Myself as the Employer of Last Resort: Criminal Justice Involvement, Self-employment, and Barriers in Recent Public Policy[*]

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Abstract

This study provides the first empirical evidence on the extent of self-employment within the US justice-involved population. Using linked tax return and Criminal Justice Administrative Records System data, we find that between 16.6% and 32.5% of individuals with criminal records are self-employed. Justice-involved individuals are 22% more likely to rely solely on self-employment. The recent Paycheck Protection Program, passed to support small business during the COVID-19 pandemic, initially disqualified those with a broad range of criminal histories; we find that these criteria excluded almost 1.3 million sole-proprietors (5%) from PPP eligibility, with a disparate impact on Black and Hispanic individuals.

Keywords: Self-employment, criminal histories, Paycheck Protection Program, federal support programs, COVID-19

JEL classification codes: H81, J24, K42

1　Introduction

Population contact with the US criminal justice system has grown substantially in recent decades. Incarceration rates increased from 117.8 to 518.9 persons incarcerated per 100,000 between 1960 and 2010.[1] Recent estimates suggest that 8% of all adult men have a felony conviction and 3% have been to prison, which is most pronounced within minority communities (Shannon et al. 2017). A rich literature documents substantial evidence of significant barriers to employment for individuals with criminal records (e.g., Pager 2003; Holzer, Raphael, and Stoll 2003, 2007; Mueller-Smith and Schnepel 2021).

In 2019, the Department of Labor allocated $87.5 million towards grants to improve the employment opportunities of those leaving the corrections system. One approach focuses on entrepreneurship, represented by the work of a growing number of nonprofit organizations (e.g., Defy, Project ReMADE, LIFE Reentry Program for Women Prisoners, the Prison Entrepreneurship Program). If justice-involved individuals face labor market discrimination, they may be better off starting their own businesses and employing themselves. However, quantitative evidence on the scope and effectiveness of entrepreneurship and self-employment in this population is essentially non-existent.[2]

In this paper, we document the first empirical evidence on self-employment rates among justice-involved individuals, the corresponding industrial composition, and comparisons to general population benchmarks. We perform the first linkage between criminal histories from the Criminal Justice Administrative Records System (CJARS) (Finlay and Mueller-Smith 2020) and tax filings from the Internal Revenue Service (IRS). The analysis focuses on five states

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[1]Authors' calculations using state and federal prison counts (`https://www.sentencingproject.org/criminal-justice-facts/` and 1960 and 2010 Decennial Census information.

[2]A contemporaneous effort in Hwang and Phillips (2021) and Bushway, Woods, and Adamson (2021) are the two clear exceptions. Hwang and Phillips (2021) documents an increase in self-employment among formerly incarcerated individuals using the NLSY and Bushway, Woods, and Adamson (2021) provide valuable information on the number of small business owners excluded from PPP due to criminal record disqualifications at a national level and how many business owners were impacted by changes to the restrictions, and independently validate our previous estimates using a new, alternative approach.

(Arizona, Michigan, North Carolina, Texas, and Wisconsin), which together represent approximately 20% of the US population.

We find that 16.6% to 32.5% of individuals with criminal records report business income to the IRS in the 2014-2018 tax years. Filing rates are especially high for Black and Hispanic women with criminal records at 42% and 32%, respectively. Using covariate-adjusted regression models, we find that those with criminal records are 1.95 percentage points (22%) more likely to rely solely on self-employment than the general population.[3] Moreover, total revenue in their businesses is 8.5% larger. Individuals with criminal records are disproportionately self-employed in construction, "other services" (e.g., automotive repair, hair salons, etc.), and waste management than the general population.

Federal support for small businesses recently received renewed focus through the establishment of the Paycheck Protection Program (PPP) in response to the COVID-19 pandemic. This program provided forgivable loans to small businesses as part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act.[4] Initial rules made businesses with an owner of 20 percent or more equity with a broad range of criminal backgrounds ineligible for the program.[5] The SBA began narrowing the scope of PPP criminal disqualifications in June 2020.[6,7]

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[3]Reliance on self-employment in a given year is defined as filing a Schedule C and having W-2 information returns totalling less than $1,000.

[4]Public Law 116-136 Sections 1102 and 1106, amended in Public Law 116-139 on April 24 and Public Law 116-142 on June 5.

[5]The disqualifying criteria included being presently incarcerated, on probation, on parole; subject to an indictment, criminal information, arraignment, or other means by which formal criminal charges are brought in any jurisdiction; or within the last five years, for any felony, has been convicted; pleaded guilty; pleaded nolo contendere; been placed on pretrial diversion; or been placed on any form of parole or probation (including probation before judgment).

[6]An earlier draft of this paper circulated as Census Bureau Working Paper ADEP-WP-2020-04, "Criminal Disqualifications in the Paycheck Protection Program," has been acknowledged as contributing to the narrowing of these disqualifying criteria by the Small Business Administration (SBA). See DEFY Ventures, INC. v. U.S. Small Business Administration (2020), Arnold Ventures (2021), and Bushway, Woods, and Adamson (2021).

[7]These restrictions were limited to any felony conviction within the past year or a felony conviction related to fraud, bribery, embezzlement, or a false statement on a loan or federal assistance application within the past five years, individuals starting probation/parole within

We leverage our linked data to measure the scope of the original PPP restrictions. While most of the disqualifying criteria are no longer in place, the original policy likely had a lasting impact since initial businesses survival at the start of the pandemic has been linked to PPP support (Bartik, Cullen, et al. 2020; Bartik, Bertrand, et al. 2020). We find that a small but non-trivial share of small business owners have disqualifying criminal histories based on the original rules. In Michigan and Texas, where we can observe full criminal histories most accurately, we find that 5.1% and 2.8% of non-farm sole-proprietors (Schedule C filers) were ineligible due to the criminal disqualifications. We observe significantly higher rates of ineligibility among Black and Hispanic owners for men and women (127% to 409% higher compared to their White counterparts), indicating a disparate racial impact of the original Small Business Administration (SBA) criminal history rules.

These findings highlight the prevalence of self-employment among the criminal justice population, with important implications for research and policy. We now know the criminal justice population is disproportionately engaged in self-employment as a means of achieving self-sufficiency, a form of economic activity consistent with existing research on criminal records and labor market discrimination. Further attention is merited in the literature since self-employment is unmeasured in most employment datasets (e.g., unemployment insurance wage records or W-2 information returns), potentially leading to underestimates of work and income among the justice-involved population.

2 Background

2.1 Barriers to employment for criminal offenders

Income stability has long been recognized as an important mechanism for reducing recidivism (Uggen, Wakefield, and Western 2005). However, indi-

the last year or individuals starting probation/parole for the same offenses previously listed within the past five years and individuals presently charged with a criminal *felony* offense in June 2020 (Small Business Administration 2020). The restriction for non-fraud felonies within the last year was later removed under the Biden administration for those not currently incarcerated (The White House 2021).

viduals with criminal records often face labor market discrimination making this goal unattainable (Bushway, Stoll, and Weiman 2007). Some discrimination is institutionalized, as states have adopted occupational restrictions for those with certain criminal histories.[8] However, even among legally accessible jobs there is an aversion to hiring individuals with criminal records. Holzer, Raphael, and Stoll (2003) reports that over 60% of employers were unwilling to hire someone with a criminal record. This is reflected in a prisoner reentry study surveying 740 recently released individuals of which 75% reported actively searching for work, but only 45% were currently employed and 70% felt as though their criminal record had affected their job search (Visher, Debus-Sherrill, and Yahner 2011).

Pager (2003)'s influential audit study documents the presence of such discrimination. Individuals that conveyed they had a criminal record, most often through a question on the application explicitly asking for this information, were 50% less likely to make it past the initial screening.[9] Discrimination based on criminal records is especially pronounced for young black men (Pager 2003; Pager, Western, and Sugie 2009; Holzer, Raphael, and Stoll 2003) and, while it is present in tighter labor markets, only gets worse in softer labor markets (Pager 2003; Sabol 2007).[10]

Ultimately, employers' preferences over criminal records have a real long-term impact on employment and wages for those with criminal records. Mueller-Smith and Schnepel (2021) shows that individuals that avoid having their first felony conviction on their record, through changes in diversion, are more likely to be employed in the short- and long-run, have higher wages and have longer spells of continuous employment than those that narrowly received their first

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[8]See the National Inventory of Collateral Consequences of Conviction: `https://niccc.csgjusticecenter.org`.

[9]The initial study was in Milwaukee and the findings were replicated in New York City in (Pager, Western, and Sugie 2009).

[10]While not directly measuring employment, a body of evidence also supports that individuals released from prison into worse labor market conditions are more likely to recidivate suggesting legal employment opportunities is important to reduce recidivism and that discrimination based on criminal records is worse in looser labor markets (Yang 2017; Schnepel 2018; Agan and Makowsky 2018).

felony conviction record. Thus, individuals facing these barriers to employment are left with either self-employment, informal employment, or illegal employment.

2.2 Evidence on self-employment and entrepreneurship

Research generally finds that self-employed individuals earn less than their employer-based counterparts (Hamilton 2000). Lower initial and long-run earnings could reflect several things: non-pecuniary benefits, overestimation of payoffs, or a lack of outside options. Heilman and Chen (2003) suggest the increasing rate of self-employment among women and minorities relates to employer discrimination based on family duties, gender, and race. These arguments extend to other marginalized groups, particularly those with criminal records.

It is difficult to quantify the extent that those with criminal justice involvement improve their economic standing through self-employment due to data constraints. Labor market outcomes are commonly studied using Unemployment Insurance (UI) wage records or W-2 information returns. However, self-employed individuals are not captured in these administrative records leaving questions related to self-employment intractable.

Surveys, like the American Community Survey (ACS), the Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP), directly ask questions regarding income differentiated by source. However, no Census Bureau-sponsored household survey also documents criminal history. There are other more targeted surveys that follow the justice-involved population, but such efforts fail to distinguish between types of income.

A major drawback of surveys in this context is potential for social desirability bias to generate systematic mismeasurement. Likewise, justice-involved individuals are disproportionately underrepresented by surveys due to low residential stability (Roman and Travis 2004), low educational attainment (Harlow 2003), and membership in minority groups (Carson and Anderson 2016), which are all associated with poor sample coverage.

Understanding this channel is essential for policy discussions regarding the

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self-sufficiency of those with criminal justice involvement and more broadly around policies or restrictions related to small businesses. For example, Fairlie (1999) and Blanchflower, Levine, and Zimmerman (2003) document discrimination against minorities in small business lending creating additional barriers to self-employment for these groups. More recently, the Payroll Protection Program (discussed in detail in Section 5.1) originally contained explicit loan disqualifications based on criminal histories.

3   Novel data linkage supports measuring self-employment in the justice-involved population

We use novel microdata linked through Federal Statistical Research Data Centers (FSRDCs) to observe individual criminal and employment histories. Criminal histories are measured using CJARS. We identify non-farm sole proprietors from tax records provided by the Internal Revenue Service, specifically from information on Form 1040s. These data were linked at the person level using a Protected Identification Key (PIK).[11]

3.1   Observable criminal histories

Our analysis focuses on five states in CJARS where both criminal court and correctional records are present: Arizona, Michigan, North Carolina, Texas and Wisconsin. Together, these states represent approximately 20% of the US population. Depending on the jurisdiction, the records extend back as early as the 1970s and identify dated incidences of charges, convictions, and spells in the correctional population (i.e. incarceration, parole, or probation). Individuals are defined to have criminal histories if they are observed with one or more misdemeanor, felony conviction, or correctional event.

Some variation in procedural coverage exists between the five states. For example, Michigan covers all court records stemming from violations of local ordinance as well as and state statutes. In comparison, North Carolina data

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[11]See `https://census.gov/datalinkage` for more information.

are limited to state statute-based convictions. Due to this variation, we do not interpret differences across states as generally meaningful and some caution is warranted when interpreting pooled estimates. All five states cover statute-based misdemeanor and felony convictions and prison records. We further describe the types of records and years of coverage in the data appendix.

3.2 Tax-based measures of employment

Self-employment is measured using whether Form 1040 with a Schedule C was filed to the IRS during 2014 through 2018 tax years. Self-employed non-farm sole-proprietors and independent contractors file a Schedule C and self-employed farmers file a Schedule F. Farm and non-farm sole-proprietors, independent contractors, self-employed individuals, and partnerships report net profits subject to self-employment taxes using a Schedule SE.[12] Sole proprietorship is the most common form of reported self-employment with Schedule C forms filed for 17% of households in 2016 (Internal Revenue Service 2016a, 2016d).

The vast majority of *identified* self-employed individuals, measured by filing a Schedule C, F or SE tax form at least once between 2014 and 2018 tax years, are non-farm sole-proprietors filing a Schedule C (93%). Moreover, there is considerable overlap among those filing self-employment taxes (Schedule SE) with 93% identified as sole-proprietors filing a Schedule C. Farm sole-proprietors constitute only 4% of identified self-employed individuals in our sample and 37% of these filers are also observed filing a Schedule C. We are unable to identify other forms of self-employment, such as partnerships or corporations that would file other tax forms.[13,14] Thus, we focus on Schedule C

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[12]In 2016, there were 1,750,996 returns for farm sole-proprietors and 25,063,932 returns for non-farm sole-proprietors (Internal Revenue Service 2016d).

[13]Specifically, we do not observe partnerships filing a K-1 (1065 form) or Sch. E (1040 form); corporations filing Form 1120 and either a 941, 943, or 940 for tax withholding; S-corporations filing a Form 1120-S and Schedule K-1; and some LLCs. The IRS treats single-member LLCs as sole-proprietors (observed) and multi-member LLCs as partnerships (not observed). LLCs can also opt to be treated as corporations, in which case they are not observed. Independent contractors file a Schedule C and are observed.

[14]In 2016, there were 3,763,117 partnerships with 28,163,819 partners (Internal Revenue

filers as our measure of small business ownership, which captures all non-farm sole-proprietors and independent contractors. This restriction also enables us to observe additional business information, such as the business owner, self-employment income, business revenue, and industry for these filers.

Form 1040 and Schedule Cs are filed at the household level. Joint filing could create an issue of either double counting self-employed persons or misidentifying the self-employed individual, which is of particular concern given gender differences in being a primary or secondary filer on the Form 1040 and differences in the likelihood of joint filing which may vary by criminal justice status.[15] We are able to identify the business owner as the self-employed person by linking to the Business Register for Schedule C filers. We assign the primary filer as the business owner for the small subset of Schedule C tax filers where business information is not available.

We also measure employer-based employment using the universe of W-2 information returns, which are filed by the employer, between 2013 and 2018 tax years. By linking to the Business Register, we observe the industry of highest employer-based earnings between 2013 and 2017 to document both the prevalence of industries within the criminal justice population and the level of experience in the five years preceding self-employment for new business owners in 2018.

4 Quantifying the scope of self-employment

4.1 Self-employment rates by criminal history

We examine Schedule C filing rate among those with varying criminal histories in Table 1 Panel A. To compare with the general population, we also consider all individuals observed filing a 1040 between 2014 and 2018 tax years with

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Service 2016b), 4,592,042 returns for S-corporations, and a total of 6,188,676 corporations (including S-corporations) (Internal Revenue Service 2016c). Independent contractors and self-employed persons receiving a Form 1099, report income and expenses on a Schedule C and file self-employment taxes using a Sch. SE if net profits are over $400.

[15]Only legally married individuals can jointly file IRS income taxes on form 1040, although they may still choose to file individually.

employment in at least one year for our five focal CJARS states.[16] Given recent criminal justice involvement may lead to incapacitation, we restrict our sample to those who are not in prison during the majority of our study period to eliminate mechanical relationships between labor supply and incarceration.

Overall, 24% of employed individuals without a criminal history file a Schedule C at least once between 2014-2018 (Column 1). This varies some by state, with rates at 16.7% and 27.4% in Wisconsin and Texas, respectively. Strikingly, in almost all states, individuals with criminal records, defined as having a misdemeanor, felony conviction, or correctional spell in prison, parole, or probation, are self-employed at higher rates (Column 11). Individuals with a felony criminal conviction are observed with the highest rates of Schedule C filing (Column 4), consistent with the hypothesis that more serious criminal records create stronger barriers to employment and push individuals into self-employment. At the high end, over one-third of Texans with a felony conviction had self-employment income registered with the IRS between 2014 and 2018 ($\approx$200,000 individuals). Those who were in the correctional system in the last five years have the lowest rates of Schedule C filing, perhaps since this group experiences volatile employment and may face legal requirements to establish employer-based employment as part of mandated release conditions. Overall, these findings suggest self-employment income represents a plausibly important path to self-sufficiency for the justice-involved population.

4.2 Self-employment rates by demographic groups

Distinct patterns emerge by demographic subgroup within the justice-involved population (Table 1, Panel B). White and Black male offenders vary in their Schedule C filing rates by state, with Black men being 5 percentage points more likely in Michigan and 5 percentage points less likely in North Carolina to be a sole-proprietor than their White male counterparts. In Texas, a state with a large Hispanic population, Hispanic male offenders are 3.2 percentage points more likely to file Schedules C than their White counterparts.

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[16]Being observed on a Form 1040 does not necessarily indicate employment, as married couples may joint file and individuals may be reporting non-labor market income.

Overall, female justice-involved individuals report self-employment income at higher rates than their male counterparts, especially for Black women who file at rates 12-15.9 percentage points higher than Black men and 9.3-23.8 percentage points higher than white women. Close to half of Black women with criminal histories in Michigan report self-employment to the IRS, an astonishingly high rate. Similarly, Hispanic women file at higher rates than Hispanic men (0.3-6 percentage points) and White women (1.2-8.9 percentage points).[17] White women with criminal records are self-employed at equal or lower rates than their white male counterparts in all states.

Older male populations are between 8.1 and 9 percentage points more likely to file Schedule C self-employment than their younger male counterparts. A similar pattern exists for women involved in the criminal justice system but to a lesser extent.

4.3   Industry of employment

We next explore which industries, measured by 2-digit NAICS codes, justice-involved individuals work in either through self-employment or standard employment arrangements compared to the general population (Figure 1a and 1b). We consider all individuals in the five CJARS states that are 18 or older as of April 3, 2018 and link to their employer-based (W-2 information returns) and self-employed (Schedule C filings) work histories. Justice-involved individuals are more likely to be self-employed in construction, other services, and waste management industries and less likely to be in professional, scientific and technical services or retail and trade industries than non-justice-involved self-employed individuals. Justice-involved individuals are also more likely to be employer-employed in construction and waste management industries as well as accommodation and food services and manufacturing; the latter two industries are not prevalent self-employment industries for either those with or without criminal justice records due to the high capital cost of the industry.

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[17]These observed higher rates of self-employment among low-income women may reflect a disproportionate incentive to report self-employment income due to the Earned Income Tax Credit (EITC) (Saez 2010; Chetty and Saez 2013).

We further disaggregate "other services" into 4-digit NAICS codes since this industrial category has previously received limited attention in the literature. Figure 1c, shows individuals are mostly likely to gain self-employment in automotive repair and maintenance and personal care services relative to the general population. Personal care services include barber shops, beauty and nail salons, dieting services, and other personal care businesses.[18]

We explore the role of experience by looking at new Schedule C filers in 2018 and the industry of highest earnings from W-2 information returns in the preceding five years, 2013 through 2017. Self-employed individuals with criminal records in construction and waste management show a higher degree of in-sector experience than the general population: 30% and 17% compared to 23% and 11% respectively (Figures 2a and 2b). Interestingly, most justice-involved individuals do not have prior experience in "other services" (8%) before entering self-employment, only 1 percentage point lower than non-justice-involved individuals (Figure 2c). Rather, justice-involved individuals have experience disproportionately in waste management, manufacturing, and accommodation and food services.

4.4 Modeling self-employment as a function of having a criminal record

We model employment and income channels as a function of criminal justice involvement to more concisely document the extent self-employment and income may disproportionately be a means of economic self-sufficiency for those with criminal records. Formally, we estimate models following the main specification below:

$$Y_{i,cz}^{2018} = \alpha + \beta\,1(\text{CJ record})_i + \gamma_{sex \times race} + \gamma_{age} + \gamma_{cz} + \gamma_{educ} + \epsilon_i \qquad (1)$$

where Y is a measure of employment or income for individual i in 2018. The first outcome of interest is labor supply in the formal sector, which is measured using an indicator for whether a 1040 is filed along with a W-2 or Schedule C.

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[18]For additional description of NAICS codes, see `https://www.naics.com/search/`.

We then consider reliance on self-employment among those that work using an indicator for whether a Schedule C is filed and whether a Schedule C is filed without total W-2 wage income of $1,000 or more. We also consider the intensity of labor market involvement and self-employment using measures of employer-based and self-employment earnings and business revenue. Specifically, among those formally employed, we measure total earnings (W-2 wages and Schedule C earnings and wages), W-2 wages, Schedule C earnings and wages, share of earnings coming from a Schedule C, and total business revenue.[19] These intensive margin variables are all transformed using the inverse hyperbolic sine (IHS).

CJ involvement is an indicator for having any conviction or correctional spell prior to April 3, 2018 with β being the parameter of interest measuring the association between having a criminal record and self-employment. Fixed effects are included for gender by race, age, commuting zone, and education level.[20,21]

In Table 1 Panel A, we first look at formal labor supply in 2018 as a function of criminal justice involvement. Individuals with a criminal record, specifically a conviction or correctional event, are 13 percentage points (28%) less likely to be engaged in formal economic activity compared to the general population. This relationship is surprisingly stable although shrinks slightly after accounting for educational attainment in Column 2 of Panel A. In Columns 3-6, we look at the likelihood of being self-employed among those working. Columns 3 and 4 document that individuals with a criminal record are 2 percentage

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[19]Self-employed individuals can receive income from either earnings or paid wages. Since business owners can vary their source of income for tax purposes we report total received income.

[20]Demographics are measured using the Census Numident. Race categories are mutually exclusive: White, Black, other, Asian/Pacific Islander, Hispanic, Native American, and missing race. Gender categories include missing, male, and female. Commuting zone fixed effects correspond to the geographic location of the individual reported in 2010. Commuting zones that straddle multiple states are split into separate fixed effects. Education levels include High School/Associate's Degree and Bachelor's/Advanced Degree.

[21]Educational attainment is only observed for individuals that responded to the 2000 Decennial long form or the American Community Survey between 2005-2018 and were 22 years or older at the time of the survey.

points or 11% more likely to be self-employed than the general population. Moreover, they are 22% more likely to be reliant on self-employment, as measured by filing a Schedule C and not also having a W-2 with $1,000 or more (Column 6). Finally, we find that this is not driven primarily by those maximizing the EITC and their net tax refunds, as seen in Columns 7-10 which exclude those within $1,000 of the first EITC kink (Tax Policy Center 2021).[22]

These results are mirrored when looking at amounts of income by source in Panel B. Individuals with a criminal record have 29% lower total earnings (W-2 wages and Schedule C earnings and wages), which predictably shrinks to 19% once accounting for educational attainment. In Columns 3 and 4, we see that the decrease in overall earnings is due to significantly lower W-2 earnings, with individuals receiving 25% lower employer-based wages when accounting for educational attainment. This is in part made up by higher Schedule C earnings on average. Columns 5 and 6, report a similar 5.3% and 5.5% increase in self-employment income. Ultimately, this represents earning 2% more of total earnings through self-employment for those with criminal records. Finally, since it is common to withhold self-employment income to reinvest in the company or for tax purposes and some individuals may be self-employed more as a side project, we measure the gross revenue reported by sole-proprietors on their Schedule C forms in Columns 9 and 10. Those with criminal records have businesses that are 8.6% larger in terms of total revenue, suggesting that they are more likely to be owners of substantial businesses that individuals are relying on than non-justice-involved individuals.

These novel statistics suggest self-employment may be a strategic response to discrimination in the formal labor market by those that have criminal records. They also highlight an important channel of employment for those with criminal records that is not observed in commonly used administrative or survey data sources and has important policy implications.

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[22]The estimates shrink slightly when excluding those around the EITC kink with notable differences by gender (Online Appendix Table 1); the male and female estimates reduce to 75-94% and 49-52% of the original coefficients, respectively.

5 Recent interactions between policies to support self-employment in the U.S. and criminal histories

5.1 COVID-19 and the Paycheck Protection Program

In December 2019, a novel coronavirus began spreading rapidly with recorded cases in nineteen countries by the end of January 2020 (World Health Organization 2020). The World Health Organization declared the 2019 Novel Coronavirus Disease (COVID-19) a pandemic on March 11, 2020 and the United States followed suit declaring a national emergency two days later.

The Paycheck Protection Program (PPP) was passed by Congress as a part of the Coronavirus Aid, Relief, and Economic Security (CARES) Act on March 27, 2020 to offer assistance to small businesses facing economic hardship in the midst of COVID-19. Initially, Congress allocated $349 billion, adding $310 billion a month later and two more allocations of $284 and $7.25 billion in December 2020 and March 2021 available through the Small Business Administration (SBA). The loans could be forgiven if at least 60% was used for payroll and the business did not decrease their workforce or wages. Additionally, these loans offered 1% interest rates, a two- or five-year minimum maturation period, deferred payments for six months, no collateral or personal guarantees, and no fees charged to the business. Small businesses were eligible to apply for funding, including sole proprietors, independent contractors, self-employed persons; accommodation and food service businesses (NAICS codes beginning with 72) with more than one physical location and less than 500 employees per location; non-profit organizations, veterans organizations, and Tribal businesses with less than 500 employees or the industry size standard if more than 500.

Originally, SBA implemented PPP eligibility restrictions for those with recent criminal histories to determine character, ability to repay loans, and potential for fraud. Specifically, the original application denied businesses with an owner of at least 20% or more equity who was currently in prison, on parole, on probation, had a pending charge, or was convicted of a felony within the

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last five years; these were later reduced in scope. Applicants report criminal history on the application form and give permission for criminal background checks by the Federal Bureau of Investigation (FBI) to verify the application information. Notably, lying on a loan application form is a felony offense punishable by up to $1 million in fines and 30 years in prison (18 U.S.C. 1014).

In our five states, sole-proprietors received an average of $28,650 in potentially forgivable loans, if spent on approved expenditures such as rent and payroll, and reported having 5 employees on average.[23]

5.2 Measuring PPP disqualification rates

We identify self-employed individuals or small businesses using Schedule C filing and do not observe other non-sole proprietor businesses (e.g., partnerships or S-corporations). This omission could lead to an overestimate of the ineligibility rate for all small businesses in the U.S. However, of the PPP loans under $150,000 granted in the five states used in this analysis, 51% were for sole-proprietors/single-member LLCs, 23% for corporations, 11% for S-corporations, 8% for independent contracts/self-employed individuals, and 2% for partnerships.[24] We are also unable to isolate small businesses in the analysis meaning some individuals may claim self-employment income associated with businesses that are ineligible for PPP support due to their firm size (>500 employees). Finally, while we estimate the number of businesses that would have been ineligible for PPP loans in early 2020, we note that tax filing status in any given year between 2014 and 2018 tax years is an imperfect proxy for *currently* being a small business owner.

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[23]Numbers are from the SBA PPP Loan Level Data provided by the U.S. Department of Treasury accessed 10/28/2020 from `https://home.treasury.gov/policy-issues/cares-act/assistance-for-small-businesses/sba-paycheck-protection-program-loan-level-data`.

[24]Percentages are calculated from SBA PPP Loan Level Data provided by the U.S. Department of the Treasury accessed on 10/28/2020 from `https://home.treasury.gov/policy-issues/cares-act/assistance-for-small-businesses/sba-paycheck-protection-program-loan-level-data`.

5.3 Disqualification rates for PPP financial assistance

We document that more than 133,600 self-employed business owners in the five CJARS states were not initially eligible for these loans due to one or more observable PPP disqualifying events resulting from prior contact with their filing state's criminal justice system (Table 3, Panel A). In states where CJARS has the most complete procedural coverage, observed ineligibility rates were the highest; 5.1 percent and 2.8 percent were ineligible in Michigan and Texas respectively. The most common reason for exclusion from PPP eligibility in Michigan was having a pending criminal charge; in Texas, the most common reason was for being on probation.

All states considered in this analysis have coverage of the criminal court system and the correctional population, but the historical and jurisdictional coverage varies; pending charges, misdemeanors, parole and probation events are not always included in the data limiting the observed disqualifying events. The states with more limited coverage exhibit observed ineligibility rates in the range of 1.4 to 1.9 percent. For example, in North Carolina, where historical criminal convictions currently can be observed only for those who have participated in the correctional population, we measure an intermediate value at 1.6 percent observed ineligible. The disqualifying statuses were not mutually exclusive with roughly 30 percent of observed ineligible individuals having more than one disqualification. Thus, elimination of any single exclusion criteria would not change the overall ineligibility rate in the population substantially.[25]

The incidence of observable PPP disqualifications varied by demographic group (Table 3, Panel B). Overall, male filers exhibited slightly higher rates of observable ineligibility than women, ranging from 0.6 to 1.6 percentage points. Male and female filers under the age of 30 were especially at risk for ineligibility based on their observed criminal history. Across CJARS states, young men had ineligibility rates 2.2 to 7.6 percentage points higher than older filers and young women had rates 0.9 to 7.1 percentage points higher than older filers.

Black men faced the highest rates of ineligibility across all examined demo-

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[25]Bushway, Woods, and Adamson (2021) provides estimates on how significant changes to PPP restrictions reduced the number of excluded businesses.

graphic groups, 3.2 to 16 percentage points higher than White men depending on the state of tax filing. In Michigan and Texas, 7.7 to 19.2 percent of Black men with reported self-employment income had an observed disqualifying event, representing over 34,000 minority business owners. Hispanic men also exhibited elevated rates of observed ineligibility compared to White men in all five states, and similar qualitative dynamics were present for female filers but with more modest base levels and less severe racial disparities.

5.4   Implications of financial assistance barriers

By September 2020, Yelp Economic Average (2020) documented that 6-10% of home and mechanic services listed on Yelp were permanently closed and 25-57% of retail and food services, which had been particularly hard hit. Bartik, Cullen, et al. (2020) suggests PPP support was an important lifeline for increasing business' expected survival rate by an estimated 14 to 30 percentage points. Individuals with criminal histories initially could not access this support.

Extrapolating the findings from Michigan, the state with the most comprehensive coverage, we estimate 1,278,260 sole-proprietors did not have access to the critical PPP funding at the start of the pandemic due to criminal disqualifications.[26] This translates to 25,565 permanent business closures for sole-proprietors with a PPP disqualification, assuming the most conservative early closure rate of small businesses of 2% through March 2020 (Bartik, Bertrand, et al. 2020). Closure rates have risen as businesses have transitioned from being temporarily to permanently closed.

These closures are likely disproportionately born by minority populations (Fairlie 2020) due to a lack of lending services in minority communities (Fairlie 1999; Blanchflower, Levine, and Zimmerman 2003) and higher rates of criminal histories among sole-proprietors. To the extent that closures are permanent and related to PPP ineligibility, the initial criminal restrictions may have resulted in reductions in minority representation among small business owners

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[26]We calculate the number of ineligible businesses as 5.1% of the total number of non-farm sole-proprietors, 25,063,932 Schedule C returns, in 2016 (Internal Revenue Service 2016d).

and removed an important source of income for those with criminal records.

6   Conclusion

An increasing number of people in the US have a criminal record, especially within minority communities. These individuals face well-documented labor market discrimination. A potential alternative is self-employment and entrepreneurship. However, due to a multitude of data constraints it has previously been unknown how prevalent this form of activity is among those with criminal records. Using novel data linkages between CJARS and IRS tax records, we document the extent that justice-involved individuals engage in self-employment, finding that 16.6-32.5% of individuals with any conviction or correctional spell are self-employed. Moreover, individuals with criminal records are 22% more likely to rely primarily on self-employment.

Our findings also highlight the role of institutionalized barriers in financial access, particularly with respect to the Payroll Protection Program (PPP). While the SBA's original criminal history-based disqualifications did not impact the vast majority of small business owners, we estimate that 5% of sole-proprietors were initially ineligible for PPP support. Moreover, minority business owners were ineligible at significantly higher rates than their White counterparts. Given the role of PPP funding in improving the likelihood of remaining open (Bartik, Cullen, et al. 2020), criminal disqualifications may have jeopardized an important income source for those with criminal records and reduced minority representation among small business owners.

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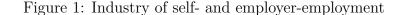
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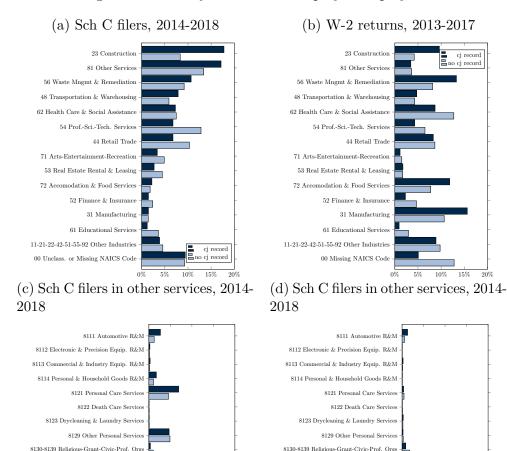
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Tables and figures

Figure 1: Industry of self- and employer-employment

(a) Sch C filers, 2014-2018

(b) W-2 returns, 2013-2017

(c) Sch C filers in other services, 2014-2018

(d) Sch C filers in other services, 2014-2018

Source: Calculations are based on IRS 1040 tax forms between 2014-2018 tax years, IRS W-2 information returns 2013-2017 tax years, NAICS codes from the Business Register, residence measured in 2010, and criminal justice involvement measured in CJARS, vintage 2020.

Notes: Estimates and sample sizes have been rounded to preserve confidentiality. The sample consists of individuals in the fives CJARS states, who are 18+ years of age or older by April 3, 2018. Self-employed NAICS codes correspond to the most recent highest net revenue industry from Schedule C filings. Employer-based NAICS correspond to the cumulative highest earning industry from W-2 information returns. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY21-ERD002-005.

Figure 2: Industry experience prior to self employment

(a) Construction

(b) Waste management

(c) Other services

Source: Calculations are based on IRS 1040 tax forms in 2018 tax years, IRS W-2 information returns 2013-2017 tax years, NAICS codes from the Business Register, residence measured in 2010, and criminal justice involvement measured in CJARS, vintage 2020.

Notes: Estimates and sample sizes have been rounded to preserve confidentiality. The sample consists of individuals in the fives CJARS states, who are 18+ years of age or older by April 3, 2018. Self-employed NAICS codes correspond to the highest net revenue industry from Schedule C filings for newly self-employed individuals in 2018; individuals not observed filing a Schedule C in 2014 through 2017 tax years. Employer-based NAICS correspond to the cumulative highest earning industry from W-2 information returns. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY21-ERD002-005.
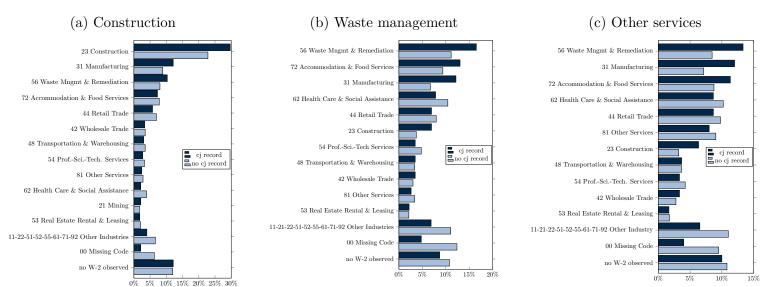
Table 1: Percent of justice involved individuals filing Form 1040 Schedule C in tax years 2014-2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Tax filing state	Form 1040 tax filer no record	ever have criminal charged	ever have criminal conviction	ever have felony conviction	1+ felony conviction past 5 yrs	ever in corrections (inc-par-pro)	in corrections past 5 yrs	in prison past 5 yrs	entered parole past 5 yrs	entered probation past 5 yrs	ever convicted or in corrections
Panel A: Percent of justice involved individuals filing Form 1040 Schedule C by type of criminal history											
Arizona	22.8%	23.4%	23.1%	24.3%	20.7%	22.6%	19.4%	19.4%	–	–	23.0%
Michigan	20.5%	26.3%	26.0%	28.0%	26.7%	25.0%	23.6%	24.0%	22.4%	23.5%	26.1%
North Carolina	23.1%	26.5%	26.5%	28.2%	25.6%	26.7%	24.8%	22.6%	21.7%	25.1%	26.5%
Texas	27.4%	32.8%	32.5%	33.7%	30.8%	31.9%	29.4%	28.1%	28.0%	29.3%	32.5%
Wisconsin	16.7%	16.6%	16.6%	16.9%	14.0%	16.0%	14.2%	11.0%	–	14.2%	16.6%
Combined States:	24.0%	27.8%	27.6%	29.3%	26.6%	27.5%	25.8%	24.2%	25.2%	25.9%	27.5%

	Male						Female					
Tax filing state	All	White	Black	Hisp.	<30	30+	All	White	Black	Hisp.	<30	30+
Panel B: Percent of justice involved individuals filing Form 1040 Schedule C by demographics												
Arizona	21.9%	23.6%	22.8%	22.4%	15.5%	24.5%	25.0%	23.7%	36.6%	28.4%	20.9%	27.1%
Michigan	25.0%	25.0%	30.2%	21.1%	18.6%	26.7%	28.0%	21.9%	45.7%	23.1%	27.5%	28.2%
North Carolina	25.0%	27.7%	22.6%	31.1%	18.1%	26.7%	30.1%	25.3%	34.6%	34.2%	30.5%	30.4%
Texas	32.2%	31.2%	32.4%	34.4%	25.0%	34.1%	33.4%	27.0%	44.6%	34.7%	30.9%	34.2%
Wisconsin	16.6%	18.1%	16.1%	13.8%	9.7%	18.2%	16.7%	14.3%	32.0%	16.0%	15.2%	17.1%
Combined States:	27.1%	26.4%	28.6%	31.5%	20.1%	29.1%	29.0%	23.0%	42.1%	32.1%	27.2%	29.6%

Source: Calculations are based on IRS 1040 tax forms between 2014 and 2018 tax years and criminal justice involvement as measured in CJARS, vintage 2020.
Notes: Estimates and sample sizes have been rounded to preserve confidentiality. Cells marked with "—" are not computable due to CJARS data limitations. Criminal histories are measured as of April 3, 2018. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY21-ERD002-005.

Table 2: Modeling self-employment as a function for criminal justice involvement

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Employment in 2018							Excluding those with AGI within +/- $1,000 of first EITC kink			
	Employed in 2018	Employed in 2018	Sch. C in 2018	Sch. C in 2018	Only Sch. C in 2018	Only Sch. C in 2018	Sch. C in 2018	Sch. C in 2018	Only Sch. C in 2018	Only Sch. C in 2018
Any conviction or correctional spell	-0.133*** (0.00910)	-0.109*** (0.00846)	0.0181*** (0.00481)	0.0211*** (0.00430)	0.0209*** (0.00164)	0.0195*** (0.00157)	0.00991** (0.00448)	0.0159*** (0.00421)	0.0163*** (0.00135)	0.0163*** (0.00145)
N	41,570,000	9,844,000	19,850,000	4,362,000	19,850,000	4,362,000	19,380,000	4,318,000	19,380,00	4,318,000
Control mean	0.482	0.478	0.17	0.188	0.077	0.089	0.168	0.185	0.075	0.087
% difference	27.6%	22.8%	10.6%	11.2%	27.1%	21.9%	5.9%	8.59%	21.7%	18.7%
Panel B: Earnings in 2018 in $1000s, IHS	Total Earnings in 2018	Total Earnings in 2018	W-2 Wages in 2018	W-2 Wages in 2018	Sch. C Earnings in 2018	Sch. C Earnings in 2018	Share of Earnings from Sch. C in 2018	Share of Earnings from Sch. C in 2018	Sch. C Revenue in 2018	Sch. C Revenue in 2018
Any conviction or correctional spell	-0.290*** (0.0235)	-0.188*** (0.0217)	-0.356*** (0.0211)	-0.250*** (0.0175)	0.0532*** (0.0105)	0.0547*** (0.0101)	0.0218*** (0.00193)	0.0191*** (0.00174)	0.0828*** (0.0139)	0.0859*** (0.0139)
N	19,850,000	4,362,000	19,850,000	4,362,000	19,850,000	4,362,000	19,054,000	4,267,000	19,850,000	4,362,000
Control Mean	4.003	4.143	3.766	3.873	0.346	0.390	0.069	0.0773	0.496	0.559
Control Mean, in dollars	50.38	57.53	46.22	52.54	4.162	4.992	0.077	0.087	9.303	11.04
Age Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gender X Race Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
State X County Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Educational Attainment Controls		Y		Y		Y		Y		Y
2000 long-form/ACS respondent		Y		Y		Y		Y		Y

Source: Calculations are based on IRS 1040 tax forms between 2014 and 2018 tax years and criminal justice involvement as measured in CJARS, vintage 2020.

Notes: Estimates and sample sizes have been rounded to preserve confidentiality. The sample consists of individuals observed in the five states in 2010 that are 18 or older as of April 3, 2018. The sample is limited to individuals that filed a 1040 and are either self-employed or employer-based in 2018 as measured by having a Schedule C or W-2 information return filed. Criminal justice involvement is measured as any felony conviction or correctional episode (probation, incarceration, or parole) as of April 3, 2018. Educational attainment is measured among 2005-2018 American Community Survey (ACS) and 2000 Decennial (long form) respondents that were 22 or older at the time of the survey (see U.S. Census Bureau (2019)). The provided person weights are used in specifications redistricted to the survey sample. All specifications include fixed effects for age and commuting zone of residence as of 2010. Standard errors are clustered by commuting zone of residence in 2010. Individuals with Adjusted Gross Income within $1,000 of the first EITC kink in 2018 are excluded from Columns 7-10 in Panel A; the threshold is $6,780, $10,180, and $14,570 for households with zero, one and two or more dependents, respectively. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY21-ERD002-024. * p<0.10, ** p<0.05, *** p<0.01

Table 3: Percent of Form 1040 Schedule C filers with any PPP disqualification

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: Percent of Form 1040 Schedule C filers with any PPP disqualification by event												
Tax filing state	In prison	On parole	On probation	Pending criminal charge	1+ felony conviction in prior 5 years	Any observable PPP disqualifying event	Total size of observable PPP disqualified population					
Arizona	0.1%	–	–	0.9%	0.7%	1.4%	6,894					
Michigan	0.2%	0.0%	1.4%	3.1%	2.1%	5.1%	37,083					
North Carolina	0.1%	0.1%	0.8%	–	1.1%	1.6%	12,143					
Texas	0.2%	0.3%	1.4%	0.4%	1.3%	2.8%	71,321					
Wisconsin	0.1%	–	0.6%	0.7%	1.0%	1.9%	6,552					
Combined States:	0.2%	0.2%	1.2%	0.9%	1.3%	2.7%	133,641					

Panel B: Percent of Form 1040 Schedule C filers with any PPP disqualification by demographics												
				Male					Female			
Tax filing state	All	White	Black	Hisp.	<30	30+	All	White	Black	Hisp.	<30	30+
Arizona	1.8%	1.1%	4.3%	3.9%	3.6%	1.4%	1.1%	0.7%	2.7%	2.3%	1.8%	0.9%
Michigan	5.4%	3.2%	19.2%	8.0%	11.8%	4.2%	4.8%	1.6%	14.3%	5.8%	10.4%	3.3%
North Carolina	2.0%	1.4%	5.0%	1.7%	4.3%	1.7%	1.2%	0.9%	2.1%	0.6%	2.1%	0.9%
Texas	3.8%	2.3%	7.7%	5.6%	7.0%	3.1%	1.9%	1.2%	3.6%	2.5%	3.3%	1.5%
Wisconsin	2.4%	1.7%	11.9%	4.7%	5.1%	2.0%	1.3%	0.7%	6.5%	3.0%	3.1%	1.0%
Combined States:	3.5%	2.1%	9.0%	5.3%	6.8%	2.7%	2.1%	1.1%	5.6%	2.5%	4.1%	1.6%

Source: Calculations are based on IRS 1040 tax forms between 2014 and 2018 tax years and criminal justice involvement as measured in CJARS, vintage 2020.

Notes: Estimates have been rounded to preserve confidentiality. PPP disqualifying status is measured as of April 3, 2018. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY21-ERD002-005.

Online appendix

Table 1: Modeling self-employment as a function for criminal justice involvement, by gender

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Employment in 2018 among men							Excluding those with AGI within +/- $1,000 of first EITC kink			
	Employed in 2018	Employed in 2018	Sch. C in 2018	Sch. C in 2018	Only Sch. C in 2018	Only Sch. C in 2018	Sch. C in 2018	Sch. C in 2018	Only Sch. C in 2018	Only Sch. C in 2018
Any conviction or correctional spell	-0.151*** (0.00818)	-0.124*** (0.00783)	0.0131*** (0.00389)	0.0192*** (0.00389)	0.0241*** (0.00133)	0.0231*** (0.00166)	0.00978** (0.00386)	0.0171*** (0.00392)	0.0218*** (0.00133)	0.0215*** (0.00169)
N	20,160,000	4,653,000	9,872,000	2,185,000	9,872,000	2,185,000	9,700,000	2,172,000	9,700,000	2,172,000
Control mean	0.5042	0.511	0.188	0.21	0.085	0.099	0.188	0.209	0.085	0.098
% difference	29.9%	24.3%	7.0%	9.1%	28.4%	23.3%	5.2%	8.18%	25.6%	21.9%
Panel B: Employment in 2018 among women							Excluding those with AGI within +/- $1,000 of first EITC kink			
	Employed in 2018	Employed in 2018	Sch. C in 2018	Sch. C in 2018	Only Sch. C in 2018	Only Sch. C in 2018	Sch. C in 2018	Sch. C in 2018	Only Sch. C in 2018	Only Sch. C in 2018
Any conviction or correctional spell	-0.0970*** (0.00894)	-0.0801*** (0.00808)	0.0313*** (0.00669)	0.0287*** (0.00612)	0.0176*** (0.00278)	0.0141*** (0.00267)	0.0140** (0.00598)	0.0165** (0.00591)	0.00822*** (0.00196)	0.00692*** (0.00225)
N	21,420,000	5,187,000	9,979,000	2,177,000	9,979,000	2,177,000	9,676,000	2,146,000	9,676,000	2,146,000
Control mean	0.464	0.453	0.155	0.169	0.07	0.08	0.158	0.164	0.067	0.076
% difference	20.9%	17.7%	20.2%	17.0%	25.1%	17.6%	8.9%	10.1%	12.3%	9.1%
Age Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gender X Race Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
State X County Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Educational Attainment Controls		Y		Y		Y		Y		Y
2000 long-form/ACS respondent		Y		Y		Y		Y		Y

Source: Calculations are based on IRS 1040 tax forms between 2014 and 2018 tax years and criminal justice involvement as measured in CJARS, vintage 2020.

Notes: Estimates and sample sizes have been rounded to preserve confidentiality. The sample consists of individuals observed in the five states in 2010 that are 18 or older as of April 3, 2018. The sample is limited to individuals that filed a 1040 and are either self-employed or employer-based in 2018 as measured by having a Schedule C or W-2 information return filed. Criminal justice involvement is measured as any felony conviction or correctional episode (probation, incarceration, or parole) as of April 3, 2018. Educational attainment is measured among 2005-2018 American Community Survey (ACS) and 2000 Decennial (long form) respondents that were 22 or older at the time of the survey (see U.S. Census Bureau (2019)). The provided person weights are used in specifications redistricted to the survey sample. All specifications include fixed effects for age and commuting zone of residence as of 2010. Standard errors are clustered by commuting zone of residence in 2010. Individuals with Adjusted Gross Income within $1,000 of the first EITC kink in 2018 are excluded from Columns 7-10 in Panel A; the threshold is $6,780, $10,180, and $14,570 for households with zero, one and two or more dependents, respectively. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY21-ERD002-024. * p<0.10, ** p<0.05, *** p<0.01

Data appendix

Observable criminal histories in CJARS, vintage 2020

Each state varies in coverage over time and criminal justice involvement types. Table 1 and 2 indicates the types of criminal justice involvement that are not included in the CJARS repository. Below we further describe the types of records collected in each of the five states used in this analysis.

Arizona: Records from the Arizona Administrative Office of the Courts and the Arizona Department of Corrections.
- Misdemeanor and Felony Court Records 1997-2020 (Most Counties)
- Prison 1983-2017 (Most Counties)

Michigan: Records from the Michigan State Court Administrative Office and the Michigan Department of Corrections.
- Local Ordinance, Misdemeanor, and Felony Court Records 1983-2019 (Statewide starting in 1997)
- Prison 1981-2019 (Statewide)
- Parole 1981-2018 (Statewide)
- Probation 1981-2019 (Statewide)

North Carolina: Records from the North Carolina Department of Public Safety in a statewide repository.

- Misdemeanor and Felony Court Records (Convictions Only) 1994-2019
- Prison 1972-2019 (Statewide)
- Parole 1996-2019 (Statewide)
- Probation 1986-2018 (Statewide)

Texas: Records from County Clerks, District Clerks, Sheriff's Offices, and the Texas Department of Corrections.
- Misdemeanor and Felony Court Records 1980-2018 (Various Counties)
- Prison 1978-2018 (Statewide)
- Parole 1978-2018 (Statewide)
- Probation 2000-2019 (Statewide)

Wisconsin: Records from the Wisconsin Court System and the Wisconsin Department of Corrections.
- Misdemeanor and Felony Court Records 2000-2019 (Statewide)
- Probation 1990-2019 (Statewide)
- Prison 1990-2019 (Statewide)