Prodigal Sons:
Incarceration, Punishment, and Morality

Ngina Chiteji, PhD
Associate Professor, NYU-Gallatin School
and Associated Faculty Member,
Wagner School of Public Service, New York University*

1 Introduction

As Garland (1993) has observed, prison (and the U.S. criminal justice system more broadly) are social institutions that affect individuals’ lives in complex and wide-reaching ways. This holds true even after an offender has left prison. There is a robust literature about the “collateral consequences” of imprisonment, which some scholars call “invisible punishments,” that attests to this claim (Holzer, 2007, Mauer & Chesney-Lind, 2002, for example). Scholars have shown that ex-offenders can pay a political price for having a prison record: Several states bar ex-offenders from voting while on parole, and in others a felony record can lead to a permanent loss of one’s right to vote (Uggen & Manza, 2004; Manza & Uggen, 2008). Past incarceration also can affect eligibility for certain public programs (Mauer & Chesney-Lind, 2002). Additionally, health researchers have documented ways in which incarceration adversely affects men’s health and mortality rates (Johnson & Raphael, 2009; Patterson, 2013). The evidence seems incontrovertible that ex-offenders endure long-run penalties beyond their time in prison.

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While the social sciences literature has been quite good at documenting the existence of collateral consequences, less attention has been paid to the ethical questions surrounding their presence. This paper attempts to fill that gap by examining two types of collateral consequences that are by nature economic.

2 The Existence of Invisible Punishments

The focus of this paper is on two economic outcomes faced by formerly-incarcerated men: penalties in the labor market associated with having been in prison, and indebtedness due to accumulated bills levied by the criminal justice system.

Labor Market Penalties: A Simple Case Study

Having a prison record has been shown to affect ex-offenders’ employment prospects and earnings. Table 1 and Figure 1 report illustrative empirical results typical of the scholarly literature, though the analysis presented here focuses exclusively on non-whites.

Table 1 presents regression output from an analysis of 2012 National Longitudinal Survey of Youth (NLSY) data. In 1979, the NLSY surveyed a nationally representative sample of youth aged 14 to 22. These individuals were then surveyed annually until 1994, biennially since that time. The NLSY79 has been widely used to investigate the determinants of earnings, including the influence of incarceration on men’s earnings (Western, 2006, for example).1

The dependent variable for Table 1 is labor income. Model 1 is in the style of a standard earnings equation, where traditional covariates such as age, ability, and geographic location are included in the regression (see Angrist & Pischke, 2009, for example). The regressions are ordinary least squares regressions. Age is included, as earnings normally rise with age.2 Regional dummies are included because earnings often vary across the country. Because it is also standard to control for differences in individuals’ ability in an earnings regression (due to the influence that ability has on earnings separate from its effect on schooling), our regressions include the respondent’s score on the Armed Forces Qualification Test (AFQT). Use of this subpart of the survey’s Armed Services Vocational Aptitude Battery (ASVAB) is common in scholarship that uses the NLSY to study earnings. Model 1 also includes
measures of parental education: Mother’s and father’s education are included (instead of the respondent’s own level of education) because incarceration can influence one’s level of education. This makes respondents’ own years of schooling an inappropriate control variable, as Table 1 is relying upon cross-sectional data; a man’s past incarceration experience may affect the level of education that is observed in 2012. Model 1 also includes a dummy variable indicating whether the respondent was incarcerated sometime in the past. This is the main variable of

Table 1. OLS regressions with 2012 annual earnings as the dependent variable—for non-white men (t stats in parenthesis)

<table>
<thead>
<tr>
<th></th>
<th>Model-1</th>
<th>Model-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever incarcerated dummy</td>
<td>-21,673.33*** (t = -8.79)</td>
<td>-20,933.3*** (t = -7.83)</td>
</tr>
<tr>
<td>Age</td>
<td>-851.8424 (t = -1.32)</td>
<td>-698.3917 (t = -1.04)</td>
</tr>
<tr>
<td>Mother’s education level</td>
<td>1,413.739** (t = 2.58)</td>
<td>1,251.491** (t = 2.28)</td>
</tr>
<tr>
<td>Father’s education level</td>
<td>-296.9367 (t = -0.66)</td>
<td>-142.3328 (t = -0.31)</td>
</tr>
<tr>
<td>Northeast region</td>
<td>10,934.49** (t = 2.24)</td>
<td>10,595.26** (t = 2.10)</td>
</tr>
<tr>
<td>South region</td>
<td>8,964.368** (t = 2.11)</td>
<td>9,051.621** (t = 2.09)</td>
</tr>
<tr>
<td>West region</td>
<td>13,224.98*** (t = 2.75)</td>
<td>12,459.86** (t = 2.52)</td>
</tr>
<tr>
<td>AFQT percentile</td>
<td>542.5848*** (t = 6.51)</td>
<td>551.7588*** (t = 6.49)</td>
</tr>
<tr>
<td>Reports having committed a crime whether incarcerated or not</td>
<td>-5,088.644* (t = -1.66)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N</th>
<th>676</th>
<th>652</th>
</tr>
</thead>
<tbody>
<tr>
<td>R squared</td>
<td>0.2627</td>
<td>0.2662</td>
</tr>
</tbody>
</table>

Notes: Author’s analysis of data from the NLSY. All regressions include a constant. All regressions incorporate the NLSY weight variable. The north central region is the omitted regional category. Men who were incarcerated in 2012 were excluded. ***p ≤ .01; **p ≤ .05; *p ≤ .10
interest; its coefficient captures the influence of prior incarceration on current earnings.

Model 2 adds a variable indicating whether the respondent reported having ever committed a crime, regardless of whether he was ever arrested and/or incarcerated for it. If some individuals possess personal traits that predispose them to offending while also influencing earnings, ex-offenders may be markedly different from other men; the “ever-committed-a-crime” dummy variable is a way to address potential omitted variable bias.3

Table 1 shows that men who have been previously incarcerated earn less than other men, holding other factors constant. Specifically, Model 2 suggests that non-white ex-offenders earn $20,933 less than their counterparts who have never been incarcerated. It is results like these that have led the existing literature to conclude that there is a penalty associated with having a prison record when an ex-offender enters the labor market.

Figure 1 compares the OLS results to fixed effects regression results. The fixed effects estimates come from regressions that use the full range of NLSY79 waves (1979 to 2012). As with Table 1, this analysis was restricted to nonwhite men.4 As Figure 1 indicates, the fixed effects coefficient is somewhat smaller in absolute value than the OLS estimate.5 Incarceration is found to reduce a nonwhite man’s earnings by $19,444.6

As intimated earlier, the analysis presented above is meant to provide an illustration of the types of findings one sees in the literature. The consequences of prison records for men’s labor market prospects is a subject that has generated a lot of research, and the literature has employed a variety of techniques to identifying the effect of a prison record. Western (2006) notes that the earnings of formerly-incarcerated men have been found to be as much as 10 to 40 percent lower than those of individuals with similar levels of education or skill.7 His own analysis using a multivariate fixed-effects regression strategy with data from the 1983 to 2000 waves of the NLSY produces estimates of 30 to 40 percent (depending upon the race and ethnicity of the man).

Some recent studies use differences in judge assignments as a way to disentangle the effect of incarceration on labor market outcomes. These studies exploit the variation in sentencing practices of different judges in situations in which some judges are known to be harsher than others, and in which the defendant has no control over the assignment to a particular judge. In one such study using data from Texas, Mueller-Smith (2015)
finds that a man’s quarterly earnings are reduced by about $683 by past incarceration.8

While our analysis focused on earnings, there is much evidence to suggest that having been incarcerated also has implications for a man’s prospects of even obtaining a job. One particularly compelling study uses an experimental approach. Pager (2003) sent matched pairs of individuals out to respond to actual job openings.9 She found that white applicants with a criminal background were 50% less likely to be called back for an interview after applying for a job than other white applicants were. For blacks, the corresponding reduction was about 64%. While the Pager (2003) study did not examine earnings, it provides an example of the types of findings that emerge when the focus is shifted to an ex-offender’s likelihood of even obtaining employment.
As noted earlier, scholars have taken the type of results discussed above as an indication that ex-offenders endure a penalty in the labor market as a result of their having been incarcerated in the past.\textsuperscript{10} The results show how incarceration can affect individuals beyond their time of confinement, and suggest that a person often continues to pay for his crime even after he has left prison.

**Debt Penalties**

A second way that engagement with the criminal justice system has long-run economic consequences for ex-offenders is that it can lead to “criminal justice debt.” This phrase describes the financial obligations that individuals incur as a result of having been arrested, tried, and convicted of an offense.\textsuperscript{11} Also called “legal financial obligations” or “LFOs,” the debt is attributable to the practice of imposing fines, fees, and surcharges as a defendant’s case makes its way through the justice system.\textsuperscript{12} The result is such that an offender can find himself faced with a large bill upon conviction, and if he does not pay the bill prior to incarceration the monies owed accumulate interest while the person is incarcerated. This means individuals can find themselves exiting prison with large amounts of debt upon their release. Harris, Evans and Beckett (2010) estimate that the median amount of debt owed by an ex-offender is $5,240, while the mean is $10,840 (Harris, Evans, & Beckett, 2010, p. 1775).\textsuperscript{13} We now review some of the empirical findings in this literature.

Why is it the case that ex-offenders can leave prison highly indebted? As the path-breaking research in the 2016 book *A Pound of Flesh: Monetary Sanctions as Punishment for the Poor* reveals, every state in the country imposes some type of “monetary sanctions,” as they are called by the author (Harris, 2016).\textsuperscript{14} Moreover, many local municipalities impose additional charges beyond those levied by the state government. While research on criminal justice debt is fairly new, the growing literature on the topic asserts that—in addition to being widespread—the phenomenon has increased in recent years (Harris, 2016, Sabol, 2016, Bannon, Nagrecha, & Diller, 2010, for example).\textsuperscript{15} In one of the most widely cited papers in the literature, Bannon, Nagrecha and Diller (2010) report that twenty-five states charge defendants for use of a public defender, and that at least 15 states assess fees for the time that a person spends in jail.\textsuperscript{16} As an example of how complex the system of fines, fees, and surcharges can become, in the state of California, Harris, Evans, and Beckett (2010)
observed that there were at least 3,100 separate costs that can be imposed. These financial costs are particularly interesting from an economic and a moral standpoint.

Table 2 and Figures 2 and 3 provide some statistics covering the different components that give rise to criminal justice debt. Before turning to the tables, however, a few more words about terminology are warranted. The terms “monetary sanctions,” “legal financial obligations,” and “criminal justice debt” are used interchangeably in the existing literature, and it is worth noting that these terms are actually capturing three distinct types of charges: (i) fines that are imposed as part of the formal punishment for having committed an offense (in addition to the prison term that a person might be assigned), (ii) fees that are charged by the courts, and (iii) surcharges, which are often stated as a percentage of the total fine(s) that an individual is assigned. Accordingly, while the word “sanction” may conjure up notions of a formal penalty for a particular action someone has taken, the term “monetary sanctions” also encompasses substantial financial costs that are not explicitly meant to be part of the official punishment for one’s crime.

Focusing on fees in isolation, Table 2 illustrates some different fees that an individual might face and the amounts a person would be obligated to pay for them. It presents data taken from Harris (2016). As shown in the table, even when taking into account just one fee charged by the state or the federal system, we encounter magnitudes that can be a significant share of an individual’s resources. Our table compares the fees to the average monthly household income for the lowest income quintile in the relevant state, and to the median earnings of a high school dropout in the nation as a whole, as reference points. As indicated in the table, a single fee can comprise anywhere from 4% to 54% of monthly income, or 20% to over 100% of weekly earnings. The fees imposed upon individuals are therefore nontrivial.

The practice of imposing jail fees is particularly interesting. As shown in the table, in Washington State an individual can be charged $100 per day spent in jail. Data from the Bureau of Justice Statistics indicate that the median stay in jail lies between 31 and 60 days (James, 2004). This means that a typical offender in Washington State could potentially owe $3,100 to $6,000 for time spent in jail while awaiting trial (for any offender who could not post bail). Both amounts surpass all of the monthly income figures in the table.
Table 2. Sample Fees Imposed in Different States

<table>
<thead>
<tr>
<th>State</th>
<th>Example of 1 fee charged in the state</th>
<th>Average monthly household income in the bottom income quintile in the state</th>
<th>Fee as a % of monthly income</th>
<th>Fee as % of median weekly earnings of a US high school dropout</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>$397.50 “felony cost”</td>
<td>$1,804.48</td>
<td>22%</td>
<td>79%</td>
</tr>
<tr>
<td>AR</td>
<td>$100 public defender fee</td>
<td>$1,565.13</td>
<td>6%</td>
<td>20%</td>
</tr>
<tr>
<td>FL</td>
<td>$100 cost of prosecution</td>
<td>$1,809.89</td>
<td>6%</td>
<td>20%</td>
</tr>
<tr>
<td>ID</td>
<td>$100 surcharge fee per felony charge</td>
<td>$2,084.52</td>
<td>5%</td>
<td>20%</td>
</tr>
<tr>
<td>IL</td>
<td>$250 jury fee</td>
<td>$2,015.50</td>
<td>12%</td>
<td>50%</td>
</tr>
<tr>
<td>IN</td>
<td>$100 “criminal cost” fee</td>
<td>$1,847.59</td>
<td>5%</td>
<td>20%</td>
</tr>
<tr>
<td>KS</td>
<td>$193 felony docket fee</td>
<td>$2,056.00</td>
<td>9%</td>
<td>38%</td>
</tr>
<tr>
<td>ME</td>
<td>$300 jury trial fee</td>
<td>$2,280.66</td>
<td>13%</td>
<td>60%</td>
</tr>
<tr>
<td>MN</td>
<td>$100 jury trial fee</td>
<td>$2,358.96</td>
<td>4%</td>
<td>20%</td>
</tr>
<tr>
<td>MT</td>
<td>$100 charge per felony that the individual is charged with</td>
<td>$2,059.77</td>
<td>5%</td>
<td>20%</td>
</tr>
<tr>
<td>NC</td>
<td>$262 felony fee</td>
<td>$1,837.73</td>
<td>14%</td>
<td>52%</td>
</tr>
<tr>
<td>VA</td>
<td>$1235 per felony for some offenses</td>
<td>$2,293.80</td>
<td>54%</td>
<td>245%</td>
</tr>
<tr>
<td>WA</td>
<td>$100 per day spent in a local jail</td>
<td>$2,402.75</td>
<td>4%</td>
<td>20%</td>
</tr>
<tr>
<td>Federal government</td>
<td>$100 per felony</td>
<td>$1,982.63</td>
<td>5%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis of data from Harris (2016), the EPI and CBPP, and the US Bureau of Labor Statistics. Fee information is taken from Harris (2016). Specifically, see Table 2.4 and p. 45 (the latter for the Washington State jail fee). The monthly income data for each state come from an Economic Policy Institute (EPI) and Center for Budget Policy Priorities (CBPP) joint report (McNichol et al., 2012). This report listed the average annual income for the bottom quintile for 2010, and we converted this figure into a monthly amount while also adding an inflation adjustment. The fee as percentage of median earnings calculation is based on the median earnings of a US high school dropout as reported by the US Bureau of Labor Statistics (BLS, 2017).
Finally, it is worth noting that some states describe their fees as “user” fees. This raises interesting questions to be pondered later in this paper.\(^{23}\)

Turning to surcharges, Figure 2 presents data from Arizona as a case study.\(^{24}\) As noted earlier, it is common for states to attach additional charges to an offender’s LFO balance, beyond any fine that is imposed upon the individual and in addition to any fees that are billed. In many states the “surcharge,” as it is called, is expressed as a rate; the relevant statute lists a percentage by which an individual’s fine or fee balance is to be marked up.\(^{25}\) As shown by the graph of data from Harris (2016), Arizona’s surcharge rate has been raised several times since its initial inception in 1999. When we compare it to other key rates, we find that it vastly exceeds the surcharge rate allowed for credit card companies. It is also much larger than the markup that people in Arizona pay for the food and clothing that they purchase. The state sales tax rate in Arizona is 5.6 percent, and the average city sales tax in the state is only 2.65 percent (Tax Foundation, 2016). From an economic standpoint, because a surcharge rate acts as a device to markup the cost of something in order to generate additional revenue for the government, it seems comparable to a tax.\(^{26}\) Figure 2 shows that Arizona’s current total surcharge rate—83 percent—is significantly higher than both the sales tax rate and the highest marginal income tax rate in the state.\(^{27}\) It is also higher than the state’s tax on cigarettes, which is about 43% (not shown).\(^{28}\) And it is higher than the state’s excise tax for alcoholic beverages—84 cents per gallon for wine and 16 cents per gallon of beer, about 1.4 percent in percentage terms.\(^{29}\) The latter two may be an appropriate comparison, as “sin” taxes are often assessed on things that citizens consider to be bad behaviors.

How does Arizona compare to other states? While we do not have detailed information about all the surcharges that are imposed at the state level for other states, Harris (2016) does provide examples of individual surcharges in some other states. The single surcharges listed for other states range from 5 percent (Florida) to 90 percent (Utah).\(^{30}\)

What about the interest rate that a person will face if he cannot clear all of his legal financial obligations prior to entering prison? Figure 3 graphs interest rate data for a selection of states. While data about the interest rates charged by the criminal justice system are not available for every state in the nation, from the data that are presently available one sees interest rates ranging from about 5 percent to 12 percent (Harris, 2016). To provide some reference points, we compare these statistics to
Figure 2. Arizona’s Criminal Justice System Surcharge Rate

Source: Authors’ analysis of data from Harris (2016), the State of Arizona, and the Tax Foundation (2016). Arizona’s criminal justice system surcharge rates as reported in Harris (2016) and the Arizona Administrative Offices of the Court’s Penalty Assessment and Surcharge Guide. Sales tax rate data come from the Tax Foundation (2016). The income tax rate statistic comes from the State of Arizona’s Department of Revenue (see www.azdor.gov/Forms/Individual.aspx). It is the top marginal rate and applies to all categories of filers, whether single, married, or head of household.

data for automobile loan interest rates and to information about state usury laws. The interest rates charged by the different states for criminal justice debt are all higher than the interest rate for a consumer durable like an automobile. Additionally, for the state of Washington, the interest rate charged on LFOs is high enough to hit the state’s usury law limit.31

Trends over Time
As noted previously, the literature suggests that jurisdictions have increased the burdens that they are placing on individuals, either by increasing the frequency with which monetary sanctions are imposed, or by increasing the size of the fines, fees, and surcharges being assessed. While there is presently no comprehensive data source regarding all the charges that all the nation’s jurisdictions have imposed across time, several studies present evidence from individual states. One particularly in-
Interesting study conducted jointly by National Public Radio (NPR), the Brennan Center of Justice, and the National Center for State Courts reports that 47 of the nation’s 50 states have increased their court fees since 2010 (NPR, 2014). Additional empirical evidence regarding trends over time can be found in Harris (2016), which indicates that the number of LFOs assessed in the state of Washington rose from 363,875 in 2006 to 483,725 in 2012 (Harris, 2016, 24). A recent report for the Arnold Foundation shows a flurry of legislative activity in Georgia from 2000 to 2016, which included the creation of an indigent defense surcharge in 2000, an increase in the surcharge levied when individuals post bond in 2008, an extension of the indigent surcharge to juvenile cases, and the creation of a special charge for persons convicted of certain sex crimes in 2016 (Harris et al., 2017). Diller (2010) shows that Florida’s legislature also has been quite active. This state’s legislature added provisions for new

Figure 3. Sample Interest Rates Charged for Criminal Justice Debt by State

Source: Authors’ analysis of data from Harris (2016) and FRED data. The interest rate data for criminal justice debt come from Harris (2016). The information for automobile loans comes from the St. Louis Federal Reserve’s FRED database (Board of Governors, 2017).
charges every year except for two during the 1996—2009 period. Illinois has seen so many changes in recent years that a special task force set up to analyze its policies stated that “Over the years, more and more costs have been passed on to court patrons through an elaborate web of fees and fines that are next to impossible to decipher and severely lacking in uniformity and transparency” (Illinois Statutory Court Fee Task Force, 2016, p. 7, emphasis added).

The empirical evidence in this survey of the literature does not cover every single type of LFO that exists in the nation, but the data presented are sufficient to reveal that cumbersome criminal justice debt is indeed something that many individuals have to contend with. The practice is therefore worth investigating from an ethical standpoint.

3 Some Ethical Questions about Invisible Punishments

In the previous section, we identified two adverse outcomes that ex-offenders can face upon their release: an earnings penalty and criminal justice debt. So far, we have not done much that is new, however. Instead, Section II essentially highlighted key findings in the existing literature about the incarceration-adverse labor market outcomes link, and summarized empirical findings from the emerging literature on monetary sanctions, although our efforts to contextualize the results from the latter literature are new. What might we make of these economic outcomes? The current section aims to show that there are several ethical questions that one can raise about them.

It is possible to imagine several questions that economists might be inspired to ask about the facts presented in Section II. Table 1 might prompt some to ask whether the labor market penalties could have consequences for the ex-offenders’ children. The presence of monetary sanctions might prompt questions such as: What are the budgetary implications for municipalities? These questions have one thing in common. They can be answered by positive analysis. Accordingly, they are well within the economist’s comfort zone.

The economic outcomes highlighted above raise some ethical questions, too, however. As a discipline, contemporary economics is less comfortable with these types of questions because they involve normative matters. Our paper is a call to be willing to engage in normative analyses of economic outcomes. In this respect, we follow the tradition of scholars
such as McPherson and Hausman (2006), who argue that it is a mistake for economists to shy away from normative matters.35

Why does the presence of invisible punishments raise questions that involve ethical considerations? How and how much a society ought to punish those who transgress is a profoundly moral question since it involves the imposition of harm on the transgressor and most societies’ moral codes contain a premise that harming someone is wrong. The philosopher C. L. Ten (1993) reminds us that because punishment involves deprivation and harm, societies need to justify it. Justifying an action requires one to ask questions about it, in order to determine whether the action is rightful.

In what follows, we pose several questions that should allow one to think about whether the two economic outcomes discussed above can be considered to be acceptable from a moral standpoint. Some require us to reflect upon who has the right to punish, while others raise concerns about whether the hidden punishments might involve coercive sales, monopoly pricing, impingement upon the presumption of innocence and other challenges to fairness, along with changes to the characteristics of important goods. The analysis in the section proceeds as follows. In each subsection, we state a question and then explain why we think it could be asked. Our goal in this section is not necessarily to answer all the questions. The aim is to uncover moral issues that seem to be lurking beneath the surface when one considers the economic outcomes identified earlier in the paper, so that we can make them transparent.

**Labor Market Penalties and a Who-Has-the-Right-to-Punish Question**

Ten (1993) notes that one of the questions that has occupied many a philosopher’s time is why ensuring that wrongdoers are punished is the function of the State. The answer is then derived from the observation that one of the functions of the State is to protect its citizens, and that protecting citizens from harm may involve protecting them from each other. Ten (1987, p. 74) quotes from John Stuart Mill’s *On Liberty* to elucidate this argument: “That the only purpose for which power can be exercised over any member of a civilized community against his will is to prevent harm to others.”

One might also draw on Hobbes’ discussion of the need for man to give up some of his liberty and to cede authority to a government in order to avoid living in the state of nature from *Leviathan* in order to see this
point. Hobbes says, “And covenants, without the sword, are but words and of no strength to secure a man at all” (Leviathan, Part II, Chapter XVII, paragraph 2). With this comment, Hobbes is arguing that there is no way to have a binding agreement among men to adhere to a set of laws that will allow them to live together in an orderly way unless there is some entity that has power over all that can enforce the laws. Adds Ten, “There is a familiar tradition in political philosophy which maintains that the State should prevent individuals from harming others and provide the conditions for persons to pursue their own plans of life” (Ten, 1987, p. 48).

Thus, one can see from political theory that it makes sense for the State to have the power to punish any citizen who takes an action that harms another. Why has this role typically has been assigned solely to the State in modern societies? Criminal prosecutions arise when an individual has explicitly violated a law of the state; and as it is the State’s rule that has been violated, it makes sense for the State to be the entity to punish the offender.

The exposition above raises an interesting question about labor market penalties that ex-offenders bear. It seems reasonable to argue that sometimes they can be construed to be penalties that are levied by the state, while others cannot be reasonably argued to be such. For the former, an example would be a law or government regulation that forbids a banker convicted of embezzling from ever working at a financial institution again. Here the wrongdoer suffers a consequence post release. Because the penalty originates with the State, however, no objection can be raised about the right of the punishing entity to punish (even if one disagrees with the specific punishment that the State imposes).

Consider a different example, however, where an ex-offender is eligible to work in a specific industry or occupation and qualified to do the job, but an employer will not hire ex-offenders. This case would seem different. In this instance, we might raise questions from an ethical standpoint, as this seems like a case in which the source of the penalty is a private individual. What grounds does a private individual have to further punish an ex-offender? Might this be construed as vengeance? Because there is a body of theory that establishes the State’s right to punish, but no similar justification for an individual’s right to punish an ex-offender, we have identified an instance in which it is possible to raise a question about the existence of hidden punishments that requires one to engage in some moral reflection.
Can hidden punishments undermine the character of civic goods or social institutions?
The philosopher Michael Sandel has argued that the spread of market practices into non-market domains can actually corrupt certain “goods.” Sandel believes this is particularly true for civic goods. As examples, he discusses ballparks and Congress, institutions that traditionally have been construed as belonging to us all. Examining the point that Sandel makes about Congress can direct us toward another question to ask about invisible punishments.

Sandel (2012) notes that, historically, Congressional committees have offered free seats to the public for most of their hearings. These seats traditionally have been available on a first-come-first-serve basis, allowing citizens who are interested in seeing how their government works to have an opportunity to mingle with policymakers. In recent years, lobbying firms have instituted a practice of paying people to camp out overnight in order to reserve seats for lobbyists who then show up at the last minute to take the seats in the room. Sandel notes that this practice displaces regular citizens, who might not be able to hire someone to stand in line for them. Sandel calls this an instance in which the “ethics of the queue” have been replaced with the ethics of the market, and he deems this outcome bad. According to Sandel, the ethics of the queue stipulate that everyone must wait their turn in a democratic fashion, and this promotes a sense of equality among citizens, which is central to democracy. Sandel argues that by commercializing the process by which seats are allocated, there is a sense in which the institution of Congress becomes tainted or degraded. Is government now for sale, he asks? Is government really meant to serve all the people, or just the ones with money, one might add? Sandel’s point is that a government for sale is a different type of government from the vision most people have in mind when they think of our government as a democracy. This, according to Sandel, provides an example of how the introduction of market principles into a non-market context can change the character of a good in a way that corrupts it or its original meaning.

Might the justice system not work just as well as an example of a type of institution that might get corrupted or degraded when market principles are introduced into its operations? The justice system is presumably a social institution that exists for the benefit of society. That arguably makes it a community good as opposed to a private good like a
hot dog. If one considers LFOs such as the increasingly common practice of charging offenders for their stay in jail or for their public defenders, it seems natural to draw a parallel to Sandel’s analysis of Congress and to ask whether we have an instance in which market-oriented principles have been introduced into a context in which they may not belong. By charging offenders for a stay in jail or for their public defender rather than funding these activities out of the community budget, has society essentially transferred a market-oriented “fee-for-service” type logic into the realm of the courts? If so, might this be bad? If we view the justice system as something that belongs to all of us, is it odd not to fund it the way we pay for other forms of government like the Executive Branch? If it belongs to all of us and is a civic or community good, why treat it like a product like an Uber ride? Applying Sandel’s logic about the way that marketization corrupts goods prompts one to think about such questions.\textsuperscript{40} Pondering them acknowledges Sandel’s point that:

...once we see that markets and commerce change the character of the goods they touch, we have to ask where markets belong--and where they don’t. And, we can’t answer this question without deliberating about the meaning and purpose of goods, and the values that should govern them. (Sandel, 2012, p. 202)

How, specifically, might a “good” get degraded in our context? And what, specifically, is the good that we’re talking about? There are likely several possibilities, but one answer would be that it is the judicial or criminal justice system at large that is the good (or public institution) that stands to have its character changed. It may get degraded if the system becomes remote to those of us not engaged with it in any direct way, as people begin to think it has no relevance to them. This could be bad for two reasons. First, if instead of viewing the justice system as a public institution, people come to think of it as an entity selling services to private individuals, will it come to be thought of like a private industry instead of a social institution? Second, if society has to have national-level, or state-level, discussions about raising taxes in order to fund this budgetary item and its expansion from time to time, citizens pay attention. We are engaged. When a public institution is funded from public funds, we are reminded about it when we want to know why our taxes are increasing. The policymaker then says, “because we’re arresting more people and confining them,” and we then ask “why?” Marketization may change
the frequency with which society has to have conversations about paying for the system. If the system is funded by people who are arrested, the general public is not likely to ask questions about the system’s expanding reach and costs. Might the system grow significantly without anyone but the people ensnared within it knowing? That has important implications in a democratic society that prides itself on monitoring its government and limiting its size.41

The Courts, User Fees, and Who Is the Consumer?
A second question one might raise related to morality, specifically the justness of monetary sanctions, is why, even if one accepts the premise that the criminal justice system should be thought of in fee-for-service terms, it is right to conceptualize things as a case in which some naughty person ought to pay a fee because the offense that she perpetrated (allegedly) is taking up the court’s time. Why shouldn’t one view the criminal justice system as something that is providing a service to the person who claims to have been wronged instead? That is to say, if someone got arrested and jailed because they stole my tv, why should the arrested party pay the fee for the jail stay? Wouldn’t it be just as natural to charge me the fee since the criminal justice system is providing me the service (and satisfaction) of locking up the person who took my tv? One wonders whether the existing practice has made an arbitrary assumption about who is being served when states decide to charge the defendant a user fee.

How one views the “who is the consumer” question is likely to be informed by how one views the ultimate purpose of the justice system or any of its components. If we think system-wide and take a Hobbesian or JS Mill view, then the public at large would seem to be the consumer since the system is providing public order. If we zero in on one element of the system instead, like prison, then perhaps some will say that the purpose of prison is confinement so it’s the person being confined who is the “user.” But does taking such a position overlook the fact that such confinement is often argued to serve public safety interests? The latter view makes the general public (and potentially the victim) the relevant consumers. Theorizing about the consumer raises many questions about whether viewing the defendants as the “users” that should be billed makes sense.
Fairness from the Perspective of Possible Coercion

The research of Harris, Evans, and Beckett (2010, p. 1755) indicates that in a few municipalities, monetary sanctions like charging a defendant for his public defender may be assessed regardless of whether the defendant ends up being convicted or not. That suggests that society might be charging some people who are “users” of the criminal justice system (if we accept the user fee logic) who are not users of their own free will. If a person has been falsely accused, he is not “choosing” jail and a lawyer the way that someone might choose to pay for a service like a haircut.42 His payment, therefore, does not seem voluntary. Sandel (2012) suggests that economic exchanges that involve coercion can be viewed as unfair and therefore morally questionable. This implies that society has another reason to ask itself whether the presence of invisible punishments is morally acceptable when considering the charges imposed upon defendants.43

The rise in the use of plea bargaining may exacerbate concerns about such coercive sales. If plea bargaining results in more cases being resolved with guilty as the outcome, in situations in which defendants agree to plead guilty to a lesser charge in order to avoid being charged with a more serious offense, this would tend to increase the size of the population that would be subject to LFOs (in states that only bill defendants for fees, fines, and surcharges if they end up being convicted).

Questions about Fairness and Equal Footing

Another conceptualization of fairness centers on the idea that two parties to an exchange should be on equal footing. Under this line of reasoning, it is unfair if one party has a disadvantaged bargaining position relative to the other (Kens, 1998). This principle provides another possible moral lens through which to view monetary sanctions. Beckett and Harris (2011, p. 526) have noted that in states that have provisions to limit LFOs based on a defendant’s ability to pay, individuals are not always represented by counsel at the hearings that will set the size of their obligation, which gives the State an advantage in the proceedings. An economist might describe this as a case in which the State has both unchecked monopoly power over how much a person will pay and political power over whether they will pay at all.44

In this section we have raised several questions about the hidden punishments highlighted in Section II in order to illustrate our point that
there are ethical questions that economists could be asking about them. We posed the questions to show what it might mean to look at economic outcomes from an ethical standpoint. Are there any existing normative frameworks within economics that can be used to attempt to evaluate invisible punishments so that we can begin to definitively answer questions about the morality and/or merits of invisible punishments? That is the subject of the next section.

4 Normative Frameworks That Could Be Used to Evaluate Invisible Punishments

In the current section, we identify two existing frameworks within economics that can be used to provide some analysis of invisible punishments from a normative perspective. One comes from Gary Becker. The second from the public finance literature.


Becker (1968) offers a framework that can be applied to at least one type of monetary sanction: fines. In Becker’s view, fines are to be viewed in a positive light. In fact, his model suggests that they should be imposed whenever possible because, given an assumption that they are a form of punishment that is costless to society, fines have an advantage over prison, as imprisoning a person requires society to use some of its scarce resources as part of the punishment process.

Becker’s analysis is unabashedly normative, as he states the following at the outset of his research: “The main purpose of this essay is to answer normative versions of these questions, namely, how many resources and how much punishment should be used to enforce different kinds of legislation?” (p. 170, emphasis by Becker). The model that Becker uses to examine these questions hypothesizes that a policymaker will want to minimize the total loss to society associated with crime, and it shows that when choosing a fine as the form of punishment, the policymaker can use the fine as both a device for decreasing offenders’ likelihood of committing crime (manipulating the severity of punishment in order to reduce the number of offenses) and as a way to provide an offset to the harm that the commission of an offense imposes on a victim. Becker likens his analysis of fines to a classic externality analysis, as the equilibrium conditions of Becker’s model imply that the optimal fine would be...
set equal to the marginal cost of apprehending and convicting offenders plus the marginal harm associated with their offenses.\textsuperscript{46}

Becker indicates that fines should be used as a form of punishment whenever possible (Becker, 1968, p. 193). In fact, he surmises that some of the anger and resentment directed at offenders who receive other forms of punishment may be due to the fact that other forms of punishment fail to compensate victims, leaving them feeling as if the offender has not really paid her debt (Becker, 1968, p. 194). Although most of Becker’s article discusses fines, the author does mention court costs intermittently. Moreover, to the extent that his analysis of fines includes discussion of having them set to compensate society not just victims, his research could be interpreted as providing a broad endorsement of financial charges.\textsuperscript{47}

Viewing the monetary sanctions that we see in society today in the context of Becker’s normative framework reveals two limitations of his analysis, however. First, in assuming that fines are costless to impose the model overlooks the fact that it does apparently cost money to try to collect LFOs.\textsuperscript{48} The existing literature argues that some jurisdictions spend considerable resources trying to collect outstanding criminal justice debt (Bannon et al., 2010; Beckett & Harris, 2011). The expenditures come in the form of police time—using police to execute search warrants for people who fail to pay, for example—and in the form of court time when poor ex-offenders are brought to court because of their failure to pay, taking up judges’ time as the court tries to determine whether the person should be returned to prison for his failure to pay or whether time should be taken to set up a payment plan. While comprehensive national data are needed before drawing any strong conclusions, these findings suggest that Becker’s model would need to be reformulated to allow for the case in which fines are not costless. Such a criticism is not hugely damaging to the model, however; as long as the social cost of using fines to punish offenders is lower than the costs to society associated with incarceration, the general conclusion about a fine having an advantage over a prison sentence would still hold.\textsuperscript{49}

A critique of the framework that is more damaging is that by modeling punishment in an optimizing framework and positing that it should be set to minimize the loss to society associated with crime, Becker has implicitly assumed that efficiency is the goal the policymaker (and, by extension, society) ought to pursue. Seeking the level of offenses that min-
imizes the total societal loss associated with punishment by weighing the marginal cost of punishment against the marginal benefit of punishment and choosing both the form of punishment and severity of punishment that equate the two, as the Beckerian framework does, yields the efficient way to deal with crime; yet, while the assumption that the policymaker should focus on efficiency will strike an economics audience as natural, a philosopher would no doubt note that in deciding that efficiency is the goal that society should emphasize, Becker has made a value judgment about which moral criterion assessments of punishment should be based upon. As philosophers have long noted, there are other goods that matter from a moral perspective.50 Thus, for example, a critic might note that the normative framework provided by Becker (1968) does not allow one to interrogate the fairness of monetary sanctions. While there is a hint that a fine might be a “fair” form of punishment from the perspective of the victim, who would then stand to be compensated (potentially) for the harm done to her, the model does not provide a way to address other considerations related to fairness (such as coercion), or corruption of the good questions posed in Section III.51 These shortcomings notwithstanding, the normative framework developed by Becker provides an interesting example of a consequentialist approach. Consequentialist frameworks have a long tradition within philosophy.

**Vertical Equity**

Another normative framework that can be brought into the conversation about monetary sanctions is the framework that public finance scholars use to evaluate tax codes. In Section II, we argued that a surcharge could be viewed as a tax. As Slemrod and Bakija (2004) note, while assessing the fairness of taxes is a complicated and subjective process, evaluations of the degree to which a particular tax system is fair are often made based upon two guiding principles: horizontal equity and vertical equity. The latter principle stipulates that those with higher incomes should pay more than people with lower incomes. How do monetary sanctions stack up against this criterion? A flat surcharge rate applied against fine and fee levels that are fixed across all income groups does not meet the criterion of being vertically equitable. For example, if a jurisdiction imposes a $100 fee for anyone charged with a felony and a $200 flat fee for a jury trial with a 50% surcharge, all felony defendants would face $150 surcharge liability regardless of their income level. Surcharge systems with
a fixed rate like Arizona’s (Section II) would therefore seem to violate the norm of vertical equity.

5 Can One Build a Christian Framework for Analyzing Hidden Punishments?

Another way to approach an assessment of the morality of invisible punishments would be to take religious doctrine as a starting point. This is certainly how some individuals in society reach their decisions about whether actions are right or wrong.

To develop a Christian framework for evaluating invisible punishments, we start with the Christian value forgiveness, in order to use it as a lens through which to view hidden punishments. We draw on the work of several philosophers as part of the analysis. Rather than focusing on a specific type (or form) of invisible punishment, the framework focuses on the general concept of invisible punishment.

Why choose forgiveness? As the philosopher and religious scholar Nicholas Wolterstorff (2009) notes, forgiveness occupies an important place in our moral culture. The criminal justice ethicist Jonathan Jacobs (2017) goes so far as to describe it as “widely regarded as among the morally best capabilities of human beings” (p. 66).

One particularly intriguing model for thinking about forgiveness is provided by Warmke (2014). He offers a spirited defense of the practice of viewing moral forgiveness as similar to the cancellation of an economic debt, a practice that dates back at least as far as Aristotle’s *Nicodemian Ethics* according to Warmke.52

Why, according to Warmke, is the analogy between moral forgiveness and what he calls “economic debt cancellation” made? Warmke argues that the two practices have something important in common. They are structurally similar. Each involves (i) a precipitating event that causes a debt to be incurred, (ii) a state of being obligated to someone else, and (iii) the debt forgiving event. The latter is the moment in which the person to whom the obligation is owed (either the financial obligation, in one case, or the moral obligation, in the other) releases the other person from the obligation to make reparations. Warmke deems it significant that both the economic debt cancellation process and moral forgiveness both share this “tripartate structure.” Moreover, argues Warmke, the structure is significant in that it ends with a norm-changing event. For-
giveness releases a wrong-doer from certain kinds of obligations, just as the cancellation of a financial debt releases the former debtor from an obligation to do something going forward. In the case of moral forgiveness, this is important because it means that “the norms of interaction between wrong-doer and victim are altered” (Warmke, 2014, p. 6). That is to say that, going forward, there are things that the wrong-doer is no longer obligated to do and things the victim no longer has a right to do (blame and complain about the wrong-doer, for example).53

What does the Christian tradition say about forgiveness? We use Wolterstroff (2009) as a scholarly basis for insights into Jesus’ teachings about forgiveness, and then use that analysis as a basis for extending Warmke’s “economic model of forgiveness”54 in order to expound a theory of what forgiveness requires in terms of debt cancellation. This will allow us to make concrete comments about the nature of debt forgiveness and what it requires of man.

Wolterstorff (2009) argues that it is the words and deeds of Jesus that give rise to the importance of forgiveness as a central component of our moral culture.55 After citing several passages in the Bible, with particular emphasis on Gospel narratives such as Matthew 18’s story about forgiving 70 x 7 times and the Parable of the Unforgiving servant, Wolterstorff argues that Jesus advocated forgiveness as an alternative to the prevailing practice of assuming that if someone does you harm, harm is due to them in return. Wolterstorff calls the latter the “reciprocity code.” Says the author, Jesus’ teachings offered “vivid metaphorical and hyperbolic ways of making the point that we are to repudiate the code of ‘making things even’ or ‘getting even’” (Wolterstorff, 2009, p. 200). Wolterstorff’s analysis would suggest that when the norms of interaction change after the debt cancellation that the economic model of forgiveness (EMF) says that moral forgiveness entails, we should view the new situation as being one in which it is no longer appropriate to seek vindictive redress against a transgressor. Instead, forgiveness requires us to replace the “ethic of love” for a desire for vengeance and/or retributive punishment.56 If this is what Jesus’ teachings enjoin us to do, then it would seem that a Christian framework requires one to view wrongdoers in a way that does not involve doling out the continual and indefinite punishment that invisible punishments involve.

There is one important aspect of invisible punishments that might make a reader wonder whether the things that Wolterstorff has to say are
relevant to them. The hidden punishments that were discussed earlier do not represent actions that a victim has taken toward a transgressor. Instead, they originate in the behavior of the state and/or private citizens who presumably have not been directly harmed by the ex-offender. Given our analysis above, one might wonder, “When Jesus says we must forgive and forego retributive punishment, isn’t that just Jesus talking to a victim? What does it have to do with society at large? Can the discussion of Christian scripture’s view of rightful behavior really have anything to do with invisible punishments, since many of them seem to involve treatment that is not coming from the victim but from other members of society, or from society’s institutions?” These are important questions. In a democracy however, it seems wrong to completely detach the policies of the State from the people within it. Any policies that society has in place to punish offenders are policies that we are all responsible for as citizens of the State. We suggest that this means that Jesus’ instructions to forgive pertain to the rest of us as well, not just to victims. It seems just as much a part of man’s moral duty as applying the teachings in instances in which one is directly harmed. If one is admonished not to nurture a desire for vengeance or retribution when one is a direct victim of a transgressor, how can it be appropriate for one to cling to such sentiments when considering a perpetrator who harmed someone else, while mulling the situation over as members of the society in which the offense occurred? This same logic would seem to apply to any punishments that we seek to render as individuals, like refusing to hire someone if the decision is based on his having been incarcerated and not on productivity considerations.

Turning to the famed contemporary philosopher Martha Nussbaum can provide additional food for thought. In *Anger and Forgiveness*, she suggests that a society’s legal institutions express the sentiments of the people of the society (Nussbaum, 2016, p. 172). She also describes public sentiment in contemporary US society as anger-ridden and vindictive:

> Far more tenacious and un-Aeschylean are the views that many people hold about punishment, once an offender is indicted and convicted. Here retributive ideas continue to dominate. (Nussbaum, 2016, p. 176)

Why is it the case that many people operate on a “doer must suffer” or “payback” model of thinking, as Nussbaum describes such views? Nussbaum suggests that it is because many people think that anger is a good
emotion, and that this is the reason we end up with legal policies that have this emotion embedded in them (pp. 248-249). To her phrase “legal policies” one might add the word *practices*, as it seems that the existence of hidden punishments shows that society tolerates formal policies that continue to punish transgressors after they have served their time, but that we also accept societal- and individual-level practices that end up imposing indefinite punishment on ex-offenders.

Nussbaum laments that the US opts to address crime through “the incoherent and inefficient ideas of anger” (p. 181). Our analysis suggests that a Christian framework for evaluating invisible punishments would make it is difficult to justify them because forgiveness would seem to preclude continual or indefinite punishment of a transgressor. When one thinks of the way Christ allowed Mary to wash his feet, or the way he treated the woman everyone wanted to stone, it seems that Jesus’ practice was to look past any wrong a person had done. He did not seem intent of treating people differently because of past transgressions.

Given its focus on forgiveness, a Christian framework has the advantage of allowing one to evaluate many invisible punishments at once because forgiveness applies to the general concept of punishing people, regardless of the particular form a specific invisible punishment takes. Whether we are talking about labor market penalties or saddling people with debt that they struggle to pay after release from prison does not matter.57

6 Discussion and Contextualization

We have argued that it is important for economists to go beyond documenting the presence of invisible punishments, and to contemplate ethical considerations related to their existence as well. Why might doing such be important? First, if economists ignore moral matters when analyzing any particular outcome, it can give the appearance that there are no potential moral debates to be had about the economic outcomes that we observe, even when there are.58 This seems misguided as moral considerations often lurk below the surface of economic outcomes.

Second, evidence from psychology and cognitive science suggests that citizens’ perspectives about policy are shaped by the moral frameworks that they hold (Lakoff, 2002; Haidt, 2012). If citizens’ views about public policies are indeed shaped by moral considerations in addition to
putatively objective considerations like financial costs, then economists who hope to be influential in public policy debates stand to benefit from thinking about ethical matters. It is possible that public policy scholars would be more in tune with voters if, when we proposed policies, we were not afraid to comment on any of the moral features that they have. This could go a long way toward helping society to weigh the moral merits of any particular policy in addition to the “objective” economic merits.

At present, scholarship on the morality of invisible punishment is sparse. Taking a philosophy of punishment approach, Lafollete (2005) has evaluated invisible punishments in relationship to the purposes of punishment that are traditionally offered in the criminology literature. He focused on (i) disenfranchisement, (ii) denial of social benefits to former felons, and (iii) barring ex-offenders from working in professions in which they’ve previously committed a crime. Lafollete concluded that it is difficult to justify the practices that we see in the United States based on the standard reasons that society offers for punishing offenders. Outside of this approach, a few scholars have argued that invisible punishments violate norms of social justice because they reinforce existing racial inequities in the criminal justice system (National Research Council, 2014; Beckett & Harris, 2011). Within legal circles, Sobol (2016) has questioned the potential conflicts of interest that may arise when the judges and courts that are dependent upon monetary sanctions as a source of income play some role in determining their assessment. Future research by economists could move the discussion beyond these conversations to a more expansive discussion of the economic dimensions of invisible punishments. Research that examines them from a multiplicity of ethical perspectives would seem beneficial. Economists may be able to bring in fresh ideas and examples of moral considerations that scholars from other traditions aren’t likely to think of.

7 Conclusion

The central aim of this paper was to examine two types of hidden punishments that are economic in their nature and to show that there are several ethical questions that can be raised about them. Additionally, we argued that it is important for economists to be willing to ask questions about the morality of economic outcomes. Reluctance to do such when doing economic research runs the risk of giving the impression
that the outcomes have no moral content. We argued that a willingness to raise questions about ethical considerations when studying economic outcomes is particularly important for economists who hope to influence public policy debates with their work. In its effort to call attention to normative matters, the paper complements the body of research that has criticized the economics discipline’s obsession with being viewed as one that is concerned solely with positive matters.

Our paper also presented three normative frameworks that could be used to evaluate some of the invisible punishments that are the subjects of the paper. This study of normative frameworks reveals, first, and probably unsurprisingly, that not all normative frameworks can address all the moral questions that one might have about invisible punishments. For example, the public finance tax framework can speak to some fairness considerations but not to other moral goods. A Beckerian framework allows one to contemplate ways that fines and some other monetary charges (like court fees) might make society’s punishment system efficient, yet this framework is also limited in its relevance in that it only applies to a few types of invisible punishments. Moreover, minimizing the total cost that crime entails for society is a laudable goal, but it need not be society’s only objective. Our study of normative frameworks also suggests that a framework based on the Christian tradition does a better job in terms of applicability to the general concept of invisible punishment, so a Christian framework might present a good way for scholars to engage the public. Seventy-one percent of US adults associate themselves with a Christian religion (Sandstrom, 2017). To the extent that other religious traditions emphasize forgiveness, too, the framework that we have developed may provide a way of assessing invisible punishments that resonates with many people, or one that can serve as a starting point for a discussion of them at the very least.

What type of punishment transgressors receive and for how long they should be punished are crucial questions for a society. The United States’ practice of imposing “invisible” punishments on top of formal ones makes one wonder if, in today’s world, our prodigal sons will ever have the chance to return home from prison to find themselves fully welcomed back into the fold.
Endnotes

1 Summary statistics and detailed information about both the construction of our sample and the variables used in our analysis are provided in the appendix.

2 While earnings typically rise with age, in our regressions age is not statistically significant. This is likely due to the narrow age range for the men in the survey, and to the fact that the NLSY men are all age 47 to 56 by 2012. This puts them close to the mid-point of the life cycle, where the age-earnings profile typically flattens out.

3 The data come from self-reports of having committed various offenses. For a more detailed discussion of the construction of this variable, see the appendix.

4 A more detailed discussion of the panel appears in the appendix.

5 This is not an uncommon outcome, as fixed-effects estimates can be better suited to controlling for unobserved characteristics than OLS regressions.

6 Our fixed effects regressions include the following control variables: age, education, region of the country, ability as measured by the respondent’s AFQT score, and time dummies.

7 Grogger (1992) and Kling (1999) are other classic studies of incarceration’s effects on ex-offenders’ labor market earnings referenced by Western.

8 Dobbie et al. (2016) applies a similar strategy to analyze the effects of prior incarceration on employment.

9 Pager’s methodology involved assembling application materials that could then be used to respond to actual job announcements, and creating sets of applications that varied only by whether or not an applicant had been previously incarcerated. More specifically, Pager (2003) constructed fictitious backgrounds for two-person teams of individuals who were given the task of applying for certain jobs. In each pair of applicants, one person was instructed to report “yes” to the have-you-ever-been-convicted-of-a-crime question on the job application form, or to list a parole officer as a reference if no such question appeared on the form. Otherwise, each member of the pair listed similar characteristics and job qualifications on his application form when applying for the job, and each team contained members of the same race. The mock job seekers contacted a randomly select-
ed set of employers for a job. Employers’ responses to the applications were then recorded.

10 For a comprehensive review of the literature, see National Research Council (2014).

11 Even individuals who are never convicted can face these charges. This matter will be discussed later in the paper.

12 In many states, there are also fees associated with serving probation and fees associated with treatment programs that an ex-offender might be mandated to attend, so individuals may face additional financial charges after they are released from prison or jail. Our paper is not directly concerned with these.

13 Harris, Evans, and Beckett’s data come from a survey of 500 people convicted of felonies from four counties in Washington state. The authors found individuals with outstanding criminal justice debt that ranged anywhere from $500 to $305,145 (Harris, Evans, & Beckett, 2010, p. 1767). All dollar values come from 2008 and are not adjusted for inflation. While no national estimates are available yet, a recent Arnold Foundation-sponsored project aims to fill this gap in the literature. See Harris et al. (2017) for further discussion of this project.

14 More specifically, Harris (2016) conducted a detailed analysis of the statutes in every state of the United States in order to identify the different types of fines, fees, and surcharges that each state imposes. See Table 2.4 of Harris (2016) for an overview.

15 Bannon, Nagrecha, and Diller (2010), Harris, Evans, and Beckett (2010), and Beckett and Harris (2011) are seminal texts on the subject of criminal justice debt. For an example of the emerging legal scholarship on the topic, see Sabol (2016).

16 In North Carolina, for example, courts are obligated to require a convicted defendant to pay a $50 fee and must also enter a judgment for the full expense of the defense services that were provided when a public defender was used (Bannon, Nagrecha, & Diller, 2010). In Virginia, a poor defendant might be charged as much as $1,235 per offense when using a public defender to represent him against any charges that had been brought against him (Bannon, Nagrecha, & Diller). In Washington State, according to Harris, Evans, and Becket (2010, p. 1753), some jails charge as much as $100 per day and require payment even before the inmate’s case is resolved.

17 It appears that most states apply the surcharge rate to the balance
of the individual’s fines only, not necessarily the fees that he faces. In Illinois, however, they can be applied to fee balances as well (Illinois Statutory Court Fee Task Force, 2016).

18 While Harris presents information about every state in the country, the table in Harris (2016) that these statistics come from was structured to give the reader simple examples of the types of charges that are levied across the nation. Accordingly, the author placed fees and surcharges together in the same column, meaning that, for some states the example that Harris presented is for fees, while in others examples of surcharges are provided. Our table pulls the information about fees (for the states in which fee data were provided). As noted earlier, in many states an individual can face a variety of fees. To simplify matters, we limit ourselves to showcasing just one fee, as our goal is simply to show that the fees can be significant for an individual.

19 Existing research indicates that an overwhelming majority of individuals who are incarcerated come from low-income backgrounds and that they often have low levels of education.

20 Again, note that our table presents sample fee data for each state listed. Because we do not have comprehensive data about every fee charged in any given state, our calculations represent lower bounds for the burden that fees would impose on a typical offender.

21 The length of jail stay is as reported in James’ (2004) analysis of data from the Bureau of Justice Statistics (BJS). Unfortunately, the data are presented in ranges of days. It was therefore only possible to identify the bracket the median offender fell into. Note that the 31 to 60 day range figure is likely to slightly overstate the amount of time that an individual would spend awaiting trial, because some individuals in jail are awaiting trial while others are actually serving sentences (for those sentenced to a short amount of time as their punishment). A 2011 report from the Criminal Court of the City of New York states that it takes an average of 400 days to bring a case to a jury trial in New York, however (Kamins & Barry, 2011), giving us confidence that the 31 to 60 day figure that we are using would not cause us to overstate the costs faced by individuals in all instances.

22 The existing literature also indicates that some states even charge individuals for time spent in prison. For example, Washington State charges an inmate $50 for each day he is imprisoned (Harris, 2016).
BJS data indicate that the median prison stay, nationwide, is 16 months (Bureau of Justice Statistics, 2009).

For example, see Bannon, Nagrecha, and Diller (2010) and Evans (2014, p.1) for use of this language. Harris, Evans, and Beckett (2010, p. 1758) also makes this point.

This case was chosen primarily based on availability of data. We were only able to locate data about changes in surcharge rates over time from Harris (2016), which presents the short time series for Arizona.

As noted earlier, most states seem to apply surcharges to the fines they impose, but some apply them on top of the fees, too. States and municipalities use surcharges for a variety of reasons. In some cases, a surcharge might be imposed to fund police officer’s pensions; in other jurisdictions, the monies might go to fund local libraries or fire trucks for the fire department. Moreover, most states and local communities impose numerous surcharges. See Harris (2016), Harris et al. (2017), and Sobol (2016) for further discussion of the stated purposes of different surcharges in different states.

Indeed, the state of Illinois seems to acknowledge this fact. Its Statutory Court Fee Task Force, created to examine practices within Illinois, indicates that the Illinois Supreme Court said in one of its decisions that many of the court’s charges should be viewed as taxes (Illinois Statutory Court Fee Task Force, 2016).

We restricted this analysis of surcharge rates to Arizona because, while Harris (2016) does provide some information about surcharge rates in other states, most of the statistics provided for other states represent examples of one or two types of surcharge that a state charges. (See Harris, 2016, Table 2.4.) For the state of Arizona, however, the author provides more comprehensive statistics about surcharge rates by adding up all the surcharges currently imposed at the state level. We cross-checked Harris’ findings for this combined surcharge rate by consulting the state of Arizona’s Penalty Assessment and Surcharge Guide, which also lists statistics for the combined surcharge rate in different years. This combined rate is the sum of four different individual surcharges that the state of Arizona imposes.

For source and the related calculations, please see the appendix.

See Findlaw (2017). For the related calculations, please see the appendix.

These examples represent some, not necessarily all, of the surcharges
that exist in the state, however, so they may be lower bounds on the total rate that a person would face in these states. Given these figures for single surcharges, our reliance on Arizona as a case study is not likely to bias our conclusions in any meaningful way. The combined surcharge rate for Arizona clearly does not seem particularly high relative to the figures for individual surcharges in these other states.

31 The usury limits in Florida, Georgia, and Nevada are all substantially higher than the interest rate that the state charges on LFOs. Nevada does not have a legal cap on interest rates. The usury limit in Connecticut is 12 percent, so the LFO interest rate is not too far from it.

32 One caveat is that this report includes fees for civil court, not just criminal courts.

33 The Arnold Foundation is currently sponsoring a multi-year study to collect comprehensive national data about criminal justice debt. The team of researchers leading the project includes Professor Alexes Harris from the University of Washington, Professor Karin Martin from the John Jay College of Criminal Justice, and scholars from Northwestern, the University of Texas, and other universities across the country.

34 These charges ranged from a $40 application fee to apply for a public defender, to a special court cost for anyone who had committed a crime against a minor ($101), to permission for certain local governments to add an $85 surcharge for any offense coming through the local court (Diller, 2010).

35 McPherson and Hausman (2006) also note that even in instances in which the discipline claims to be engaged in purely positive analysis, normative judgments often underlie the analysis. As scholars such as Tiemstra (2009) note, positive economics is not really as value-free as it claims to be.

36 See Thomas Aquinas for another argument supporting the State’s right to punish. Hoekma (1986) discusses Aquinas’ views.

37 Holzer, Raphael, and Stoll (2004) conducted a survey that found that 60% of employers said they probably would not or definitely would not hire an applicant with a criminal record.

38 The legal scholar James Jacobs hints at this ethical dilemma in his recent text *The Eternal Criminal Record* when he writes, “The criminal may be punished primarily for breaking the rules, but we often feel free to give him some additional punishment if we think he broke
the rules because of traits of character that we find loathsome (Jacobs, 2014, p. 205; emphasis added). Jacobs then asks: Is this kind of retributivism consistent with liberalism or does it represent a departure from liberal values?”

39 Sandel (2012) uses the terms “corruption” and “degradation” interchangeably. In this context, “corruption” has a different meaning from its common use to refer to political corruption. A reader who wonders why a philosopher might talk about “degradation” in this context should see Haidt’s discussion of the centrality of feelings of disgust, and concerns about sanctity, to most moral codes. As a moral psychologist, Haidt notes “there’s more to morality than harm and fairness,” and shows that all societies have moral norms that deem some things to be “untouchable,” or worthy of special treatment or reverence (Haidt, 2012, p. 149). The implication is that the goods or people deemed to be “noble, pure, and elevated” should be treated that way and that there would be cause for concern if they were to be degraded or desecrated (Haidt, 2012, p. 106).

40 One hypothetical response to this argument might be that the courts impose charges on people all the time and that criminal justice debt should simply be viewed like parking tickets or other fines people sometimes have to pay for committing some infraction. However, the fact that criminal justice debt is being assessed in addition to whatever punishment a defendant gets sentenced to undermines such a response. This is why authors such as Harris, Evans, and Becket (2010) refer to them as collateral consequences.

41 A second way to think about degradation is to limit one’s thought to the incarceration element of the criminal justice system. If we think of prison (by itself) and view it as a public institution that punishes guilty citizens, as the political philosophy literature would instruct one to think of things, is it possible that the marketization may cause one to begin to think of prison as a commercialized system of providing accommodations for those awaiting trial and convicts? If we start to view jails and prisons this way, do they become akin to “hotels” or “rooming houses” in one’s thought? If we do begin to think of them as privately-provided accommodations—as private goods in the temporary housing market space—might this not make people likely to cease to care about the conditions under which the “occupants” live? Why should I care about the accommodation facility’s operations if
it is a “private” good? Am I likely to still ask questions about their operations in such a case? The new way of thinking may even get exacerbated with private prisons: Marketization may make it easier for citizens to think about private prisons as simply being providers of accommodation services, rather than expecting them to serve public purposes, too (such as encouraging rehabilitation).

42 Note additionally that as Sandel (2012) indicates, the common defense that proponents of introducing marketization into new domains offer is that charging for a “service” will allow it to be allocated more efficiently. So, for example, if society allows people to pay to use the carpool lane to reduce their travel time, an economist would say society is getting a more efficient outcome because the people who are willing to pay the fee for the service of cutting their wait time will be the ones who value the good (time) the most. However, it seems unlikely that we could apply such an argument to user fees for jail stays or public defenders.

43 The US Supreme Court recently ruled that the State of Colorado may not keep monies paid for restitution by people who are later exonerated (and that its procedures for recovery should not be onerous). At issue was the State of Colorado’s procedures that required any exonerated person seeking a refund to file a civil suit in which he was required to establish his innocence convincingly in order to receive the refund (Nelson v. Colorado decided in April 2017). At present, it is not clear how widely this decision will apply, however (for example, whether it will apply to other states automatically or to instances in which a state has charged someone a fee, such as public defender fees). Accordingly, the issue raised in this section remains relevant.

44 The State is the sole supplier of court time, jail stays, and public defenders.

45 And to compensate society as well. See Becker (1968, p. 192) for further discussion of this point.

46 More specifically, \( f^* = H'(o) + C'(o) \) in equilibrium. “o” represents offenses; \( H' \) is the marginal increase in harm experienced by victims associated with a change in the number of offenses, and \( C' \) is the derivative of the cost of apprehension with respect to the number of offenses. The variable “f” is a measure of the severity of punishment.

47 Note also that Becker’s model endorses the use of fines and imprisonment together. Becker would say this makes sense in cases in which
there is no amount of money (or no feasible amount) that could fully compensate a victim, such as with the case of murder (Becker, 1968, p. 196). In such a case, society would need a combination of fines and incarceration in order to maximize social welfare.

Becker does mention the prospect that there might be collection costs briefly (p. 180), but he assumes any collection costs would be minor leaving the social cost of punishment close to zero ($b = 0$) for the case of fines.

Mathematically, it can easily be shown that the reformulation simply requires relaxing the model’s assumption that $b=0$ and that one could assume $b_{\text{fine}} > 0$ but less than $b_{\text{prison}}$ instead.

For example, as McPherson and Hausman (2006) point out: freedom, rights, and equality are other moral notions that people care deeply about.

This is not to say that Becker does not care about fairness at all. He does express concern about instances in which a statute gives the choice of either a fine or incarceration as punishment and when the incarceration term seems much harsher than the fine value. Becker gives an example of an offense that is punishable by a $500 fine or 30 days in jail. Here, Becker asserts, it would be reasonable to be concerned that the fine treats a poor person unfairly since a poor offender is likely to end up incarcerated due to inability to pay a fine, while a rich offender who’d committed the same crime would only forfeit $500 (a small magnitude relative to 30 days of one’s liberty). What Becker is not concerned about is the mere notion of having a fine, if the same fine can be paid by every offender. This is because, as noted elsewhere, in Becker’s framework, the optimal fine should be set equal to the value of the harm done (so it can only vary by type of offense, not by the offender’s personal characteristics).

Providing a full summary of the philosophers who have equated forgiveness to debt cancellation is beyond the scope of this paper. The interested reader can consult Warmke (2014).

Note that Nussbaum, whose work we discuss later, might dispute Warmke’s benign characterization of the forgiveness process. She believes that the Christian tradition’s forgiveness process involves practices that are damaging to the self, practices related to status lowering. We do not engage this argument as our interest lies solely in showing that forgiveness is advocated in Christian religions.
54 This is what Warmke names the economic debt-cancellation framework.

55 Wolterstorff (2009) says that Hannah Arendt also attributed the centrality of forgiveness to our moral culture to Jesus teachings (p. 195), although the two philosophers seem to disagree about whether the teachings were rooted in religious beliefs (Wolterstorff’s view) or social practices of the time (Arendt’s view, according to Wolterstroff).

56 Wolterstorff writes: “I suggest that Jesus’ injunctions to forgive should be seen as an integral part of his repudiation of the reciprocity code and his affirmation of the alternative ethic of love. The reciprocity code says that I am to even things up with the wrongdoer...by seeing to it that he is subjected to hard treatment roughly equal to the harm he did me. Forgiveness is one component in the alternative ethic of love” (p. 203). Additionally, the author adds, “What is it that one forgoes when one forgives? I suggest that there are two main components to the foregoing that constitutes forgiveness. In the first place, one foregoes the negative feelings one has...The second component of forgiveness, so I suggest, is the foregoing of retributive punishment” (Wolterstorff, 2009, p. 203).

57 Note that we are invoking forgiveness as a framework for thinking about the additional, invisible punishments that an offender receives (beyond incarceration). We are not arguing that offenders should receive no punishment.

58 For example, if, when presenting my economic analysis, I say that policy X increases efficiency and nothing else, might the reading public assume that this is the only consequence of the action?

59 Reasons such as deterrence, rehabilitation, communicating society’s disapproval with a violation of its norms, retribution, and restitution. See Morris and Rothman (1995) for a discussion of the standard purposes of punishment. Beckett and Harris (2011, p. 519) also make a version of this lack-of-a-penological-rationale argument for the specific case of monetary sanctions.
References


Evans, D. (2014). The debt penalty: Exposing the financial barriers to of-


National Longitudinal Survey of Youth—1979 Cohort. Data available at <www.nlsinfo.org/content/cohorts/nlsy79>


Tuttle, B. (2017). These are the states with the highest cigarette taxes. Time Magazine, Money section online, April 20, 2017. Available at www.time.com

Data Appendix

A. The sample for the OLS regressions

1. Our Sample and the variables used in the analysis
Our data come from the nationally representative National Longitudinal Survey of Youth (NLSY-79). The NLSY is a longitudinal study which surveyed 12,686 young people ages 14 to 22 in 1979 and has continued to follow them since that time.\(^1\) We use the data from the 2012 wave of the NLSY for our analysis, with some minor exceptions, as this was the most recently available data at the time the paper was written. As with most of the literature examining the labor market effects of having a prison record, we restrict the analysis to men. Additionally, we focus on nonwhite men. Due to our interest in current labor market outcomes, we restrict the analysis to men who were not incarcerated in 2012.

The dependent variable: earnings
The OLS regressions use earnings as reported in the 2012 wave for the dependent variable. This variable reflects a man’s total income from wages and salary.

Regressors
Age: This variable is constructed using a respondent’s birth year. We subtract the birth year from 2012.

Location: In each survey wave, the NLSY contains a variable recording the region that the respondent lives in. This geographic information
is presented in the form of four location categories: (i) the Northeast, (ii) the North central region, (iii) the South, and (iv) the West. Most Americans would consider the states listed as falling under the “North central” category to be in the Midwest. We created separate dummy variables for each region using the North central (Midwest) region as the omitted category in the regressions.

**The incarceration dummy:** To assess the role of past incarceration, we constructed a measure of whether an individual has ever been incarcerated. This variable is a dummy variable that takes on a value of one if the respondent has been incarcerated sometime in the past and a value of zero if not. The information used to construct this dummy variable comes from the NLSY variables that indicate instances in which a respondent was incarcerated at the time of his interview. For each survey year, the NLSY contains this information indicating whether the respondent was incarcerated or not, and we pull information from each wave to construct our dummy.\(^2\) Our dummy variable is coded as “1” if the individual was incarcerated in any wave between the 1979 wave and the 2010 wave.\(^3\)

**Parental education:** The controls for parental education are two of four additional measures that do not come from the 2012 wave of the NLSY. Instead, the parental education variables are based on data that was collected about mothers’ education levels and fathers’ education levels at the beginning of the survey (1979). The NLSY codes each parental education variable as follows: 0 for no years of school. 1 to 12 for each grade level that was completed in elementary school through high school; and then 13 for the 1st year of college up to a value of “20” (denoting an 8th year of post-secondary schooling or more).

**Ability:** The ability measure that we include in the regressions comes from the 1980 wave of the survey. That is when the ASVAB questions were administered. The AFQT score reported in the NLSY is constructed from four parts of the ASVAB, as is common practice: (1) the arithmetic reasoning section, (2) the mathematics knowledge section, (3) the word knowledge section, and (4) the paragraph comprehension section (Reeves & Howard 2013 Brookings report).

**The Ever-committed-a-crime variable:** The “ever-committed-a-crime” variable used in Model 2 to control for individual traits that might reflect a predisposition toward criminal activity is constructed based on data collected in 1980. In that year, the NLSY asked respondents wheth-
er they had ever committed a crime in the past (regardless of whether they were ever caught and punished for it). Respondents were asked separate questions about a variety of different types of crimes, for example, property crimes, drug crimes, et cetera. We compiled the responses to these questions into a single measure. The variable is coded as 1 if the individual reported having committed any type of crime and 0 if he answered no to all of the relevant questions.

2. Background notes about our sample size
Our OLS analysis is based upon data from the 2012 wave of the NLSY (primarily), the most recently available data at the time the paper was written. The analysis is restricted to men who were not incarcerated in 2012. There were 1750 nonwhite men surveyed in 2012 who were not incarcerated at that time. This case count represents a reduction relative to the number of nonwhite respondents listed as having individual identification numbers for the 2012 wave (2588 cases). The discrepancy is likely explained by the fact that while there were 12,686 individuals at the start of the NLSY (in the 1979 wave), the NLSY reports that only 7301 respondents were interviewed successfully in 2012 (in total)—33 years after the start of the survey. Our lower case count relative to the number of nonwhites at the first launch of the NLSY is therefore not surprising. Our sample also has a few cases for which earnings data were absent: There are 1682 cases with valid labor income data for 2012. Additionally, there are several observations for which our “ever incarcerated” dummy variable contains missing data. This is because we erred on the side of caution by coding anyone who had missing incarceration data in any prior year with a missing value code rather than assigning a zero to the case. The logic for doing such is that if the individual’s incarceration status during the relevant survey year cannot be established, it’s wrong to assume that this is a case to which we should assign a “no.” Finally, to eliminate the potential influence of outliers, the OLS regressions were run on a trimmed sample that eliminated the top 1% of earners.

3. Summary statistics
Table A1 shows summary statistics for our sample of nonwhite men. Note that given the age range surveyed in 1979, the men are all between the ages of 47 and 56 in 2012. Accordingly, our dataset represents men at the mid-point of the life course.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever incarcerated</td>
<td>.225</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Age in 2012</td>
<td>51.4</td>
<td>(0.091)</td>
</tr>
<tr>
<td>Labor income$^7$</td>
<td>$45,441.1</td>
<td>(2,349.12)</td>
</tr>
<tr>
<td>Region of residence in 2012 (proportion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>.138</td>
<td>(0.014)</td>
</tr>
<tr>
<td>North central</td>
<td>.139</td>
<td>(0.014)</td>
</tr>
<tr>
<td>South</td>
<td>.523</td>
<td>(0.020)</td>
</tr>
<tr>
<td>West</td>
<td>.199</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Parental education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s years of schooling</td>
<td>10.4</td>
<td>(.128)</td>
</tr>
<tr>
<td>Father’s years of schooling</td>
<td>9.9</td>
<td>(.160)</td>
</tr>
<tr>
<td>AFQT percentile score</td>
<td>28.17</td>
<td>(1.01)</td>
</tr>
<tr>
<td>Reports having committed a crime before (irrespective of whether the respondent was arrested or incarcerated for it)</td>
<td>59.6%</td>
<td>(Mean = .596, standard error = 0.019)</td>
</tr>
</tbody>
</table>

|                                | Mean  |       |
| Additional characteristics of the sample (Variables not included in the regression, however) | | |
| Years of schooling             | 12.8  | (0.092) |
| Married                        | .5001 | (0.02) |

Notes: Authors’ analysis of data from the NLSY. All calculations incorporate the NLSY weight variable.
B. The Panel Data Analysis

The panel used for the fixed-effects regression is drawn from the NLSY, from 1979-2012. As the number of time periods that any given nonwhite man is included may vary across individuals, the panel is unbalanced. Means for the variables are reported in Table A2.

**Table A2. Means for the panel dataset of nonwhite men**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor income (in constant dollars from 2012)</td>
<td>26,895</td>
</tr>
<tr>
<td>Age</td>
<td>32.24</td>
</tr>
<tr>
<td>Years of schooling</td>
<td>12.1</td>
</tr>
<tr>
<td>Incarcerated sometime in the past</td>
<td>.156</td>
</tr>
<tr>
<td>AFQT</td>
<td>25.3</td>
</tr>
<tr>
<td>Reside in Northeast</td>
<td>.169</td>
</tr>
<tr>
<td>Reside in the South</td>
<td>.459</td>
</tr>
<tr>
<td>Reside in the West</td>
<td>.239</td>
</tr>
<tr>
<td>Reside in the North central region</td>
<td>.133</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis of data from the NLSY, using a panel composed of data from the 1979-2012 waves. All statistics incorporate the statistical weight.

The regression panel includes 27,949 observations (person-years). The regression is estimated using Stata’s robust variance command that includes clustering.

Because the panel dataset includes earnings information from a variety of years, we adjusted the earnings data to account for inflation over time using the consumer price index (CPI-U). The CPI data were obtained from the U.S. Bureau of Labor Statistics (BLS) website.

Following Western (2006), the incarceration dummy used for the panel analysis was created as follows: When relevant, the first time a respondent was observed to be incarcerated, he is assigned a “1” for the incarceration measure for that year and all years after. Men who were never incarcerated in any year are assigned a “0” for the dummy variable.
C. The Tax-Related Calculations for the “Debt Penalties” Subpart of Section II

1. How the cigarette tax rate was calculated

   The Arizona Department of Revenue reports that the cigarette tax is $2 per pack of 20 cigarettes (10 cents a cigarette). This data is available at www.azdor.gov Assuming a base price of $4.65 calculated from Tuttle (2017), two dollars is about 43% of $4.

2. How the beer tax rate was calculated

   A six-pack of bud light costs about $5.79 (www.pugetsound.edu/alcohol), and most cans of beer are 12 ounce cans. That makes a six-pack equivalent to about 72 ounces, or 0.5625 of a gallon. With a tax of 16 cents per gallon, a $5.79 six-pack would get taxed at about 8 cents, or 1.4% when converted into a rate.

Endnotes

1 The survey was annual until 1994 and biennial since then.
2 The NLSY is widely used by researchers who are interested in incarceration because of this fact that it is the only major nationally representative dataset that collects information about whether an individual has been incarcerated or not. As noted by other authors however, it likely underestimates the number of people who have been incarcerated as respondents may have been confined during parts of any given survey year that the interviews were not conducted. For example, if an individual was jailed during the month of May but his interview date was in August, the fact that he’d been incarcerated at some point during that year would not be captured.
3 As noted earlier, our sample excludes men who were incarcerated in 2012, so this year is not relevant for the construction of the past-incarceration dummy.
4 There were 5385 non-interviews reported for 2012 in the NLSY at large. This means the NLSY captured about 57.6% of its original respondents in 2012. Our analysis is affected by some additional losses at times; for example, in cases in which earnings information is missing or people for whom we couldn’t construct a full incarceration history measure.
The case count falls to 998 as a result. Comparisons of the dropped observations to the included ones suggests that former are no more (and no less) disadvantaged than the included cases. Mean income, education, age, and ability are the similar across the two groups.

We also ran the regressions in logs. The results were qualitatively similar for most variables, although the ever-committed-a-crime in the past control in Model 2 is not statistically significant and two region dummies lose statistical significance.

Earnings data are reported for the prior year in the NLSY. Accordingly, this is technically earnings for the 2011 calendar year. Our mean is comparable to what is found by the Census. The Census reports $46,849 for blacks in 2011 and $41,026 for Latinos in 2011 (for men in the 45-64 age bracket—the closest Census bracket to our men).