicants cannot actually be interviewed and hired. In particular, it is unclear if applicants with criminal records who are called back will actually be hired, since most employers will still run a background check at the end of the hiring process. If employers do not want to hire people with criminal records, they might reject ex-offender applicants at that point.

To examine whether BTB’s effect on callbacks translates into larger racial disparities in employment, Doleac and Hansen (2016) use the variation in when BTB policies were implemented across the United States as a natural experiment. Carefully controlling for individual characteristics and local trends in employment, Doleac and Hansen tested the effect of state and local BTB policies on the probability that individuals were employed. The authors focus on the group most likely to be affected by BTB: young, low-skilled men. These men are the most likely to have a recent conviction that would concern employers, and so individuals in this group who have recent convictions are the most likely to be helped by the policy (because their records are hidden under BTB), while those in this group who do not have criminal records are the most likely to be hurt (due to statistical discrimination). Figure 12 shows the effect on white non-Hispanic, Hispanic, and black men.

Within the population of young, low-skilled men, both black and Hispanic employment fell after BTB policies were enacted—by 3.4 and 2.3 percentage points, respectively — whereas white non-Hispanic employment was virtually unchanged. This implies that the unintended consequences of the policy are large. The negative effects of BTB were

FIGURE 12.

## Effect of BTB on Probability of Employment for Young, Low-Skilled Men, by Race



Source: Doleac and Hansen 2016.

Note: The analysis spans the years 2004 through 2014.

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largest during the Great Recession, suggesting that employers are more likely to discriminate against broad groups (e.g., all young black men) during slack labor markets. In addition, there is some evidence that employers increase their hiring of older black men and low-skilled white men after BTB policies are enacted. Both groups are appealing to employers that want to avoid hiring individuals who were recently incarcerated; when criminal histories are unobservable, employers appear to substitute toward these groups.<sup>4</sup>

Since the majority of our nation's BTB policies have been enacted within the last three years, the body of literature available to assess the efficacy of the policy is very limited. However, the findings to date support the results of previous work exploring the effects of increased information

availability on labor market discrimination. Unfortunately, when the information is desired by firms, hiding or delaying criminal history information appears to increase, and not decrease, discrimination against individuals without criminal records who belong to groups that are more likely to have recent convictions. In other words, the new research finds that racial discrimination becomes more likely in the wake of policies that make it more difficult for firms that desire criminal record information to obtain it. It is possible that BTB helps those with criminal records, though there is not yet any rigorous evidence that BTB increases employment for this group. However, BTB also negatively impacts racial minorities without a criminal record, and the net effect is a reduction in employment for this already vulnerable population.

## CHAPTER 3.

# Principles for Helping Individuals with Criminal Records

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The challenges facing low-skilled workers—and particularly low-skilled workers with criminal records—are pronounced. To increase successful labor market reentry for workers with criminal records, I present five guiding principles.

### 1. Increase Availability of Jobs for Low-Skilled Workers

The first step to increasing employment for low-skilled workers—including individuals with criminal records—is to make sure low-skilled jobs are available. As workers with criminal records are hired, they develop substantive skills and work experience that improve their future employability and earnings potential. In particular, work experience serves as a credible signal of productivity that can eventually outweigh the negative signal associated with a criminal record.

Achieving the sort of labor market that puts workers with records into this virtuous cycle can be difficult, of course. Tight labor markets, characterized by many job vacancies and relatively few unemployed workers, are particularly helpful in encouraging employers to give serious consideration to applicants they might otherwise avoid. We know that tight labor markets disproportionately benefit low-skilled workers (Hoynes 2000), and, by extension, many workers with criminal records. There is therefore a role for monetary and fiscal policy at the national level and fiscal stimulus at the local level to broadly strengthen labor markets (Chodorow-Reich et al. 2012; Ramey 2011; Serrato and Wingender 2016).

Apart from monetary and fiscal policy, jobs programs specifically for low-skilled workers could be better designed and more broadly available. Jobs-of-last-resort programs, recommended by Smeeding (2016) and others, could give those with criminal records work experience until they are able to find private sector employment. Along similar lines, summer jobs programs for disadvantaged youth have been shown to endow participants with valuable skills and reduce their likelihood of acquiring criminal records (Heller 2014). In addition, state and local governments should reconsider regulations that currently prohibit individuals with criminal

records from obtaining occupational licenses and from working in particular sectors. Many of these regulations have questionable public safety benefit, but severely limit the opportunities available to low-skilled workers trying to enter the labor market (Bushway and Sweeten 2007; Raphael 2011).

### 2. Focus on Building Work Readiness

Even when low-skilled jobs are available, many people with criminal records do not have the necessary training or soft skills to make them productive employees. Building skills so that these individuals can acquire and maintain gainful employment is key to successful reintegration. Unfortunately, there is a limited research base available to guide policy efforts on this front.

Evaluations of job training programs are relatively numerous, but they can have limited relevance to the problems faced by workers with criminal records. Still, a number of training programs have had beneficial effects. For instance, the U.S. Department of Labor's Job Corps increased earnings for young people (albeit temporarily) while reducing their arrest and incarceration rates (Barnow and Smith 2015; Schochet, Bughardt, and McConnell 2006). A number of other job training programs have had similarly positive impacts (Greenstone and Looney 2011).

However, effective programs targeting people with criminal records will likely need to address several dimensions of individuals' lives, including the need for stable housing and access to medical care (particularly mental health care and substance abuse treatment). The evidence on programs specifically targeting this population is extremely limited. There are some excellent experimental evaluations that consider the effects of reentry programs, but many find limited effects on recidivism and employment (Cook et al. 2014; Redcross et al. 2012). One recent meta-analysis of educational programs delivered to incarcerated individuals found large reductions in recidivism, although there was only weak evidence of positive effects for post-release labor market outcomes. Those results are promising, but were based on only a few studies that had experimental or quasi-experimental designs (RAND 2013). Overall, we need much more evidence on what works to improve reentry outcomes.

Across the country, reentry programs are implemented based on best practices with no rigorous evaluations, and this is hampering our ability to identify and scale effective programs. Programs should be implemented using experimental designs that randomly assign eligible individuals to participate. It is likely that different types of interventions will be useful for different categories of ex-offenders—for example, young vs. old, violent vs. nonviolent, and those with and without histories of substance abuse. Future research should focus on identifying scalable programs that can cost-effectively address the needs of these diverse groups.

### 3. Communicate Work Readiness to Employers

Employers often know relatively little about job applicants, leading those tasked with hiring to rely on measures the firm considers important like educational attainment, criminal record information, and drug tests that provide some information about applicants' potential productivity. When some of these measures are unavailable, employers might discriminate broadly against racial groups that they believe contain many applicants with (for example) criminal records. Regardless of the crude signals employers use to screen workers, it is important to help low-skilled workers—and workers with criminal records—to credibly communicate their job readiness.

In particular, it can be beneficial for job seekers to communicate their unique suitability for specific tasks. In this way, signals of work readiness become a positive-sum policy, with employers and workers finding the unique matches that make sense given workers' abilities and employers' needs. Increasing the information available to employers is integral to this process: it helps employers to see beyond a criminal record to the potential inherent in the job applicant. Job training, apprenticeship, and other programs that result in the acquisition of a high-quality certificate, often tailored to particular types of employment, can play an important role in facilitating this communication between workers and firms.

### 4. Reduce the Cost of Hiring People with Criminal Records

Concerns about negligent hiring lawsuits can discourage employers from hiring individuals with criminal records. State laws (and EEOC guidelines) typically require employers to consider applicants' criminal histories in the

context of the job for which they are applying, and to use reasonable judgement in determining whether particular convictions signal that an applicant poses an unnecessary risk. Insufficient guidance is provided as to what constitutes due care in hiring. A criminal history that seems unrelated at the time of hiring might appear to be a red flag in hindsight, providing the basis for a lawsuit that could be catastrophic for a business owner. In this context, hiring someone with a criminal record carries higher expected costs than hiring someone without a record, thus discouraging employers from giving applicants with criminal records a chance. Providing more clarity about which types of records constitute a risk could increase employers' willingness to hire ex-offenders.

There are a few ways to provide this clarity. For instance, court-recognized employability certificates issued by several jurisdictions shield employers from negligent hiring lawsuits based on a certificate holder's criminal history. Expanding expungement of criminal records could have a similar effect, because expunged convictions cannot be used as the basis for lawsuits. By clarifying which criminal histories constitute a liability risk to employers and which do not, the government can reduce employers' reluctance to hire people with criminal records.

### 5. Carefully Weigh the Impact of Unintended Consequences of Employer Regulations

Well-intentioned efforts to improve labor market outcomes for workers with criminal records might have unintended negative consequences. For instance, BTB policies delay employers' acquisition of information about the criminal record status of applicants. Proponents believe that BTB allows workers with criminal records to advance further through the hiring process, thereby gaining a fair opportunity to demonstrate their suitability for employment, particularly through face-to-face rapport building with prospective employers.

However, recent research suggests that careful study of new employer regulations is necessary to ensure that young, non-white workers without criminal records are not harmed by BTB requirements, as may occur if employers use race as a proxy for criminal history when they cannot easily observe an applicant's criminal record (Agan and Starr 2016; Doleac and Hansen 2016). Of course, encouraging firms to voluntarily remove the criminal history box from their applications is a different matter, as explained in box 1. Understanding the impact of proposed policy reforms on both workers and

employers is essential to ensuring that policies are effective in achieving their goals and do not have large unintended negative effects for other workers.

To reach the policy goal of increasing employment for people with criminal records, policymakers and regulators should consider other policies that could potentially produce even greater benefits for people with criminal records, with fewer unintended costs.

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National Institute of Justice, the Russell Sage Foundation, and the Spencer Foundation, and has been published in leading academic journals including the *Review of Economics and Statistics* and the *American Economic Journal: Applied Economics*. Doleac holds a Ph.D. in Economics from Stanford University, and a B.A. in Mathematics and Economics from Williams College. She has spoken at Interpol and the White House, and her research on DNA databases was cited in the Supreme Court's *Maryland v. King* case. She was an NBER/NSF Crime Research Fellow, and previously worked at the Brookings Institution and the Congressional Budget Office.

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# Endnotes

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1. Participation for those with less than a high school degree has been relatively stable, albeit at a low level. This likely reflects the increasing share of that group that is foreign born; low-skilled native-born Americans have much lower labor force participation than their foreign-born counterparts (U.S. Census and BLS 2015; author's calculations).
2. On the other hand, black men experience criminal justice consequences that are disproportionate to their rates of criminal activity (United States Sentencing Commission 2012), potentially reducing the usefulness of black men's criminal record information to firms.
3. The introduction of personality tests designed to measure characteristics like conscientiousness and extroversion, by contrast, did not reduce non-white employment, as many had feared, but it also did not increase it (Autor and Scarborough 2008).
4. A third study (Shoag and Veuger 2016) compares employment outcomes for low-skilled black men living in high-crime neighborhoods (who the authors assume are more likely to have a criminal record) with those living in low-crime neighborhoods (who they assume are less likely to have a criminal record). While this study uses less-precise variation in BTB laws and employment (annual instead of monthly data), it finds that the employment gap between these two groups decreased after BTB, suggesting that employers now treat those with and without records more similarly. The study does not consider effects on young men, specifically; it considers BTB's effects on the working-age population as a whole, despite the likelihood that BTB's effects vary with age. That said, the results are consistent with the findings in Doleac and Hansen (2016) and Agan and Starr (2016).

# References

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- Acemoglu, Daron, and David Autor. 2011. "Skills, Tasks and Technologies: Implications for Employment and Earnings." *Handbook of Labor Economics* 4b: 1043–1171.
- Agan, Amanda, and Sonja Starr. 2016, June. "Ban the Box, Criminal Records, and Statistical Discrimination: A Field Experiment." Working Paper No. 16-012, Michigan Law, University of Michigan, Ann Arbor.
- Altonji, Joseph G., and Charles R. Pierret. 2001. "Employer Learning and Statistical Discrimination." *Quarterly Journal of Economics* 116 (1): 313–50.
- Autor, David H., David Dorn, and Gordon H. Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." *American Economic Review* 103 (6): 2121–68.
- . 2016. "The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade." *Annual Review of Economics* 8 (1).
- Autor, David H., Lawrence F. Katz, and Melissa S. Kearney. 2008. "Trends in U.S. Wage Inequality: Revising the Revisionists." *Review of Economics and Statistics* 90 (2): 300–23.
- Autor, David H., and David Scarborough. 2008. "Does Job Testing Harm Minority Workers? Evidence from Retail Establishments." *Quarterly Journal of Economics* 123 (1): 219–77.
- Barnow, Burt S., and Jeffrey Smith. 2016. "Employment and Training Programs." In *Economics of Means-Tested Transfer Programs in the United States*, vol. 2, edited by Robert Moffitt. Chicago: University of Chicago Press.
- Bartik, Alexander Wickman, and Scott Nelson. 2016. "Credit Reports as Résumés: The Incidence of Pre-Employment Credit Screening." MIT Department of Economics Graduate Student Research Paper No. 16-01, MIT Department of Economics, Cambridge, MA.
- Beller, Andrea H. 1978. "The Economics of Enforcement of an Antidiscrimination Law: Title VII of the Civil Rights Act of 1964." *Journal of Law & Economics* 21 (2): 359–80.
- Bertrand, Marianne, and Esther Dufo. 2016, February. "Field Experiments on Discrimination." NBER Working Paper No. 22014, National Bureau of Economic Research, Cambridge, MA.
- Bertrand, Marianne, and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review* 94 (4): 991–1013.
- Bertrand, Marianne, Dolly Chugh, and Sendhil Mullainathan. 2005. "Implicit Discrimination." *American Economic Review* 95 (2): 94–98.
- Bitler, Marianne P., and Hilary W. Hoynes. 2015. "Heterogeneity in the Impact of Economic Cycles and the Great Recession: Effects Within and Across the Income Distribution." *American Economic Review* 105 (5): 154–60.
- Blanchflower, David G., and Andrew J. Oswald. 2004. "Well-Being Over Time in Britain and the USA." *Journal of Public Economics* 88 (7–8): 1359–86.
- Bureau of Justice Statistics. n.d. "National Prisoner Statistics Program." Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice, Washington, DC.
- Bushway, Shawn. 2004. "Labor Market Effects of Permitting Employer Access to Criminal History Records." *Journal of Contemporary Criminal Justice* 20 (3): 276–91.
- Bushway, Shawn, and Robert Apel. 2012. "A Signaling Perspective on Employment-Based Reentry Programming: Training Completion as a Desistance Signal." *Criminology and Public Policy* 11 (1): 21–50.
- Bushway, Shawn, and Gary Sweeten. 2007. "Abolish Lifetime Bans for Ex-Felons." *Criminology and Public Policy* 6 (4): 697–706.
- Council of Economic Advisers (CEA). 2016. "The Long-term Decline in Prime-Age Male Labor Force Participation." Council of Economic Advisers, Executive Office of the President, The White House, Washington, DC.

- Chodorow-Reich, Gabriel, Laura Feiveson, Zachary Liscow, and William Gui Woolston. 2012. "Does State Fiscal Relief During Recessions Increase Employment? Evidence from the American Recovery and Reinvestment Act." *American Economic Journal* 4 (3): 118–45.
- Civil Rights Act of 1964, Pub. L. 88-352, 78 Stat. § 241 (1964).
- Clemens, Jeffery. 2016. "The Low-Skilled Labor Market from 2002 to 2014: Measurement and Mechanisms." Discussion Paper No. 16-006, Stanford Institute for Economic Policy Research, Stanford University, Stanford, CA.
- Cohen, Yinon, and Yitchak Haberfeld. 1991. "Why Do Married Men Earn More than Unmarried Men?" *Social Science Research* 20 (1): 29–44.
- Cook, Phillip J., Songman Kang, Anthony A. Braga, Jens Ludwig and Mallory R. O'Brien. 2014. "An Experimental Evaluation of a Comprehensive Employment-Oriented Prisoner Re-entry Program." *Journal of Quantitative Criminology* 31 (3): 355–82.
- Doleac, Jennifer L., and Benjamin Hansen. 2016. "Does 'Ban the Box' Help or Hurt Low-Skilled Workers? Statistical Discrimination and Employment Outcomes for Those With and Without Criminal Records." Working Paper No. 22469, National Bureau of Economic Research, Cambridge, MA.
- Doleac, Jennifer L., and Luke C. D. Stein. 2013. "The Visible Hand: Race and Online Market Outcomes." *Economic Journal* 123 (572): 469–92.
- Dube, Arindrajit, Eric Freeman, and Michael Reich. 2010. "Employee Replacement Costs." Working Paper No. 201-10, Institute for Research on Labor and Employment, University of California–Berkeley, Berkeley, CA.
- Fallick, Bruce, and Charles A. Fleischman. 2004. "Employer-to-Employer Flows in the U.S. Labor Market: The Complete Picture of Gross Worker Flows." Paper No. 2004-34, Finance and Economics Discussion Series, Board of Governors of the Federal Reserve System.
- Finlay, Keith. 2009. "Effect of Employer Access to Criminal History Data on the Labor Market Outcomes of Ex-Offenders and Non-Offenders." In *Studies of Labor Market Intermediation*, edited by David H. Autor, 89–125. Chicago: University of Chicago Press.
- Greenstone, Michael, and Adam Looney. 2011, November. "Building America's Job Skills with Effective Workforce Programs: A Training Strategy to Raise Wages and Increase Work Opportunities" Strategy Paper, The Hamilton Project, Brookings Institution, Washington, DC.
- Heckman, James T. and Brook S. Payner. 1989. "Determining the Impact of Federal Antidiscrimination Policy on the Economic Status of Blacks: A Study of South Carolina." *American Economic Review* 79 (1): 138–77.
- Heller, Sara B. 2014. "Summer Jobs reduce violence among disadvantaged youth." *Science* 346 (6214): 1219–23.
- Holzer, Harry J., Steven Raphael, and Michael A. Stoll. 2006. "Perceived Criminality, Criminal Background Checks, and the Racial Hiring Practices of Employers." *Journal of Law and Economics* 49: 451–80.
- Hoynes, Hilary, 2000. "The Employment and Earnings of Less Skilled Workers Over the Business Cycle," in *Finding Jobs: Work and Welfare Reform*, edited by Rebecca Blank and David Card. Russell Sage Foundation: New York.
- Hoynes, Hilary W., Douglas L. Miller, and Jessamyn Schaller. 2012. "Who Suffers During Recessions?" *Journal of Economic Perspectives* 26 (3): 27–48.
- Lang, Kevin, and Jee-Yeon K. Lehmann. 2012. "Racial Discrimination in the Labor Market: Theory and Empirics." *Journal of Economic Literature* 50 (4): 959–1006.
- Lee, David, and Alexandre Mas. 2012. "Long-Run Impacts of Unions on Firms: New Evidence from Financial Markets, 1961–1999." *Quarterly Journal of Economics* 127 (1): 333–378.
- Leonard, Johnathan S. 1990. "The Impact of Affirmative Action Regulation and Equal Employment Law on Black Employment." *Journal of Economic Perspectives* 4 (4): 47–63.

- Muhlemann, Samuel and Mirjam Strupler Leiser. 2015. "Ten Facts You Need to Know About Hiring." Discussion Paper No. 9363, The Institute for the Study of Labor (IZA), Bonn, Germany.
- Neumark, David. 2016. "Experimental Research on Labor Market Discrimination." Working Paper No. 22022, National Bureau of Economic Research, Cambridge, MA.
- Oreopoulos, Philip, Marianne Page, and Ann Huff Stevens. 2008. "The Intergenerational Effects of Worker Displacement." *Journal of Labor Economics* 26 (3): 455–483.
- Pager, Devah, Bruce Western, and Bart Bonikowski. 2009. "Discrimination in a Low-Wage Labor Market: A Field Experiment." *American Sociological Review* 74: 777–99.
- Pager, Devah, Bruce Western, and Naomi Sugie. 2009. "Sequencing Disadvantage: Barriers to Employment Facing Young Black and White Men with Criminal Records." *The Annals of the American Academy of Political and Social Science* 623(1): 195-213.
- Ramey, Valerie A. 2011. "Can Government Purchases Stimulate the Economy?" *Journal of Economic Literature* 39 (3): 673–85.
- RAND Corporation. 2013, August 22. "Education and Vocational Training in Prisons Reduces Recidivism, Improves Job Outlook."
- RAND Corporation, Santa Monica, CA. Raphael, Steven. 2011. "Improving Employment Prospects for Former Prison Inmates: Challenges and Policy," in *Controlling Crime: Strategies and Tradeoffs*, edited by Phillip J. Cook, Jens Ludwig, and Justin McCrary, 521–572. Chicago: University of Chicago Press.
- Redcross, Cindy, Megan Millenky, Timothy Rudd, and Valerie Levshin. 2012. "More than a Job: Final Results from the Evaluation of the Center for Employment Opportunities (CEO) Transitional Jobs Program." Office of Planning, Research and Evaluation Report 2011–18, Administration for Children and Families, U.S. Department of Health and Human Services, Washington, DC.
- Rodriguez, Michelle Natividad, and Beth Avery. 2016, September 1. "Ban the Box: U.S. Cities, Counties, and States Adopt Fair Hiring Policies." National Employment Law Project, New York, NY.
- Rooth, Dan-Olof. 2007. "Implicit Discrimination in Hiring—Real World Evidence." Discussion Paper 05/07, Centre for Research and Analysis of Migration, University College London, London, UK.
- Schnepel, Kevin. Forthcoming. "Good Jobs and Recidivism." *Economic Journal*. doi:10.1111/eoj.12415.
- Schochet, Peter Z., John Bughardt, and Sheena McConnell. 2006. "Does Job Corps Work? Impact Findings from the National Job Corps Study." *American Economic Review* 98 (5): 1864–86.
- Serrato, Juan Carlos Suárez, and Philippe Wingender. 2016. "Estimating Local Fiscal Multipliers." Working Paper No. 22425, National Bureau of Economic Research, Cambridge, MA.
- Shoag, Daniel, and Stan Veuger. 2016. "No Woman No Crime: Ban the Box, Employment, and Upskilling." Working Paper No. 2016-08, American Enterprise Institute, Washington, DC.
- Smeeding, Timothy M. 2016. "Multiple Barriers to Economic Opportunity for the 'Truly' Disadvantaged and Vulnerable." *The Russell Sage Foundation Journal of the Social Sciences* 2 (2): 98–122.
- Sullivan, Daniel, and Till Von Wachter. 2009. "Job Displacement and Mortality: An Analysis Using Administrative Data." *Quarterly Journal of Economics* 124 (3): 1265–1306.
- United States Sentencing Commission. 2012. "Report to the Congress: Continuing Impact of *United States v. Booker* on Federal Sentencing." United States Sentencing Commission, Washington, DC.
- U.S. Bureau of Labor Statistics (BLS). n.d. "National Longitudinal Surveys of Youth 1997 (NLSY97)." U.S. Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC.

- U.S. Census Bureau. n.d. "Resident Population: National Population Estimates for the 2010s." Population Estimates, U.S. Census Bureau, U.S. Department of Commerce, Washington, DC.
- U.S. Census Bureau (Census) and Bureau of Labor Statistics (BLS). 2015. "Current Population Survey." U.S. Census Bureau and Bureau of Labor Statistics, Washington, DC.
- U.S. Equal Employment Opportunity Commission (EEOC). 2016. "Race-Based Charges, FY 1997–FY 2015." U.S. Equal Employment Opportunity Commission, Washington, DC.
- Wozniak, Abigail. 2015. "Discrimination and the Effects of Drug Testing on Black Employment." *Review of Economics and Statistics* 97 (3): 548–66.
- The White House. 2015. "Take the Fair Chance Pledge." The White House, Washington, DC.
- Yang, Crystal S. 2016, May. "Local Labor Markets and Criminal Recidivism." Unpublished working paper. Accessed September 2016 at [http://scholar.harvard.edu/files/cyang/files/labor\\_recidivism\\_may2016.pdf](http://scholar.harvard.edu/files/cyang/files/labor_recidivism_may2016.pdf).
- Ziegert, Jonathan C., and Paul J. Hanges. 2005. "Employment Discrimination: The Role of Implicit Attitudes, Motivation, and a Climate for Racial Bias." *Journal of Applied Psychology* 90 (3): 553–62.





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## Highlights

Jennifer L. Doleac of the University of Virginia offers five key principles for helping individuals with criminal records successfully navigate the low-skill labor market. She also discusses the wider range of labor market challenges faced by low-skilled workers.

## The Principles

**Principle 1:** Increase availability of jobs for low-skilled workers

**Principle 2:** Focus on building work readiness

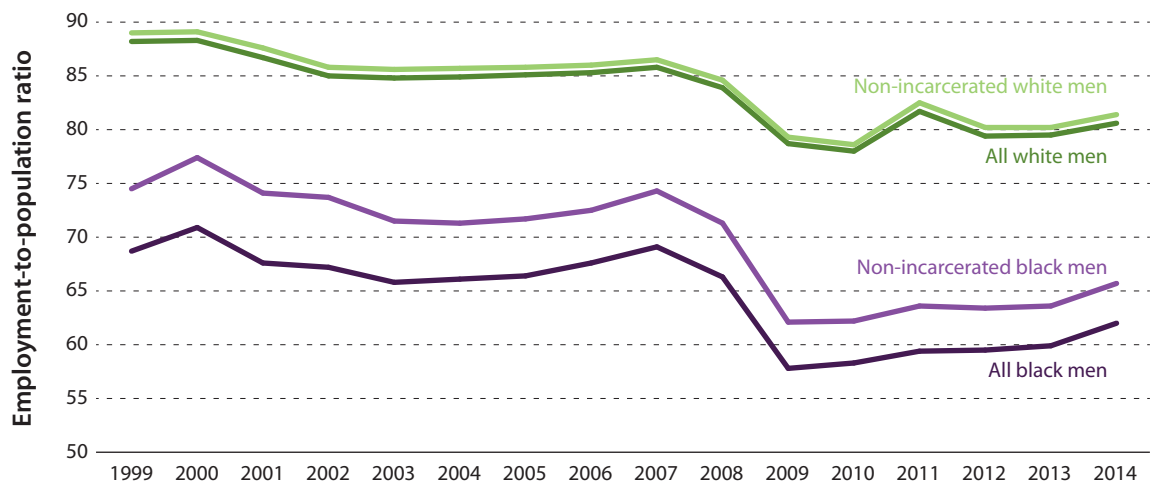
**Principle 3:** Communicate work readiness to employers

**Principle 4:** Reduce the cost of hiring people with criminal records

**Principle 5:** Carefully weigh the impact of unintended consequences of employer regulations

FIGURE 4.

### Employment-to-Population Ratio, 1999–2014, by Race With and Without Adjustments for the Incarcerated Population



Sources: U.S. Census and BLS 2015; Bureau of Justice Statistics n.d.; U.S. Census Bureau n.d.; author's calculations.

Note: Conventional labor force statistics exclude the incarcerated population. Limited to men ages 20–39.

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