
The Impact of the War on Drugs on Union Density, 1973-2019

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Abstract:	The War on Drugs (WoD) notoriously targeted poor people and poor communities, especially people of color. Its negative impact on the labor militance necessary to form and defend unions has only recently been studied. This paper explores the magnitude of the WoD's role in pulling people out of the labor market into jail and prison, and its long shadow in probation and parole, involving three times more people. Incorporating two additional measures affecting economic security, access to unemployment insurance, and having more than one family income, it gives evidence that the WoD contributed to the decline in union density.

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Studies of declining union representation since the 1970s have focused on economic factors and ascendant conservative political forces. Runaway shops in manufacturing eliminated union jobs. High unemployment in the 1980s made workers grateful for any job available. The high US exchange rate under Volcker impaired US competitiveness and opened long-term foreign market penetration into the predominantly-union auto industry, for instance, as prices dramatically skewed by exchange-rate changes shifted brand loyalties.

This paper identifies specific paths whereby this conservative move impacted labor. It treats union formation as relying on the willingness to stand up for rights, and therefore as an expression of militance (Milkman and Luce, 2017). Fighting to retain one’s union in the face of pressures to decertify requires action, not just inertia. While some others recognize that the racist War on Drugs (WoD) was itself a form of labor discipline (Reich and Prins 2020; Seligman and Nam-Sonenstein 2024), this is the first paper to study econometrically its contribution to the decline in union density in the US since the 1970s. It argues that the WoD and its associated dramatic increase in the number of those incarcerated, on probation, and on parole, undermined workers’ sense of rights and their militancy. It thereby contributed to the retrenchment of organized labor and decline in union density.

A second aspect of this conservative policy shift was the accelerated decline in access to unemployment insurance (UI) in the 1980s. Hirsch et al. (2024) provide a consistent union density data series (see figure 1). The most precipitous decline is from 1979-1985, which is also when incarceration accelerates and the extent of unemployment-insurance reciprocity steeply falls (see figures 7 and 8, discussed below).

(figure 1 goes about here)

The paper begins by outlining the dimensions of the War on Drugs and its far-reaching impacts. It interprets the magnitude of incarceration, probation, and parole as an expanded labor reserve, and argues that the WoD’s practices undermined people’s confidence

and sense of rights, impairing militancy, and the fight for union representation. It develops an empirical model that includes other determinants of union membership; econometric evidence confirms the hypothesis that the WoD contributed to union decline.

The War on Drugs

In the 1960s, the press associated working-class militance more with the civil-rights and Black Power movement than with strike activity. The FBI had hounded and is implicated in the murder of the head of the Chicago Black Panther Party, Fred Hampton (Barrett, 2021). Throughout the decade, there was rising Black union membership in autos, electrical, and metal-fabricating sectors, for instance (Sustar 2018). Black caucuses were formed in many industrial unions and were active in the increasing number of wildcat strikes in the late 1960s and early 1970s. The night before Martin Luther King was killed, he spoke at striking sanitation workers' meeting in Memphis (Belafonte, 2011), going beyond solidifying legal rights for Black people, to supporting their efforts to improve their economic standing.

President Nixon knew Black voters disproportionately favored Republicans' opponents and set out to destroy their ascending political clout. Beginning in 1970, his War on Drugs (WoD) policy initiative had the intended consequence of harassing and vilifying the Black community to impair its collective political voice (Erichman 1994 interview with Baum, discussed in Baum, 2016). Combined with measures that reduced the magnitude of automatic stabilizers, both unemployment and its pressure on workers were intensified by this assault on militance. As will be seen, the evidence suggests that the period of economic retrenchment of the 1980s-1990s accelerated the expansion of the WoD, which warehoused and constrained those at the lowest levels of the economic ladder.

After the Vietnam War wound down in 1975, companies began running away from postwar labor-management institutions. Some had workers pack up equipment to send

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abroad; others converted work previously performed in-house to tasks subcontracted to other companies paying less to non-union workers. Both trends expanded the size of the pool competing for workers' jobs. As computerization spread, foreign workers became realistic competitors for US workers in services as well as manufactured imports. Van Arnum and Naples (2016) showed that increasing import penetration perceptibly increased income inequality over the period.

US unemployment moved significantly higher in the context of these runaway shops, hitting depression levels by 1982-83, and only recovering slowly over the decade. Simultaneously, a political consensus around accelerating the WoD led to increasing arrests, arraignment, incarceration, parole, and probation of disproportionately Black men (Hinton et al. 2018; Naples, 2022). Black people were almost 5 times as likely to be incarcerated as whites, and Latinx 1.3 times as likely (Nellis 2016:17). Eric Sterling (2014) calculated that these practices imply that one-third of all Black men in the US will have been incarcerated at some point in their lives.

The concomitant distorted perception of Blackness as criminogenic, and drug users as crazed criminals, fueled a national spending spree that expanded police presence and built prisons. Over the period 1980-2008, the number of local and state police rose by about 50% (US Census, in USAFacts 2024). Americans use drugs, and very few (3%) evidence drug dependence or addiction. Nevertheless, drug use gained a higher pejorative than alcohol abuse, which is twice as common as substance-use disorders from drugs (Surgeon General 2015:1-11).

The cause of an arrest is registered based on the highest-level offense, so someone arrested for both gun and drug possession is not registered as a drug arrest. Figure 2 shows that the expansion in arrests for other crimes swamped apparent increased drug arrests, first in the early 1980s, then in the early 1990s when drug arrests grew by 801,000, doubling, and

total arrests grew by 4.6 million, or 44 percent (FBI).¹ This massive increase in total arrests likely reflected WoD arrests of drug users or sellers registered as “higher-level” crimes.

(figure 2 goes about here)

The increasing pool of arrestees led to higher jail numbers, where those charged who could not post bail awaited trial;² those found guilty typically were sent to state or federal prison. Figure 3 shows the magnitude of the increase in incarceration from its relative low in the 1960s. It rose in the 1970s, accelerated in the 1980s, remained steep into the 1990s, and in all grew almost 7-fold from 1970 to the 2009 peak. The numbers only started to decline after the Great Recession (2007-2009) put a dent in public revenues.

(figure 3 goes about here)

The difference in the rate of increase in incarceration vs. arrests (compare figures 2 and 3) cannot be overemphasized. The WoD was not just an increased public willingness to pursue drug users and sellers, there was an increasingly venomous will to punish, often for mandatory, extended periods.

Some found guilty were given probation, limited to house arrest, or later released from prison on parole. While far less restrictive than prison, these too are part of the “correctional” system and subject people to limitations in their geographic movement (GPS-linked ankle bracelets or shackles), job and housing choices, daily schedules, friends they may associate with, and to required random drug checks, home inspections, and court and probation/parole officer appearances, etc. Failure to follow rules (e.g., for charging an ankle restraint in a 2-hour window, see Glaser 2021) can extend the period on probation/parole or lead to reincarceration. These constant external controls and interferences with freedom of movement impede the possibility of getting and keeping a steady job and reinforce economic insecurity. The magnitude of this extended carceral population swamps those in jail or prison (see figure 4).

(figure 4 goes about here)

Personal rights were further restricted by the mandates imposed on those paroled from prison or assigned probation. They were required to limit their friendships with others who were ex-inmates, limit the geographic scope of their movements, and meet regularly with a probation officer overseeing their life choices - an infantilizing practice. Technical violations of these rules were a significant source of “recidivism” and return to prison.³ These practices of the WoD would later be called the New Jim Crow (Glasser 2000; Alexander 2010). This new emerging underclass created the illusion that others had a higher relative economic status, which helped ratchet down workers’ expectations for themselves.

This expanding carceral system created new employment insecurities. For instance, company drug testing was encouraged by legislation, but debated as violating the fourth amendment (Thornicroft 1990-91). This invasive and not necessarily reliable testing (eating rolls with poppy seeds could lead to testing positive for heroin) meant workers could not even count on the job they currently had when the economy was expanding, they were at risk of losing it. Also, if a person were arrested for drug possession or sales and could not afford to post a few thousand dollars in bail, they could spend most of a year in jail awaiting trial before being tried and found not guilty. Meanwhile, they lost their job, and their family lost their economic support. Someone who bought more drugs than they needed and shared with friends at a party would qualify as low-level drug sellers under the laws put in place. Those found guilty suffered the loss of close family life, more so to the extent that they were housed in prisons some distance from home. Family members who had jobs were that much more fearful of job loss and pressured to curry their employer’s favor by their quiescence and union avoidance.

Wages for prison work are extremely low. Treating workers as “paying their way,” prisons subtract an amount for room and board, phone and video-call charges from wages,

netting workers a tiny fraction of the minimum wage on an hourly basis (Bertram 2024; Sawyer 2017). Prisoners can be fined for misconduct, and the fines and fees imposed put two-thirds of their families into more than \$13,000 in debt (Seligman and Nam-Sonenstein 2024), a modern form of debt-peonage. In the 1980s, prison overcrowding with the ballooning of arrests meant inhumane treatment: for instance, extra mattresses on the floor next to cell toilets in NJ jails receiving inmates from prison overflow, lack of clean clothes, no fresh air or exercise (Union County, 1982). The chain-gang character of such conditions, treating people like cattle undeserving of pay and healthcare,⁴ is demoralizing.

Even those released before trial owe bond companies or have to pay for electronic monitoring devices before the trial (Seligman and Nam-Sonenstein 2024). Those on probation or parole are required to pay for ongoing carceral incursions, including GPS shackles, urine tests, and even required programs.

Once found guilty of a felony, and the definition of what constituted a felony was expanding in this period, people were cut off from access to government funds to finance higher education or housing. Many states prohibited their qualifying for a range of licensed positions, such as teacher or plumber. They were relegated to an underclass. Wang and Bertram (2022) report that only 40% of those previously incarcerated had employment at any point in time over the 4 years after release, Wicks-Lim (2024) that expected wages are lower than for the nonincarcerated, particularly for Black men.

Another dimension of the WoD was the carte blanche offered to police. Until Derek Chauvin's public murder of George Floyd, police officers in the United States were very rarely prosecuted or found guilty of murder in cases where prisoners died in custody (Berman 2021). On the contrary, police and medical examiners embraced "diagnoses" of cases of death in custody in the presence of prisoner restraint⁵ as resulting from *excited delirium*, a fabrication advanced by a pair of medical examiners and promulgated by Taser International

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that blamed drug use, even where no evidence of drugs was present.⁶ Taser financed distribution of an “excited-delirium” white paper to 1,000 police departments nationwide, and the expression became a standard part of many medical examiners’ arsenal for cause of death until the recent Physicians for Human Rights Report and activist efforts exposed the fallacy.⁷

Not only did the Black population face a police force empowered to kill without cause with impunity, people faced ongoing harassment simply for being Black.⁸ Racial profiling led to disproportionate traffic stops, pretext warrantless searches, and use of force on Black individuals (Harris 2020:4; Edwards et al. 2019:16794).

The unforgiving and harsh treatment of Black persons, particularly by the police and the carceral system (courts, jails and prisons, probation, and parole officers), taught that rights were contingent, not absolute, and could suddenly be taken away. Since Black workers disproportionately favor unions (Ahlquist et al. 2024 figure D), among other reasons because they help protect against employer discrimination, this directly impaired union formation. The impact went beyond those caught up with the carceral system, it disempowered workers generally. Adam Reich and Seth Prins (2020:1313) provide evidence that communities with higher incarceration rates of residents are less likely to have high rates of labor organization and have lower rates of success in NLRB union-recognition elections.

The WoD also had direct consequences for unemployment. Bruce Western and Katherine Beckett (1999) observed that incarceration reduces the measured unemployment rate by keeping those with high unemployment risk out of the labor market. The penal system carries hidden unemployment because BLS statistics do not treat jobless inmates as unemployed.

On the other hand, arguably the expansion of the numbers of people entangled in the WoD serves as an additional potential labor supply. During the Covid pandemic, disease spread rapidly in prisons, causing high death rates. Consequently, many states released

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3 prisoners on their own recognizance; of 11,000 so released, only seventeen committed crimes
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5 (Johnson, 2022). This belies any claim that the long sentences being meted out prevent
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7 recidivism, rather, they warehouse part of the labor reserve.
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10 Figure 5 showcases the magnitude of this reserve. The lowest curve is U-3, the
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12 standard BLS measure of unemployment. U-6 is the higher schedule, including discouraged
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14 workers and those involuntarily part-time for economic reasons. The other curves (U-3' and
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16 U-6') add a measure of those in the complete carceral system relative to the labor force,
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18 expanded to include those in the carceral system.⁹ This U-3' is less cyclical than U-6 alone,
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20 but it runs in the same numerical range as U-6 until the financial crisis and the pandemic,
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22 when U-6 is substantially higher. U-3' cycles around 10%. The data can also be interpreted as
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24 showing that the recession of the early 1990s, for instance, would have exhibited higher
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26 unemployment had it not been for the WoD sweeping people into jail and prison, given the
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28 growth of the carceral population after 1979.
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33 (figure 5 goes about here)
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35 When the carceral population is included with U-6, it is evident that in the Great
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37 Recession, total labor slack exceeded 20%. When U-6 was 13.7% in 2010, the carceral
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39 population adds another 7% additional, or 50% more. This is quite a different picture of the
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41 magnitude of excess labor supply from what the U-3 measure alone indicates.
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45 The macroeconomic question is whether it can be shown that this wider reserve army,
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47 encompassing the carceral system, more effectively helps explain variables like labor
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49 militance, wage growth, productivity growth and even profitability than the standard U-3
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51 series. It may be that the carceral reserve had a stronger impact because of the harsh
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53 treatment and underlying fear that incarceration promotes. Or the carceral reserve may have
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55 had a weaker impact because prisoners were, if only temporarily, pulled away from the labor
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57 force and, once released, moved to an “unemployable” category that were not viable
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employees (Western and Beckett 1999), such that the formerly incarcerated did not offer effective competition for other employees. Ultimately the answer is empirical.

Econometric Analysis

Explanatory Variables

As suggested in Naples (2023), both current unemployment and recent unemployment arguably undermine militancy. Job loss forces families to tap limited savings, and the experience of economic duress makes people more quiescent in the face of unfair work practices. However, at the historic peak of US union density, Bernstein (1954) found that current unemployment was not a major factor. Ashenfelter and Pencavel (1969) suggested that high unemployment in the most recent cyclical trough would correlate with workers’ associated stock of grievances, potentially motivating union formation in the next expansion, a positive historic-unemployment effect. Milkman and Luce (2017) observed that even the high unemployment of the Great Recession mattered less in motivating union formation than the negative impact of the anti-union institutional environment. These debates suggest that the unemployment measures should be subjected to two-sided statistical tests.

It has long been claimed that women in the labor force provide competition for men, which undermines men’s leverage and therefore potential union presence. More recently Jacobs and Dixon (2010) suggested that women were innately less militant when they joined the labor force, but their willingness may increase over time; however, the authors did not find statistically significant support for the hypothesis.

If we situate the decision to join or remain in a union in the context of a household, rather than as individual, a salient aspect of the increasing participation of women in paid work is that the share of household income lost from one person out of work would be lower. Ashenfelter and Pencavel (1969) suggested that successful union drives require perceived benefits to outweigh the costs; the latter includes both employer retaliation, like illegal firings

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3 or closing jobs sites that vote for a union (recently, Starbucks), and possible worktime lost to
4 strikes. Juliet Schor and Samuel Bowles (1987) showed that more than unemployment *per se*,
5 the cost of job loss would impair labor militance and strike activity. Women's paid work can
6 be interpreted as reducing the proportionate cost of job loss from unemployment spells.
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11 The share of dual-income households rose from 35% in 1947 to the peak of 58% in
12 1989 for families (Pew Research Center 2015; see figure 6). Both higher divorce rates,
13 reducing the number of couples, and increases in early retirement after the Great Recession,
14 subsequently reduced the proportion. Arguably, when the dual-income proportion is higher,
15 there is less pressure on workers to succumb to employer pressure and relinquish rights, such
16 as the voice gained by having a union (Freeman and Medoff, 1982).
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26 (figure 6 goes about here)
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28 Finally, several analysts have suggested that the shift to a more conservative political
29 environment since the late 1970s has impaired union formation. Jacobs and Dixon (2010)
30 emphasized the spread of anti-union right-to-work laws. Milkman and Luce (2017) observed
31 that the Bush NLRB appointments "led to a series of decisions that were especially hostile to
32 organized labor (p. 150)," and that the conservative political context encouraged employers
33 to manipulate NLRB elections and use replacements during strikes, rather than bargaining in
34 good faith. Palley and LaJeunesse (2007:253) identify as key both employer rights of
35 dismissal and employee rights of redress for unfair dismissal.
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46 This paper looks at two sets of conservative policy changes that did not explicitly
47 target the labor movement, but nevertheless arguably impaired organizing efforts. First, the
48 Keynesian Consensus that embraced unemployment insurance as a vehicle to provide
49 automatic stabilizers eroded over the postwar period, in part because of the increasing
50 conservatism of the post-Vietnam period, in part in the wake of the Great Recession (see
51 figure 7). UI take-up rates or rates of reciprocity reached 54 percent in the 1950s; they fell to
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the mid-20 percents by the 2010s. Declining reciprocity rates reflect increasingly ungenerous state policies, in terms of weeks of coverage, workweeks required to qualify, etc., to implement federal unemployment-compensation mandates (Blank and Card, 1991).¹⁰ While not included in this measure, the extent of income replacement has also fallen, as benefits were subject to rising taxation (Whittaker, 2015). They tend to be lower in the south, where the fraction of unemployed workers rose from 1977-1987 (Blank and Card 1991:1168), and vary dramatically by state (Equifax, 2024). The decline in UI reciprocity raised the cost of job loss, increasing the impact of unemployment spells on workers’ economic security, and likely impaired militance.

(figure 7 goes about here)

Second, the War on Drugs is a far-reaching series of conservative laws and practices at the federal, state, and local levels beginning in the 1970s that undermine workers’ sense of rights and agency. For this study, an Incarceration Labor Rate is constructed that interprets the incarceration rate like another kind of unemployment rate, as a quantification of labor slack, since those in prison are not working in the market economy. The numerator is the number incarcerated in federal/state prisons or local/county jails, the denominator is the labor force plus the number incarcerated (see figure 8). The empirical study expands to include a comparable Probation Labor Rate, and Probation & Parole Labor Rate, a measure of probation and parole relative to this extended labor force. Both categories of those under carceral supervision are already counted in the labor force since it is part of their mandate to seek employment. But because of the restrictions they face and impediments to their full participation, they are further markers of constrained rights and the long shadow of the WoD.

(figure 8 goes about here)

The Model

Because the proportion of workers in unions is a fraction running from 0 to 1, it is logged to ensure consistent estimations. For analytical symmetry, so are the explanatory variables. Then the causal model to be explored here is as follows:

$$\text{UnionMemb} = \beta_0 + \beta_1 U + \beta_2 U_H + \beta_3 \text{UIRecip} + \beta_4 \text{Fam}>1\text{Earner} + \beta_5 \text{IncarcerationLRate} + \beta_6 \text{ProbationLRate} + \beta_7 \text{ParoleLRate} + \varepsilon,$$

where all variables are logged, UnionMemb is the share of private employees in unions; U is U-3, the standard BLS unemployment rate; U_H is historical unemployment, the average of U-3 over the preceding 4 years; UIRecip is the share of the unemployed who succeeded in receiving unemployment-insurance benefits, Fam>1Earner is the proportion of families not solely dependent on one breadwinner; IncarcerationLRate measures incarceration in federal, state and local facilities relative to the sum of the labor force and such incarceration; and ProbationLRate (ParoleLRate) aggregates national probation (parole) figures relative to the same denominator as IncarcerationLRate. The last three variables are all measures of aspects of the WoD.

Empirical Results

Given the visible trend in the dependent variable, a Durbin-Watson test for autoregression was run and found to be significant; hence Prais-Winsten estimation was used to correct for autocollinearity, limiting results to 1974-2019, constrained by the availability of UIRecip.

Table 1 provides these estimates. The results indicate that the model explains the vast proportion of the variation in the data. Over the full period, 1973-2019, Eq. 1 finds that the proportion of families with at least two earners has a significantly positive impact on union membership. This confirms the hypothesis that having the added income support from a working spouse helps support militancy. It calls into question the perception that women's

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competition undermines men’s bargaining power at work, which is premised on a zero-sum game, rather than recognizing that it is economic growth that pulls in labor-force entrants.

(table 1 goes about here)

In Eq. 1, the unemployment rate has a negative sign, significant at the 10% level in a 2-tailed test. This suggests that current unemployment may have some constraining impact on union formation or protection.

The statistically most significant variable is, however, the incarceration rate. As expected, a higher incarceration rate is strongly negatively associated with union density. The creation of an underclass of citizens without rights impairs militancy. It is striking that such powerful results have flown under the radar for so long, and we only started to see analyses of the WoD impacts on labor organizing (i.e., Reich and Prins, 2020) once there was a movement to decriminalize drugs (e.g., Oregon in 2020).

The WoD did lead to other forms of carceral containment besides incarceration, specifically, probation and parole. To explore the impact of probation on militancy requires reducing the number of observations to begin in 1977, when national probation data began to be reported. Results for the model of Eq. 1 in the shorter data series are reported (Eq. 2), and then results with the probation labor rate (Eq. 3).

The original model, limited to 1977-2019 (Eq. 2), gives results quite similar to the longer period (Eq. 1) for the incarceration labor rate. However, the proportion of multi-earner families is only significant at the 7 percent level, and its impact appears smaller in this shorter period.

Once the probation labor rate is added (Eq. 3), the results are even muddier. There is no improvement in the adjusted R^2 ; multi-earner families is no longer significant; the t-statistic for the incarceration labor rate, while still significant, falls by half; and the probation

labor rate is not significant. Not surprisingly, the two WoD measures alone have a simple correlation of .96, and there appears to be multicollinearity among other variables as well.

To see if more insight can be gleaned, the incarceration labor rate is dropped in Eq. 4. Multi-earner families and UI reciprocity are again strongly significant. Historical unemployment is significant for the first time, garnering a positive sign. This suggests that the effect of grievances from the past outweighs the constraining impact of previous job loss. The probation labor rate earns an extraordinarily high t-statistic, and its negative coefficient grows dramatically, as it becomes the only proxy for the WoD.

Finally, the study is further expanded to include the impact of parole. This requires shortening the data series further, to begin in 1979 when national parole data were first published. When the only measure of the WoD included is the incarceration labor rate, it is highly significant (Eq. 5); multi-earner families is significant at the 6% level.

In Eq. 6, including the probation labor rate supplants the incarceration labor rate as the most significant WoD variable, and the proportion of multiple family earners and UI reciprocity are again strong positive forces for union density at conventional levels.

Once parole is added in Eq. 7, both the probation and parole labor rates meet standard criteria for statistical significance in one-tailed tests, while the incarceration labor rate drops out. All these variables have simple correlations of .93-.97, so they are in some sense substitutes for each other, reflecting the common underlying WoD. Both multi-earner families and UI reciprocity continue strongly significant; as in eq. 4, historical unemployment earns a positive sign, significant at the 7 percent level.¹¹

(table 2 goes about here)

These results are a reminder that the WoD has had a wide reflection. The impact on labor is not only immediate, but being arrested, held on bail, tried in court, even if these lead

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to probation or parole, with the subsequent constraints on one’s freedom, have ongoing impacts in the labor market and on worker leverage.

As with any time-series analysis, it is worth confirming stationarity, that is, the independence among observations requisite for using standard regression techniques. Estimates of non-stationarity in the dependent variable for the full period, 1973-2019 (Eq. 1) were significant at the 8 percent level; taking the first difference did not change that significance level. However, once the analysis was shortened to begin in 1977 or 1979, all evidence of stationarity disappeared. Since the significant impact of WoD variables was sustained across the three periods, non-stationarity was not deemed an impediment to these research findings.

Conclusions

This paper has broken new ground in the study of union density in three ways. First, it provided evidence that the nation’s conservative political turn in the post-Vietnam era affected union formation through (1) contracting unemployment-insurance reciprocity, and (2) an expanding WoD, with its concomitant expanded incarceration, probation, and parole. Third, it generally confirms that having two incomes supports union formation. Like UI reciprocity, this is interpreted as reflecting a lower cost of job loss and therefore less economic insecurity.

As others have found, current unemployment does not typically impact membership numbers. There is some evidence that historical unemployment has a positive impact, suggesting workers take action to defend or organize unions in reaction to deteriorating conditions on the job given high chronic economic slack. This is consistent with Milkman and Luce’s (2017:160) recognition that the Great Recession spurred Occupy Wall Street activism that drew attention to the wide separation between the very rich and the poor. They

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3 suggested that the “alt-labor” movement that began in the early 2000s was given impetus by
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5 that activism, which also fueled novel wage initiatives by existing unions.
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8 Organized labor has historically advocated for unemployment insurance, including
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10 extending benefits during protracted downturns. This study provides empirical evidence that
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12 this does not only support union workers as individuals, it supports union formation. The
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14 AFL-CIO (2024) also recognizes abortion rights as worker rights. The finding that increases
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16 in the proportion of families with multiple earners favor union density provides another
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18 reason to support the right to avoid unwanted pregnancies – it helps the union collectively for
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20 families to draw more than one income.
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22

23
24 While the AFL-CIO has called for reforms in the system of mass incarceration (see
25
26 Legend, 2016), it has not been at the forefront of calls to legalize (Hudak 2021) or
27
28 decriminalize drugs (Gibson et al. 2023), despite their likely major impact on the number in
29
30 the carceral system and therefore union density. Most states have legalized (24) or
31
32 decriminalized (8) marijuana (DISA 2024), sometimes with state AFL-CIO advocacy
33
34 (Missouri, New York, Maryland, and DC), and three are considering legalization (Linderman
35
36 2024). Moreover, the Biden Administration is reducing marijuana from a Schedule I to a
37
38 Schedule III drug, which permits its use for medical purposes (Malyshev and Ganley 2024).
39
40 Since about 87 percent of drug arrests are for possession (FBI 2019), decriminalizing
41
42 possession can dramatically reduce arrests, jail and prison populations, probation and parole.
43
44
45
46

47 The evidence of this paper suggests that a policy push to eliminate the WoD and
48
49 decriminalize drug use could be the levers that not only undo mass incarceration, but benefit
50
51 working people and efforts to form or defend unions.
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Bibliography

AFL-CIO. 2024. Reproductive Rights are Worker Rights. AFL-CIO,
<https://aflcio.org/reproductive-rights>

Ahlquist, John S., Grumbach, Jake and Kochan, Thomas. The Rise of the “Union Curious:” Support for Unionization among America’s Frontline Workers. EPI,
<https://www.epi.org/publication/rise-of-the-union-curious/#epi-toc-1>.

Alexander, Michelle. 2010. *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*, The New Press: New York.

Ashenfelter, Orley and Pencavel, John. 1969. American Trade Union Growth: 1900-1960. *Quarterly Journal of Economics*, 83(3) (Aug.): 434-448.

Barrett, Devlin. 2021. FBI Pressured to Answer for Domestic-Spying Program Tied to Black Panther Fred Hampton’s Killing in 1969. *The Washington Post*, May 4,
https://www.washingtonpost.com/national-security/fred-hampton-black-panthers-fbi-surveillance/2021/05/04/2b12f826-acd7-11eb-b476-c3b287e52a01_story.html

Baum, Dan. 2016. Legalize It All, *Harper’s Magazine*. April,
<https://harpers.org/archive/2016/04/legalize-it-all/>

Belafonte, Harry, with Shnayerson, Michael. 2011. *My Song: A Memoir of Art, Race and Defiance*. New York: Alfred A. Knopf.

Berman, Mark. 2021. When Police Kill People, They are Rarely Prosecuted and Hard to Convict. *The Washington Post* April 4,
https://www.washingtonpost.com/nation/2021/04/04/when-police-kill-people-they-are-rarely-prosecuted-hard-convict/?itid=ap_markberman&itid=lk_inline_manual_4

Bertram, Wanda. 2024. FCC Votes to Slash Prison and Jail Calling Rates and Ban Corporate Kickbacks. Prison Policy Initiative, July 18.
<https://www.prisonpolicy.org/blog/2024/07/18/fcc-vote/>

Bernstein, Irving. 1954. The Growth of American Unions. *American Economic Review* 44(3) (June):301-318.

Blank, Rebecca M. and Card, David E. 1991. Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation? *Quarterly Journal of Economics* 106(4) (November): 1157-1189.

Cahalan, Margaret Werner with Parsons, Lee Anne. 1986. Historical Corrections Statistics in the United States, 1850-1984. US Department of Justice, Bureau of Justice Statistics, NCJ-102529, December, <https://bjs.ojp.gov/content/pub/pdf/hcsus5084.pdf>

Council of State Governments Justice Center (CSG). 2019. Confined and Costly: How Supervision Violations are Filling Prisons and Burdening Budgets. June. <https://csgjusticecenter.org/publications/confined-costly/>

Da Silva Bhatia, Brianna, Heisler, Michele, Naples-Mitchell, Joanna, Saadi, Altaf and Sherwin, Julia. 2022. "Excited Delirium" and Deaths in Police Custody; the Deadly Impact of a Baseless Diagnosis. Physicians for Human Rights, March, <https://phr.org/wp-content/uploads/2022/03/PHR-Excited-Delirium-Report-March-2022.pdf>

Edwards, Frank, Lee, Hedwig and Esposito, Michael. 2019. Risk of Being Killed by Police Use of Force in the United States by Age, Race-Ethnicity, and Sex. *Proceedings of the National Academy of Sciences* 116(34) (August 20): 16793-16798.

Equifax. 2024. 2024 Unemployment Weekly Benefit Amount and Taxable Wage Base Information. Equifax, October 29, https://assets.equifax.com/ews/ucm/assets/unemployment_WBA_tax_rate_wage_base_information.pdf

Federal Bureau of Investigation (FBI). Various Years. Arrest Offense Counts in the United States. Crime Data Explorer.

- _____. Various years. *Crime in the United States [Year]*.
<https://ucr.fbi.gov/crime-in-the-u.s/>
- _____. Various years. Crime in the United States. *Law Enforcement Bulletin*.
<https://leb.fbi.gov/file-repository/archives/september-1985.pdf/view>
- Freeman, Richard B. and Medoff, James L. 1984. *What Do Unions Do?* Basic Books: New York.
- Gibson, Sandy, Patterson, Natasha, Naples, Michele I., Mitchell, Michael B., Bates, Diane C., Bowen, Daniel, Dell-Angelo, Tabitha, Herres, Joanna, Pearson, Kim, Whalen, Dara, Lowe, Laurie, Donaldson, Robert. 2023. Multidisciplinary Argument for the Decriminalization of Drugs. *Journal of Addictions and Offender Counseling* 45(1):70-97.
- Glaser, April. 2021. Incarcerated at Home: The Rise of Ankle Monitors and House Arrest During the Pandemic. NBS News, July 5, <https://www.nbcnews.com/tech/tech-news/incarcerated-home-rise-ankle-monitors-house-arrest-during-pandemic-n1273008>
- Glasser, Ira. 2000. *American Drug Laws: The New Jim Crow. The 1999 Edward C. Sobota Lecture*. ALBANY L. REV., 63(3): 703-724.
- Glaze, Lauren E. and Bonczar, Thomas P. 2006. Probation and Parole in the United States, 2005. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics Bulletin, November NCJ 215091, <https://bjs.ojp.gov/content/pub/pdf/ppus05.pdf>
- Golden, Lonnie. 2015. Irregular Work Scheduling and Its Consequences. Economic Policy Institute, April 9. <https://www.epi.org/publication/irregular-work-scheduling-and-its-consequences/>
- Harris, David A. 2020. Racial Profiling: Past, Present, and Future? American Bar Association. https://www.americanbar.org/groups/criminal_justice/publications/criminal-justice-magazine/2020/winter/racial-profiling-past-present-and-future/

- Hester, Thomas. 1987. Probation and Parole 1986, *Bureau of Justice Statistics Bulletin*, December, <https://bjs.ojp.gov/content/pub/pdf/pp86.pdf>
- Hinton, Elizabeth K., Henderson, LeShae and Reed, Cindy. 2018. An Unjust Burden: The Disparate Treatment of Black Americans in the Criminal Justice System, Vera Institute, <https://www.vera.org/publications/for-the-record-unjust-burden>
- Hirsch, Barry T., Macpherson, David A. and Even, William E. 2024. “Union Density, Private Sector.” <http://www.unionstats.com/>
- Hudak, John. 2021. Reversing the War on Drugs: A Five-Point Plan. Brookings, www.brookings.edu/articles/reversing-the-war-on-drugs-a-five-point-plan
- Jacobs, David and Dixon, Marc. 2010. Political Partisanship, Race and Union Strength from 1970 to 2000: A Pooled Time-Series Analysis. *Social Science Research* 39:1059-1072.
- Johnson, Carrie. 2022. Released During Covid, Some People are Sent Back to Prison with Little or No Warning. NPR, WNYC, August 22. <https://www.npr.org/2022/08/22/1118132380/released-during-covid-some-people-are-sent-back-to-prison-with-little-or-no-warn>
- Kaeble, Danielle. 2021. Probation and Parole in the United States, 2020. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, NCJ303102, December, <https://bjs.ojp.gov/content/pub/pdf/ppus20.pdf>
- Lartey, Jamiles. 2024. More States Restricting “Excited Delirium” as Cause of Death in Police Custody. The Marshall Project ‘Closing Argument’ Newsletter. Accessed 7.19.24 www.themarshallproject.org/2024/06/15/police-custody-excited-delirium-meaning.
- Legend, John. 2016. ‘We Will Not Sit on the Sidelines’: John Legend’s Proposal for Ending Mass Incarceration. AFL-CIO Criminal Justice Reform, blog, June 7,

<https://aflcio.org/2016/6/7/we-will-not-sit-sidelines-john-legends-proposal-ending-mass-incarceration>

Linderman, Kate. 2024. Are Marijuana Laws at Stake this Election? What's on the Ballot in some States. *Miami Herald* <https://www.msn.com/en-us/news/other/are-marijuana-laws-at-stake-this-election-what-s-on-the-ballot-in-some-states/ar-AA1sw7MX?ocid=BingNewsSerp>

Malayshev, Alex and Ganley, Sarah. 2024. Update on the DEA's Efforts to Reschedule Cannabis: What You Need to Know. Reuters, Sept. 11, <https://www.reuters.com/legal/litigation/update-deas-efforts-reschedule-cannabis-what-you-need-know-2024-09-11/>

Maruschak, Laura M. , Bronson, Jennifer and Alper, Mariel. 2021. Medical Problems Reported by Prisoners. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, NCJ 252644, June, <https://bjs.ojp.gov/sites/g/files/xyckuh236/files/media/document/mprpspi16st.pdf>

McCann, Sam. 2022. Health Care Behind Bars: Missed Appointments, No Standards, and High Costs. Vera. <https://www.vera.org/news/health-care-behind-bars-missed-appointments-no-standards-and-high-costs>

Milkman, Ruth and Luce, Stephanie. 2017. Labor Unions and the Great Recession. *RSF: The Russell Sage Foundation Journal of the Social Sciences*. 3(3):145-165.

Naples, Michele I. 2022. "Estimating the Savings from Decriminalizing Drug Consumption: The Case of New Jersey," *Rutgers Journal of Law & Public Policy* 19(2) (Spring):354-423.

_____. 2023. How Large is Unemployment and its Impact on Workers' Economic Leverage? *Review of Radical Political Economics* 55(4) (December).

Nellis, Ashley. 2016. The Color of Justice: Racial and Ethnic Disparity in State Prisons 10, Sentencing Project, <https://www.sentencingproject.org/publications/the-color-of-justice-2016-report>.

Davis, Jason. 2021. Testimony on the Drug War. In Abolish the Drug War New Jersey, 2021, Abolish the Drug War New Jersey Coalition Launch Event, July 13, virtual, video 12:30 – 17:30, <https://www.youtube.com/watch?v=qJOtnZQW-FU>.

Obasogie, Osagie K. 2021. Excited Delirium and Police Use of Force, *Virginia Law Review* 107, 1545, 1560-61 (2021).

Palley, Thomas I. and LaJeunesse, Robert M. 2007. Social Attitudes, Labor Law, and Union Organizing: Toward a New Economics of Union Density. *Journal of Economic Behavior and Organization* 62:237-254.

Pew Research Center. 2015. The Rise in Dual Income Households. Pew Research Center, https://www.pewresearch.org/ft_dual-income-households-1960-2012-2/

Physicians for Human Rights (PHR). 2023. PHR Welcomes American College of Emergency Physicians (ACEP) Policy Reversal on “Excited Delirium,” Calls for Further Action. PHR Press Release, May 9, <https://phr.org/news/physicians-of-human-rights-welcomes-american-college-of-emergency-physicians-acep-policy-reversal-on-excited-delirium-calls-for-further-action/#:~:text=A%20March%202022%20PHR%20report,Black%20men%20in%20police%20custody>.

Prison Policy Initiative. 2022. *State and Federal Prison Wage Policies and Sourcing Information*, https://www.prisonpolicy.org/reports/wage_policies.html [https://web.archive.org/web/20220414083352/https://www.prisonpolicy.org/reports/wage_policies.html] (last visited Mar. 31, 2022)

_____. 2023. The Whole Pie. Prison Policy Initiative,
<https://www.prisonpolicy.org/reports/pie2023.html>

Puglisi, Lisa, Calderon, Joseph P. and Wang, Emily A. 2017. What Does Health Justice Look Like for People Returning from Incarceration? *AMA Journal of Ethics* 19(9) (Sept.):903-910.

Reich, Adam D. and Prins, Seth J. 2020. The Disciplining Effect of Mass Incarceration on Labor Organization. *American Journal of Sociology* 125(5) (March):1303-1344.

Sawyer, Wendy. 2017. How Much do Incarcerated People Earn in Each State? Prison Policy Initiative, Blog (April 10). <https://www.prisonpolicy.org/blog/2017/04/10/wages>.

Schor, Juliet B. and Bowles, Samuel. 1987. Employment Rents and the Incidence of Strikes. *Review of Economics and Statistics* 69(4) (Nov.):584-592.

Seligman, Eric and Nam-Sonenstein, Brian. 2024. 10 Ways that Mass Incarceration is an Engine of Economic Injustice. Prison Policy Institute,
https://www.prisonpolicy.org/blog/2024/08/27/economic_justice/

Sentencing Project. 2023. Prison Population Over Time.
<https://www.sentencingproject.org/research/>

Sprick, Emerson. 2022. What Share of the Unemployed Receive Unemployment Insurance? Context, Trends and Influences. Bipartisan Policy Center, Accessed 7.27.24
<https://bipartisanpolicy.org/explainer/what-share-of-the-unemployed-receive-unemployment-insurance-context-trends-and-influences/#:~:text=A%20vital%20measure%20of%20reach%20and%20effectiveness%20of,UI%20and%20how%20many%20successfully%20apply%20for%20UI>.

Sterling, Eric E. 2014. Is the War on Drugs Helping to Keep You Unemployed or Underpaid? A Worker's Guide to the War on Drugs. Working paper,

<https://static1.squarespace.com/static/53ce893fe4b076d747fd326e/t/53d2b935e4b02f566edfc5a1b/1406318901231/War+on+Workers.pdf>

Surgeon General of the US. 2015. Facing Addiction in America; The Surgeon General's Report on Alcohol, Drugs, and Health. US Department of Health and Human Services, <https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf>

Sustar, Lee. 2018. Black Power at the Point of Production, 1968-73. *International Socialist Review* # 111

Thornicroft, Kenneth W. 1990-91. The War on Drugs Goes to Work: Employer Drug Testing and the Law. *Ohio Northern University Law Review* 17:771-784.

Union County Jail Inmates v. Scanlon (James)(Union County), US District Court for the District of New Jersey – 537 F. Supp. 993 (DNJ 1982) April 27, 1982, <https://casetext.com/case/union-county-jail-inmates-v-scanlon>

U.S. Bureau of Labor Statistics. 2024. Unemployment Rate. In St. Louis Federal Reserve Bank, FRED Economic Data, <https://fred.stlouisfed.org/series/UNRATE>

_____. 2024. Total Unemployed, Plus All Persons Marginally Attached to the Labor Force, Plus Total Employed Part Time for Economic Reasons, as a Percent of the Civilian Labor Force Plus All Persons Marginally Attached to the Labor Force (U-6). In St. Louis Federal Reserve Bank, FRED Economic Data, <https://fred.stlouisfed.org/series/U6RATE>

U.S. Census Bureau. 2024. Table F-12. Number of Earners—Families by Median and Mean Income: 1947-2022. Current Population Survey, 1948 to 2023 Annual Social and Economic Supplements (CPS ASEC), accessed 6.24.2024 <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-families.html>

US Department of Justice, Bureau of Justice Statistics (DOJ BJS), 1984. Probation and Parole 1983. US Department of Justice, Bureau of Justice Statistics, NCJ No. 94776, December, <https://bjs.ojp.gov/content/pub/pdf/pp83.pdf>

_____. Various years. *Sourcebook of Criminal Justice Statistics*. US Department of Justice, Bureau of Justice Statistics.

_____. Various years. *Correctional Populations in the United States, [Year] – Statistical Tables*. US Department of Justice, Bureau of Justice Statistics.

USAFacts Team.2021. Police Departments in the US: Explained. USAFacts <https://usafacts.org/articles/police-departments-explained/>

Van Arnum, Bradford and Naples, Michele I. 2013. “Financialization and Income Inequality in the United States, 1967-2010,” *The American Journal of Economics and Sociology*. 72(5) (October):1158-1182.

Vera. 2023. Incarceration Statistics. Vera. <https://www.vera.org/ending-mass-incarceration/causes-of-mass-incarceration/incarceration-statistics>

Wang, Leah and Bertram, Wanda. 2022. New Data on Formerly Incarcerated People’s Employment Reveal Labor Market Injustices. Prison Policy Institute, <https://www.prisonpolicy.org/blog/2022/02/08/employment/>

Western Bruce and Beckett Katherine. 1999. “How Unregulated Is the US Labor Market? The Penal System as a Labor Market Institution.” *The American Journal of Sociology* 104(4):1030–1060.

Whittaker, Julie M. 2015. Taxation of Unemployment Benefits. Congressional Research Service Report 7-5700, Nov. 16, <https://sgp.fas.org/crs/misc/RS21356.pdf>

Wicks-Lim, Jeannette. 2024. Revising the Racial Wage Gap among Men in the United States: The Role of Nonemployment, Underemployment, and Incarceration. *Review of Black Political Economy* 51(3)(September):362-400.

Table 1

Econometric Results for Union Members' Private-Sector Employment Share, Logged Values

Includes Effects of Incarceration, 1973-2019, and Probation, 1977-2019[^]

	1973-2019		1977-2019		1977-2019		1977-2019
	Eq. 1		Eq. 2		Eq. 3		Eq. 4
Intercept	9.765282		9.387909		9.415722		9.550292
	26.63	***	23.44	***	21.95	***	26.34
>1Earner	0.822034		0.671914		0.672363		1.8658
	2.08	**	1.53		1.37		10.4
UIRecip	0.011839		0.077803		0.077084		0.224714
	0.2		1.21		1.19		3.31
U rate	-0.07013		-0.05856		-0.06022		0.037626
	-1.69	*	-1.34		-1.31		1.21
UHprev4yrs	-0.02243		-0.00044		0.001892		0.099057
	-0.41		-0.01		0.03		1.87
Incarc L Rate	-1.05787		-1.04914		-0.95466		
	-8.37	***	-7.77	***	-3.2	***	
Probation L Rate					-0.09904		-0.99692
					-0.35		-17.83
<i>Eq. statistics</i>							
Rho	0.902376		0.890257		0.908244		0.364541
Transformed							
D-W	1.982341		2.191857		2.249859		1.97578
R ²	0.9972		0.9978		0.9975		0.9970
Adjusted R ²	0.9968		0.9975		0.9971		0.9966
Observations	47		43		43		43
F-statistic	2876.61	***	3345.86	***	2428.26	***	2467.94

[^]Coefficient estimates; t-statistics underneath, marked as significant at the * 10%, ** 5%, *** 1% level

2-tailed tests for unemployment variables, otherwise 1-tailed tests

Table 2
Econometric Results for Union Members' Private-Sector Employment Share, Logged Values
Includes Effects of Incarceration, Probation and Parole, 1979-2019^

	Eq. 5		Eq. 6		Eq. 7	
Intercept	9.401633		9.167867		9.25931	
	23.38	***	24.53	***	25.78	***
>1Earner	0.708341		1.423747		1.676083	
	1.62	*	5.23	***	6.18	***
UIRecip	0.0784663		0.2589396		0.2547804	
	1.19		4.17	***	4.2	***
U rate	-0.0565566		0.0016886		0.0190484	
	-1.3		0.05		0.65	
UHprev4yrs	0.0027366		0.0811176		0.0838773	
	0.05		1.64		1.91	*
Incarc L Rate	-1.06082		-0.3584176		0.0885099	
	-7.67	***	-1.54		0.3	
Probation L Rate			-0.6818384		-0.9059769	
			-2.58	***	-3.7	***
Parole L Rate					-0.2746233	
					-1.78	**
Eq. Statistics						
Rho	0.8751059		0.2879916		0.1142581	
Transformed D-W	2.104471		1.889559		1.834993	
R ²	0.9981		.9969		.9930	
Adjusted R ²	0.9978		.9964		.9915	
Observations	41		41		41	
F-statistic	3587.15	***	1821.69	***	669.88	***

^Coefficient estimates; t-statistics underneath, marked as significant at the * 10%, ** 5%,
*** 1% level
2-tailed tests for unemployment variables, otherwise 1-tailed tests

Endnotes

¹ The FBI refers to these as estimated arrest numbers. A better word might be approximate.

When some police departments fail to report, at least in recent years, there has been no imputation of arrests. The totals are simply lower than they would otherwise be.

² Seligman and Nam-Sonenstein (2024) report that 83 percent will prove to be innocent.

³ CSG 2019 reports 25% of admissions to state prisons are for technical violations of probation or parole.

⁴ The current \$5 copay to access health services takes 3 days to earn, see Sawyer 2017, Prison Policy Initiative 2022.

One-third to two-fifths of those incarcerated have chronic health conditions (Maruschak et al., 2016:1). For the period they are in jail or prison, the institution controls their medication(s) and access to treatment. Someone with PTSD on anti-depressants may see their medication interrupted for weeks until they can be evaluated by a prison doctor and a prescription delivered. That prison doctor has the right to suspend medications previous doctors had ordered. Prisons often fail to get prisoners to medical appointments, provide transition drugs when they get out, or assist in re-enrolling them for Medicaid coverage (McCann, 2022; Puglisi et al., 2017).

⁵ An example would be a handcuffed prisoner lying on the floor face down with several police holding him down, one's knee pressed into his back or neck.

⁶ Da Silva Bhatia et al. 2022. Taser had always insisted its weapons would only stun people; a growing body of evidence confirmed tazing could be lethal, see Obasogie 2021.

⁷ The Da Silva Bhatia et al. 2022 study sponsored by Physicians for Human Rights has succeeded in convincing national medical-examiner organizations (NAME and ACEP) to abandon this diagnosis, see PHR (2023). California, Colorado, and Minnesota have outlawed the diagnosis, New York and Hawaii are considering doing the same (Lartey 2024).

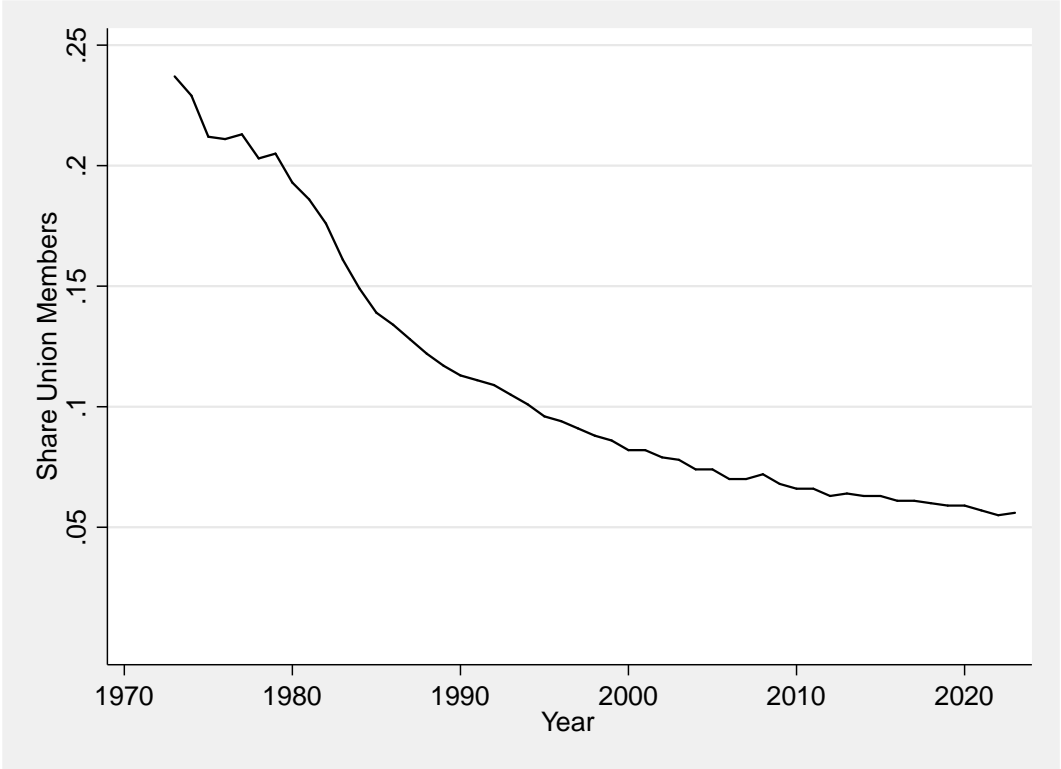
⁸ A NJ youth and his friend were walking to play basketball when two undercover police officers decided they were probably hiding drugs in their bodies (Jason Davis testimony in Abolish the Drug War New Jersey, 2021). The officer stopped the 14-year-old, pulled down his pants in the middle of the street, and searched his anal cavity for drugs, finding none. His friend fought them off and suffered a broken jaw. This is public anal rape and attempted rape under the guise of law enforcement.

⁹ Those incarcerated are added to the labor force, and, with probationers and parolees (who would be included in the standard labor force), are added to the number of unemployed in the numerator.

¹⁰ Irregular work (Golden 2015) and the emergence of the “gig” economy would also put people’s eligibility for unemployment insurance at risk and reduce reciprocity.

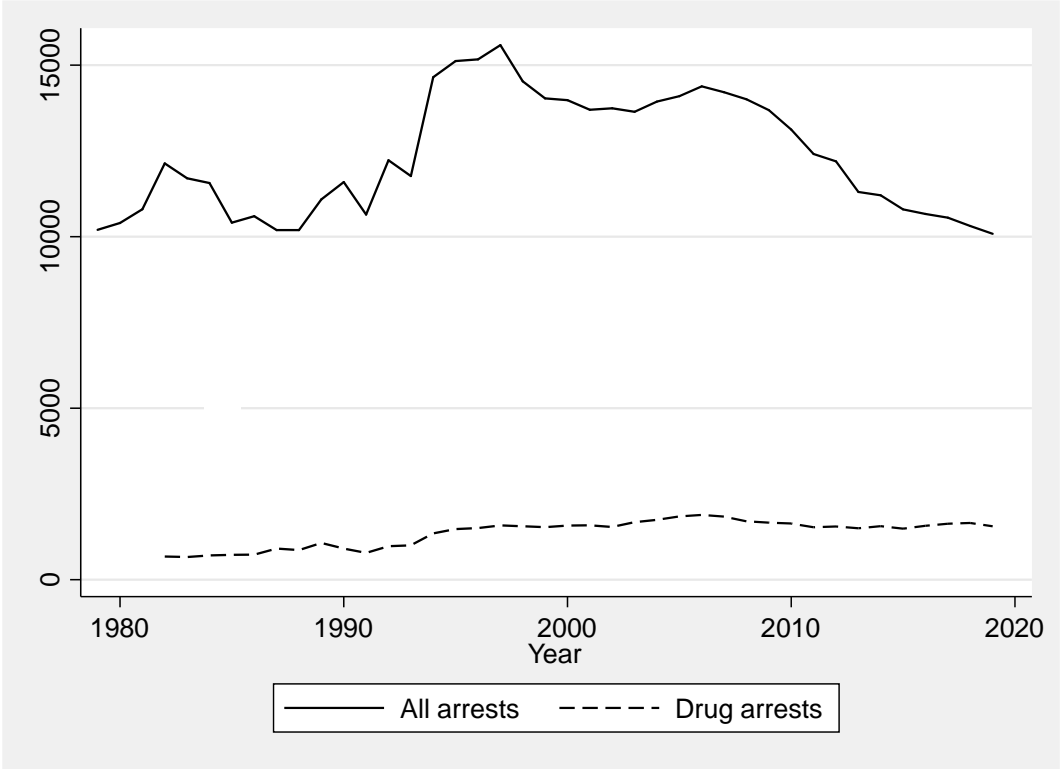
¹¹ Dropping the incarceration labor rate did not substantially change these results, except to strengthen the statistical significance of the probation and parole measures.

Figure 1
Union Members' Employment Share, Private Sector, 1973-2023



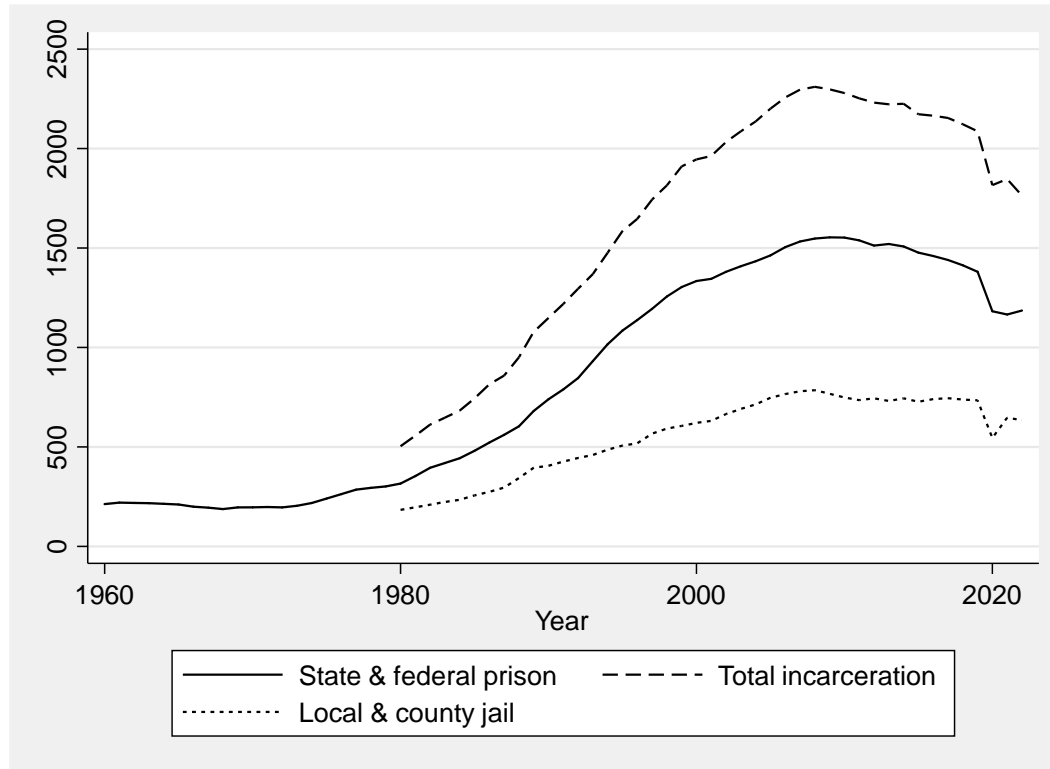
Hirsch et al., 2024

Figure 2
Number of Arrests, 1979-2019,
and Number of Arrests for Drug Violations, 1982-2019, in Thousands



FBI

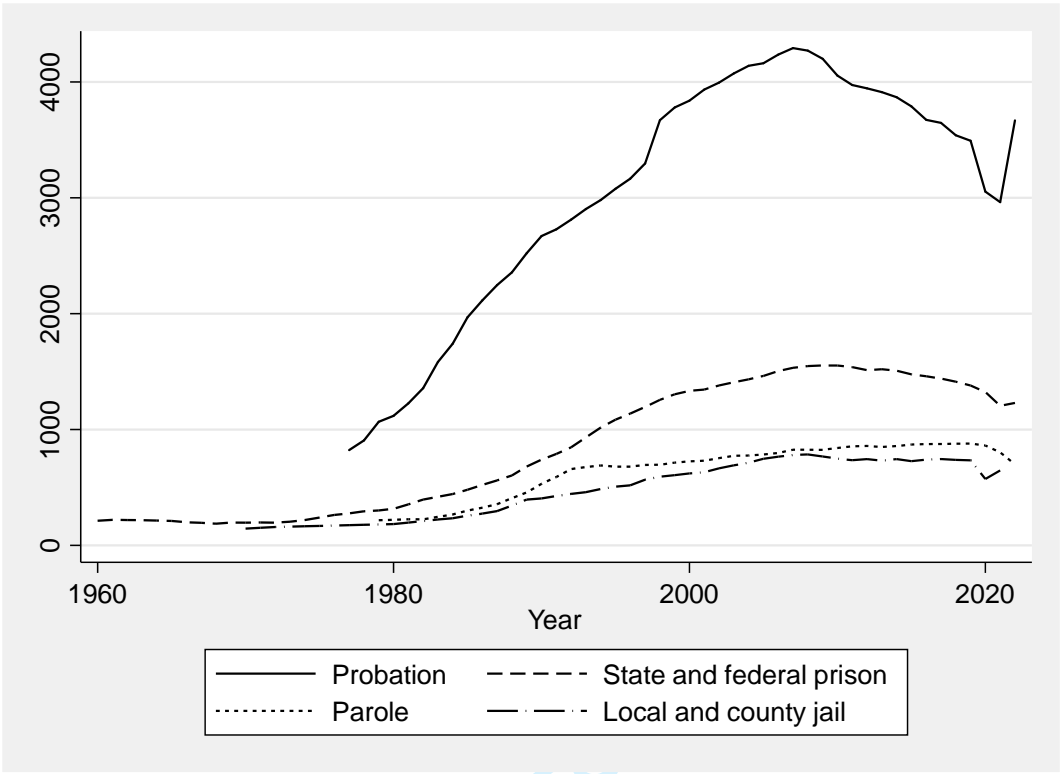
Figure 3
Prison Incarceration, 1960-2021,
Jail and Total US Incarceration, 1981 – 2021, in Thousands



Solid curve from data in Sentencing Project (2023), 1960-2020

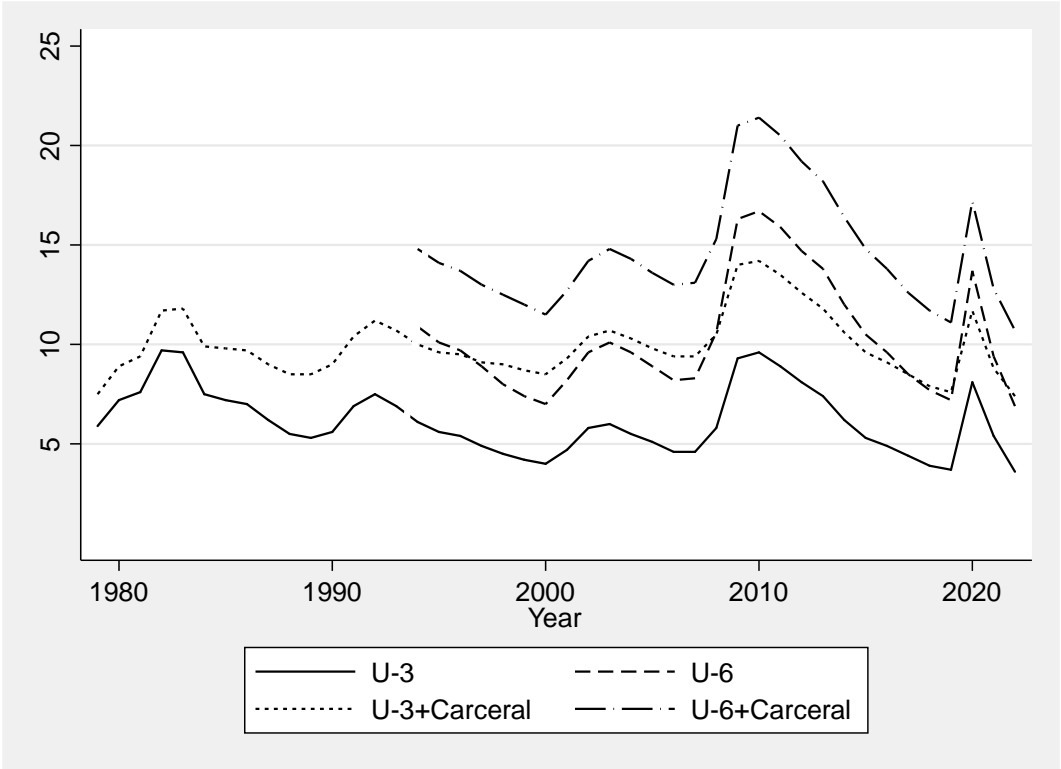
Other curves from data in Vera (2023), 1980-2021

Figure 4
Number on Probation, in Prison, on Parole or in Jail, 1977-2022, in Thousands



US DOJ BJS

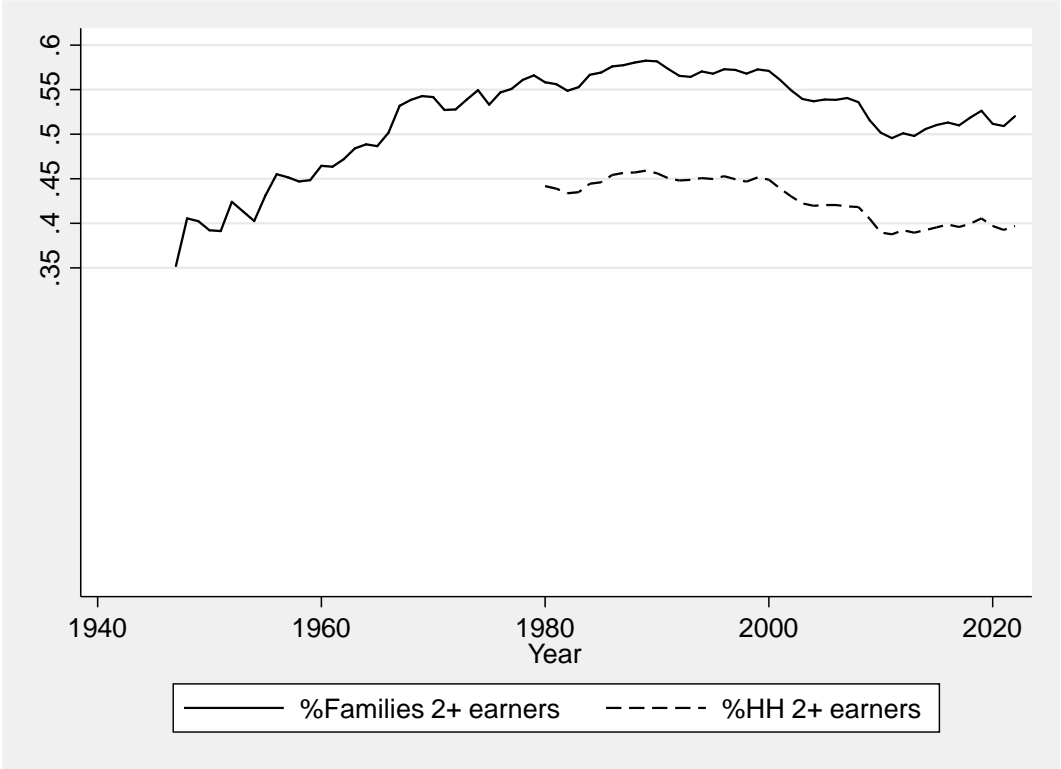
Figure 5
U-3, and U-3 plus those under Carceral Control,
U-6, and U-6 plus those under Carceral Control



U-3, U-6 from BLS in St. Louis FRED

Explanation for construction of the Carceral rate is explained in the text.

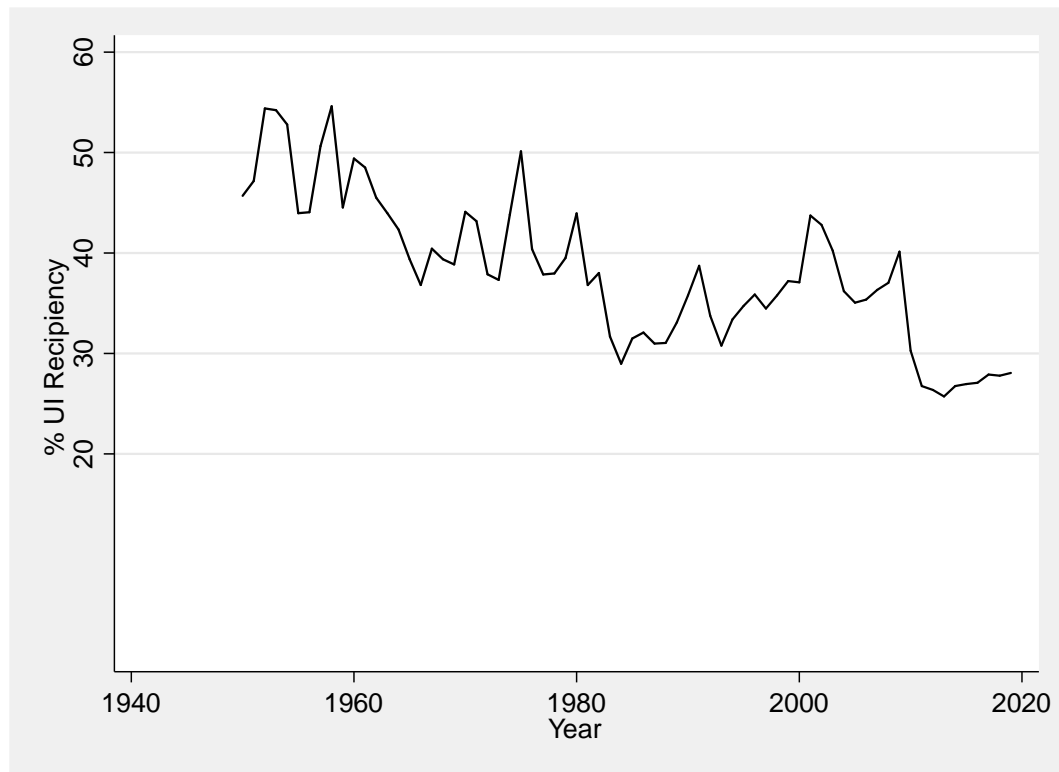
Figure 6
Multi-Earner Families and Households



US Census (2024)

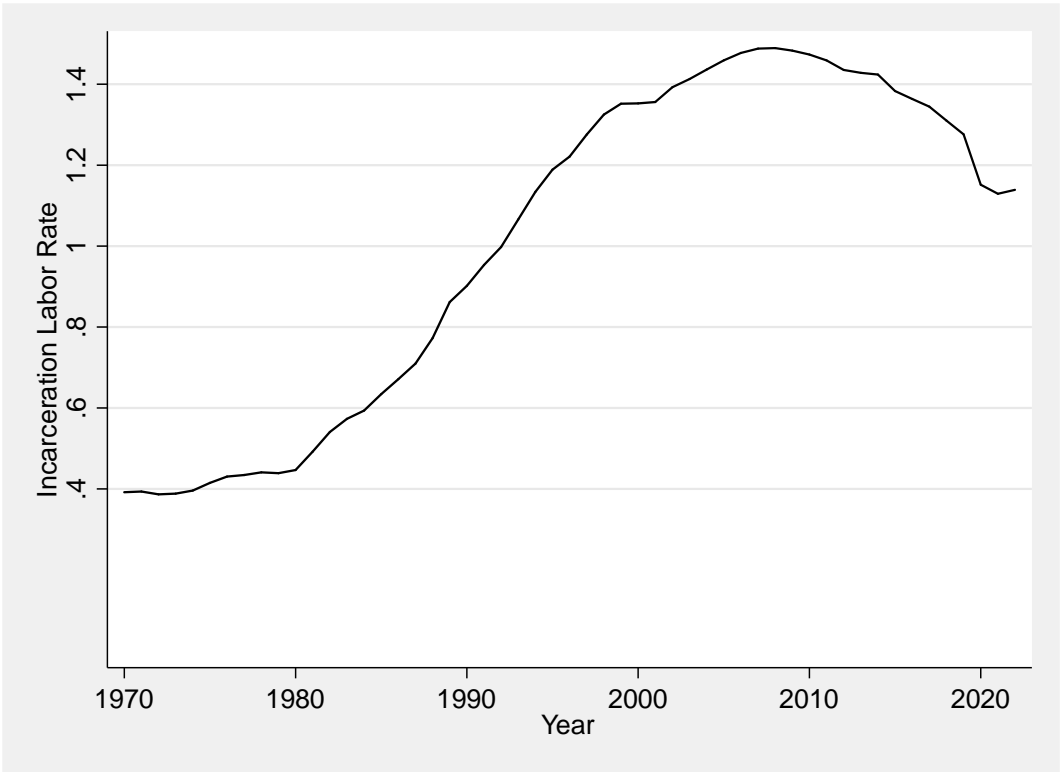
Figure 7

Percent of the Unemployed Receiving Unemployment Compensation
(Unemployment Recipency), 1950-2019



Sprick (2022)

Figure 8
Incarceration Labor Rate, 1960-2022



See text for definition.