

# Criminal Justice Contact and Indebtedness in Young Adulthood: Investigating the Potential Role of State-level Hidden Sentences

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#### Abstract

Contact with the American criminal justice system is associated with socioeconomic disadvantage and financial insecurity, but little research has explored the link between criminal justice contact and indebtedness. In this study, we ask whether contact in young adulthood is associated with access to credit and unsecured debt burdens. We also focus on state-level policies that operate alongside official punishments and restrict citizenship and societal participation among the justice-involved (termed hidden sentences), and ask whether such policies moderate the association between criminal justice contact and indebtedness. We find that criminal justice contact, especially incarceration, is associated with reduced access to unsecured credit and greater absolute and relative debt burdens. These associations are strongest for individuals residing in states with more onerous hidden sentence regimes. We argue that indebtedness is a key socioeconomic consequence of criminal justice contact and that hidden sentences may exacerbate these consequences.

### Keywords

criminal justice system, incarceration, debt, hidden sentences

## Introduction

After decades of growth, the American criminal justice system has become a powerful engine of socioeconomic inequality. The reliance on punishment in the United States is often conceptualized as part of a neoliberal ideology that favors punishment over the welfare state as a strategy for governing the poor (Beckett and Western 2001; Wacquant 2009). Formal sanctions issued by a judge are paired in the United States with a complex, and largely hidden, system of state policies that create social exclusion through the termination of parental rights, fines and fees, restrictions on the right to vote, limitations on social welfare benefits, occupational restrictions, and other penalties. Together, they serve to "chip away at critical ingredients of the support systems of poor people in this country" (Travis 2002:18). Such restrictions are often implicated in the consequences of incarceration (see Pager 2007; Western 2002), but their potential role in the link between incarceration and

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Cody Warner, Department of Sociology and Anthropology, Montana State University, 2-128 Wilson Hall, Bozeman, MT 59717, USA. Email: cody.warner@montana.edu socioeconomic inequality has been largely unexplored (but see Warner, Kaiser, and Houle 2020).

Our study builds on research on the socioeconomic consequences of incarceration, along with recent work on state-level punishment regimes (Hagan, Foster, and Murphy 2020), to explore two primary questions. First, using data from the 1997 cohort of the National Longitudinal Survey of Youth (NLSY97), we ask whether criminal justice contact is linked to access to credit and indebtedness-an important but understudied aspect of socioeconomic inequality in the twenty-first century (Dwyer 2018). Criminal justice contact, particularly incarceration, contributes to labor market inequalities (Wakefield and Uggen 2010), and scholars have recently turned their attention to outcomes such as net worth, assets, and debts (Dwyer, DeMarco, and Haynie 2019; Maroto 2015; Maroto and Sykes 2019; Sykes and Maroto 2016; Turney and Schneider 2016; Zaw, Hamilton, and Darity 2016). We expand this research by examining the relationship between criminal justice contact and unsecured debt that is accrued from credit cards, banks, and other businesses. Unlike secured debts (e.g., home mortgages), unsecured debts have higher interest rates, are more burdensome to repay, and are a source of significant financial distress (Houle and Berger 2017). Our results show that criminal justice contact is associated with a reduced probability of holding debt but elevated debt burdens among those with access.

Second, and our primary contribution, we draw attention to state-level laws and policies, or hidden sentences, that are activated as a result of criminal justice contact and could exacerbate debt burdens among the justiceinvolved. These policies limit access to key elements of full societal participation, and scholars have theorized that such policies may contribute to the collateral consequences of incarceration (Petersilia 2003; Travis 2002; Warner et al. 2020). The number, breadth, and severity of these laws and policies vary considerably across U.S. states (Kaiser 2016). No research to our knowledge has examined whether these policies are linked to unsecured debt burdens, though recent research has begun to explore how states shape outcomes associated with incarceration (Hagan et al. 2020). We ask whether hidden sentences modify the association between criminal justice contact and debt by appending the NLSY97 data with state-level data on total and types of hidden sentences from the National Inventory of the Collateral Consequences of Conviction (NICCC). Findings indicate that the association between criminal justice contact and debt is highest in states with more hidden sentence laws and policies. Our study thus broadens the scope of research on the consequences of incarceration and other forms of criminal justice contact by considering both unexplored sources of socioeconomic inequality and the subnational policies that may exacerbate financial precarity among the justice-involved.

#### Literature Review

Contact with the American criminal justice system has been linked to a range of deleterious socioeconomic outcomes, including decreased educational attainment (Kirk and Sampson 2013), employment struggles (Pager 2007), depressed wages (Western 2002), and withdrawal from the labor market (Apel and Sweeten 2010). Recent research has also shown that these and other consequences extend beyond incarceration to lower level forms of contact (such as arrests and convictions with no incarceration) that are more prevalent (Kohler-Hausmann 2013; Stewart and Uggen 2020; Sugie and Turney 2017; Uggen et al. 2014). Like incarceration, scholars view the mark of other forms of contact as an "absorbing status" that block opportunities across a range of outcomes (Maroto and Sykes 2019).

More recently, scholars have examined how criminal justice contact is implicated in wealth inequality in young adulthood, including outcomes such as net worth, homeownership, and owning a bank account (Maroto 2015; Maroto and Sykes 2019; Remster and Kramer 2018; Schneider and Turney 2015; Sykes and Maroto 2016; Turney and Schneider 2016). Young adulthood is a critical time period for socioeconomic attainment and mobility (Furstenberg 2008) when debt accumulates rapidly (Houle 2014a; Yilmazer and Devaney 2005). But it is also life course stage when the risk of criminal justice contact is high (Wakefield and Apel 2016), making it a critical period for understanding the consequences of criminal justice contact. For example, Maroto and Sykes (2019) found that criminal justice contact-including arrests, conviction, and incarceration-during young adulthood is associated with large declines in assets and debts. This suggests that criminal justice contact may play an important role in shaping young adult's debt and asset acquisition-setting the stage for inequalities that may accumulate across the life course (DiPrete and Eirich 2006). But questions remain.

One limitation is that researchers have not distinguished between different types of debt (see Maroto and Sykes 2019). This is important because some forms of debt (e.g., mortgages) may be wealth enhancing, while other forms of debt (e.g., credit cards, medical debts) can be a barrier to wealth acquisition and upward mobility (Houle and Berger 2017). Combining these diverse debt obligations into a single measure masks the financial burden created by some lines of credit and differential access to these credit instruments. Of particular concern are unsecured debts, which can be difficult to pay, retrospectively imposed, and have become increasingly common in U.S. households.

The expansion of unsecured debt in the United States stems from a series of financial deregulation policies in the late 1970s and 1980s that gave banks more power to control lending, leading to increased profits and the marketing of loans to households who previously did not have access to credit. Like incarceration, scholars have argued that rising unsecured debt is a form of social control that has supplemented or replaced the welfare state (Campbell 2010; Dwyer 2018; Prasad 2012). Average unsecured debt has more than doubled in the past three decades, and indebtedness has become a central feature of financial wellbeing and socioeconomic inequality (Dwyer 2018). But not all debts are created equal or are accessible to all. Socially advantaged populations are more likely to have access to low-cost prospective credit arrangements, while disadvantaged populations are often limited to highcost predatory loans in the fringe banking sector and retrospective debt obligations (Campbell 2010; Dwyer 2018; Leicht and Fitzgerald 2013; Prasad 2012). Although disadvantaged groups may carry lower absolute debt than more advantaged populations, they have higher debt burdens relative to their economic resources (e.g., debt to income [DTI]) and more difficulty repaying these debts (Tach and Greene 2014). Individuals with a history of criminal justice contact disproportionately fall into this group.

# Criminal Justice Contact, Access to Credit, and Indebtedness

How might criminal justice contact influence indebtedness? We argue that the link between criminal justice contact and unsecured debt is a function of two proximal causes: (1) access to prime credit and (2) the need or imposition of debt. Our expectations are displayed in Figure 1, and we argue that criminal justice contact (1) limits access to formal and prime credit markets and (2) increases the likely need for subprime credit or imposition of retrospective debt obligations, leading to elevated debt burdens. But we contend that these proximal financial burdens are in part a function of statelevel policy decisions that create financial burdens for the justice-involved.

Proximally, contact with the criminal justice system may impact access to credit markets through exclusion, avoidance, and poor credit standing. Criminal justice contact results in legal debt through monetary sanctions (Harris, Evans, and Beckett 2010), and this debt can be reported to credit agencies who may see this as a sign of untrustworthiness (see Martin et al. 2018). Recent research also finds that those with a history of criminal justice contact may actively avoid some formal institutions, including banks and other lending agencies (Brayne 2014; Goffman 2009; Remster and Kramer 2018). Banks, hospitals, and other institutions are often legally

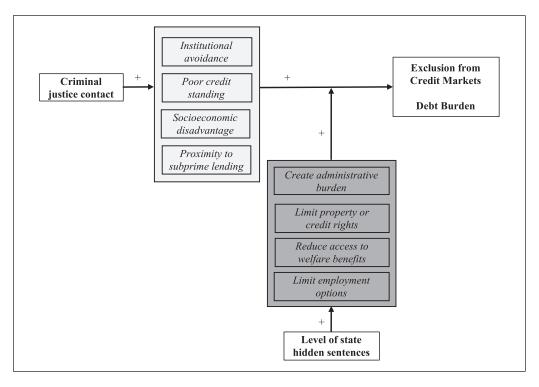


Figure 1. Conceptual model of expected associations between criminal justice contact, state hidden sentences, and debt outcomes.

Note. Key theoretical mechanisms in gray scale.

mandated to keep formal records and require proof of identity, and these data are increasingly used by law enforcement for a range of surveillance purposes. Furthermore, when individuals are removed from society via incarceration, their opportunities to participate in credit markets, like the labor market, are likely limited (Harding et al. 2018). Finally, criminal justice contact could prohibit access to credit because any resulting discrimination and socioeconomic disadvantage could damage an individual's credit standing. Contact at all levels is detrimental to employment prospects (Pager 2007; Uggen et al. 2014), and declines in net worth and homeownership (Maroto 2015; Turney and Schneider 2016) could impede an individual's ability to develop a credit history.

Criminal justice contact is therefore likely to reduce an individual's access to credit markets, but the socioeconomic hardship associated with contact may increase the need for credit and contribute to elevated debt burdens. The now widespread availability of credit means that some lines will remain available to the justice-involved, and the need for credit is likely high given that justice-involved populations struggle to find stable employment, and face pressure to repay legal debts and other past due bills. This could push those marked by the system into the fringe banking industry, where payday, title, and other types of loans bring high interest rates and unfavorable repayment options.

Indeed, those who participate in the fringe banking sector often borrow to cancel other debts or pay bills (Pew Research Center 2012). Payday lending and subprime small dollar loan store fronts are also concentrated in economically distressed communities where justiceinvolved populations tend to reside (Faber 2019; Friedline and Kepple 2017; Kubrin et al. 2011; Massoglia, Firebaugh, and Warner 2013), which may increase the opportunity and attractiveness of these credit instruments. Thus, contact with the criminal justice contact could both limit access to credit and contribute to greater absolute amounts borrowed among those who go into debt, and higher relative debt burdens relative to economic resources.

Only one study to our knowledge has examined the link between criminal justice contact and unsecured debt. In an unpublished working paper, Dwyer and colleagues (2019) examined the probability of debt-holding and found that the justice-involved are less likely to have credit card debt, but more likely to have other retrospective debt obligations than their peers, supporting our theoretical argument above. We extend this work and ask whether criminal justice contact is associated with both the probability of debt-holding and levels of absolute and relative debt burdens, and consider the role of the state policy environment in shaping the financial burdens of criminal justice contact.

# State-level Hidden Sentences and Indebtedness

Credit and the need or imposition of debt obligations are the proximal mechanisms linking criminal justice contact and indebtedness. However, the financial precarity of the justiceinvolved may also be a function of the broader policy environment within which they are embedded (Hagan et al. 2020; Warner et al. 2020). Criminal convictions in the United States trigger a series of state-level laws, policies, and restrictions that limit or alter an individual's full participation in society, what we refer to as hidden sentences.1 These hidden sentences are numerous, diverse, and wideranging (Kaiser 2016). Among other things, they restrict the justice-involved from obtaining certain occupational or professional licenses, holding a driver's license, residing in certain areas, accessing educational and public assistance loans, or receiving public and private welfare benefits (Beckett and Herbert 2010; Petersilia 2003; Travis 2002). Hidden sentences operate largely outside of public and legal view (Travis 2002), and are thus difficult to document and measure. However, a collaboration between the American Bar Association (ABA) and the National Institute for Justice has resulted in a comprehensive database of hidden sentences through the NICCC (described in detail below).

Figure 2 shows state variation in the number of policies that specify hidden sentences. On the low end of the spectrum are states like Vermont, Minnesota, and New Mexico, where hidden sentences broadly impact all areas of societal participation through a relatively lower number of policies. On the high end are states like California, Illinois, and Louisiana, which tend to have proportionately higher numbers of hidden sentences targeting employment and business activities, educational access, government programs and social services, and civic and privacy rights.

We argue that hidden sentences may play a role in the debt-related consequences of criminal justice contact for at least two reasons. First, given their scope, hidden systems may alter how individuals interact with credit markets following criminal justice contact. With an average of more than 500 laws specifying more than 800 specific hidden sentences across U.S. states, hidden sentence regimes could create an administrative burden that negatively impacts access to different types of credit. As institutions increase in size and complexity, individuals encounter increased learning, compliance, and psychological costs of participation that can ultimately lead to avoidance or noncompliance (Herd and Moynihan 2019). Participation costs may be particularly high related to hidden sentences because they are dispersed throughout hundreds of state codes with few resources directed toward helping individuals understand all restrictions (Kaiser 2016). A single hidden sentence-even as restrictive as a driver's license suspension—may be easier to navigate than diverse and wide-ranging restrictions that each chips away at various citizenship rights. Large numbers of hidden sentences are thus likely to accumulate and create burdens that push individuals away from key social institutions. As such, we expect the size of a state's hidden sentence regime to exacerbate criminal justice contact

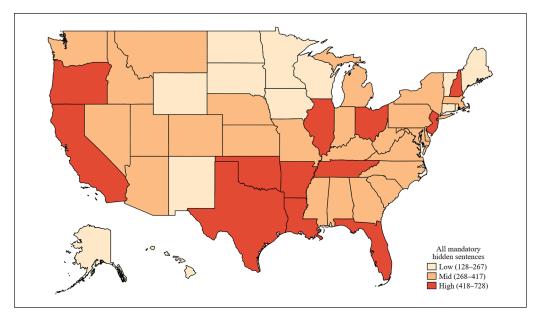


Figure 2. Mandatory state hidden sentence laws in the United States. Note. Authors' calculations based on National Inventory of the Collateral Consequences of Conviction data.

due to the number and variety of ways hidden sentences control societal participation.

Second, hidden sentences may also increase indebtedness through their impact on access to credit markets, restrictions on social services, or occupational and employment restrictions. Hidden sentences can formally restrict property and credit rights, thereby limiting individuals' access to prime credit markets. For example, the justice-involved may face civil forfeiture of cash, vehicles, homes, and personal property that is even tangentially or suspected of being related to a crime (Kaiser 2016). Hidden sentences also include civil fines, liens, and withholdings in addition to legal debt through criminal fines and fees. Hidden sentences may then require the reporting of any debt related to criminal justice contact to credit agencies, directly disqualifying individuals from government-sponsored loans and damaging credit.

Hidden sentences could also exacerbate the financial consequences of criminal justice contact by reducing access to social services, thereby increasing the need for credit. Numerous laws deny access to public benefits like food-stamp programs, social security, medical benefits, or residence in public housing. More recently, the Small Business Administration (SBA) limited COVID-19 relief programs aimed toward small businesses to those without a criminal history (Collateral Consequences Resource Center 2020). If individuals are more likely to turn to credit when the welfare state is reduced (Prasad 2012), then the presence of hidden sentences could increase absolute and relative debt burdens.

Finally, hidden sentences may increase debt burdens by creating labor market barriers. Some hidden sentences directly restrict individuals' ability to work in certain jobs (often including all civil service positions in a state) or allow occupational licenses to be denied based on criminal justice contact (such as barbering and beautician services). Others may discourage employers from hiring justice-involved individuals by restricting business licenses or funding and programs directed toward business or agricultural purposes. And restrictions on driver's licenses can make labor force participation problematic, geographically limiting the scope of potential employment options. All of this can complicate the ability to work and earn

a competitive wage, thus increasing the need for credit to supplement wages and potentially increasing indebtedness.

In sum, criminal justice contact may restrict access to some forms of credit while also increasing the need for debt and credit. If this is the case, we would expect (as shown in Figure 1) that the link between criminal justice contact and indebtedness would be exacerbated in states that impose greater numbers of postconviction penalties, especially those tied to credit, social welfare benefits, or the labor market.

# Data and Method

We draw individual-level data from the NLSY97, a nationally representative longitudinal sample of 8,894 young men and women who have been followed for 17 survey waves since 1997. Respondents were 12 to 16 years old at the time of the first interview, and 30 to 36 years old at the most recent round of data collection. Previous research has used the NLSY97 data to examine the consequences of incarceration (Apel and Sweeten 2010; Sugie and Turney 2017), as well as the causes and consequences of debt (Houle 2014a; Houle and Warner 2017).

State-level data on hidden sentences are from the NICCC, a collaborative effort of the ABA and the National Institute of Justice that identifies all postconviction hidden sentences in all U.S. jurisdictions. The database covers a broad range of hidden sentences, including those connected to employment, occupational licensing, access to benefits, voting, housing, and education (see https://niccc.csgjusticecenter.org/). Additional state-level characteristics (see below) are drawn from the U.S. Census, American Community Survey, Bureau of Justice Statistics, and the University of Kentucky Center for Poverty Research National Welfare Data (2019). State-level data were linked to a restricted version of the NLSY97 that includes state of residence at each survey wave. After accounting for respondents with missing data on debts and assets (n = 1,561) and all other study variables (n = 258), our final analytic sample is 7,165 respondents.

# Unsecured Debt

Respondents are asked questions about types and amounts of assets and debt holdings at approximately ages 20, 25, and 30 as part of the NLSY97 young adult asset modules (YAST).<sup>2</sup> Our measure of unsecured debt includes credit card debt (for current and closed credit cards), loans obtained through a bank or credit union, and debt owed to stores or businesses. We hypothesize that criminal justice contact may be associated with the presence of debt, debt amounts, and debt burdens, and therefore create three dependent variables: (1) any reported consumer debt (1 = yes), (2) amount of debt among debtors (in dollars), and (3) a dichotomous measure of debt burden, indicating whether or not a respondent has an unsecured DTI ratio greater than 30 percent (1 = yes). Individuals with debt burdens are likely to face significant financial distress as a result of that debt, have difficulty paying down this debt, and have problems qualifying for additional loans (del Río and Young 2008; Kennan 2018). In supplementary models, we also separated consumer debt into its component parts of credit card debt and debt owed to businesses or banks. We adjust reported debt for inflation and standardized it to reflect 2010 dollars using the Consumer Price Index.<sup>3</sup>

## Criminal Justice Contact

Our focal independent variable captures criminal justice contact between the measurement of the age 25 and 30 debt variables. At each interview, respondents are asked detailed questions about their system contacts since the last interview. Those who report an arrest are asked follow-up questions about convictions and incarcerations. Given that the vast majority of hidden sentences (see below) are applicable to those with at least a criminal conviction, we create a series of mutually exclusive dummy variables that capture individuals who were convicted between ages 25 and 30 with no subsequent incarceration and those who are incarcerated between ages 25 and 30. Individuals can also be coded as having experienced an incarceration through a residence item, indicating that a respondent's current dwelling is jail, prison, or a work release facility. Those with only an arrest (with no other action) or with no criminal justice contact are in the reference category.<sup>4</sup>

## Hidden Sentences

The NICCC contains a comprehensive list of hidden sentence laws that could impact individuals with criminal convictions. We aggregate the online database to the state level for a total of all hidden sentence laws in each state, focusing on those that are classified as mandatory (i.e., do not involve any discretionary action to be activated). We use a count of hidden sentence laws for several reasons. First, it is the most direct measure of the administrative burden resulting from the scope of hidden sentences that the justice-involved must navigate postconviction. Second, states with greater numbers of total hidden sentences are also more likely to score highly on other measures of severity, such as having hidden sentences that are permanent (or specify no relief), or wide-ranging (i.e., they apply to broad rather than specific offenses).5 And third, given that we do not know the precise hidden sentences applicable to any given offender (see the "Discussion" section for more on this), a total count of mandatory restrictions avoids speculation about how particular hidden sentences directly or indirectly impact the lived experiences of the justice-involved. That said, the NICCC data include descriptive categories that allow us to isolate theoretically relevant categories of hidden sentences related to (1) credit or property rights, (2) access to social welfare benefits, and (3) employment or occupational licensing. For each measure of hidden sentences, we use the percentile distribution to classify states using a three-category measure: low hidden sentence state (<25th percentile; referent), moderate hidden sentence state (25th-75th percentile), and high hidden sentence state (>75th percentile). For those who report criminal justice contact between YAST 25 and YAST 30, we take the number of hidden sentence laws in the state of residence at

the time of the arrest. For those without contact, we take the number of hidden sentences in the state of residence at the time of the YAST 25 interview.<sup>6</sup>

# **Control Variables**

Like other studies in this area, reverse causality and unobserved heterogeneity are a source of concern in observational research. We leverage the longitudinal data-which include repeated measures of our independent and dependent variables, and detailed data on respondents' social backgrounds-and statelevel data to adjust for a range of characteristics that may confound our association of interest. First, to ensure that our focal association is not biased by prior debt and criminal justice contact, we control for lagged measures of our independent and dependent variables, including lagged unsecured debt from the YAST-25 module and lagged criminal justice contact (1 = convicted or incarcerated before)age 25). Second, given that young adults from some sociodemographic groups are disproportionately likely to have high debt burdens (Houle 2014a, 2014b) and have contact with the criminal justice system (Wakefield and Uggen 2010), we include controls for gender (1 = male), race (white [referent], black, other race), and parent education (less than or equal to high school [referent], some college, college degree).<sup>7</sup> Third, those with lower levels of adult attainment are more likely to have contact with the criminal justice system (Western 2006), and have higher unsecured debt burdens, and more difficulty accessing credit, than their more advantaged counterparts (Houle and Berger 2017). We therefore control for educational attainment (less than or equal to high school degree [referent], some college, and 4-year college degree), wages (coded in thousands of dollars), full-time employment status (1 = yes), homeownership (1 = yes), and coresidence with parents (1 = yes). Given variation in assets, debts, and criminal justice contact by household status (Killewald, Pfeffer, and Schachner 2017; Sampson and Laub 1990), we control for marital status (never married [referent], cohabitating,

married, and divorced/separated) and parental status (1 = respondent is a parent). Following recent research (Maroto and Sykes 2019), all young adult controls are measured at the time of the YAST 30 interview.

Finally, state characteristics can play a role in the consequences of incarceration (Hagan et al. 2020) and individual patterns of indebtedness (Houle, Bruch, and Berger 2019; Ratcliffe et al. 2016), and may therefore confound our association of interest. Recent research shows that laws and policies at the state level, including hidden sentences, are correlated with state sociodemographic characteristics, welfare generosity, and the state incarceration rate (Plassmeyer and Sliva 2018). State sociodemographic characteristics are from the U.S. Census Bureau decennial census and American Community Survey, and include residence in a Southern state (1 = yes), the percent of the state that is non-Hispanic black, the percent of residents with a 4-year degree or higher, and the unemployment rate. Drawing from data compiled by the University of Kentucky Center for Poverty Research, we control for the maximum Temporary Assistance for Needy Families (TANF) and Supplemental Nutrition Assistance Program (SNAP) benefits for a family of four between 2004 and 2015. Using data from the Bureau of Justice Statistics, we control for the incarceration rate. Statelevel covariates are based on annual state-level data, averaged from 2005 to 2014, and reflect the respondent's state of residence at the age 30 interview.

## Analytic Strategy

At the individual level, we hypothesize that criminal justice contact may impact unsecured debt in three ways: access to credit, absolute debt levels (among debtors), and debt burdens (debt relative to income). We therefore present three sets of analyses. We first estimate the probability of reporting any consumer debt, net of covariates using a linear probability model (Breen, Karlson, and Holm 2018; Mood 2010). We then use a truncated ordinary least squares (OLS) regression model to predict debt levels among those with nonzero debt, which allows us to estimate differences in absolute debt levels among debtors (see Houle 2014b). Finally, to better capture debt burden—or debt relative to economic resources we estimate the probability of reporting debt that exceeds 30 percent of reported income using a linear probability model.

Following recent research on criminal justice contact and wealth outcomes (Maroto and Sykes 2019), we focus on changes in debt over time using conditional change score panel models as displayed in Equation 1:

$$Y_{t} = \beta_{0} + \beta_{1} \Delta X_{1} + \beta_{2} Y_{t-1} + \beta_{3} X_{t-1} + \epsilon_{t}, \qquad (1)$$

where  $Y_t$  refers to each of the three outcome measures taken at age 30,  $\Delta X$  captures change in criminal justice contact from age 25 to 30,  $Y_{t-1}$  and  $X_{t-1}$  capture the outcome and predictor variables at age 25 (respectively), and  $\epsilon_t$  is the error term.

Finally, to test our expectation that the association between criminal justice contact and indebtedness is exacerbated by hidden sentences, we include interaction terms between state hidden sentence level and criminal justice contact, as displayed in Equation 2:

$$Y_{t} = \beta_{0} + \beta_{1} \Delta X_{1} + \beta_{2} Y_{t-1} + \beta_{3} X_{t-1} + \beta_{4} X_{2} + \beta_{5} \Delta X_{1} X_{2} + \epsilon_{t},$$
(2)

where  $X_2$  captures state hidden sentence level, and  $\Delta X_1 X_2$  captures the interaction between change in criminal justice contact and state hidden sentence level. For ease of interpretation, we graph the marginal effects from these models using the margins and coefplot commands in Stata, and the mlincom command to test for differences in the marginal effects of criminal justice contact by state hidden sentence level (Mize 2019).

# Results

We present descriptive statistics for all study variables in Table 1. Approximately 9 percent (n = 612) of NLSY97 respondents report criminal justice contact between (roughly) ages 25 and 30, and just over 5 percent experience incarceration. Table 1 also shows the

	Full sample		tice contact as 25 and 30?	
Variable	Mean/proportion	No	Yes	t-test
No criminal justice contact (referent)	0.915			
Convicted (no incarceration)	0.030		0.353	
Incarcerated	0.055		0.647	
Any unsecured debt (age 30)	0.401	0.408	0.332	***
Amount unsecured debt (among debtors) <sup>a</sup>	US\$8,204.0	US\$7,713.8	US\$14,653.7	***
	(19,561.7)	(17,887.8)	(29,665.0)	
$DTI \ge 30\%$	0.275	0.253	0.507	***
Criminal justice contact (age 25)	0.175	0.137	0.585	***
Amount unsecured debt (age 25) <sup>a</sup>	US\$2,996.0	US\$2,910.3	US\$3,914.2	*
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(10,053.4)	(9,475.5)	(14,876.9)	
Hidden sentences	(,)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(* ,, * * * * )	
Low hidden sentence state (referent)	0.082	0.080	0.105	*
Mid hidden sentence state	0.503	0.504	0.492	
High hidden sentence state	0.415	0.416	0.404	
Sociodemographic background	0.115	0.110	0.101	
Gender (male = $I$ )	0.499	0.475	0.755	***
Race	0.177	0.175	0.755	
White (referent)	0.574	0.580	0.502	***
Black	0.280	0.271	0.376	***
Other	0.146	0.149	0.123	†
Parent education	0.140	0.147	0.125	
HS degree or less	0.490	0.476	0.647	***
Some college	0.257	0.264	0.188	***
College degree or more	0.219	0.284	0.131	***
Young adult social and economic status	0.219	0.226	0.131	
Education				
	0.349	0.326	0.400	***
≤HS degree (referent)			0.600	*
Some college	0.382	0.386	0.342	***
4-year college degree	0.269	0.288	0.059	
Relationship status	0.270	0.257		***
Unmarried (referent)	0.369	0.356	0.505	*
Cohabitating	0.140	0.137	0.167	****
Married	0.401	0.421	0.181	
Divorced/separated	0.090	0.085	0.147	***
Parent $(1 = yes)$	0.618	0.612	0.685	***
Wages <sup>a</sup> (thousands of dollars)	28.17	29.52	13.68	***
	(28.10)	(28.42)	(19.15)	
Full-time employment ( $I = yes$ )	0.600	0.621	0.379	***
Homeownership (1 = yes)	0.316	0.336	0.093	***
Coresidence with parents $(I = yes)$	0.179	0.175	0.229	***
State-level controls				
Southern state ( $I = yes$ )	0.392	0.386	0.458	***
State % non-Hispanic black	12.87	12.82	13.44	†
	(8.25)	(8.23)	(8.45)	
State % with 4-year degree	28.10	28.15	27.62	**
	(4.33)	(4.32)	(4.37)	
State Temporary Assistance for Needy Families	1,088.2	1,091.2	1,055.2	***
and Supplemetal Nutrition Assistance Program	(190.9)	(191.6)	(179.2)	
(TANF-SNAP) benefits (four-person family)				
State incarceration rate	459.3	457.5	479.4	***
	(137.5)	(137.5)	(136.8)	
Observations	7,165	6,553	612	

### Table I. Descriptive Statistics for All Variables.

Note. Standard deviations for continuous variables only (in parentheses). DTI = debt to income; HS = high school.

<sup>a</sup>Debt and wages reported in 2010 dollars. t-test: <sup>†</sup>p<.10. \*p<.05. \*\*\*p<.01. \*\*\*\*p<.001.

breakdown of individuals by state level of hidden sentences, with about half of all respondents residing in a state with a moderate level of hidden sentences. Moreover, the majority of respondents (59.9 percent) report no unsecured debt at age 30, and average debt among debtors is approximately US\$8,200. Just over one quarter of the sample (27.5 percent) report an amount of debt that exceeds 30 percent of their income.

Table 1 also provides some initial support for the first research question outlined above regarding criminal justice contact and debt. Individuals with a history of criminal justice contact are significantly less likely than their peers with no contact to report unsecured debt at age 30 (33.2 percent compared with 40.1 percent). Among borrowers, however, individuals with recent contact with the criminal justice system owe approximately US\$7,000 more than their peers who experienced no contact between ages 25 and 30 (p < .001). Nearly half of those with criminal justice contact report high debt burdens, compared with only a quarter of respondents without criminal justice contact. Differences in consumer debt owed at age 25 (prior to criminal justice contact), however, are much smaller. This suggests that disparities in unsecured debt increase after criminal justice contact, as opposed to reflecting preexisting differences. Given there are substantial social and economic differences between young adults with and without criminal justice contact, we next turn to our multivariate results.

Table 2 shows estimates for each of our debt outcomes: any debt (Panel A), average debt among debtors (Panel B), and debt burden (DTI  $\geq$  30 percent, Panel C). The coefficients displayed in Model 1 are adjusted for lagged debt, lagged criminal justice contact, and time-stable baseline characteristics. In Model 2, we add young adult sociodemographic characteristics.

Beginning with the probability of reporting debt (Panel A), Model 1 shows that, after accounting for prior debt, prior criminal justice contact, and a host of background characteristics, those with a recent incarceration are 8.6 percentage points less likely than those with no criminal justice contact (or only an arrest) to report owing unsecured debt at age 30. This is consistent with the hypothesis that a recent incarceration is a barrier in the credit market. However, this association is reduced after adjusting for young adult social and economic characteristics, suggesting that individuals with a recent incarceration are less likely to report debt largely because of disadvantages in other outcomes associated with access to the credit market or risk of incarceration. We find less evidence for differences between those who have experienced convictions with no incarceration and those with no contact.

Among debtors (Panel B, Table 2), we find that individuals with a history of incarceration hold substantially and significantly more unsecured debt than those without criminal justice contact. Net of baseline controls, including lagged debt and lagged criminal justice contact, a recent incarceration is associated with approximately US\$8,600 more owed in consumer debt (among debtors). This association is robust to controls for young adult social and economic status in Model 2. According to these estimates, recently incarcerated debtors report over US\$7,900 more in unsecured debt than those who have no criminal justice contact or only an arrest. Across the models in Panel B, there are no significant differences between those with no criminal justice contact and those with convictions that do not result in an incarceration.

The final results in Table 2 (Panel C) confirm that criminal justice contact is associated with elevated debt burdens. In Model 1, we find that those with a recent conviction are 10.1 percentage points more likely to report debt that exceeds 30 percent of their income relative to those without criminal justice contact, while those with a recent incarceration are 31.8 percentage points more likely to report a high debt burden. While these associations are reduced in Model 2, a recent incarceration continues to be associated with elevated debt burden after controlling for young adult social and economic status.

So far, our results are consistent with expectations that criminal justice contact is associated with reduced access to credit and increased unsecured debt levels and burdens. However, it

	Pane Any c		Pane Debt amor		Pane DTI ≥	
Predictor	Model I	Model 2	Model I	Model 2	Model I	Model 2
Criminal justice contact (ag	ge 25–30)					
No contact or arrest only (referent)	_	—		—	—	—
Convicted (no	0.029	0.045	-677.681	-921.039	0.101**	0.042
incarceration)	(0.034)	(0.033)	(2,084.717)	(2,088.319)	(0.032)	(0.028)
Incarcerated	-0.086***	-0.048 <sup>†</sup>	8,638.420 <sup>*</sup>	7,954.808 <sup>*</sup>	0.318***	0.147***
	(0.025)	(0.025)	(3,791.774)	(3,820.124)	(0.027)	(0.023)
Lagged variables (age 25) <sup>d</sup>	( )	<b>x</b> ,			· /	<b>、</b>
Unsecured debt	0.005***	0.005***	321.315***	319.125***	0.003***	0.003***
(thousands of dollars)	(0.001)	(0.001)	(80.264)	(80.290)	(0.001)	(0.000)
Criminal justice contact	0.021	0.038*	4,331.040**	3,760.722**	0.085***	0.017
	(0.016)	(0.016)	(1,395.764)	(1,399.468)	(0.015)	(0.013)
Constant	0.473 <sup>****</sup>	0.367***	6,450.004***	7,035.804***	0.330***	0.578***
	(0.012)	(0.020)	(696.925)	(1,266.427)	(0.011)	(0.016)
Model covariates <sup>e</sup>	<b>x</b> ,	× /	× /		( /	( /
Time stable	Yes	Yes	Yes	Yes	Yes	Yes
Time varying	No	Yes	No	Yes	No	Yes
n	7,165	7,165	2,874	2,874	7,165	7,165
R <sup>2</sup>	.004	.048	.062	.067	.077	.325

 Table 2. Regression Models Predicting Any Debt, Debt among Debtors, and Debt Burden.

Note. DTI = debt to income; OLS = ordinary least squares.

<sup>a</sup>Any debt predicted using linear probability models.

<sup>b</sup>Debt among debtors predicted using OLS regression, restricted to only those respondents who report any debt. <sup>c</sup>DTI predicted using linear probability models (1 = debt exceeds 30% of wages).

<sup>d</sup>Lagged debt and criminal justice contact measured at age 25.

<sup>e</sup>Time-stable covariates include race, gender, and parent education, and time-varying covariates (measured at age 30) include educational attainment, relationship status, earnings, employment, homeownership, and coresidence with parents.

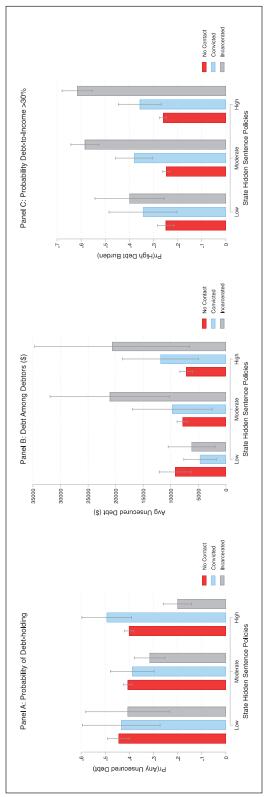
 $^{+}p < .10. *p < .05. **p < .01. ***p < .001.$ 

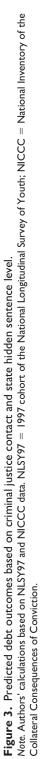
is not clear whether this association is similar for prospective credit arrangements (e.g., credit cards) and retrospective debt obligations (e.g., overdue bills). If criminal justice contact does reduce access to formal credit markets while increasing debt burdens, we would expect that criminal justice contact is associated with less credit card debt but greater retrospective debt obligations. In Table A1, we find support for this expectation, as individuals with a history of incarceration are less likely to have access to credit cards and report less credit card debt. Among those who owe debt to businesses, however, a recent incarceration is associated with greater amounts owed. Thus, contact with the criminal justice system, and incarceration in particular, is associated with less access to credit (especially prospective

credit instruments) but is associated with elevated debt burdens.

# Do State Hidden Sentences Moderate the Association between Criminal Justice Contact and Unsecured Debt?

For our second research question, we ask whether state hidden sentences exacerbate (or moderate) the disparities in debt by criminal justice contact shown above. We do this by estimating models with an interaction term between state hidden sentences and criminal justice contact. We display the marginal effects from these models graphically in Panels A (any debt), B (debt among debtors), and C (debt burden) of Figure 3. We show the marginal effects





from these models in Table A2. The models described below include all state- and individual-level control variables. Two patterns are of particular interest: whether justice-involved populations have greater debt burdens and less access to credit in states with higher versus low hidden sentences (within-group comparisons), and whether disparities in debt by criminal justice contact are higher in states with more hidden sentences (between-group comparisons). Across all models, the findings show that incarcerated individuals are significantly and substantially more debt-burdened in states with more hidden sentence policies.

Starting with Panel A, the probability of holding any debt by criminal justice contact and state hidden sentences, a few key findings emerge. First, individuals with a history of incarceration are significantly less likely to have unsecured debt in states with high hidden sentences relative to incarcerated individuals in states with low (p < .01) and moderate (p < .05) hidden sentences. Approximately 49 percent of formerly incarcerated individuals report having unsecured debt in low hidden sentence states, compared with 40 percent in moderate hidden sentence states and 28 percent in high hidden sentence states. We find no evidence that the probability of unsecured debt varies by state hidden sentence level for convicted individuals or those who have not had contact with the criminal justice system. Second, we find that disparities in unsecured debt holdings are significantly larger in states with high levels of hidden sentences than in states with moderate (p < .05) and low (p <.10) levels of hidden sentences. That is, the average marginal effect of incarceration (the difference between incarcerated individuals and those without criminal justice contact) is significantly larger in states with more hidden sentences. In states with low (and moderate) hidden sentences, those with a history of incarceration are just as likely to have unsecured debt as those with no criminal justice contact (differences are small and nonsignificant). However, in high hidden sentence states, individuals with incarceration have an 11-percentage-point lower probability of holding unsecured debt than their counterparts.

A similar pattern emerges in Panel B, showing predicting average amount of unsecured debt among debtors, but the confidence intervals are wide and the estimates imprecise. Looking to the figure, it appears that (1) incarcerated individuals who live in moderate and high hidden sentence states have substantially more unsecured debt than incarcerated individuals who live in low hidden sentence states. and (2) disparities in debt by criminal justice contact level are larger in states with more hidden sentences. For example, formerly incarcerated individuals who live in states with high or moderate hidden sentences report approximately US\$14,000 more unsecured debt than those who live in states with low hidden sentences (p < .05). Moreover, the disparity in debt between the formerly incarcerated and those with no criminal justice contact is larger in states with higher hidden sentences. In low hidden sentence states, differences in debt are

minor. In moderate and high hidden sentence states, however, formerly incarcerated individuals report over US\$10,000 more debt compared with those with no criminal justice contact (p < .05).

This trend largely holds in Panel C, showing results from a model predicting the probability that unsecured debt exceeds 30 percent of household income (or debt burden). Two key patterns emerge: (1) formerly incarcerated individuals in low hidden sentence states are substantially and significantly less likely to have high debt burdens than those living in moderate and high hidden sentence states, and (2) disparities in debt burdens by criminal justice contact increase significantly as hidden sentence policies rise. For example, 27 percent of formerly incarcerated respondents who reside in low hidden sentence states have high debt burdens, compared with 45 percent in high hidden sentence states (p < .01). Disparities between those with and without recent contact also increase dramatically across these states. In low hidden sentence states, the probability of having a high debt burden is virtually identical for incarcerated and nonincarcerated respondents. In high hidden sentence states, incarcerated individuals have a 20 percentage point higher probability

of having high debt burdens compared with their peers without contact (p < .05).

Overall, the results above provide evidence that disparities in unsecured debt—including access to credit, debt levels, and debt burdens—by criminal justice contact are larger in states with more hidden sentences. These differences are strongest when comparing the formerly incarcerated and those without contact but are less robust for those who are convicted but not incarcerated. These findings are consistent with our theoretical expectations that state hidden sentence policies create, and exacerbate, indebtedness among the justice-involved.

One question that remains is whether some types of hidden sentences—those that curb credit and property rights, restrict welfare benefits, or limit employment-are more strongly related to indebtedness among the justice-involved than others. To address this, we reestimate the models above but distinguish between hidden sentences that restrict or limit (1) credit and property rights, (2) access to social welfare benefits, and (3) employment and occupational licensing. The results from these models are shown graphically in Figures A1 to A3. Two key findings emerge from these models. First, the differences reported above are strongest for measures of "total hidden sentences," suggesting that the burdens of these hidden sentence policies are cumulative. Second, when looking at different types of hidden sentences, the pattern of results presented above is strongest for hidden sentences that limit access to social welfare benefits. This is consistent with our expectation that policies that limit access to welfare benefits may increase debt burdens among the justice-involved, particularly the formerly incarcerated.

# Discussion

After decades of correctional growth, scholars argue that the reliance on punishment in the United States is part of a neoliberal ideology that seeks to reduce the social safety net and manage poor and disadvantaged populations through more punitive means. A similar argument has been made about the expansion and reach of unsecured credit. Large shares of American households carry unsecured debt, often borrowing to supplement stagnant wages and in place of welfare benefits that are more difficult to obtain. Against the backdrop of both phenomena are states' power to craft laws that create social exclusion outside of visible punishments. In our study, we ask whether state-level hidden sentences increase debt burdens among the justice-involved. We make two key theoretical arguments that are broadly supported in the data.

First, we argue that criminal justice contact reduces access to formal credit markets, while also increasing absolute and relative debt burdens. Consistent with this argument, we find that incarceration in particular during young adulthood is associated with a lower likelihood of debt-holding, net of confounders. Although we are not able to test all proposed theoretical mechanisms, the association is reduced when controlling for young adult socioeconomic attainment. This is consistent with our argument that incarceration restricts access to credit due, in part, to socioeconomic disadvantage. We also find a strong negative association between incarceration and credit card debt-holding, but not retrospective debt obligations, consistent with the argument that criminal justice contact reduces access to formal (prospective) credit markets.

Although criminal justice contact is associated with reduced access to formal credit markets, we also find that it is associated with increased relative and absolute debt burdens among borrowers. We argue that criminal justice contact increases debt burdens because it increases the need for debt (via high-cost subprime credit markets), as well as the imposition of debt (via retrospective debt obligations). Our results largely support these expectations, particularly for incarceration. This association is partially reduced when controlling for young adult socioeconomic status and is driven primarily by retrospective debt obligations. These findings are consistent with our expectations that criminal justice contact through incarceration limits access to formal and prime credit markets, and individuals may then turn to high-cost 16

subprime credit markets. Retrospective debt obligations in the form of fines, fees, and other unpaid bills are also likely culprits for these differences. Importantly, we find that incarceration is associated with both higher absolute debt levels (among debtors) and debt relative to income—a proxy for debt burden. This suggests that not only are the formerly incarcerated taking on more debt after they are released but that they are taking on debts that are difficult to repay. In turn, these debts are likely to be carried forward over time, which may have long-term impacts on economic well-being (Dwyer 2018; Houle and Berger 2017; Tach and Greene 2014). Falling into debt, it seems, may be yet another socioeconomic consequence of criminal justice contact during the transition to adulthood (Maroto and Sykes 2019).

Our second, and main, argument is that these disparities are exacerbated by state-level hidden sentences that strip away core elements of citizenship and societal participation from those marked by the criminal justice system. Such restrictions create fissures between the law-abiding "us" and the criminal "them" (Travis 2002), limiting access to social welfare benefits, credit and property rights, employment opportunities, and creating administrative burden (Herd and Moynihan 2019). We argue that such policies exacerbate debt burdens and exclusion from credit markets among the justice-involved. Our findings are consistent with this argument, particularly for individuals with a history of incarceration. Overall, we find that the associations between incarceration and indebtedness described above are strongest in states with more hidden sentences—such that (1) incarcerated individuals living in these states were more indebted than their counterparts in states with fewer hidden sentences, and (2) disparities in debt between those who were incarcerated and those who were not are larger in states with more hidden sentences.

Our study contributes to several literatures in criminology, economic sociology, and life course sociology. In criminology, this study contributes to research on the *collateral consequences* of felony convictions and incarcerations (Kirk and Wakefield 2018), a term that describes the wide-ranging social, economic, and psychological consequences of criminal justice contact. We argue in this article that indebtedness is one such collateral consequence, but that it is partially a function of specific policy decisions that create hidden sentences. Scholars have long argued that exclusionary policiessuch as occupational licensing-create and exacerbate collateral consequences (see Western 2002:528). But while recent research shows substantial variation in collateral consequences across states (Hagan et al. 2020), our study points to specific state-level policies that may contribute to these collateral consequences and could be leveraged to reduce disparities.

Our findings also provide empirical support for a special case of the credit-welfare tradeoff hypothesis in economic sociology. Prasad (2012) and others argued that debt burdens rise during periods of welfare retrenchment, in part because disadvantaged populations turn to credit to replace retrenched welfare benefits (known as the credit-welfare tradeoff). However, previous research on this topic has been cross-national and has not considered the relevance of the credit-welfare hypothesis within countries. This is especially important in the U.S. case, where states have been granted broad authority to implement and define access to social welfare programs. We find that when states limit social welfare benefits, the formerly incarcerated are more likely to take on unsecured debt. This suggests that such policies have the potential to increase social disparities in debt burdens.

Relatedly, our findings show how elements of a state's punishment regime and resulting indebtedness may contribute to cumulative disadvantage (DiPrete and Eirich 2006; Sampson and Laub 1997). We know from previous research that young adulthood is a critical turning point for socioeconomic attainment and mobility (Furstenberg 2008), and that disadvantage in young adulthood reverberates across the life course as doors to opportunity are opened or closed. Criminal justice contact, and specifically incarceration, is part of a process of cumulative disadvantage-work by Western (2002) and others shows that the incarceration wage gap increases with age, suggesting that the disadvantages of criminal justice contact are smaller in young adulthood, but accumulate and grow across the life course. Put in this context, our study has two implications. First, the disparities we observe here may increase over time and reverberate into other domains, as young adults age and their struggle to repay debt begins to take its toll on their social, economic, and psychological well-being (Drentea 2000; Dwyer 2018; Sun and Houle 2020). Second, hidden sentences may therefore create economic disparities that grow across the life course. In turn, our study joins a growing chorus of research that shows how states are a key site of social inequality in the United States (Hagan et al. 2020; Montez, Hayward, and Zajacova 2019). Future research on this topic could directly examine this question by using longitudinal data from older born cohorts (in particular, data better situated to parse out preexisting differences between those with and without criminal justice contact).

Finally, we would be remiss if we did not underscore the importance of hidden sentences for racial inequality in the United States. The links between carceral punishment and the institution of slavery are clear (Alexander 2012). While we do not specifically test for racial differences here, it is well established that black young adults face more criminal justice contact than whites, thus likely encountering more hidden sentences. The consequences of hidden sentences, then, almost certainly fall disproportionately on young people of color. Hidden sentences are therefore a historically rooted but "hidden" modern engine of institutional racism and racial economic inequality.

Our study joins a growing body of work drawing attention to state-level formal and informal punishment regimes, but unanswered questions remain. First, making clear connections between specific exclusionary policies and inequality would point to clear pathways for reform. Here, survey or interview research that targets individual's experiences navigating specific policies (perhaps by focusing on a subset of states where hidden sentences occur most frequently) would provide important insights. Such work would also overcome a key limitation of our study: it is unknown which hidden sentences apply to any given offender. The activation of hidden sentences varies based on the range of potential criminal justice outcomes, which may lead us to underestimate the link between hidden sentences and indebtedness.

Second, it is not clear whether hidden sentences are associated with collateral consequences beyond indebtedness, though recent research suggests that hidden sentences are associated with employment outcomes (Warner et al. 2020). Relatedly, the relationship between debt and other collateral consequences is not clear. On one hand, debt could be the result of other collateral consequences, such as employment outcomes. On the other, postprison debt could contribute to these deleterious outcomes by increasing poverty or reducing opportunities for upward mobility. While we find that debt burdens are concentrated among retrospective debts, we do not know the specific source. For example, individuals could be reporting financial obligations owed to courts or to private businesses that contract out correctional supervision services. Previous research has documented the profound and lasting impact of legal fines and fees on individuals convicted of crime (Harris et al. 2010; Martin et al. 2018), and these debts could contribute to the stark differences observed in our study.

In sum, our study provides some preliminary answers and raises important questions about how exclusionary state policies create financial burdens among the justice-involved, and recognizes that indebtedness is a key component of socioeconomic inequality in the United States (Dwyer 2018). But these collateral consequences are not inevitable and are at least in part the result of explicit policy decisions. To the extent that state-level hidden sentences exacerbate the consequences of incarceration, our findings point to one potential policy lever to reduce socioeconomic inequality produced by the expansion of the criminal justice system.

	Panel A: Credit card debt	lit card debt	Panel B: Debt to businesses	o businesses
Predictor	Any <sup>a</sup>	Amount <sup>b</sup>	Any <sup>a</sup>	Amount <sup>b</sup>
Change variables (age 25–30)				
No contact or arrest only (referent)				I
Convicted (no incarceration)	-0.037	375.954	0.091**	-1,029.500
	(0.028)	(789.773)	(0.031)	(3,543.254)
Incarcerated	-0.052**	-1,264.978*	-0.004	8,205.159
	(0.018)	(599.887)	(0.023)	(5,018.213)
Lagged variables (age 25)				
Unsecured debt <sup>c</sup> (thousands of dollars)	0.004***	92.846***	0.003***	443.033**
	(0.001)	(21.031)	(0.001)	(137.532)
Criminal justice contact	-0.004	366.102	0.045**	3,075.124
	(0.014)	(454.151)	(0.014)	(2,303.924)
Constant	0.201***	3,398.887***	0.227***	7,452.339**
	(0.018)	(508.380)	(0:017)	(2,801.855)
Model covariates <sup>c</sup>				
Time stable	Yes	Yes	Yes	Yes
Time varying	Yes	Yes	Yes	Yes
с. и	7,165	1,972	7,165	1,437
R <sup>2</sup>	.085	.078	.044	.073
<sup>a</sup> Anv credit card and business debt predicted using linear probability models.	r probability models.			

**Table A1.** Any Debt and Amount of Debt among Debtors, by Debt Type.

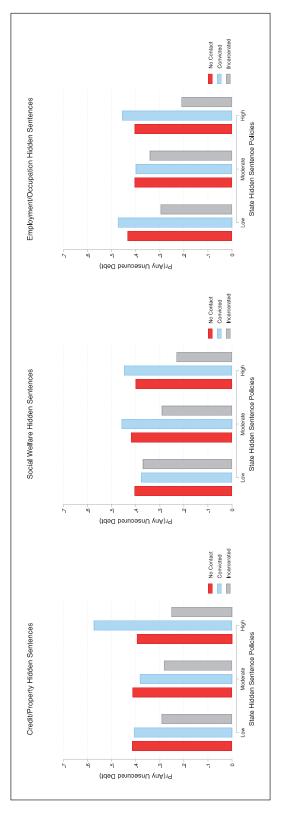
"Any credit card and business debt predicted using linear probability models. <sup>b</sup>Amount of credit card and business debt predicted using ordinary least squares regression, and restricted to those respondents who report any debt.

"Time-stable covariates include race, gender, and parent education, and time-varying covariates (measured at age 30) include educational attainment, relationship status, earnings, employment, homeownership, and coresidence with parents.  $^{\dagger}p<.10.~^{*}p<.05.~^{**}p<.01.$ 

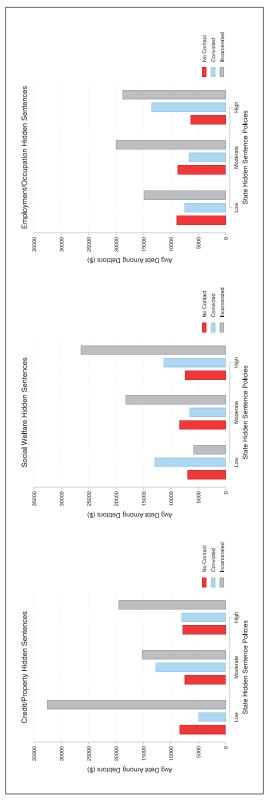
Appendix

	Any	Any debt	Debt among debt	Debt among debtors (thousands of dollars)	Debt bur	Debt burden (DTI)
Predictor Pr. (an	Pr. (any debt)	AME <sub>Hidden</sub> sentences	Average debt	$AME_{Hidden sentences}$	Pr. (DTI $>$ 30%)	AME <sub>Hidden</sub> sentences
Panel A: Within-group differences	states with					
Low hidden sentences .49 (.0	.09)***	.09 (.09)∆ <sub>Low-Mid</sub>	3.37 (2.26)	−14.83 (6.07)∆ <sub>Low-Mid</sub> *	.23 (.07)***	–.19 (.08)∆ <sub>Low-Mid</sub> *
Moderate hidden sentences .40 (.(	(.03)***	.21 (.09)∆ <sub>Low-High</sub> *	<b>18.20 (5.53)</b> ***	−14.41 (7.39)∆ <sub>Low-Hish</sub> *	.42 (.03)***	−.22 (.08)∆ <sub>Low-High</sub> **
High hidden sentences28 (	(.03)***	.12 (.04)∆ <sub>Mid-High</sub> **	17.78 (7.12)*	0.42 (9.09)∆ <sub>Mid-High</sub> **	.45 (.03)***	–.03 (.04)∆ <sub>Mid-High</sub>
Convicted young adults residing in states with	tes with			2		5
Low hidden sentences .45 (.0	.45 (.08)***	.05 (.09)∆ <sub>1 см-Міd</sub>	1.96 (1.65)	−5.90 (3.99)∆ <sub>I cw-Mid</sub>	.29 (.07)***	0.04 (.08)∆ <sub>1000-Mid</sub>
Moderate hidden sentences .40 (.0	.05)***	−.06 (.10)∆ <sub>1 cwv-Hitch</sub>	6.98 (3.58)*	−7.19 (3.70)∆ <sub>1.000</sub> Hinb	.32 (.04)***	−.01 (.09)∆ <sub>1 cw-Hith</sub>
High hidden sentences .51 (.0	.05)***	11 (.07)∆ <sub>Mid-High</sub>	9.15 (3.44)**	−2.16 (9.09)∆ <sub>Mid-High</sub>	.30 (.05)***	.02 (.06)∆ <sub>Mid-High</sub>
First di	First difference	Second difference	First difference	Second difference	First difference	Second difference
Panel B: Between-group differences						
۱	no contact)					
	(60)	.05 (.10)∆ <sub>1 cw-Mid</sub>	-6.02 (2.72)*	−16.14 (6.14)∆ <sub>1 ow-Mid</sub> **	03 (.08)	–.19 (.08)∆ <sub>10w-Mid</sub> *
Moderate hidden sentences –.00 (.04)	.04)	.16 (.10)∆ <sub>Low-Hish</sub> †	10.12 (5.58) <sup>†</sup>	$-16.40(7.51)\Delta_{Low-High}^{-1}$	.16 (.03)***	−.21 (.08)∆ <sub>Low-High</sub> **
High hidden sentences –.11 (.C	11 (.03)***	.11 (.05) $\Delta_{\text{Mid-High}}^{\ast}$	10.38 (7.11)	−.260 (9.07)∆ <sub>Mid-High</sub>	.18 (.03)***	−.02 (.04)∆ <sub>Mid-High</sub>
AME conviction $\Delta$ (conviction – no contact)	intact)	0		0		0
Low hidden sentences .01 (.09)		.01 (.10) A <sub>Low-Mid</sub>	-7.43 (2.19)***	-6.34 (4.04) $\Delta_{Low-Mid}$	.02 (.07)	−.04 (.08)∆ <sub>Low-Mid</sub>
Moderate hidden sentences –.00 (.05)		−.10 (.10)∆ <sub>Low-Hish</sub>	-1.10 (3.61)	−9.18 (4.17)∆ <sub>Low-Hish</sub> *	.06 (.04)	−.00 (.09)∆ <sub>Low-Hish</sub>
High hidden sentences	.05)*	−.11 (.07)∆ <sub>Mid-High</sub>	1.75 (3.51)	−2.84 (5.18)∆ <sub>Mid-High</sub>	.03 (.05)	−.04 (.06)∆ <sub>Mid-High</sub>

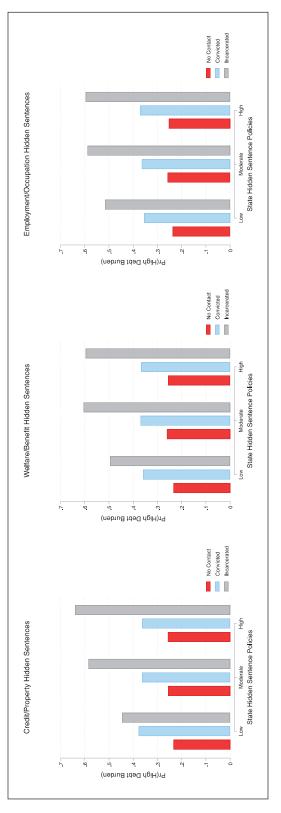
Table A2. AME of Criminal Justice Contact and Hidden Sentences on Unsecured Debt.













### **Author's Note**

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### Notes

- 1. There is no agreed-upon terminology to capture these laws and policies (Kirk and Wakefield 2018), with labels including "invisible punishments" (Travis 2002), "collateral consequences" (American Bar Association 2013), or "hidden sentences" (Kaiser 2016). The terms collateral consequences and invisible punishments are, we feel, too broad. While sometimes used to refer to hidden punishments imposed by law, these terms also often capture unintended effects of criminal justice contact, including labor market struggles and financial hardship (Kirk and Wakefield 2018; Mauer and Chesney-Lind 2002). By specifically differentiating between policies and unintended outcomes, we seek to better understand the collateral consequences of incarceration (see the "Discussion" section).
- 2. The modules are not always delivered when respondents are aged 20, 25, or 30, but rather around the 20, 25, and 30 interview waves.
- Debt is highly skewed, and so we also estimated models using a log transformation.

These models were substantively and statistically similar to models using debt in dollars, so for ease of interpretation we show results using nontransformed debt (see Dwyer, McCloud, and Hodson 2011).

- 4. Supplementary analyses examined if this coding strategy affected the pattern of results by (1) creating a separate category of arrest-withno-other-action, (2) using a simply yes-no measure of any type of criminal justice contact, and (3) using a measure of incarceration that removes those with a recorded residence in jail or prison. Results are consistent across these different model specifications.
- 5. In the National Inventory of the Collateral Consequences of Conviction (NICCC) data, the correlations between total hidden sentences and total that are permanent or activated by any offense (rather than specific offenses) are .67 and .56, respectively. Controlling for these features of hidden sentences does not change the pattern of results.
- 6. The exact matching procedure does not appear to impact the pattern of the results. For instance, we matched the state of residence for all respondents (regardless of criminal justice contact) at age 25, as well as for all respondents at age 30, and the results were consistent.
- A total of 305 respondents are missing parental education. To reduce missing values on this measure, we include a dummy variable for respondents missing parental education (1 = yes, not shown).

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