Criminal Justice Involvement and Well-Being in Old Age *

Jennifer L. Doleac Jonathan Eggleston William G. Gale
Michael Mueller-Smith Briana Sullivan

January 16, 2023

Abstract

This paper uses data from the Criminal Justice Administrative Records Systems linked with survey and administrative data sources from the U.S. Census Bureau to provide the first evidence on the looming retirement crisis stemming from the aging generations of Americans who have been increasingly impacted by criminal justice policies like mass incarceration. First, we characterize the living circumstances of those with criminal histories approaching retirement. In spite of almost a decade of criminal desistance on average, this population exhibits serious economic vulnerability, higher disability rates, and greater detachment from kinship networks, factors that put these individuals at risk in retirement. Current data indicate a growing reliance on safety net programs such as the Supplemental Security Income program, for which eligibility does not depend on work history. Second, we measure the share of current retirees with criminal records, and provide projections of how these rates among retiring cohorts will increase through 2050. We find that approximately 13% of those age 62 in 2018 have a criminal record, and this will grow to 23% over the next two decades, peaking among cohorts retiring around 2040. Finally, we leverage two recent class action lawsuits that constrained the Social Security Administration's ability to deny SSI and OASDI benefits to those with criminal records. This analysis shows that extending safety benefits to the aging justice-involved populations has a number of important benefits: reducing poverty, decreasing disability and mortality rates, lowering usage of costly living arrangements like nursing homes, homeless shelters, and residential treatment facilities, and strengthening co-residency among families.

*Doleac – Department of Economics, Texas A&M University, jdoleac@tamu.edu; Eggleston – U.S. Census Bureau, jonathan.s.eggleston@census.gov; Gale – Brookings Institution, wgale@brookings.edu; Mueller-Smith – University of Michigan, mgms@umich.edu; Sullivan – U.S. Census Bureau, briana.d.sullivan@census.gov. Any opinions and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Census Bureau. The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY2022-CES010-002.

1 Introduction

There is a large and growing literature on the causal effects of criminal justice involvement on economic outcomes like employment and earnings (see for example Pager, 2003; Mueller-Smith, 2015; Dobbie, Goldin and Yang, 2018; and Mueller-Smith and Schnepel, 2021). These studies generally find that – at least in the United States – having been convicted or incarcerated reduces future employment and earnings. Federal, state, and local criminal justice policies shifted to become tougher on crime late in the 20th century, with the result that birth cohorts born in the 1970s through the early 1990s faced dramatically higher likelihoods of being convicted or incarcerated at some point during their lifetime (Finlay and Mueller-Smith, 2019). These likelihoods varied across cities and states, but in general these cohorts will go through life with higher rates of criminal justice involvement than did their parents and grandparents. Advances in technology mean that these criminal records are also more easily accessible to anyone who is interested (employers, landlords, government caseworkers, etc.).

This set of facts raises important questions about whether social safety nets constructed based on the life experiences of previous generations are prepared to support the economically-vulnerable members of cohorts currently reaching or approaching old age. Because of changes in criminal justice policy, these cohorts are less likely to have lengthy formal-sector employment histories that would qualify them for Social Security benefits; lower incomes will make it more difficult to save privately for retirement; and reductions in marriage rates will reduce the availability of spousal benefits. Formal rules disqualify people with criminal records from some types of government support; confusion about when criminal records are disqualifying may depress take-up of support even when it is available. In addition to access to government benefits, criminal justice (CJ) contact may affect informal social support networks (and thus the need for a formal safety net): if CJ contact and prison spells reduce marriage rates, this could change long-term household structures. In particular, people with prior CJ contact may be less likely to have partners or adult children to help care for them as they get older.

Data constraints have, until now, prevented investigations of these issues, as surveys like the Current Population Survey (CPS), the American Community Survey (ACS), and the Survey of Income and Program Participation (SIPP) do not ask whether respondents have criminal records. For the retiring population, this is especially challenging given that criminal activity may have occurred many years earlier. In this paper, we link newly-available, individual-level administrative data on criminal histories from the Criminal Justice Administrative Records System (CJARS) (Finlay and Mueller-Smith, 2020) with administrative and

survey data on employment, income, and social service receipt.[1] In a number of jurisdictions, CJARS data extend back over 40 years, providing the unique opportunity to identify individuals retiring today and in the coming years who had had contact with the criminal justice system earlier in their lives.

With this linked data in hand, we pursue three complementary empirical exercises. First, we provide the first descriptive analysis of economic well-being for individuals with criminal records at or reaching retirement age (ages 50 to 70). Specifically, we consider ACS respondents who were age 50-70 at the time of recent surveys, and who had at least one felony conviction or incarceration spell before age 50. We compare them against those without any criminal history as well as a reweighted sample created to match the justice-involved population on sex, race, educational attainment, and state of birth. Across the board, we see that aging justice-involved individuals face severe socioeconomic disadvantage. They are 27 percentage points more likely to be living in poverty, with roughly half the household income of those aged 50 to 70 years old without criminal records. This is in spite having over 8 years on average of desistance since their last contact with the justice system (e.g. felony conviction or leaving prison).

The second exercise we present creates forecasts for the share of individuals reaching retirement age with criminal records over the next three decades. Although we face obvious censoring in this effort since since some considered cohorts are still decades away from retirement, we are able to make significant progress given that the vast majority of individuals who have any justice-involvement will initiate such behavior as a teenager or young adult. Mueller-Smith, Pyle and Walker (2022) find that more than half of justice-involved individuals in a given year will have faced their first criminal charge before turning 19 years old, and 92% will face their first criminal charge before turning 30 years old. We find that by 2042, the share of individuals holding any criminal record, a felony record, and a prison record will reach 23.1%, 8.5%, and 4.5% respectively, reflecting a 77%, 83%, and 27% increase since 2018. These increases are driven primarily by larger shares of Black men, White men, and Black women having contact with the justice system, although the true degree of the increase in population exposure is somewhat buffered by higher mortality rates among those with criminal records, which reduces the likelihood that they live to age 62 in the first place.

Finally, we present causal estimates on the impact of safety net assistance, specifically Supplemental Security Income (SSI) and Old-Age, Survivors, and Disability Insurance (OASDI), for older, formerly justice-involved individuals at or reaching retirement age. We leverage recent class action lawsuits (*Martinez v. Astrue* and *Clark v. Astrue*) against the

[1] Finlay, Mueller-Smith and Papp (2022) provides an introductory overview to this new data resource.

Social Security Administration (SSA), which severely curtailed SSA's ability to deny those criminal records SSI and OASDI benefits through the "fugitive felon" provisions, as a source of exogenous variation in benefit take-up. Such successful lawsuits cut fugitive felon benefit suspensions from 58,000 per year in FY2009 to 830 in FY2015 and reduced reported government savings fugitive felon denials from $440 million to $3 million over this same time period (O'Carroll, 2015).

Analysis of this natural experiment in a difference-in-differences and event study framework finds that curtailing the use of fugitive felon denials by SSA significantly boosted take-up of SSA benefits among formerly justice-involved individuals. Take-up of either OASDI or SSI increases by 4.1 percentage points (↑ 20%) and average annual benefits (including zeros) increase by $272 (↑ 14%) over the follow-up period. This is driven primarily, but not exclusively, by extensive and intensive increases in SSI benefits (↑ 38% and ↑ 52% respectively). As opposed to OASDI, SSI does not require the same history of formal sector employment to qualify for benefits, a condition that many individuals with criminal records and limited labor market experience may struggle to satisfy.

SSI and OASDI categorically make beneficiaries eligible for government provided health insurance. We also observe this phenomenon in our data, finding that Medicaid coverage increases by 3.7 percentage points (↑ 15%) and Medicare by 2.1 percentage points (↑ 15%).

Beyond simply affecting take-up of government benefits, we find that expanding safety net eligibility generates a number of important benefits for the justice-involved population and broader social returns. First, the share of older justice-involved individuals living in poverty declines by 3.8 percentage points (↓ 10%), and the share living in a homeless shelter or drug treatment facility drops by 0.5 percentage points (↓ 54%) and 0.4 percentage points (↓ 53%) respectively. They also appear to be living healthier lives, with a 2 percentage point decline (↓ 5%) in disability rates, 0.3 percentage point decrease (↓ 25%) in living in a nursing home, and a 0.2 percentage point reduction (↓ 2%) in 3 year mortality rates. Living circumstances change as well, with older justice-involved individuals being 2 percentage points (↑ 12%) more likely to be living with a minor child and 1 percentage points (↑ 4%) more likely report being married. Finally, null results are observed for both future labor market activity and criminal behavior, results that are perhaps unsurprising given the age and background of the focal population.

Taken together, our findings present a complex picture. Those with criminal records face severe disadvantage and economic vulnerability in old age. Because of policies enacted during the 1980's and 1990's, this population will grow significantly in the coming decades. The consequence of this expansion will be substantial fiscal pressure on the U.S. social safety net, especially considering that a disproportionate share of older justice-involved individuals

will access the safety net through SSI rather than OASDI. However, these costs generate meaningful direct benefits formerly justice involved individuals: reducing poverty, improving health, and strengthening household units.

2 Background and Related Literature

2.1 Trends in criminal justice contact

The best data available on CJ contact over time is for incarceration. The Prison Policy Initiative compiled data from federal, state, and local prisons and jails over nearly a century. Figure 1 shows the number of people incarcerated per 100,000 residents, from 1925 to 2015. While the number of people incarcerated at any given time does not tell us the number of people with incarceration histories – because the same person can be incarcerated more than once – this data provides a reasonable proxy for the national trends of interest in this paper.

Of particular interest are state incarceration rates, as state prisons house most felony offenders and state policies determine conviction and incarceration rates. Figure 1 shows that incarceration rates were pretty flat, around 100 per 100,000 residents, until the mid-1970s. At that point they began climbing, until reaching a peak of over 400 per 100,000 residents in the mid-1990s. This means that individuals who were young adults in the 1980s, 1990s, and 2000s, faced a higher risk of CJ contact than those who were the same age in the 1970s or earlier. Someone who was born in 1950 would have turned 30 in 1980, just as incarceration rates were beginning to rise. That person would have turned 62 in 2012. A similar individual born in 1960 would have turned 30 in 1990, about midway up the curve in Figure 1. They will turn 62 in 2022. Finally, someone born in 1970 would have turned 30 in 2000, at the peak of the incarceration curve. That person will turn 62 in 2032. In 2021, we are just at the beginning of a wave of cohorts who were young adults during the era of mass incarceration, and who are now approaching old age.

2.2 Government benefits of interest

2.2.1 OASDI

Created in 1935 as part of the New Deal, Old-Age, Survivors, and Disability Insurance (OASDI) originally covered a modest fraction of the workforce and required employers and employees to pay a small dedicated payroll tax. Over the next several decades, successive presidents and Congresses expanded the program's size and scope. Old-Age and Survivors Insurance (OASI) – which is what most people refer to as Social Security – provides benefits

for retirees and their survivors and dependents. Disability insurance (DI) provides income for working-age people who can no longer work, given their skills and physical abilities. The programs cover almost all American workers except for a minority of state and local government employees.

More than 60 million Americans – almost a fifth of the population – receive Social Security benefits in a given year, mostly through OASI. Retirement benefits average about $16,000 per year, less for surviving dependents and people with disabilities.

A worker's monthly retirement benefit depends on his or her average lifetime wages in the formal labor market, adjusted for national wage growth and other factors. It is a highly progressive formula, but individuals must have worked at least 10 years (40 quarters) in order to qualify. Workers can begin claiming benefits as early as 62; the monthly benefit is adjusted based on the timing of initial claims.

In addition to old-age insurance, Social Security provides other forms of social insurance. Survivor, spousal, and dependent benefits provide life insurance. Qualifying spouses and former spouses of retirees can choose between their own benefits and 50 percent of the retiree's payments. Children also may be eligible for dependent benefits if they are under age 18 and unmarried, or in certain other circumstances. When a beneficiary dies, surviving spouses are eligible for payments that are usually at least 75 percent of the retiree's benefits.

Disability Insurance (DI) provides further protection against income loss. DI aims to protect people against the risk of experiencing a long-lasting disability. DI provides benefits to workers who suffer from a medical condition that is expected to last at least one year (or result in death) and that prevents the individual from working. To be eligible, an individual must have worked a sufficient number of years and have an impairment that the Social Security Administration (SSA) determines is severe enough to qualify. The benefit formula is similar to that of OASI.

2.2.2 SSI

The Supplemental Security Income (SSI) program was established in 1972 within the Social Security Act and made its first payments in January 1974. The objective of the program was to provide a last resort, means-tested benefit to low-income elderly, blind, and disabled persons, regardless of their work history. SSI replaced state-level programs that had been performing a similar function for the elderly, as well as federal programs that had provided separate assistance for the blind (Aid to the Blind) and those with disabilities (Aid to the Permanently and Totally Disabled). SSI benefits tend to be on the low end of the range available through OASDI.

Minor legislative changes since 1972 have increased maximum benefit levels, changed how

SSI benefits should be calculated alongside other public benefits, and shifted to monthly rather than quarterly benefit reviews. The amount of earned and unearned income excluded from benefit calculations, for instance, has not been updated since 1972 and has thus not kept up with current levels of income. Asset limits have not been updated since 1989.

2.2.3 How criminal justice contact affects benefit eligibility

There are several ways in which prior CJ contact might affect one's eligibility for SSA benefits. As discussed above, CJ contact may indirectly affect SSA benefits by reducing time spent working in the formal labor market and earnings from such employment. This would reduce OASDI benefits, which depend on work histories. In addition to this indirect channel, there are also rules related to CJ contact that directly affect OASDI/SSI eligibility.

The process for disability recognition can exclude people with felony convictions from OASDI/SSI. A permanent exclusion applies to disabilities caused or exacerbated in the commission of a felony or while incarcerated for a felony.

To be eligible for OASDI/SSI benefits under current law, in addition to meeting other eligibility requirements, a person cannot be fleeing to avoid (1) prosecution for certain felonies, (2) custody or confinement after conviction for certain felonies, or (3) recapture because of escape from custody. A person would also be ineligible if they were violating a condition of probation or parole imposed under federal or state law. These requirements, sometimes referred to as "fugitive felon" requirements, were established by the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996. Additionally, incarcerated people cannot receive SSI benefits and PRWORA allows for incentive payments to state and local institutions in exchange for information provided to SSA about prisoners that prevents overpayments of benefits.

There are agencies other than SSA subject to enforcing fugitive felon rules. These include the U.S. Department of Veterans Affairs (veteran and veteran-family benefits), the US Department of Agriculture (Supplemental Nutrition Assistance Program benefits), and the Department of Housing and Urban Development (federal housing assistance), among others. SSA's enforcement processes have generally been considered the most comprehensive, due to multi-step procedures and informational agreements with law enforcement that other agencies do not all have.

SSA enforces fugitive felon provisions in two steps. First, a question is included on application forms that asks the applicant if they are fleeing to avoid prosecution, custody, or recapture for certain felonies. In any continuing assessments for eligibility, staff may ask the beneficiary if they fit these criteria. Upon completion of these application forms and/or interviews, individuals are required to sign a statement certifying they understand that any

falsification of information on the application form may be a crime.

Second, SSA links its benefit rolls to records (i.e. arrest warrant files) from state and local institutions and the Federal Bureau of Investigation (FBI). Of these sources, the most comprehensive is the FBI's National Crime Information Center (NCIC) database, which SSA gained access to in 2000.

Upon matching a beneficiary to warrant records, SSA confirms the identity of the individual and that the warrant is still active, and then locates the individual with local law enforcement. Before suspending benefits, SSA sends a notice to the beneficiary informing them that warrant information has been found about them. This notice also informs the individual about their rights to file an appeal and explains what constitutes a "good cause exemption," should the individual pursue it. Upon notification that they may no longer be eligible for payments, the burden is on the beneficiary to request a review for a good cause exemption, and to provide the evidence that they meet the requirements for one.

Enforcement of this rule has changed over time. Prior to 2009, SSA denied or suspended benefits to any individual confirmed to have an outstanding felony arrest warrant. Such warrants could be triggered by something as minor as outstanding court debt, and many people have outstanding warrants for their arrest without knowing it. In 2009, however, SSA's policies were challenged in the class action lawsuit *Martinez v. Astrue*. In the case, plaintiffs argued that SSA's implementation did not do enough to confirm whether a person was actually "fleeing" as described by law, and that SSA was wrongfully suspending benefits for individuals who, for instance, may simply not be aware of an outstanding warrant. In the settlement that resulted from the case, SSA agreed to (1) enforce fugitive felon restrictions only on individuals with outstanding warrants related to escape or flight, and (2) retroactively pay benefits to individuals who had their benefits wrongfully suspended based upon the new procedure.

Enforcement for individuals with warrants due to violation of probation or parole were not included in the Martinez lawsuit or settlement, but were separately challenged in the *Clark v. Astrue* class action lawsuit three years later. The court ruled in this case that SSA could no longer deny benefits solely based on the existence of a warrant for violation of probation or parole. Since the ruling, SSA has the responsibility of proving that an individual is actually in violation of the alleged warrant before being able to suspend benefits. SSA does so by confirming that law enforcement is actively pursuing the individual.

The consequences of the Martinez and Clark rulings against SSA had important implications for those with criminal records. O'Carroll (2015) reported that benefit suspensions arising from the fugitive felon provisions declined from 58,000 in fiscal year 2009 (before Martinez took effect) to only 830 in fiscal year 2014 (after both Martinez and Clark), which

was associated with reduced agency savings from $440 million in 2009 to $3 million in 2014.

3 Data

This project takes advantage of a new, unique administrative dataset, the Criminal Justice Administrative Records System (CJARS), which gathers and maintains administrative criminal history records from local and state governments around the United States (Finlay and Mueller-Smith, 2020). CJARS is a partnership between the University of Michigan and the U.S. Census Bureau, and is the first multi-state database of its kind. The dataset links individuals' adult criminal history records across states and over time. These individuals can also be linked with socio-economic data held by the federal government. This enables research on fundamental questions that have so far been impossible to answer, such as how many people have criminal records, where they live, and what their lives look like outside the justice system.

This analysis relies on a vintage of CJARS data that primarily come from Arizona, Colorado, Florida, Maryland, Michigan, Minnesota, Nebraska, New Jersey, North Carolina, North Dakota, Oregon, Pennsylvania, Texas, and Washington.[2] This a geographically diverse set of states with a representative set of CJ policies, as these states have similar imprisonment, violent crime, and property crime rates as non-CJARS states (Finlay, Mueller-Smith and Papp, 2022).

Historical criminal justice records in CJARS date back as far as the late 1970's in some jurisdictions. In line with the timing of federal investments in modernizing criminal justice information technology, many jurisdictions came online in the 1980's and early 1990's. CJARS well replicates aggregate caseload information compared to various Bureau of Justice Statistics data series, lending credibility to the quality of the underlying micro-data (Papp and Mueller-Smith, 2021). We use these data both to define our main analysis sample (people with CJ contact before age 50) and as an outcome measure (future CJ contact).

The primary dataset we link CJARS to is the ACS. The ACS is the largest household survey in the United States, sampling approximately 3.5 million addresses every year. Because of the ACS's extremely large sample size, we are able to obtain a sizable sample of the CJ population for our analyses. The ACS provides local area information on various demographic and economic characteristics, such as income, health insurance coverage, disability status, martial status, and educational attainment. Importantly for our work, the ACS asks about both OASDI and SSI income. The survey was officially launched for the entire country starting in 2005. In 2006, the ACS began data collection for all types of group

[2]As CJARS continues to be in active development, future vintages will incorporate additional states.

quarters, including institutions such as prisons and nursing homes. In 2008, the survey began collecting data on health insurance.

We link the ACS and CJARS data together at the individual level using the Census Bureau's Person Identification Validation System (PVS), as described by Wagner and Layne (2014). This procedure matches both survey data and administrative data to a master reference file. Individuals who are matched are given an identifier called a Protected Identification Key (PIK), which acts as an anonymized Social Security Number that can be used to link administrative datasets and surveys. For the 2010 ACS, about 93 percent of individuals were assigned a PIK (Bond et al., 2013). In the CJARS data, about 80 percent of individuals were assigned a PIK; the PIK rate is higher for individuals with multiple criminal justice records (Finlay and Mueller-Smith, 2020).[3] Bond et al. (2013) argue that inability to assign a reliable PIK in survey data is nonrandom. They use 2009 ACS data to document that young children, minorities, immigrants, recent movers, low-income individuals, and non-employed individuals are less likely to receive a PIK. These results suggest that individuals with a CJ history may be less likely to be assigned a PIK in the ACS. Therefore, nonlinkage bias may affect our results, which we are unable to adjust for given the lack of criminal justice data in the ACS.

We also use various administrative datasets from the SSA in our analysis. To obtain date of birth, date of death, and sex for everyone in the CJARS data, we use the SSA's Numident file. We also use administrative data on social security benefits. Our OASDI data comes from the Master Beneficiary Record (MBR) and our SSI data comes from Supplemental Security Record (SSR).

For all our analyses, ideally we would use the administrative data on SSA benefit receipt, given known issues with individuals confusing OASDI and SSI in survey responses (Giefer et al., 2015). However, due to the nature of the data sharing agreement between the U.S. Census Bureau and the SSA, we only have access to the MBR back to 2015 and the SSR back to 2010. Therefore, we lack access to the administrative data before the *Martinez v. Astrue* 2009 settlement. Because of this, we rely on the ACS survey data for information on earlier benefit receipt. Nevertheless, we still use the MBR and SSR data to provide current descriptive statistics on benefit receipt of the CJ population and how this varies by type of CJ involvement, as the administrative data provides a much larger sample size than does the ACS sample.

Finally, for our projections of the percent of adults who will have a CJ history by age 62, we use the Census Best Race and Hispanic Origin File to examine how these projections

[3]Note that individuals who do not have legal status in the United States will not have a PIK and cannot be linked. As a result, it is not surprising that CJARS has lower match rates than other federal data series.

vary by race. This dataset harmonizes race and Hispanic origin information from decennial censuses, the ACS, data from other federal agencies, and data from third party vendors to create a single measure of race and Hispanic origin for everyone in the country who had data in one of the aforementioned datasets.

3.1 Analysis sample

Our main analysis sample consists of people who (1) responded to the ACS in years 2005-2019, (2) were age 50-70 at the time of the survey, (3) were living in a CJARS state, and (4) were born between 1940 and 1965. Those defined to be justice-invovled individuals (JII) had at least one felony conviction or prison spell prior to turning 50 years old.

For some analyses we consider a non-JII comparison group who has no observed history of criminal justice involvement to provide context or to partial out time trends. Because the JII sample is non-representative of the general population, we utilize a reweighting strategy applied to the ACS person weights to scale up (or down) existing survey weights for the non-JII population to match the joint racial/ethnic, sex, age, educational attainment, and state of birth distribution of the JII sample. This results in a reweighted comparison group that is less White, more male, younger, and with lower educational attainment than the general non-JII population, providing a more realistic counterfactual for our natural experiment.

4 Demographic, household, economic, and criminal record traits of the aging justice-involved population

Next, we describe the characteristics of those in our main analysis samples: those age 50-70 in recent years of the ACS. In this section, the JII sample consists of individuals who have at least one felony conviction or incarceration spell on their record before age 50.

Table 1 provides demographic, household, economic, and criminal record information for those with criminal justice contact and those without. Column 1 provides the mean of each characteristic for JII sample, weighted using ACS person weights. Column 3 shows means for the non-JII population using modifed ACS person weights, scale to match the joint racial/ethnic, sex, age, educational attainment, and state of birth distribution of the JII sample. Column 5 shows means for the non-JII population weighted using the original ACS person weights. Standard errors appear in columns 2, 4, and 6.

4.1 Demographic characteristics

Our analysis sample is restricted to include people ages 50-70, but we see that people in our JII group are about 3.5 years younger than those in the non-JII population on average. About 79% of the CJ group is male. 52% of the CJ group is white (non-Hispanic); 33% is Black (non-Hispanic), 0.5% is Asian (non-Hispanic), 2% is other race (non-Hispanic); and 13% are Hispanic. Overall, this group is much less likely to be white or Asian, and more likely to be Black or Hispanic compared to the general population.

Only 33% of those with prior justice involvement were married at the time of their survey response, although 77% had ever been married. By contrast, 66% of those in our non-JII group were currently married, and 91% had ever been married. Such disparities persist even when rescaling the non-JII ACS person weights to match key demographic and educational characteristics in the JII population. This descriptive evidence is consistent with evidence that justice involvement disrupts romantic partnerships and family formation (see for example O'Keefe, 2020; Liu, 2021). This could have important consequences in old age, if it affects the availability or strength of support networks.

Related, 20% of those in the CJ group live in a household with at least one nonrelative; by comparison, only 11% of the rescaled non-JII comparison group has a nonrelative in their household.

Consistent with previous evidence, people in our CJ group have less education than those without CJ involvement. 24% have less than a HS diploma; 40% have a HS diploma; 28% have some college; and only 8% have a Bachelor's degree or more. In contrast, on 10% of those in the non-JII sample have less than a high school diploma and 31% have a Bachelor's degree or more.

Finally, we see that 36% of people in our CJ sample had a disability at the time they responded to the ACS. By contrast, only 19% of the non-JII sample and 22% of the rescaled non-JII comparison sample had a disability.

4.2 Economics characteristics

In Table 1, we can immediately see that those with prior CJ contact are worse off in terms of economic outcomes: 36% live in a household below the poverty line, compared with 8% of the non-JII population overall and 13% of our rescaled non-JII comparison group. These worse outcomes may be a function of lower labor force attachment. Only 44% of our JII group (ages 50-70) were working at the time of the ACS survey. This is substantially lower than the 57% of the non-JII population and 64% of the rescaled non-JII comparison group that were working. So, even though this population is approaching retirement and we might

expect those who can afford it to retire early, we see that lower labor force attachment of the CJ group swamps any early-retirement effect for these cohorts.

These lower employment rates translate into lower incomes. The CJ-contact group has an average household income of $55,690, and average person-level income of $25,200. Those in the non-JII group have an average household income of $101,300, and an average person-level income of $52,510. And those in our rescaled non-JII comparison group have an average household income of $83,020 and an average person-level income of $45,010. Finally, the JII population is much likely to report having pension or other retirement income (7%) compared to the non-JII population (19%) and the rescaled non-JII sample (12%).

With lower incomes, higher disability rates, and higher poverty rates, those in our JII group are more likely to receive safety-net income from the SSI program and other public assistance programs (e.g. TANF, general assistance, etc). Overall 12% of those in our JII group receive SSI and 4% receive public cash assistance. This compares with 3% (1%) in the non-JII population and 5% (1%) in our rescaled non-JII comparison group receiving SSI (cash assistance).

Finally, we consider whether individuals report having health insurance. Our JII group is much less likely to have any health insurance: 74% vs. 86-92% for the non-JII groups. Only 36% of the JII group has private health insurance, while 74% of the non-JII population and 67% of the rescaled non-JII comparison group have private health insurance. This is likely a function of the CJ group's lower labor force attachment. Public health insurance makes up some of this gap: 21% of the JII group have Medicare and 30% have Medicaid. By comparison, 33% of the non-JII group have Medicare and 9% have Medicaid; 17% of the rescaled non-JII comparison group have Medicare and 14% have Medicaid.

4.3 Criminal justice characteristics

In the final portion of Table 1, we show information on prior and current justice involvement for those aging JII population.

On average, this group had 3.8 convictions on their record before age 50; 2.4 of these were felony convictions. Of the people who had spent any time incarcerated, the amount of time served was substantial: 8.5 years, on average.

Consistent with what we know about people aging out of crime at younger ages, nearly 74% of people in our JII group had no contact with the justice system after age 50. On average, it had actually been 8.2 years since their last (pre-age-50) criminal charge at the time of their ACS survey response. If we restrict attention to those who had no additional justice contact after age 50, this average time since last criminal charge rises to 9.2 years. In

other words, for most people in our JII sample, their involvement in the justice system was far in the past and they appear to have desisted from any further criminal activity.

5 Current and future shares of retirees with criminal records

The previous section provided descriptive evidence on the economic vulnerability of the aging justice-involved population. We believe this might just be the tip of the iceberg.

Policies set in place during the 1980's and 1990's dramatically increased justice involvement for birth cohorts transitioning into adulthood over this period (Finlay and Mueller-Smith, 2019). While it has taken several decades, these birth cohorts are only just beginning to reach retirement age. For example, a man turning 18 in 1978 just as mass incarceration was beginning to grow reached 62 years old in 2022. By contrast, an individual turning 18 in 2000 at the peak of mass incarceration will only reach age 62 in 2044.

While any forecasting exercise comes with serious assumptions, in this context we can actually make serious progress on anticipating the wave of former justice-involvement that will hit future retiring populations in the decades to come. This comes from the fact that the vast majority of individuals who will have any justice-involvement will do so before they turn 30 years old. Mueller-Smith, Pyle and Walker (2022) find that more than half of justice-involved individuals in a given year will have faced their first criminal charge before turning 19 years old, and 92% will face their first criminal charge before turning 30 years old. Justice involvement through age 30 can be observed for anyone born in or before 1991, who be turning 62 in 2053.

To address future justice contact that has not been realized in these populations, we model the growth rate of cohort-level justice involvement (on the extensive margin) over the life-cycle. One complicating factor is that those with justice-involvement exhibit higher mortality rates than the general population. So, even those rates of justice contact have gone up, many justice-involved individuals will not live to retirement age. To accurately forecast the share of the retiring population with justice-involvement, we also model the anticipated differential mortality rates in these cohorts. Details of these strategies are described in Appendix A.

Figure 2 forecasts the share of 62-year-old's with different histories of justice contact, by year. Panel (a) shows the overall population, (b) and (c) split it out for men and women. Panels (d) through (f) break this out for White, Black, and Hispanic men, while (g) through (i) show White, Black, and Hispanic women.

We observe that only 13% of 62 year old's in 2018 had either a misdemeanor or felony charge on their criminal record. By 2039, we anticipate that this will grow to 23%. We observe similar growth for more serious forms of criminal justice contact, with growth rates from 2018 to 2039: 6% → 11% (felony charges), 5% → 9% (felony convictions), and 3.5% → 4.5% (time in prison).

These numbers vary quite a bit across sex and race/ethnicity groups. Men, especially Black and white men, show the largest absolute increases in justice involvement. For example, an additional 18 percentage points of Black male cohorts will have faced one or more felony charges by 2042, off a base of 17 percent of the 2018 retiring cohort. Black women also show noteworthy absolute increases in justice involvement: cohort share of any criminal charge by age 62 will grow from 9% to 25% from 2018 to 2042. In contrast, women, especially white and Black women, show the largest relative increases with contact rates growing by over 100-200%.

These numbers reflect large increases relative to the 2018 baseline and suggest major shifts in the composition and life experiences of the older population. Given the descriptive evidence highlighted in Section 4, this also raises serious fiscal questions on the integrity of the U.S. social safety in the coming decades as it confronts new demands on its resources.

6 Causal impact of safety-net support for aging justice-involved individuals

The final portion of this paper steps back and seeks to answer what the causal impact of safety net assistance for aging justice-involved individuals is. With a growing population of retiring individuals with criminal records, who face clear economic vulnerability, it is natural to want to know how they benefit from income support.

To accomplish this, we leverage the class action lawsuits in *Martinez v. Astrue* and *Clark v. Astrue* against the SSA. As discussed in more detail in Section 2, both rulings severely curtained SSA's ability to rule those with criminal records as being ineligible for either SSI or OASDI resulting from the fugitive felon provisions.

The Martinez ruling took effect in 2010, with the Clark ruling going into effect 3 years later. We leverage this source of plausibly exogenous variation in SSI/OASDI benefit eligibility in a difference-in-differences and event study framework. Our treatment group is defined as those with either a felony conviction or prison spell prior to turning 50 years old and the control group is the rescaled non-JII population. The post period is defined as 2010 and beyond, although given that the Clark ruling does not come into effect until 2013, we

expect a transition period during the initial years in the post-period.

Figure 3 shows the raw take-up rates and benefit levels of SSI and OASDI in the JII and rescaled non-JII populations over 2006 through 2019. Following 2009, there is a discernible uptick in SSI or OASDI for the JII population, especially compared to the non-JII group. This is driven mainly by increased participation in the SSI program.

Table 3 shows the results of our diff-in-diff analyses, with companion event study figures shown in Figures 4 and 5. We find that curtailing the use of fugitive felon denials by SSA significantly boosted take-up of SSA benefits among formerly justice-involved individuals. Take-up of either OASDI or SSI increases by 4.1 percentage points (↑ 20%) and average annual benefits (including zeros) increase by $272 (↑ 14%) over the follow-up period. This is driven primarily, but not exclusively, by extensive and intensive increases in SSI benefits (↑ 38% and ↑ 52% respectively). As opposed to OASDI, SSI does not require the same history of formal sector employment to qualify for benefits, a condition that many individuals with criminal records and limited labor market experience may struggle to satisfy.

SSI and OASDI categorically make beneficiaries eligible for government provided health insurance. We also observe this phenomenon in our data, finding that Medicaid coverage increases by 3.7 percentage points (↑ 15%) and Medicare by 2.1 percentage points (↑ 15%).

Beyond simply affecting take-up of government benefits, we find that expanding safety net eligibility generates a number of important benefits for the justice-involved population and broader social returns. First, the share of older justice-involved individuals living in poverty declines by 3.8 percentage points (↓ 10%), and the share living in a homeless shelter or drug treatment facility drops by 0.5 percentage points (↓ 54%) and 0.4 percentage points (↓ 53%) respectively. They also appear to be living healthier lives, with a 2 percentage point decline (↓ 5%) in disability rates, 0.3 percentage point decrease (↓ 25%) in living in a nursing home, and a 0.2 percentage point reduction (↓ 2%) in 3 year mortality rates. Living circumstances change as well, with older justice-involved individuals being 2 percentage points (↑ 12%) more likely to be living with a minor child and 1 percentage points (↑ 4%) more likely report being married. Finally, null results are observed for both future labor market activity and criminal behavior, results that are perhaps unsurprising given the age and background of the focal population.

7 Discussion

This paper uses newly-available data from CJARS, linked with administrative and survey data from the ACS and SSA, to accomplish three goals. First, we provide an early look at the well-being of people with CJ contact as they approach old age. We find that individuals with

prior CJ contact who are currently transitioning into retirement (the beginning of a wave of people who came of age during mass incarceration) face substantial socioeconomic disadvantages, even when compared with individuals with similarly-low education attainment. The CJ population's lower labor force attachment – which is at least partly a consequence of their CJ contact – may affect their eligibility for and takeup of OASDI benefits. SSI benefits appear to be serving their intended purpose as a safety net of last resort for this population, but this program may face substantial strain in the years ahead if it is forced to support a much larger share of the population than in the past.

Second, we show that we are on the cusp of a major transformation in retirement as a larger and nontrivial share of individuals reaching age 62 will have criminal histories. Since the vast majority of first-time justice-involvement occurs prior to age 30, we are able to make convincing forecasts for the share of 62 years old who will have criminal records through 2050.

Finally, we leverage a natural experiment to estimate the causal effect of extending safety net benefits to aging formerly justice-involved individuals. While supporting this population in the coming decades will be costly, it generates significant benefits, some of which will provide their own forms of cost savings. We observe significant reductions in poverty, disability and mortality rates, nursing home usage, living in homeless shelters, and living in a residential treatment facility. We also see improvements in household structures, with indications that JII are more likely to remain living with an intact family unit when they have access to SSI support.

The U.S. will be dealing with the repercussions of criminal justice policy choices from years ago for decades to come. In this paper, we highlight yet another unanticipated consequence of these decisions through considering how they will impact the future of retirement in the U.S. A process set in motion three decades ago is only starting to play out, with important fiscal implications for the U.S. safety net.

References

Bond, Brittany J., David Brown, Adela Luque, and Amy O'Hara. 2013. "The Nature of the Bias When Studying Only Linkable Person Records: Evidence from the American Community Survey." *Proceedings of the 2013 Federal Committee on Statistical Methodology (FCSM) Research Conference*, Available at https://www.census.gov/content/dam/Census/library/working-papers/2014/adrm/carra-wp-2014-08.pdf.

Dobbie, Will, Jacob Goldin, and Crystal S. Yang. 2018. "The Effects of Pretrial Detention on Conviction, Future Crime, and Employment: Evidence from Randomly Assigned Judges." *American Economic Review*, 108(2): 201–40.

Finlay, Keith, and Michael Mueller-Smith. 2019. "Inequalities in U.S. Criminal Justice and Economic Outcomes." Working paper.

Finlay, Keith, and Michael Mueller-Smith. 2020. "Criminal Justice Administrative Records System (CJARS) [dataset]." Ann Arbor, MI: University of Michigan.

Finlay, Keith, Michael Mueller-Smith, and Jordan Papp. 2022. "The Criminal Justice Administrative Records System: A Next-Generation Research Data Platform." *Scientific Data*, 9(562).

Giefer, Katherine, Abby Williams, Gary Benedetto, and Joanna Motro. 2015. "Program Confusion in the 2014 SIPP: Using Administrative Records to Correct False Positive SSI Reports." *Proceedings of the 2015 Federal Committee on Statistical Methodology (FCSM) Research Conference*, Available at https://nces.ed.gov/fcsm/pdf/I1_Giefer_2015FCSM.pdf.

Liu, Sitian. 2021. "Incarceration of African American Men and the Impacts on Women and Children." Working paper.

Mueller-Smith, Michael. 2015. "The Criminal and Labor Market Impacts of Incarceration." Working Paper. https://sites.lsa.umich.edu/mgms/wp-content/uploads/sites/283/2015/09/incar.pdf.

Mueller-Smith, Michael, and Kevin T. Schnepel. 2021. "Diversion in the criminal justice system." *The Review of Economic Studies*, 88(2): 883–936.

Mueller-Smith, Michael, Benjamin Pyle, and Caroline Walker. 2022. "Estimating the Impact of the Age of Criminal Majority: Decomposing Multiple Treatments in a Regression Discontinuity Framework." *Working paper.*

O'Carroll, Patrick P. 2015. "Protecting the Safety Net from Fraud, Waste, and Abuse."

O'Keefe, Siobhan. 2020. "Babyâs Gone: The Effect of Increased Sentencing Severity on Fertility and Family Formation." Working paper.

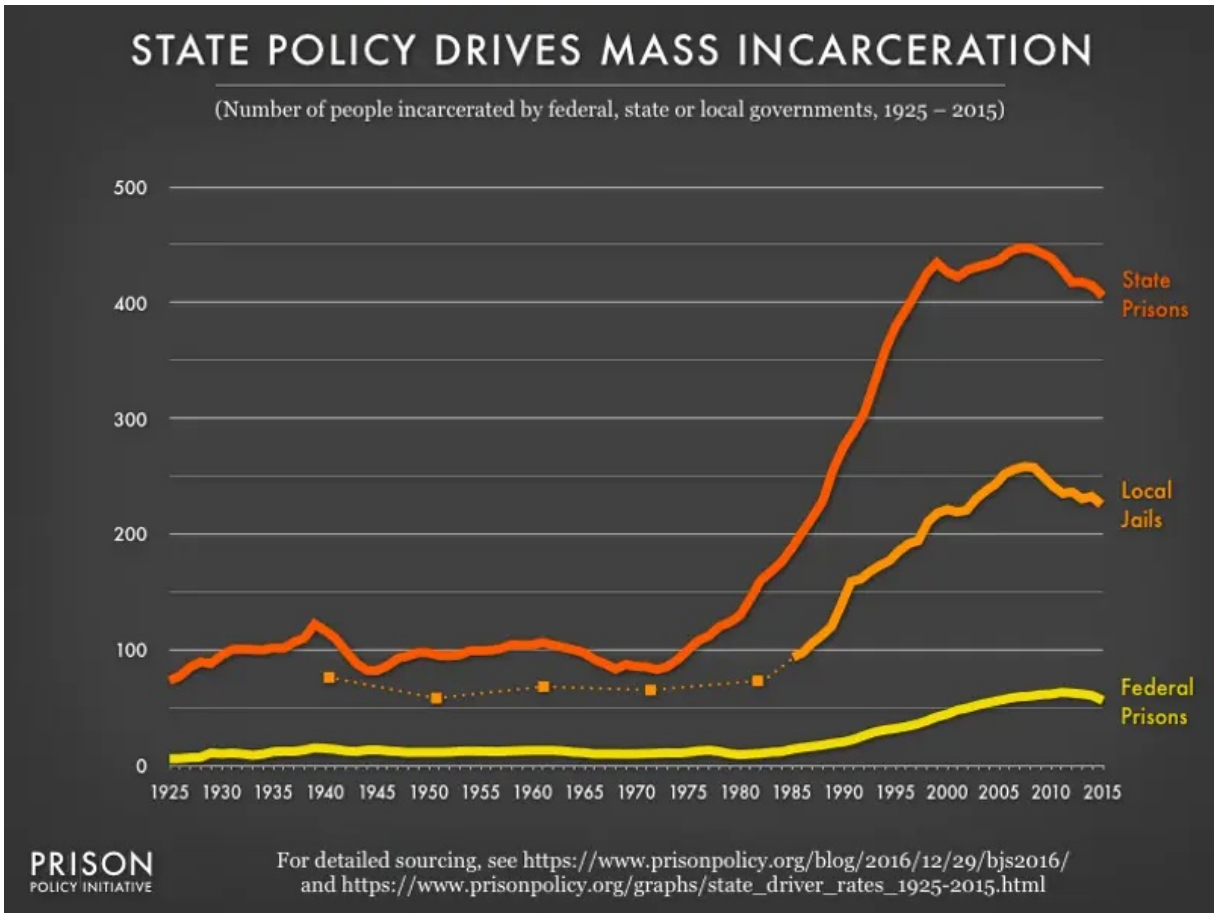
Pager, Devah. 2003. "The Mark of a Criminal Record." *American Journal of Sociology*, 108(5): 937–975.

Papp, Jordan, and Michael Mueller-Smith. 2021. "Benchmarking the Criminal Justice Administrative Records Systemâs Data Infrastructure." Ann Arbor, MI: University of Michigan. Available at https://cjars.isr.umich.edu/benchmarking-report-download/.

Wagner, Deborah, and Mary Layne. 2014. "The Person Identification Validation System (PVS): Applying the Center for Administrative Records Research and Applications' (CARRA) Record Linkage Software." *Center for Administrative Records Research and Applications (CARRA) Working Paper*, Available at https://www.census.gov/library/working-papers/2014/adrm/carra-wp-2014-01.html.

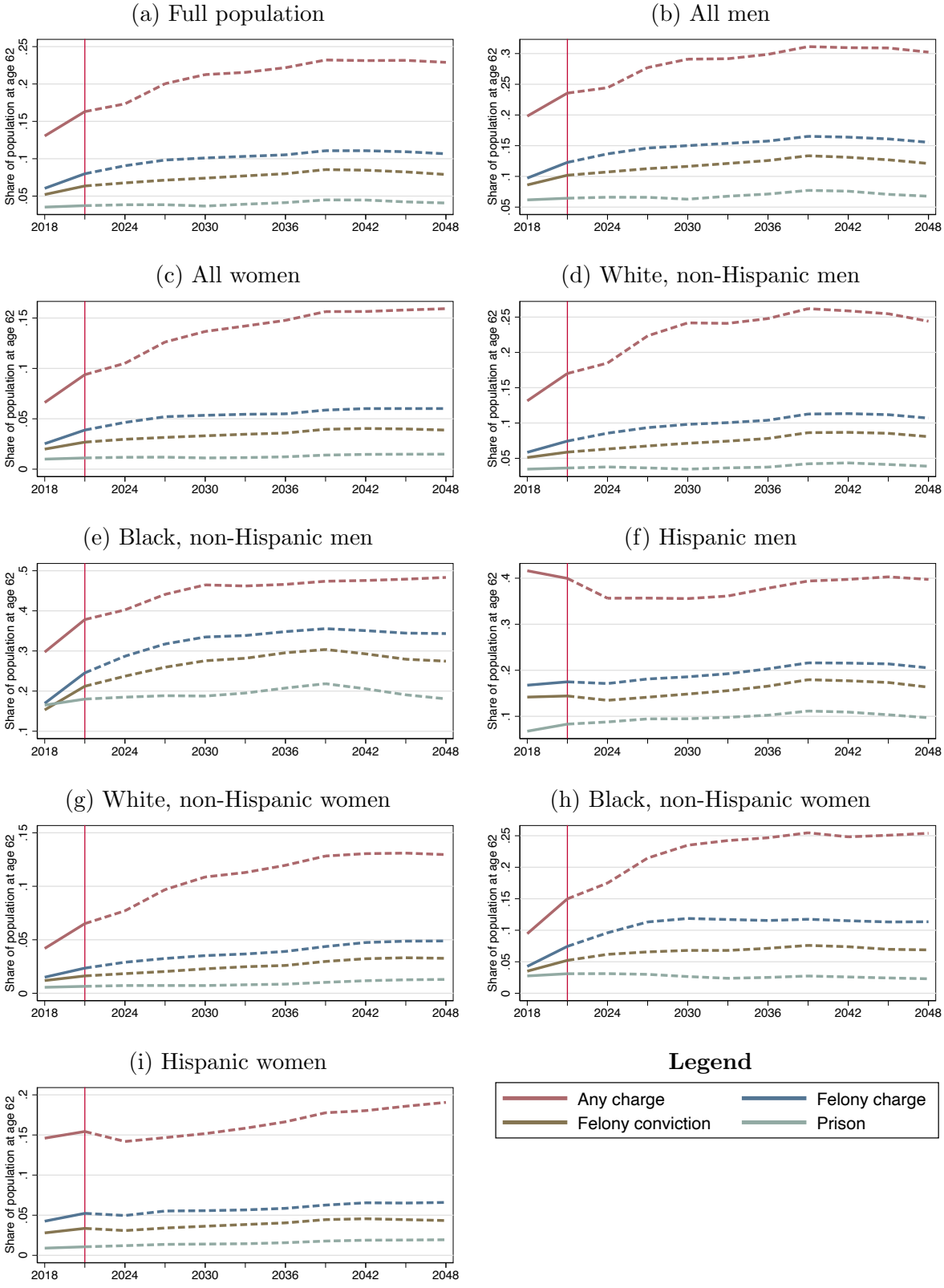
8 Figures and Tables

Figure 1: Incarceration per 100,000 residents, over time



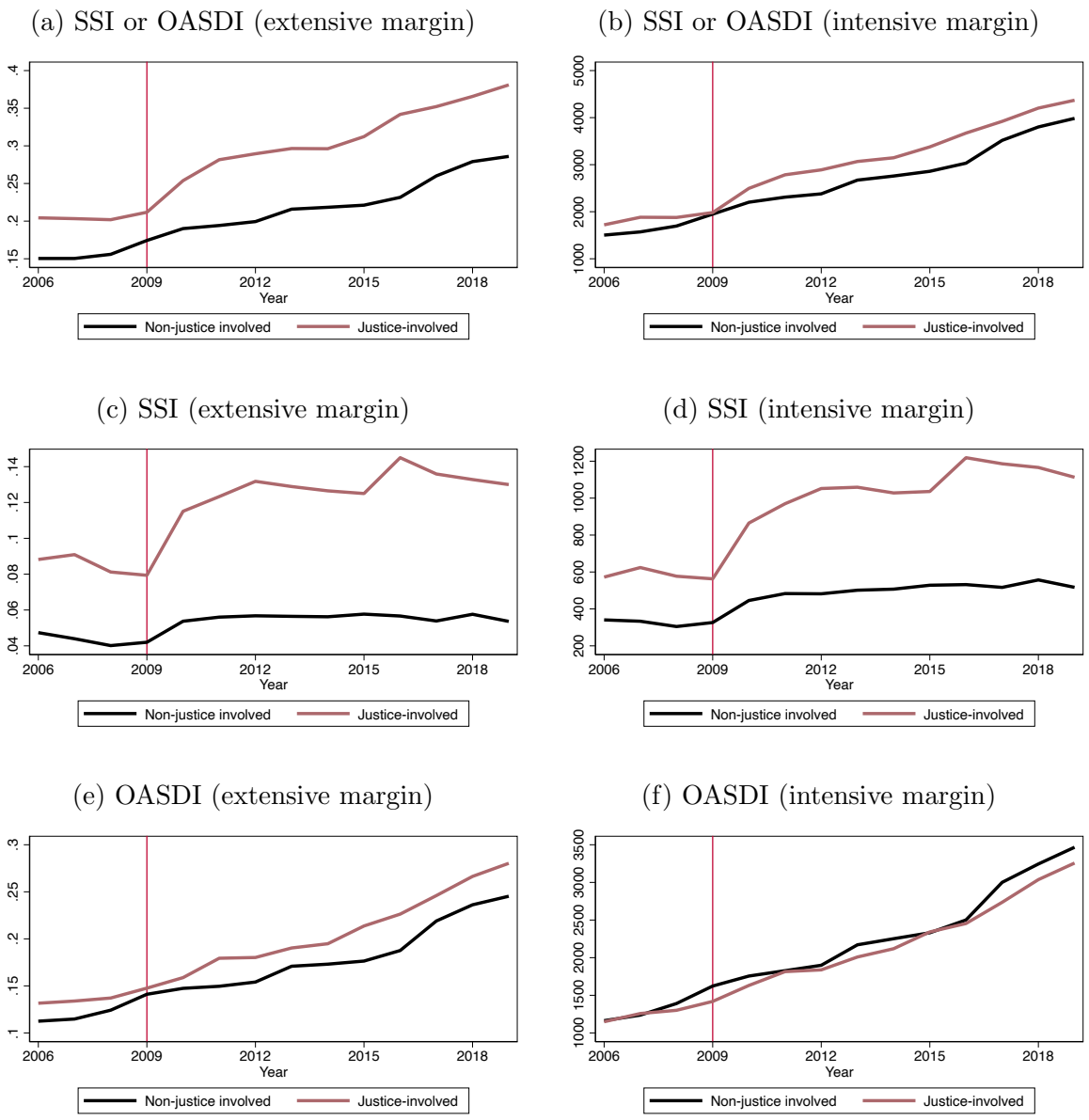
Source: Prison Policy Initiative.

Figure 2: Forecasted share of 62-year old's in U.S. with criminal background



Source: Authors' calculations are based on the Criminal Justice Administrative Records Systems (CJARS), SSA Numident, and Census Best Race and Hispanic Origin File. Solid lines indicate non-forecasted estimates. Dashed lines indicate forecasted estimates based on combination on observed cohort-level justice contact through 2021, modeled lifecycle growth of new entrants to the justice system in middle age, and modeled survival rates through age 62 of justice-involved and non-justice involved individuals.

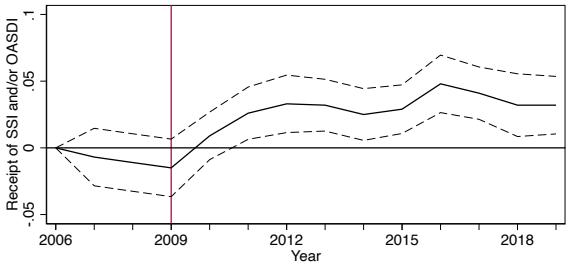
Figure 3: Raw changes in take-up of SSA safety net programs of JII and non-JII populations aged 50 to 70 years old, 2006 to 2019



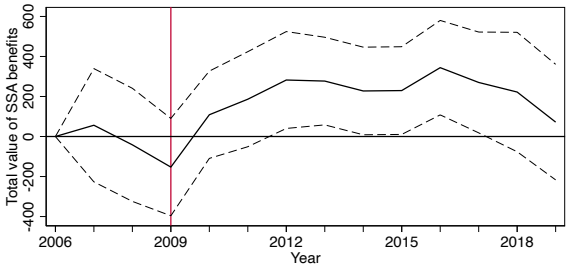
Notes: Sample consists of ACS respondents linked to the Criminal Justice Administrative Records Systems (CJARS) and the SSA Numident. It includes respondents born between 1940 and 1965, aged 50 to 70 at the time of interview. Justice-involved is defined as having a felony conviction or at least one incarceration spell prior to age 50. The non-JII group consists of individuals living in a CJARS-covered state at the time of interview. ACS Survey Years: 2005-2019. ACS person-level weights rescaled to match JII population characteristics on age, birth cohort, race/ethnicity, and educational attainment.

Figure 4: Event-study estimates on changes in take-up of SSA safety net programs in response to expanded eligibility for formerly justice-involved individuals, aged 50 to 70 years old

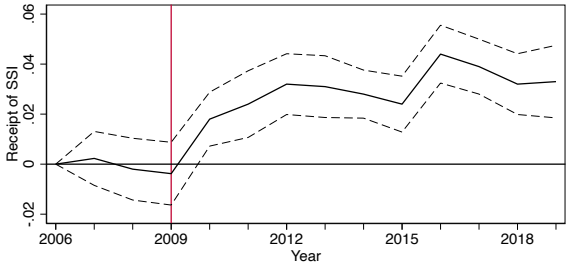
(a) SSI or OASDI (extensive margin)



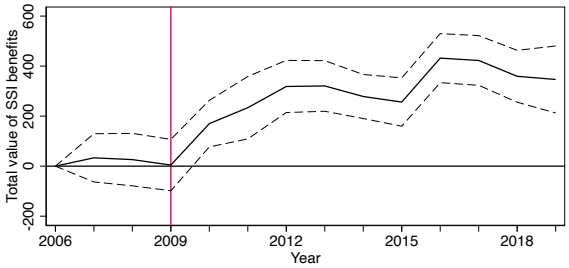
(b) SSI or OASDI (intensive margin)



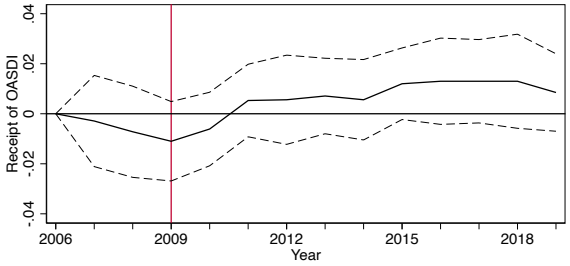
(c) SSI (extensive margin)



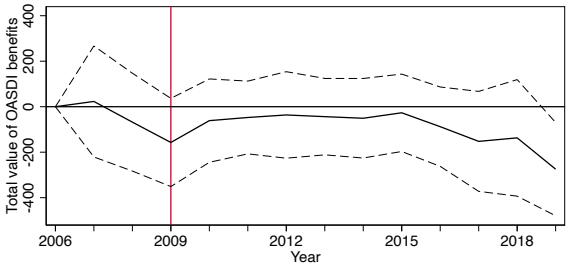
(d) SSI (intensive margin)



(e) OASDI (extensive margin)



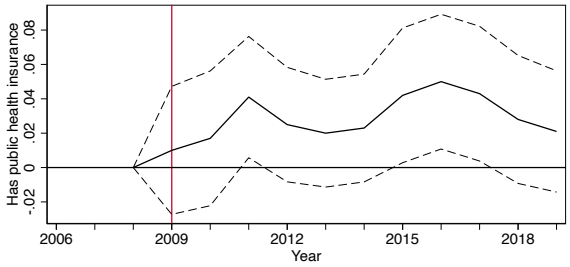
(f) OASDI (intensive margin)



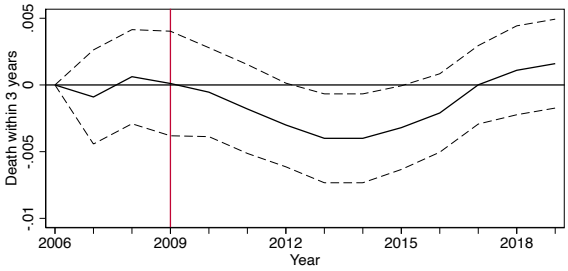
Notes: Sample consists of ACS respondents linked to the Criminal Justice Administrative Records Systems (CJARS) and the SSA Numident. It includes respondents born between 1940 and 1965, aged 50 to 70 at the time of interview. Justice-involved is defined as having a felony conviction or at least one incarceration spell prior to age 50. The non-JII group consists of individuals living in a CJARS-covered state at the time of interview. ACS Survey Years: 2005-2019. ACS person-level weights rescaled to match JII population characteristics on age, birth cohort, race/ethnicity, and educational attainment.

Figure 5: Event-study estimates on impact of expanded SSA safety-net eligibility for formerly justice-involved individuals, aged 50 to 70 years old

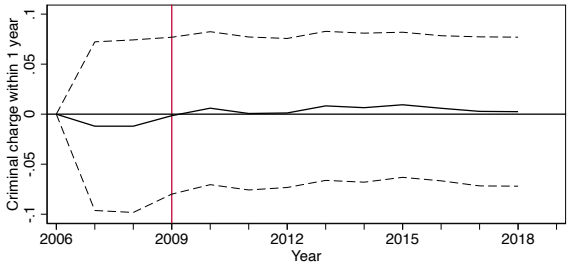
(a) Public health insurance coverage



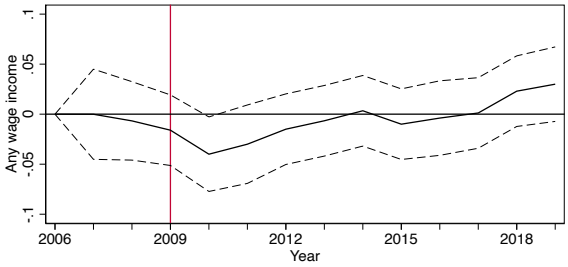
(b) 3 year mortality rates



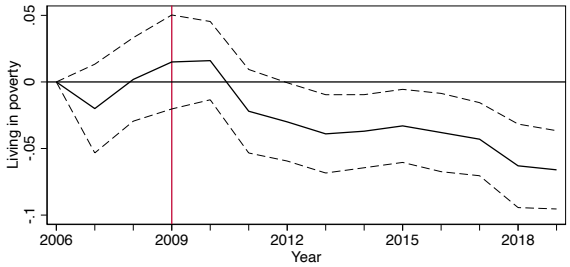
(c) Any criminal charges



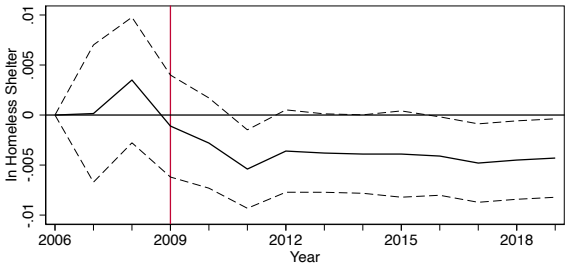
(d) Any wage income



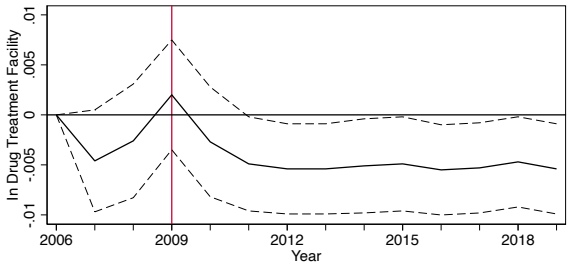
(e) Living in poverty



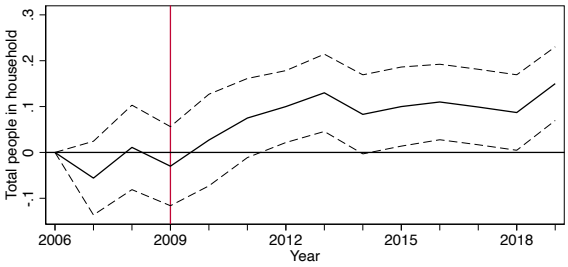
(f) Homeless shelter



(g) Residential treatment facility



(h) Total people in household



Notes: Sample consists of ACS respondents linked to the Criminal Justice Administrative Records Systems (CJARS) and the SSA Numident. It includes respondents born between 1940 and 1965, aged 50 to 70 at the time of interview. Justice-involved is defined as having a felony conviction or at least one incarceration spell prior to age 50. The non-JII group consists of individuals living in a CJARS-covered state at the time of interview. ACS Survey Years: 2005-2019. ACS person-level weights rescaled to match JII population characteristics on age, birth cohort, race/ethnicity, and educational attainment.

Table 1: Demographic, household, economic, and criminal record characteristics of aging justice-involved individuals (ages 50-70 years old), relative to non-justice involved population and reweighted general population population (continued on next page)

	JII, age 50-70		Non-JII, age 50-70			
	All		Re-weighted		Original ACS weights	
	Mean	SE	Mean	SE	Mean	SE
Demographic Traits						
Average Age*	56.85	0.013	56.97	0.002	60.68	0.002
Birth Cohorts*						
% Born in 1940's	11.31	0.08	12.06	0.01	35.48	0.01
% Born in 1950's	53.71	0.12	54.23	0.02	47.71	0.02
% Born in 1960's	34.98	0.12	33.71	0.02	16.81	0.01
% Male	78.92	0.1	78.92	0.01	46.56	0.02
Race and Hispanic Origin*						
% White, non-Hispanic	51.62	0.12	51.62	0.02	76.69	0.01
% Black, non-Hispanic	32.7	0.12	32.7	0.02	10.31	0.01
% Asian, non-Hispanic	0.48	0.02	1.43	0.004	3.27	0.01
% Other race, non-Hispanic	1.88	0.03	0.93	0.003	1.01	0.003
% Hispanic, any race	13.31	0.08	13.31	0.01	8.72	0.01
% Currently married	33.26	0.12	61.27	0.02	66.08	0.01
% Ever married	76.84	0.11	85.56	0.01	91.41	0.01
Educational Attainment*						
% with less than HS diploma	24.4	0.11	24.4	0.01	10.41	0.01
% with HS diploma	39.54	0.12	39.54	0.02	28.79	0.01
% with some college	28.03	0.11	28.03	0.01	30.04	0.01
% with at least a Bachelor's	8.03	0.07	8.03	0.01	30.76	0.01
% with a Disability	36.02	0.12	21.61	0.01	18.72	0.01
Household Traits						
Avg Household Size	2.33	0.004	2.66	0.0005	2.42	0.0004
% with at least one minor in household	16.74	0.09	21.96	0.01	15.6	0.01
% with nonrelative in household	19.82	0.11	10.64	0.01	7.59	0.01
% residing in nursing facilities or other health care facilities	0.48	0.02	0.25	0.002	0.2	0.001
% residing in (non-correctional) residential treatment centers	0.31	0.01	0.07	0.001	0.03	0.0006
% residing in emergency and transitional shelters	0.4	0.02	0.07	0.001	0.02	0.0004

Notes: Sample consists of ACS respondents linked to the Criminal Justice Administrative Records Systems (CJARS) and the SSA Numident. It includes respondents born between 1940 and 1965, aged 50 to 70 at the time of interview. Justice-involved is defined as having a felony conviction or at least one incarceration spell prior to age 50. The non-JII groups consist of individuals living in a CJARS-covered state at the time of interview. ACS Survey Years: 2005-2019. Estimates in columns (1) and (2) as well as (5) and (6) are weighted using ACS person-level weights. "Re-weighted" estimates in columns (3) and (4) use ACS person-level weights that are rescaled to match sample characteristics for the JII sample; variables used in this rescaling exercise are denoted with *.

Table 2: Demographic, household, economic, and criminal record characteristics of aging justice-involved individuals (ages 50-70 years old), relative to non-justice involved population and reweighted general population population (continued)

	JII, age 50-70		Non-JII, age 50-70			
	All		Re-weighted		Original ACS weights	
	Mean	SE	Mean	SE	Mean	SE
Economic Traits						
% Living in Poverty	35.81	0.12	12.83	0.01	8.17	0.01
Average HH Income	55690	203	83020	29	101300	35
Average Person-level Income	25200	110	45010	21	52510	25
% with SSI income	12.2	0.08	5.36	0.01	3.26	0.01
% with OASDI income	20.33	0.1	17.71	0.01	31.78	0.01
% with either SSI and OASDI income	30.06	0.11	21.9	0.01	34.02	0.01
% with both SSI or OASDI income	2.47	0.04	1.17	0.004	1.02	0.003
SSI amount received in past 12 months	1080	8	520.7	1	316.6	1
OASDI amount received in past 12 months	2362	14	2479	2	4707	3
SSI + OASDI amount received in past 12 months	3441	15	3000	2	5024	3
% with retirement income	7.55	0.07	12.31	0.01	19.35	0.01
% Receiving any public assistance (AFDC/TANF, GA) from state/local welfare office	3.69	0.05	1.46	0.004	1.05	0.003
Public assistance income received in past 12 months	83.8	2	39.83	0.2	31.5	0.2
% with wages or salary income	43.89	0.12	63.71	0.02	57.08	0.02
Wages or salary income received in past 12 months	17060	94	34040	18	35180	20
% with self-employment income	6.29	0.06	7.22	0.01	7.06	0.01
Self-employment income received in past 12 months	1741	38	2752	7	2953	8
% with any health insurance	73.5	0.11	85.58	0.01	92.21	0.01
% with Private health insurance	36.36	0.12	66.72	0.02	74.01	0.01
% with Public health insurance	45.03	0.13	28.89	0.02	39.23	0.02
% with Medicaid	30.22	0.12	13.94	0.01	9.48	0.01
% with Medicare	21.17	0.11	17.47	0.01	33.35	0.02
Criminal Justice Traits						
Avg number of pre-age 50 convictions	3.76	0.01				
Avg number of pre-age 50 felony convictions	2.37	0.01				
Avg number of pre-age 50 years spent in prison	8.51	0.03				
% No CJ Contact after age 50	74.07	0.11				
Time since last criminal charge pre-age 50 (in years)	8.15	0.02				
Time since last criminal charge pre-age 50 (in years), conditional on not having CJ contact after 50	9.24	0.03				

Notes: Sample consists of ACS respondents linked to the Criminal Justice Administrative Records Systems (CJARS) and the SSA Numident. It includes respondents born between 1940 and 1965, aged 50 to 70 at the time of interview. Justice-involved is defined as having a felony conviction or at least one incarceration spell prior to age 50. The non-JII groups consist of individuals living in a CJARS-covered state at the time of interview. ACS Survey Years: 2005-2019. Estimates in columns (1) and (2) as well as (5) and (6) are weighted using ACS person-level weights. "Re-weighted" estimates in columns (3) and (4) use ACS person-level weights that are rescaled to match sample characteristics for the JII sample; variables used in this rescaling exercise are denoted with *.

Table 3: Impact of expanded OASDI and SSI eligibility for formerly justice-involved individuals

	Impact of expanded safety-net eligibility	Pre-reform mean among formerly justice-involved individuals		Impact of expanded safety-net eligibility	Pre-reform mean among formerly justice-involved individuals
Take up of SSA programs			**Future criminal activity**		
Either SSI or OASDI	0.041***	0.21	Any charges over 1 year	0.011	–
	(0.0046)			(0.017)	
Both SSI and OASDI	0.0058***	0.017	Any felony charges over 1 year	0.02	–
	(0.0012)			(0.019)	
Any SSI	0.032***	0.084			
	(0.0027)		**Labor Market Activity**		
Any OASDI	0.014***	0.14	Any wage income	0.0038	0.48
	(0.0036)			(0.0064)	
Total SSI and OASDI benefits	272.0***	1879	Total wages	-47.1	14680
	(60.6)			(479.6)	
Total SSI benefits	304.5***	582.3	IHS(total wages)	0.087	5.06
	(23.7)			(0.07)	
Total OASDI benefits	-32.5	1296	Any self-employment income	-0.00083	0.073
	(50)			(0.0023)	
			Total self-employment income	118.9	1663
Health Insurance coverage				(132.1)	
Any health insurance	0.063***	0.65	IHS(self-employment income)	0.0022	0.71
	(0.009)			(0.022)	
Private health insurance	0.033***	0.35			
	(0.008)		**Living circumstances**		
Public health insurance	0.026**	0.37	In-poverty	-0.038***	0.38
	(0.011)			(0.0067)	
Enrolled in Medicaid	0.037***	0.25	Living in a homeless shelter	-0.0047***	0.0087
	(0.01)			(0.0012)	
Enrolled in Medicare	0.021***	0.14	Living in a (non-correctional) residential treatment facility	-0.0039***	0.0073
	(0.0045)			(0.001)	
			Any public assistance	0.00092	0.035
Health outcomes				(0.0028)	
Living in a nursing home or other healthcare facility	-0.0028***	0.011	Total public assistance	2.81	74.6
	(0.0009)			(7.39)	
Disabled	-0.020***	0.39			
	(0.0048)		**Household composition**		
2 year mortality risk	-0.0012**	0.041	Total individuals in household	0.12***	2.23
	(0.00051)			(0.017)	
4 year mortality risk	-0.0016**	0.075	Married	0.013***	0.34
	(0.00078)			(0.0048)	
			Living with minor	0.022***	0.18
				(0.004)	

Notes: Sample consists of ACS respondents linked to the Criminal Justice Administrative Records Systems (CJARS) and the SSA Numident. It includes respondents born between 1940 and 1965, aged 50 to 70 at the time of interview. Justice-involvement contact is defined as having a felony conviction or at least one incarceration spell prior to age 50. ACS Survey Years: 2005-2019. Estimates are weighted using person-level weights. For regressions regarding: health insurance, N=8,506,000; mortality rates (full population), N = 30,660,000; criminal activity (restricted to states with adequate court coverage), N = 8,689,000; all other outcomes, N = 9,409,000.

Appendix A: Forecasting methodology

One contribution of this paper is to better understand how the share of retirees with criminal records will grow substantially over the next two decades. For cohorts that have not yet reached age 62, we forecast their age 62 rates based on (1) the cohort's measurable CJ interactions over the observable age profile and (2) using older cohorts to fit a model predicting how the prevalence will change over the age profile due to deaths and first-time offenses. While this exercise technically does involve forecasting prevalence rates for cohorts that will be reaching age 62 over the next 30 years, because the vast majority of first-time CJ contact happens early on in someone's life (largely between ages 18 to 30, which is fully observable in current data holdings), any forecasting error should have a small impact on our estimates.

First, for each cohort, we calculate the percent of individuals who have their first CJ interaction at a given age, using every age from 18 to their age as of 2019. For example, for men born in 1970, we calculate from age 18 (1988) to age 49 (2019) the percent who are convicted of a felony for the first time at that given age.

Historical CJARS data coverage, which varies by jurisdiction, is crucial in this exercise. To deal with this, we restrict birth cohorts to only individuals born in counties for which CJARS can measure CJ contact at least between ages 21 to 30 years old. We identify county of birth using the SSA Numident file, which tracks place of birth for all individuals born in the United States, which we use as a proxy for the county they are residing in while they are in their 20s. For example, let's consider statistics for felony convictions, focusing on men born in 1970. For this date of birth year, we only use men who were born in certain counties in the United States. These counties are ones that have felony data coverage at least between 1991 (when this cohort was 21) and 2000 (which this cohort was 30). Because of this, the geographic basis of these statistics will change modestly across birth cohorts.

Next, for birth cohorts that have not yet reached age 62, we forecast the share of the cohort who will have had one or more CJ events as of age 62. To do this, we estimate a model predicting this outcome on lagged values and age coefficients. Letting $P_{a,c}$ denote the percent of individuals in cohort c with a first-time CJ event at age a, the linear model we estimate is

$$P_{a,c} = \alpha_0 + \alpha_1 P_{a-1,c} + \alpha_2 P_{a-2,c} + \alpha_3 P_{a-3,c} + \alpha_4 Age_a + \alpha_5 Age_a^2 + \epsilon_{a,c} \quad (1)$$

Therefore, we are using the most recent percentages to predict the value for the current one. To account for the fact that criminal activity happens mostly during younger ages, we also include an age and age squared term. Given this model, we can predict first-time criminal events at every age up to 62. From this, we can then add up all the percentages for

each cohort to get the total percentage that have, for example, a felony by age 62.

Intuitively, we are making the assumption that the shape of the age-crime profile is stable across birth cohorts, but differences in policies across generations generate level differences between the birth cohorts.

The statistics described above, however, may overstate the percent of people at 62 with a CJ history if such people are more likely to die earlier than people without a CJ history. To account for this effect, we estimate a similar model as described above in Equation 1, but using death as the outcome variable. We use the same sample, so we make the same county of birth restrictions. We estimate the percent of people who die by a given year separate for CJ vs non-CJ individuals. Because CJ history can vary over time, we fix a person's CJ status as of what it is at age 50 to differentiate these groups. Let j denote a person's CJ status. To predict age of death after 2019, we use the same form of a model with 3 lags and an age and age squared coefficient. Letting $D_{a,c,j}$ denote the percent of individuals in cohort c and CJ status j who die at age a, our model is

$$D_{a,c,j} = \beta_{0,j} + \beta_1 P_{a-1,c,j} + \beta_2 P_{a-2,c,j} + \beta_3 P_{a-3,c,j} + \beta_{4,j} Age_a + \beta_{5,j} Age_a^2 + \epsilon_{a,c,j} \tag{2}$$

In the near final step, we want to turn these percentages into population counts. Using the Numident, we calculate the number of individuals in each birth cohort nationwide (B_c). This is based on everyone born in the United states, so it is not dependent on CJARS coverage. From this count, the number $N_{c,62,1}$ of individuals with a CJ history who are alive at 62 is then

$$N_{c,62,1} = B_c * (\sum_{a=18}^{62} P_{a,c}) * (1 - \sum_{a=18}^{62} D_{a,c,1}) \tag{3a}$$

For the number without a CJ history alive at 62, the formula is

$$N_{c,62,0} = B_c * (1 - \sum_{a=18}^{62} P_{a,c}) * (1 - \sum_{a=18}^{62} D_{a,c,0}) \tag{3b}$$

And from this, the death-adjusted percent of people with a CJ history is

$$N_{c,62,1}/(N_{c,62,1} + N_{c,62,0}) \tag{4}$$

Since the age-crime profile and death rates may vary by type of CJ contact, we calculate these statistics separately by criminal-justice event, which are (1) charged with a misdemeanor or felony, (2) charged with a felony, (3) convicted of a felony, and (4) incarcerated

in prison.[4] We also generate estimates separately for men and women, using sex from the Numident. Furthermore, we split the results out by race and ethnicity, using the Census Best Race and Hispanic Origin File. We show the results by White non-Hispanic, Black, and Hispanic (any race).

[4]Note that misdemeanor and felony charges include both convictions and non-convictions.