Declining Employment Among Young Black Less-Educated Men: The Role of Incarceration and Child Support

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Abstract

In this paper, we explore the continuing decline in employment and labor force participation of nonenrolled Black men between the ages of 16 and 34 who have a high school education or less in the 1980s and 1990s. We focus on two fairly new developments: (1) the dramatic growth in the number of young Black men who have been incarcerated and (2) strengthened enforcement of child support policies. We analyze micro-level data from the Current Population Survey Outgoing Rotation Groups (CPS-ORG), into which state-level data over time on incarceration rates and child support enforcement have been merged. Our results indicate that previous incarceration and child support enforcement can account for half or more of the decline in employment activity among Black men aged 25–34. Previous incarceration also contributes to the decline among those aged 16–24. © *2005 by the Association for Public Policy Analysis and Management*

INTRODUCTION

During the 1990s, employment rates among young and less-educated minority women—particularly African-Americans—increased quite dramatically. This increase is generally attributed to a combination of welfare reform policies, expansions of the Earned Income Tax Credit (EITC), and other supports for working poor families, as well as a very robust labor market during that time period (Meyer & Rosenbaum, 2001; Blank, 2002).

In contrast, the employment rates of young less-educated Black men who are out of school continued their long secular decline during this time period. Though these young men did benefit from the economic boom of the 1990s, and the wages of those in the labor force seemed to rise in this period, the boom was not sufficient to offset the negative secular trend that has been reducing employment and labor force activity among these young men for the past several decades. Furthermore, there has been little good evidence to date about why this

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trend has continued in the 1980s and 1990s, despite positive trends in educational attainment and reductions in criminal activity for this group.[1]

In this paper, we explore the effects on the labor force activity of young less-educated Black men in the past two decades from two relatively recent developments: (1) the dramatic rise in the fractions of young Black men who have been incarcerated during the past two decades and (2) growing enforcement of child support orders in that time period. Both of these factors disproportionately affect young Black men, and both are likely to limit the employment rates of those affected. Indeed, these two factors are probably the most dramatic changes to affect young Black men over the past two decades, and many are affected by both developments. But, until now, little good empirical evidence has been generated that links these developments to the general decline in employment activity for this population.

In this paper we hope to provide such evidence. We have merged state-level data over the past two decades on Black incarceration rates as well as enforcement of child support policies into data from the Outgoing Rotation Groups of the Current Population Survey (CPS-ORG). We use a three-year lag on Black male incarceration rates as a proxy for the presence of ex-offenders in the Black male population of each state, and data on state-level enforcements activities to measure child support policy. We provide estimates of these equations estimated by Ordinary Least Squares (OLS) and also by Difference-in-Difference (DD) methods, where the latter are based on differences between estimated effects for young less-educated Black men and White men. We present results of some Hausman tests to confirm the exogeneity of these measures; and we provide additional evidence that the child support policy index that we use do affect child support outcomes at the state level.

RECENT TRENDS IN MALE EMPLOYMENT

We begin by documenting the continuing decline in employment and labor force participation among young less-educated Black men. In Figures 1 through 4, we plot employment and labor force participation rates of young and less-educated Black, White, and Hispanic men for the period 1979–2000. Figures 1 and 2 present employment-to-population ratios and labor force participation rates for those aged 16–24, while Figures 3 and 4 present comparable plots for those aged 25–34.[2] In both cases, the sample consists of those with high school or less education who are not currently enrolled in school. The period in question includes two recessions (1981–82 and 1990–92) as well as three cyclical peaks in 1979, 1989, and 1999–2000.[3]

[1] See Freeman and Rodgers (2000) and Holzer and Offner (2002) for a discussion of these trends for men ages 16–24. Both of these articles provide evidence that the boom did raise employment rates among young Black men. The former paper shows somewhat greater improvements during the boom than the latter, due to restrictions in the sample studied (only those in large metropolitan areas were analyzed) and some intrinsic miscoding in the former. The latter paper clearly indicates that the increases were not great enough to offset the group's long-term secular decline in employment. The recent evidence on wage growth among young Black men (for example, Chandra, 2000; Juhn, 2003) suggests that their estimated relative earnings growth in recent years has been inflated somewhat by declining labor force participation among the less-skilled. For earlier reviews of literature on this topic see Smith (2000) and Holzer (2000).

[2] Whites and Blacks represent non-Hispanics here.

[3] Polivka and Miller (1994) show that changes in the CPS that were implemented in 1994 reduced measured employment rates of Black men by 1–2 percentage points, though for young men overall the changes were either close to zero or slightly positive. All estimates we present below are from equations that include year dummies that control for any such small effects.

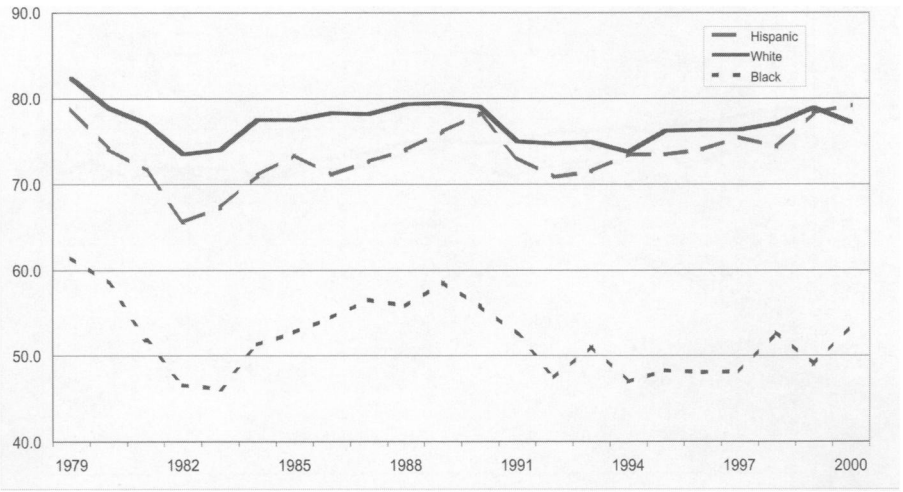

Figure 1. Employment/population rates for males 16–24 years old, 1979–2000.

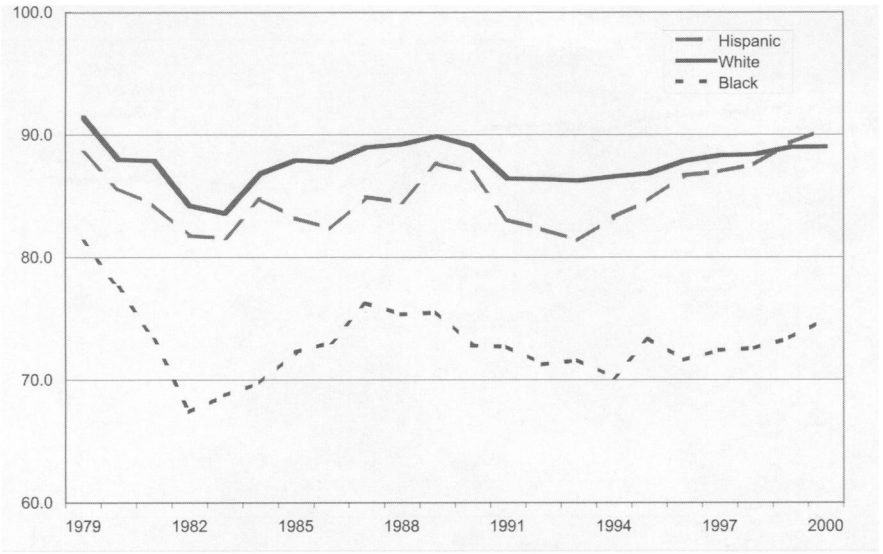

Figure 2. Employment/population rates for males 25–34 years old, 1979–2000.

The results show that employment and labor force participation rates among young White and Hispanic less-educated men are fairly comparable to one another, but these rates among comparable young Black men have lagged behind those of the other two groups over the entire period. Employment rates for all three groups show some cyclical movements, with declines in the early 1980s and 1990s for each; cyclical move-

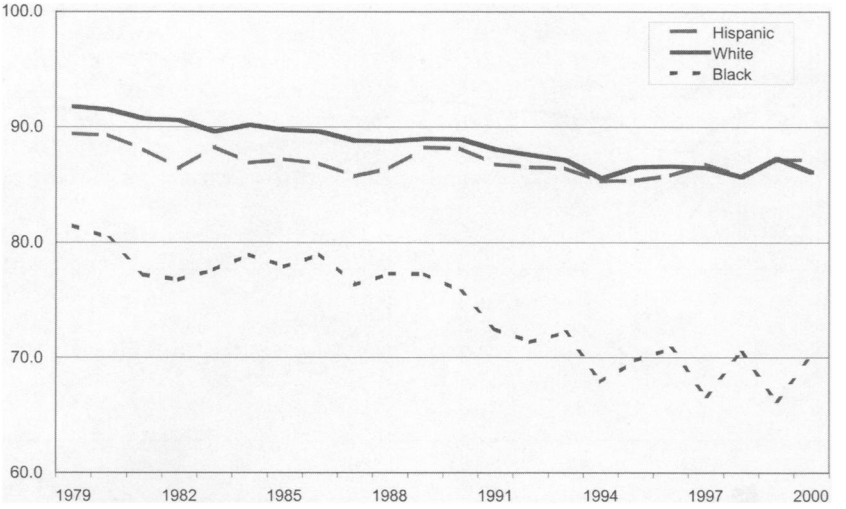

Figure 3. Labor force participation rates for males 16–24 years old, 1979–2000.

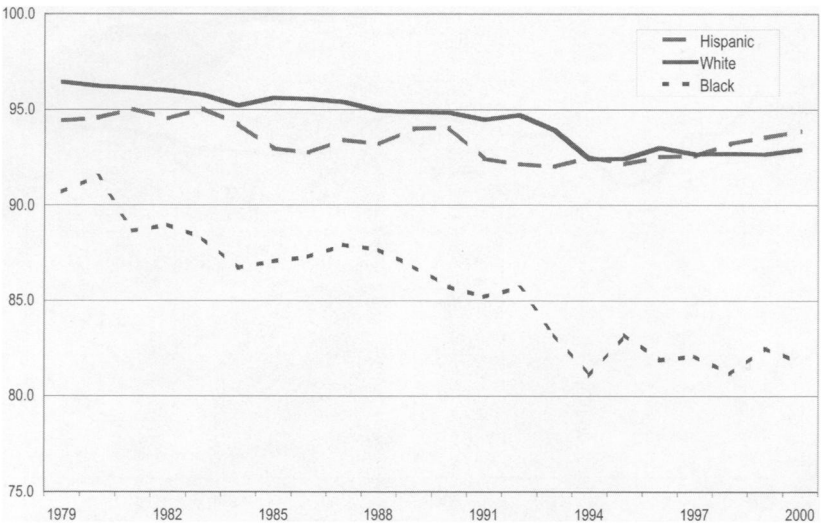

Figure 4. Labor force participation rates for males 25–34 years old, 1979–2000.

ments in labor force participation are less pronounced. But the gaps in employment and especially labor force activity between young Black men and the other groups widen over time. During the 1990s, employment rates among White and Hispanic young men stabilize, after declining somewhat in the 1980s; these declines have been analyzed elsewhere and have been attributed to declining real wages experienced by

these groups.[4] But the declines experienced by young Blacks are greater during that decade than for the other groups of men, and they continue during the 1990s.

If anything, the decline in labor force activity for the Black 16–24-year-olds is greater in the 1990s than the 1980s, despite the stronger economy of the latter period and the higher educational attainments of young Blacks. Among the 25–34-year-olds, the decline in the 1990s in labor force activity is much less pronounced, but still noticeable. But, when regression equations are used to control for various demographic and economic changes observed in this time period, the data indicate larger unexplained drops in employment activity—of about 16 percentage points for the younger group and 13–14 percentage points for the older one—during the 1990s.[5] And, since these calculations are based only on those currently in the civilian noninstitutional population, they ignore the large numbers of young Black men currently incarcerated; if they were included, the declines in employment for this population would be even more severe.

We also note that the decline in employment of young Black men in the 1990s is not well-accounted for by factors that have been emphasized in the literature of earlier decades. This literature has emphasized a variety of factors, such as disappearing industrial jobs, falling real wages, skill gaps between Whites and Blacks, competition from women and immigrants, and alternative income through crime, in accounting for differences in employment (as well as wages) between Black and White men.[6] But skill gaps and crime fell during the 1990s, while real wages rose.[7] Recent evidence casts doubt on the importance of declining manufacturing or blue-collar employment, and of substitution by women or immigrants for young Black men, as major factors. And, of course, the strength of the labor market should have disproportionately raised employment among young Black men, relative to most other groups, given their greater sensitivity to cyclical swings in the economy.[8]

INCARCERATION AND CHILD SUPPORT: POTENTIAL EFFECTS AND EMPIRICAL EVIDENCE

Both incarceration rates and child support enforcement grew dramatically in the 1980s and especially the 1990s; and both forces were disproportionately concen-

[4] See Juhn (1992) and Devereux (2003) on this issue. Juhn's evidence clearly indicates that declining wages are not large enough to account alone for the large employment drops observed among Black men. Whether real wages really declined over this period or simply stagnated depends on one's judgment of the extent to which the Consumer Price Index and other indices overstate inflation (see Schultz, 2003); but the decline in their wages relative to those of more-educated men and women more broadly is not in dispute.

[5] We describe the regressions more fully in Section IV below. When the regressions are run without the incarceration or child support variables, but with all other demographic and local economic variables included, the year dummies suggest modest improvements in employment over the 1980s and dramatic drops during the 1990s. More information on these results is available from the authors.

[6] See Holzer (2000) for a review of evidence on these matters. The declines in industrial jobs and in real wages for these men likely reflect underlying changes in technology or international trade, while institutional factors (like declining real minimum wages and union membership) have also contributed to the falling real wages for less-educated workers.

[7] See Juhn (2003) for recent evidence on trends in real wages, Hauser and Huang (1996) for evidence on trends in test scores, and Freeman (1999) for evidence on falling crime rates.

[8] Holzer and Offner (2002) find that declining blue-collar or manufacturing employment account for little of the employment declines in the 1990s. Most studies (for example, Hamermesh & Bean, 1998) find little evidence of strong substitution between immigrants and Blacks in the labor market. While Borjas (1986) found evidence of substitution between adult women and younger Black men, Blank and Gelbach (2002) found little evidence of strong effects more recently. Autor and Duggan (2003) suggest that rising disability insurance payments can account for some shrinkage of less-educated men in the labor market, though it seems less likely that this explains trends among younger Black men.

trated on the community of young Black men. For instance, 5 percent of all Black men were incarcerated as of 2002, relative to just 2 percent for Hispanic men and under 1 percent for all White men. Among young Black men, the incarceration rate was 12 percent (Bureau of Justice Statistics, 2003). These rates, of course, reflect incarceration at any point in time. Among those who are not currently incarcerated, Freeman (2003) estimates that 22 percent of all Black men have been previously incarcerated—which suggests that, among the younger cohorts, the rates might reach 30 percent or more.[9] Furthermore, one-fourth of less-educated Black women aged 16–24 and one-half of those aged 25–34 are custodial mothers of children with a father living elsewhere; these rates are much higher than for any other demographic group and suggest that a high percentage of young Black men are noncustodial fathers.[10]

Why would incarceration and child support have negative effects on the employment and labor force activity of young Black men? For one thing, the poor work experience and weak employment networks of many young Black men are likely exacerbated by an incarceration spell (Travis, Solomon, & Waul, 2001). Furthermore, employers are much less likely to hire ex-offenders than other groups of comparably skilled workers (Holzer, Raphael, & Stoll, 2002, 2003).[11] Also, an audit study of employers in Milwaukee by Pager (2003) indicates that employers seem much more averse to hiring Black men with criminal records than comparable White men.[12] And the aversion to hiring ex-offenders might even limit job options for young Black men who do not have criminal records among employers who do not check criminal records (Holzer, Raphael, & Stoll, 2002).

Previous empirical evidence largely bears out the notion that ex-offender status limits employment opportunities for young men. Some studies find strong negative effects on their employment rates (for example, Freeman, 1992) while others find them instead on earnings (Grogger, 1995).[13] But, assuming that the labor supply of these young men is quite sensitive to expected wage rates (Holzer, 1986; Grogger, 1997), then it is likely that anything that depresses their earnings should ultimately also lower their rates of employment and labor force participation. Furthermore, while much of this literature assumes that the biases in these estimates are likely to be toward finding negative effects of past incarceration on employment outcomes

[9] See Freeman (2003) for these calculations. Since incarceration rates have risen steeply in recent years, and such incarceration is mostly concentrated among younger Black men, we infer that the fraction of men under 40 with criminal records significantly exceeds the average for all age groups in that population.

[10] Child support tabulations are from the 2000 Current Population Survey-Child Support Supplement. Various data from BJS also indicate that at least 70 percent of incarcerated men are also noncustodial fathers (Holzer, Raphael, & Stoll, 2003).

[11] There are a variety of reasons for this—such as prohibition by law (federal or state) in particular occupations; employer fears about potential legal liability if an offender does harm to a customer or coworker; employer fears about their own property and physical safety; and so on. The occupations most likely to exclude those with criminal records include those involving any kind of child, elder, or patient care; as well as those involving the handling of finances or interstate movement of goods. For a review of court cases and legal issues surrounding employer liability for damages caused by an employee who is an ex-offender, see Holzer, Raphael, and Stoll (2003).

[12] In her study, 34 percent and 14 percent of White and Black men, respectively, who had not been offenders received job offers in the time period under study, while the comparable rates for offenders were 17 percent and 5 percent. The sample was not large enough to show a significant interaction effect between race and ex-offender status though the magnitudes of the findings suggest such an interaction.

[13] Freeman's study uses data from the National Longitudinal Survey of Youth, 1979, cohort while Grogger studies the unemployment insurance earnings records of incarcerated men from California in the 1980s. This literature is ably reviewed by Kling et al. (2000).

(because of unobserved personal characteristics that will be negatively correlated with incarceration but positively with employment), other biases (for example, from measurement error in self-reported rates of criminal activity) might go in the opposite direction.[14]

With regards to child support, the growing establishment and enforcement of child support orders tends to raise the expected value of the order against noncustodial parents, by raising the probability that any such order will have to be paid if one has regular earnings. Furthermore, these orders constitute a large tax on the earnings of low-income noncustodial fathers. Child support orders for low-income noncustodial fathers are in the range of 20–35 percent of income (Pirog, Klotz, & Byers, 1998). When combined with payroll taxes and phase-out ranges for food stamp benefits, the marginal tax rates on these men are often as high as 60–80 percent (Primus, 2002). If noncustodial fathers are behind in their child support, states will garnish up to 65 percent of their take-home pay to cover their child support payments, which is the federal limit on wage garnishment for debt purposes (Mincy & Sorensen, 1998; Sorensen & Oliver, 2002).[15]

Of course, the extent to which high marginal tax rates discourage labor supply depends on the elasticity of labor supply for any given group. The empirical literature suggests elasticities for low-wage workers and especially less-educated men in the range of 0.4–1.0.[16] As an example, if a quarter to a half of all young Black men are noncustodial parents who face marginal tax rates of about 0.30 because of child support orders; then labor supply of the overall group might be reduced by anywhere from 3 to 15 percent as a result. If substantial fractions of the noncustodial fathers are in arrears, the negative effects would be even larger.[17]

But, to date, the empirical evidence on these issues has been fairly weak. While there is fairly strong evidence that more stringent enforcement of child support policy raises child support payments to families and reduces participation on welfare (for example, Garfinkel et al., 1998; Freeman & Waldfogel, 2001; Huang, Kunz, & Garfinkel, 2002; Sorensen & Hill, 2004), we have had less clear evidence on its effects on the labor supply of low-income men. In particular, Freeman and Waldfogel (1998) find little evidence of labor supply effects, though their study suffers from a number of data limitations.[18]

[14] See Holzer, Raphael, and Stoll (2002) for extensive discussion of these biases. For discussions of self-report bias of criminal activity and how it varies by race, see Viscusi (1986) and Hindelang, Hirshi, and Weis (1981). To the extent that employers fail to hire nonoffenders because they cannot distinguish them from offenders, a bias toward zero in estimated negative effects is also generated.

[15] If child support orders are not readjusted for many low-income fathers when their earnings rise, the statutory marginal rate may not be the effective one. The most important effective rates may be the ones between zero and any positive earnings that trigger the payment of orders at average rates of about 25 percent for those paying on time and 65 percent for those in arrears.

[16] See Juhn, Murphy, and Topel (1991) for evidence of larger labor supply elasticities among low-wage workers in general, and Grogger (1997) for evidence that elasticities of young men choosing between legal and illegal work are nearly one.

[17] This discussion assumes that the noncustodial parents can escape undetected into the underground economy, and that their incentives to pay child support for their children are limited either because of their weak ties to their children or because their children are on public assistance and thus they receive little, if any, of the child support paid on their behalf.

[18] They use data only from the 1986 and 1991 Survey of Income and Program Participation (SIPP). Separate estimates for White and Black men are not provided, and the measures of state-level enforcement activity that they use capture only a few of the policies in our index.

DATA AND ESTIMATION ISSUES

For our estimates below we have used data from the Current Population Survey Outgoing Rotation Groups (CPS-ORG) for the period 1979–2000. We limit our sample to young less-educated men—that is, those aged 16–34 who have a high school diploma or less—in the civilian noninstitutional population. We also focus on those who are not currently enrolled in school. As in Figures 1–4, the primary outcome variables in which we are interested are whether each of these young men is employed and whether he participates in the labor force.[19]

We have also appended state-level data on incarceration of Black men and child support policies in each year to these data. The incarceration rates we use are the percentages of the Black male population in each state and year that are incarcerated, lagged by three years.[20] Since the average length of a prison stay for an offender before release is about three years (Travis, Solomon, & Waul, 2001), the lagged rate should capture the flow of Black ex-offenders in the state's population in any given year.

Of course, for our purposes we would prefer to have a measure of the *stock* of all ex-offenders in every state and in each year, rather than its annual *flow*. However, to our knowledge no such measure exists.[21] Summing the annual flow across different years would be inappropriate, given the high rates of recidivism in the population of ex-offenders over time and that the absence of such data before the 1980s would severely truncate our analysis. On the other hand, an annual flow in a measure that is highly autocorrelated (as this one is) and which closely fits the relevant age group should serve as a reasonable proxy for the stock measure.[22] Still, it is important to remember (as we noted above) that the magnitudes of both incarceration and ex-offenders in the population will be much higher for younger cohorts of Black men than for all cohorts combined.

To measure child support policy at the state level, our primary variable of interest is an index of state activities in any state designed to establish paternity and extract child support payments from noncustodial parents. Our index is simply the sum of six 0–1 measures on whether a state undertakes each of a set of activities that includes: (1) universal wage withholding for noncustodial fathers; (2) the establishment of presumptive guidelines for support orders; (3) interception of state income tax refunds from those who are delinquent in payment; (4) having an in-hospital paternity establishment program; (5) presumptive use of genetic testing to establish paternity; and (6) use of the "New Hire Directory" recently established by the U.S. Department of Health and Human Services to

[19] Following Clark and Summers (1982), we ignore the distinction between those unemployed vs. out of the labor force when studying employment for all of those in the population. But our measure of labor force participation does make this distinction. Comparisons between results for the two measures below indicate that incarceration and child support discourage labor force participation much more than they raise unemployment among those in the workforce.

[20] Data from BJS on incarceration rates by race are available starting in 1981 and, thus, three-year lagged data are available only from 1984 onward.

[21] Christopher Uggen of the University of Minnesota has generated some estimates of ex-offenders at the state level, though not for different years. His measures also include those on felony probation, many of whom have not been incarcerated. See Uggen and Manza (2002).

[22] For example, the correlation between contemporaneous incarceration rates of young Black men and the three-year lagged value of this variable is about .80. Since the average age of prisoners at the time of release is roughly 30, a measure that captures annual releases will accurately reflect the flow into our sample of young males aged 16–34.

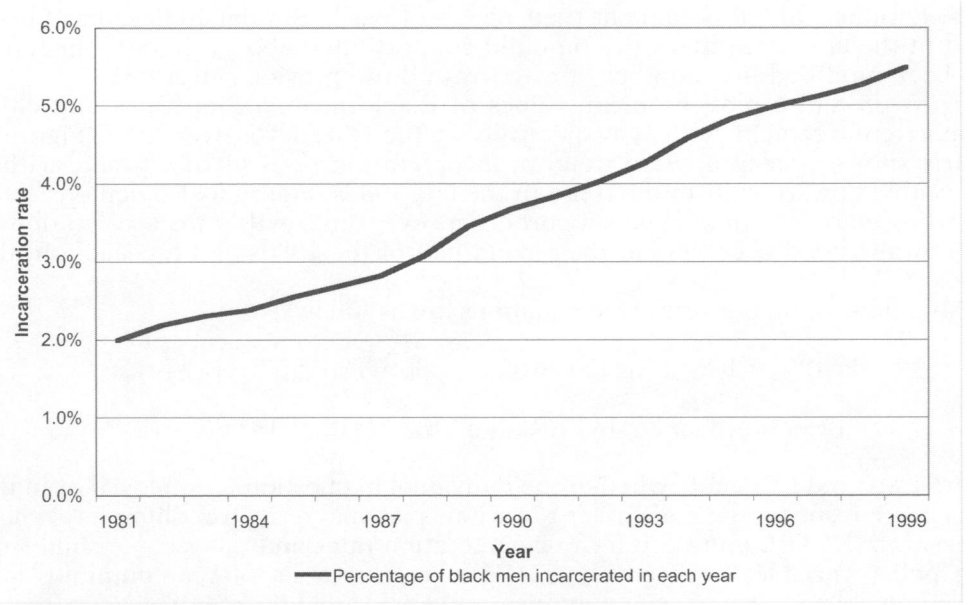

Figure 5. Trends over time in incarceration rates of Black men.

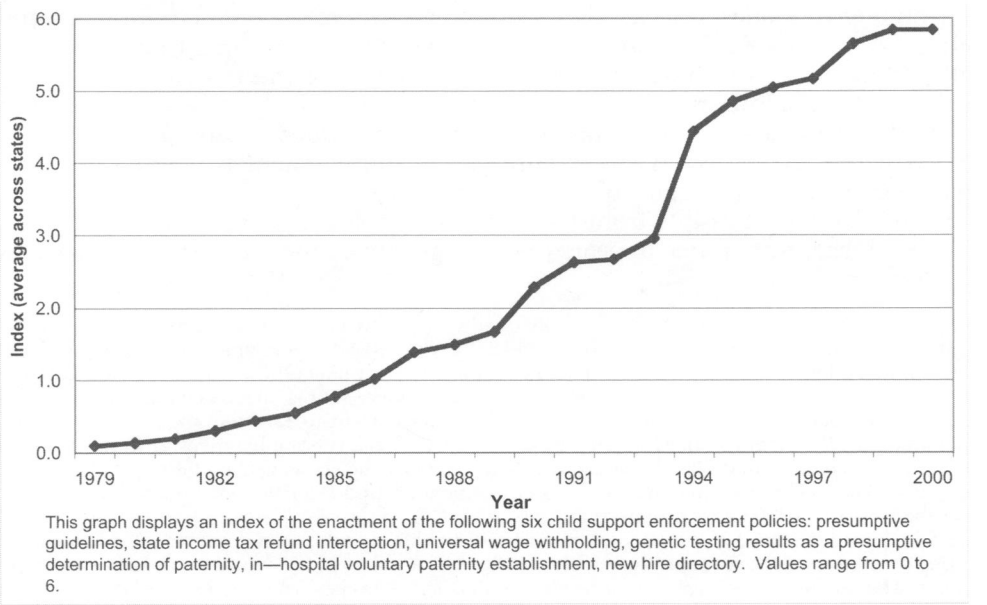

Figure 6. Trends over time in child support enforcement policy.

identify noncustodial parents at their places of work. Similar indices have been used in the empirical literature on child support cited above, though our index has been modified in a number of ways from those previous efforts.[23]

Figures 5 and 6 plot the mean values of Black incarceration rates and child support enforcement indices respectively at the state level over time. Figure 5 clearly shows a steep upward trend in incarceration rates of Black men, with a noticeable upward shift in the trend in the late 1980s. Figure 6 also demonstrates the rising enforcement of child support orders over time, with some acceleration in the upward trend occurring in the second half of the 1980s and especially in the 1990s.[24]

Using these data, our estimated equations are as follows:

$$EMP_{ijkt} = f(X_{ijkt}; X_{jt}; INCARC_{k,t-3}; CS_{kt}; TIME_t; STATE_k) + u_{ijkt} \quad (1)$$

$$LF_{ijkt} = g(X_{ijkt}; X_{jt}; INCARC_{k,t-3}; CS_{kt}; TIME_t; STATE_k) + v_{ijkt} \quad (2)$$

where EMP and LF denote whether the individual in question is employed or in the labor force respectively; the X refer to various personal or metropolitan-level characteristics; INCARC and CS refer to incarceration rates and the various child support policy variables, respectively; TIME represents a set of year dummies and STATE represents a set of state dummies; and i, j, k, and t denote the person, metro area, state, and year, respectively.[25] All versions of Equations (1) and (2) are estimated as linear probability models (which differ very little from some logit models that we have estimated), and reported standard errors are adjusted for clustering at the state level (using Huber-White methods). Since the incarceration are only available beginning in 1981, and the three-year lagged data in 1984, the sample period for all estimates is 1984–2000.

Before moving onto the estimated results of these equations, we briefly address a few econometric issues. For one thing, the exogeneity of the incarceration variables might be questionable here, since incarceration (and crime) might be functions of employment rates as well as vice versa. However, our primary focus is on a three-year lagged incarceration rate. While this variable is unlikely to be strictly endogenous with respect to contemporaneous employment rates, it might still be correlated with the error term if states with severe employment problems for young Black men generate high rates of incarceration over time.

However, we report results from Hausman tests below that generally indicate that the lagged incarceration rate appears to be exogenous in these equations. We use two

[23] The timing of the policy measures is based on whether the activity in question was in effect as of July 1 of each year. Our index is based on more variables than that used by Freeman and Waldfogel (1998), while it contains fewer than that used by Huang, Kunz, and Garfinkel (2002). The latter contains three variables for withholding wages and two for guidelines (advisory vs. presumptive) while we use only the strictest and broadest of these in each case; they also use the right to establish paternity until age 18 (which we consider ineffectual) while we add in-hospital paternity establishment and the use of the "New Hire" directory, both of which were generally enacted by the states in the mid-to-late 1990s.

[24] The particularly large jump in child support enforcement around 1993–94 indicates widespread adoption of the New Hires Directory around that time.

[25] The X include age and educational attainment for individuals; and the unemployment rate, as well as fractions of employment accounted for by blue-collar jobs and by females and Hispanics, in metropolitan areas. The unemployment rates used here are published estimates from the Bureau of Labor Statistics while the other metropolitan-area variables are calculated from the CPS data on our own. Those not living in metro areas are given national averages for non-metropolitan workers in those years. For more information on these, see Holzer and Offner (2002).

sets of potential instrumental variables (IVs) to generate these tests: (1) a set of variables measuring state-level limits on incarceration generated by overcrowding legislation, as used by Levitt (1996); and (2) another set of variables measuring sentencing reforms at the state level (Reitz, 2004).[26] We discuss these variables in greater detail below and argue that they are appropriate as potential IVs. Furthermore, our inclusion of state and time dummies in all estimated equations, as well as time-varying measures of relevant labor market characteristics at the metropolitan level, further strengthens our confidence that we have controlled for many of the local factors that could lead our lagged incarceration measures to be correlated with the error term.

Another concern might involve unobserved heterogeneity across states. While the state dummies will control for state characteristics that are fixed over time, we might also be concerned about time-varying characteristics (such as changes in household structure that affect the attitudes and behaviors of youth) that might be correlated with child support policy and/or incarceration at the state level. To deal with this problem, we present some "Difference-in-Difference" (or DD) estimates below, in which we pool our sample of young Black men with comparable samples of young Whites and estimate the effect of lagged Black incarceration rates and child support policy on the employment rates of Blacks relative to those of these other groups. In doing so, we attribute all observed effects of these variables on Whites to unobserved heterogeneity and infer the effects on Blacks only from any additional effects that these variables have on that group.[27] This could lead to the understatement of (or lower bounds on) effects for Blacks, particularly on child support, since our estimates of the fractions of Whites who are noncustodial fathers (especially in the 25–34 age group) are not trivial.[28]

Finally, to ensure that our child support measures are really capturing the effects of policy on the expected values of child support payment, we provide some additional estimates of their effects on other measures of child support outcomes, such as numbers of cases with collections (relative to the number of single mothers in any state) and total collections per state within the public child support collections system.

ESTIMATION RESULTS: SUMMARY STATISTICS AND REGRESSIONS

Table 1 presents means and standard deviations on the key dependent and independent variables we use in our analysis. These include the employment/population and labor force participation rates of less-educated young Black men, broken down separately by age group (16–24 vs. 25–34); and key state-level variables reflecting trends in incarceration and child support policy. We present these data pooled over all years (that is, 1979–2000) as well as for three specific periods that mark business cycle peaks (that is, 1979, 1989, and 1999–2000).[29]

The data confirm many of the trends over time that appeared in Figures 1–6. Employment and labor force participation rates of young Black men declined dur-

[26] We thank Steve Levitt and Kevin Reitz for sharing their data with us.

[27] In most cases, DD estimates are based on interactions between the variables of interest and dummy variables for being Black, with the estimated effects coming only from the interaction terms. In our case, we have estimated effects on separate samples of young White and Black men and used the differences in coefficients between them to infer the DD effect, since our Chow tests strongly rejected the pooling of these samples.

[28] Calculations from the CPS Child Support Supplement indicate that the percentages of young White women with high school or less education who are single mothers are 9 percent and 24 percent among those aged 16–24 and 25–34, respectively.

[29] Unfortunately, data on incarceration for Black males were available only beginning in 1981, and thus lagged rates only begin in 1984.

Table 1. Means (and standard deviations)—Key variables.

	1979–2000	1979	1989	1999–2000
Outcomes for Black males				
Employment/population				
16–24 years old	0.525	0.615	0.586	0.513
25–34 years old	0.731	0.813	0.755	0.742
Participation in labor force				
16–24 years old	0.753	0.814	0.772	0.682
25–34 years old	0.861	0.907	0.868	0.821
State-level variables				
Lagged Black male incarceration	0.033	0.020[1/]	0.027	0.051
	(0.014)	(0.007[1/])	(0.0087)	(0.012)
Child Support Policy Index	2.101	0.094	1.674	5.845
	(2.012)	(0.292)	(0.752)	(0.362)

Note: The data are from the Current Population Survey Outgoing Rotation Groups (CPS-ORG), 1979–2000, along with metropolitan and state-level data. The samples of young black males include only those who are not enrolled in school and have high school or less education.
The Child Support Policy Index ranges in value from 0 to 6 and is described in the text. Expenditures on child support enforcement are in thousands of 2000 dollars. All outcomes are sample-weighted, while state-level variables are also weighted by the numbers of black males in each state.
[1/] These figures correspond to the year 1984.

ing both the 1980s and 1990s, especially among those aged 16–24. The declines for the youngest group accelerated in the 1990s, while they are more mixed for the older group (with employment rates flattening but participation rates declining at roughly the same rate as in the earlier decade).

The state-level variables also show that incarcerated rates grew quite dramatically among Black men over the two decades, as did child support enforcement efforts. Indeed, by the end of the 1990s the six activities included in our state index were being implemented by virtually all states, which constituted a sharp increase in activity even from 1989.

To what extent did these higher incarceration rates and growing enforcement of child support orders influence the employment and labor force activities of young Black men? Table 2 provides OLS regression estimates of Equation (1) above for employment and of Equation (2) for labor force participation. Table 3 presents the DD estimates for the same equations, based on differences between estimates for young Black and White men. All reported estimates are derived from linear probability models. Separate estimates appear for those aged 16–24 and those aged 25–34 in each table. Robust (that is, Huber-White) standard errors appear in parentheses.

Results from three specifications of each estimated equation are presented. The first includes our lagged incarceration measure but not the child support index; the second includes the child support index but not lagged incarceration; and the third includes both. We present results from all three specifications because of the high correlation of these two measures with state and time dummies and with each other.[30] As noted above, all specifications include state and time dummies, as well as controls for time-varying demographic and labor market characteristics of metropolitan areas.

[30] The simple correlation between lagged incarceration rates and the child support enforcement index in these data is roughly 0.7. State and time dummies account for 80–90 percent of the variation in each of these variables.

Table 2. Employment and labor force participation equations for young Black men: OLS.

	Employment			Labor Force Participation		
A. Ages 16–24	1	2	3	1	2	3
1. Lagged incarceration rate	–0.680		–0.580	–0.953		–0.784
	(0.797)		(0.804)	(0.706)		(0.713)
2. Child Support Policy Index		0.671	0.606		1.110 *	1.024*
		(0.652)	(0.658)		(0.578)	(0.583)
R^2	0.1514	0.1514	0.1515	0.1385	0.1386	0.1386
B. Ages 25–34						
1. Lagged incarceration rate	–0.758		–0.803	–1.401***		–1.512***
	(0.610)		(0.616)	(0.490)		(0.495)
2. Child Support Policy Index		–0.193	–0.289		–0.522	–0.704
		(0.532)	(0.537)		(0.428)	(0.432)
R^2	0.0790	0.0790	0.0790	0.0718	0.0715	0.0719

Note: Other independent variables include the personal and metropolitan variables described in the text, as well as state and time dummy variables. Huber-White standard errors appear in parentheses. Coefficients on child support variables are multiplied by 100. The symbols *,**, and *** represent significance levels of .10, .05, and .01, respectively. Sample sizes are 16,482 and 21,578 for those aged 16–24 and 25–34, respectively.

Table 3. Employment and labor force participation equations for young Black men: Difference-in-Difference (DD).

	Employment			Labor Force Participation		
A. Ages 16–24	1	2	3	1	2	3
1. Lagged incarceration rate	–1.051		–0.959	–1.442**		–0.981*
	(0.860)		(0.867)	(0.749)		(0.745)
2. Child Support Policy Index		0.176	0.089		1.357**	0.450
		(0.707)	(0.715)		(0.617)	(0.609)
B. Ages 25–34						
1. Lagged incarceration rate	–0.949*		–1.290**	–1.292***		–1.403***
	(0.647)		(0.664)	(0.513)		(0.518)
2. Child Support Policy Index		–0.751	–0.075		–0.541	–0.734*
		(0.544)	(0.579)		(0.446)	(0.449)

Note: To obtain Difference-in-Difference results, we subtracted coefficients from equations for young white men from those for young black men. Standard errors are the squared roots of the sums of squared Huber-White standard errors for blacks and whites, and appear in parentheses.

The results of Tables 2 and 3 generally provide support for the hypothesis that previous incarceration limits the employment and labor force activity of young Black men. Results are generally stronger for labor force participation than for employment, perhaps since the former is a cleaner measure of labor supply than the latter; results are also generally stronger for those aged 25–34, among whom the concentrations of ex-offenders and noncustodial fathers are generally larger.

The estimated effects of lagged incarceration on employment are generally negative but not significant among those aged 16–24, while those on labor force participation are mostly significant. Among those aged 25–34, estimated effects on both measures are generally significant. The inclusion of controls for child support policy in these equations has little effect on these estimates, and DD estimates are similar to or a bit larger than OLS estimates. The estimated magnitudes of these coef-

ficients are generally in the range of 0.6 to 1.5. Since each percentage point of lagged incarceration in our independent variable corresponds to as much as 6 percentage points of ex-offenders in the population of young Black men (since incarceration rates for the overall Black male population now average about 0.05 and the percentages of ex-offenders in the young Black male population are roughly 0.30), these magnitudes imply that each additional percentage point of ex-offenders in the population reduces employment and labor force participation by about 0.10–0.25 percentage points, which seems plausible and consistent with earlier research (by Freeman, 1992, and others) that we note above.

The estimated effects of child support policy on employment and labor force participation of young Black men are more mixed than those of lagged incarceration. All coefficients are negative for those aged 25–34; those on labor force participation are at least marginally significant, and the estimated magnitudes rise somewhat when we move from OLS to DD estimates. But estimated effects for those aged 16–24 are generally positive (though mostly not significant). These estimates were also quite sensitive to exactly how we specified controls for time.[31] Given the much higher percentage of noncustodial fathers among the older group, these results are fairly sensible.

How large are the estimated effects of lagged incarceration and child support policy on employment and labor force activity of young Black men, and to what extent might they account for observed negative trends in the latter over time? In Table 4 we present some calculations in which we multiply the coefficient estimates of Tables 2 and 3 by changes in lagged incarceration and child support enforcement activity between 1979 and 2000 from Table 1.[32] The results (from column 3) indicate that the increase in lagged incarceration from the late 1970s through the year 2000 reduced employment by 2–4 percentage points among those aged 16–24 and 3–5 points among those aged 25–34; comparable estimates for labor force participation are 3–4 and 5–6 points, respectively. Estimates of the effects of child support are more varied; among those aged 25–34 these policies reduced employment by 2 percentage points or less and labor force participation by about 4 points, while small positive effects appear for those aged 16–24. Summing across the two effects in each case suggests that incarceration and child support together reduced employment rates in the period 1979–2000 by about 3 percentage points (using the DD estimates) for those aged 16–24 and 5 points for those aged 25–34; comparable estimates for labor force participation rates are about 1 point and 9–10 points, respectively.

Of course, the actual declines in such activity are larger for the younger cohort (0.10 and 0.13 for employment and labor force participation, respectively) than for the older one (0.07 and 0.09, respectively) during that time period. The results thus suggest that the effects of past incarceration and child support enforcement might account for most or all of the declines in labor force activity among the 25–34-year-old group over these two decades, and a good deal less among the younger one.

But, as indicated above, the unexplained declines in employment during the 1990s alone are even larger than the changes actually observed for the entire period (about 0.13–0.14 for the 25–34-year-old group and 0.16 for the younger group). Since nearly two-thirds of the incarceration increases and nearly three-fourths of the child support increases occurred during the 1990s, we can adjust our estimates

[31] We estimated equations in which the time dummies were replaced with linear, quadratic, or cubic time trends, as well as separate linear trends for the 1980s and 1990s. Results are available from the authors.

[32] Since our lagged incarceration measure only goes as far back as 1984, we extrapolate the changes observed between 1984 and 1989 to the period 1979–84. We assume constant impacts of child support and incarceration on employment or labor force participation over this entire period, since our attempts to generate separate estimates for sub-periods generated unstable coefficients and large standard errors.

Table 4. Implied effects of incarceration and child support policies on employment and labor force participation of young Black males.

OLS	Employment			Labor Force Participation		
A. Ages 16–24	1	2	3	1	2	3
1. Lagged incarceration rate	–0.026		–0.022	–0.037		0.030
2. Child Support Policy Index		0.039	0.035		0.064	0.059
B. Ages 25–34						
1. Lagged incarceration rate	–0.030		–0.031	–0.054		–0.058
2. Child Support Policy Index		–0.011	–0.017		–0.030	–0.040
Difference-in-Difference	Employment			Labor Force Participation		
A. Ages 16–24	1	2	3	1	2	3
1. Lagged incarceration rate	–0.040		–0.037		–0.055	–0.038
2. Child Support Policy Index		0.010	0.005		0.078	0.026
B. Ages 25–34						
1. Lagged incarceration rate	–0.036		–0.050	–0.050		–0.054
2. Child Support Policy Index		–0.043	–0.004		–0.031	–0.042

Note: These estimates are derived by multiplying regression coefficients from Tables 2 and 3 by difference in means of lagged incarceration rates and child support indices between 1979 and 2000.

from Table 4 and show that the two changes together reduced employment by about 2 percentage points among the younger group and 3 percentage points for the older one; comparable estimates for labor force participation are about 1 and 7 percentage points, respectively. Thus, child support and incarceration can account for at least half of the unexplained decline in labor force participation among 25–34-year-old Black men during the 1990s, but less among those aged 16–24.

For both groups of young Black men but especially the younger one, other factors no doubt have reduced employment and labor force activity that we do not observe or control for. Perhaps their skills fell behind relative to growing employer needs; or perhaps their informal job networks continued to atrophy. The growing fraction of young Black men growing up in single-parent households in this period might also have negatively affected skills, attitudes, or behaviors in ways that limited later employment activity. Whatever the exact reason, employment of young Black men was clearly declining in the 1990s for a wide variety of reasons.

TESTING OUR POLICY VARIABLES

To address the issue of potential endogeneity in lagged incarceration, we present the results of some Hausman tests that we have performed. In these tests, we estimate the significance of differences between OLS and IV estimates. This can be done by including the residual from the first-stage IV estimates as an additional independent variable in the second-stage structural equation (Wooldridge, 2002). Tests of statistical significance on these residuals are thus tests of whether we can reject the hypothesis that OLS and IV estimates are the same, which is equivalent to rejecting the hypothesis that our incarceration measure is exogenous.

Of course, these tests depend importantly on the quality of potential IVs. As noted earlier, we use two sets of variables in our tests below: one generated by Levitt (1996) and representing state litigation on overcrowding that has limited incarcer-

ation in some states; and one generated by Reitz (2004) on state-level sentencing reforms. The former set of variables reflect six possible stages of potential litigation in states where such litigation has been introduced and where limits on incarceration were imposed: a period of pre-filing, filing, preliminary decisions by the courts, final decisions, further actions, and release from these restraints. In any given year, states where such litigation occurred might be in any one of these six stages, which are represented by a set of dummy variables. Levitt shows quite clearly that these variables are negatively related to incarceration rates, especially after filing has occurred and before release but not before filing.

The sentencing variables include dummies for the abolition of parole, presumptive or voluntary sentencing guidelines for felonies, no or limited appellate review of sentences, abolition of parole, and the existence of guidelines for intermediate offenses. Reitz has also shown, perhaps surprisingly, that reductions in court discretion on sentencing tend to reduce incarceration rates among Blacks. But these measures are generally not strongly correlated with Black incarceration rates in the early 1980s. Thus, both sets of measures appear to be plausible as IVs.

We provide some descriptive data on these IVs in Table A1 of the Appendix. Twelve states had overcrowding litigation in the 1980s and 1990s, while 14 states had implemented sentencing reforms by the end of our time period. The percentages of Black men affected by these developments were about 12 percent at the peak of prison overcrowding litigation and roughly 15–30 percent by sentencing reforms at their peak.

Our Hausman test statistics—that is, the coefficients and standard errors on the residual in the second stage equations—appear in Table 5. We present three sets of results—those using only the variables for overcrowding litigation as IVs, those using variables for sentencing reform only, and those using both. Results are presented separately for employment and labor force participation equations, and for those aged 16–24 and 25–34. We also present two specifications of each equation, both without and with the inclusion of the child support variable as an additional control.

The results indicate that, in the vast majority of cases, we cannot reject the hypothesis that lagged incarceration is exogenous with respect to employment outcomes. Indeed, for those aged 25–34 this is true for every test. Among those aged 16–24, results are a bit more mixed, but are similar to those for the 25–34-year-old cohort when both overcrowding litigation and sentencing reform variables are used as IVs.[33]

It is also noteworthy that the IVs performed reasonably well in the first-stage equations we estimated as well. Specifically, both sets of variables were jointly significant at the 0.01 level in each case. The prison overcrowding litigation had uniformly negative effects on incarceration among young Black men, as Levitt had found for all demographic groups combined; the strongest negative effects were found for the periods in which preliminary or final decisions had been reached. The sentencing reform variables had more mixed effects, which varied according to whether or not the overcrowding litigation IVs were included in the equations.[34]

Thus, our IVs look like plausible instruments, and give us greater confidence in the Hausman test results. As we noted earlier, the fact that all of our estimated equa-

[33] We performed a similar set of Hausman tests for the contemporaneous incarceration rate, as opposed to the lagged one. Given the fairly high correlation between the two measures (as noted above), the results from the two sets of tests were not dramatically different from one another.

[34] We found consistent positive effects of parole abolition and negative effects of guidelines for intermediate sanctions on Black male incarceration rates, while the other coefficients varied with the specification. Our estimated equations included all of the sentencing reform variables in each specification, and so coefficients on individual variables might also be sensitive to the inclusion or exclusion of some.

Table 5. Hausman Test statistics for endogeneity of lagged incarceration rate.

	Employment		Labor Force Participation	
A. Ages 16–24	1	2	1	2
Instrumental variables				
1. Overcrowding litigation only	-3.439	-3.945*	-3.829*	-4.543**
	(2.764)	(2.883)	(2.441)	(2.540)
2. Sentencing reform only	-8.527***	-5.442	-1.741	4.228
	(3.707)	(7.677)	(3.314)	(6.583)
3. Both	-0.881	-1.081	-1.644	-1.838
	(2.392)	(2.450)	(2.139)	(2.189)
B. Ages 25–34				
Instrumental variables				
1. Overcrowding litigation only	0.469	-2.018	0.654	1.195
	(2.301)	(2.299)	(1.902)	(1.959)
2. Sentencing reform only	-1.850	0.166	-0.575	3.669
	(3.130)	(5.891)	(2.574)	(4.859)
3. Both group of variables	-0.671	-0.623	0.169	0.427
	(1.849)	(1.889)	(1.371)	(1.393)

Note: The estimation of Hausman test statistics is described in the text. Huber-White standard errors are in parentheses. The estimates presented in column 1 are for equations that do not include the Child Support Index, while the ones in column 2 do include it.

tions include state and time dummies as well as controls for a range of time-varying labor market characteristics also strengthen our confidence in these results.

Finally, we explore the link between child support enforcement and other child support outcomes in Table 6. We present estimates of equations in which two such outcomes—the fractions of single mothers receiving collections and the total real dollar values of such collections-are the dependent variables while our child support index is the independent variable, along with state and time dummies. The child support outcomes are drawn, in part, from federal data collected by the Office of Child Support Enforcement (OCSE) at the U.S. Department of Health and Human Services.[35]

The estimated results indicate strongly positive and significant relationships between child support outcomes and our index of enforcement activities. Furthermore, increases in our enforcement measure account for roughly 80 percent of the increases in collections over time. Thus, our child support index seems to be capturing the relevant set of policy activities that are driving child support outcomes across states, and which apparently have implications for the labor force activity of young Black men as well.

[35] The child support outcomes used in these equations are derived from data on OCSE's IV-D program. Our dependent variables represent the numbers of IV-D cases in which collections occur and the total (deflated) dollar values of these collections divided by estimates of the numbers of single mothers in each state and year, as estimated from three-year moving averages in the CPS. Our estimated equations are also weighted by the numbers of young Black men in each state, so that states with very small Black populations are not weighted equally with those having large populations.

CONCLUSION

In this paper we estimate the effects of previous incarceration and strict child support policy enforcement on the labor force behavior of less-educated young Black men in the past two decades. We find that past incarceration is strongly and negatively associated with such behavior. We also find some evidence that child support enforcement limits labor force activity, especially among those aged 25–34. In fact, our results imply that past incarceration and child support can account for most of the declines over time in labor force activity for this age group, though somewhat less among those aged 16–24. Our OLS and DD results are generally similar, while our Hausman tests also suggest that our results are not driven by potential endogeneity in our lagged incarceration variable.

And evidence on cost-effective programmatic efforts to combat these problems is sorely needed as well. One such effort that has been rigorously evaluated is the Parents' Fair Share program, which had little positive impact on employment outcomes of low-income fathers. But critics have questioned whether the employment services provided to fathers in that effort were very strong, and whether the incentives (or coercion) inducing fathers to participate were very powerful. Perhaps other such efforts must provide subsidized employment opportunities as well as services/training and need to involve strong incentives or requirements that young men participate (Primus, 2002). Rigorous evaluations of programs aimed at ex-offenders—such as that provided by the Center for Employment Opportunities (CEO) in New York or the Safer Foundation in Chicago—are needed as well.[36]

Beyond programmatic efforts, some broader policy changes might be needed to address the negative effects of incarceration and child support policy on employment of young Black men. Regarding incarceration, policymakers at the state

Table 6. Child Support Policy Index and child support outcomes.

	Percent of Cases with Collections	Total Value of Collections
Mean 1979	0.110	3.796
Mean 2000	0.846	23.876
Coefficient from regressions on Child Support Policy Index	0.099	2.991
(Std. error)	(0.000)	(0.010)
R^2	0.862	0.796
Actual change 1979–2000	0.737	20.080
Implied change 1979–2000	0.571	17.202

Note: Equations are weighted by the numbers of black men aged 16–34 in each state. "Percentage of cases" is defined as the numbers of IV-D cases with collections deflated by the number of single mothers in each state. "Total value of collections" is measured in thousands of dollars per single mother. All equations include state and time dummies.

[36] See Bushway (2003) for a review of evidence on the cost-effectiveness of employment programs aimed at ex-offenders. Programs generally provide support services, job placement assistance, training, and (in the case of CEO) subsidized work experience.

level should review the barriers to employment that they generate for ex-offenders, perhaps distinguishing those that are sensible from those that are strictly punitive and perhaps counterproductive (like drivers' license revocation and other bans on occupational licensing for those with criminal records). Efforts to link ex-offenders to the private sector labor market could begin while they remain incarcerated, by lessening restrictions on the ability of private employers to use inmate labor, especially in tight labor markets.[37] The use of other tools, such as federally sponsored bonding and tax credits to employers, should be explored further as well. And greater funding could be provided for groups (like CEO and Safer) that work with employers to generate job opportunities for offenders soon after their release.

Regarding child support, states should be encouraged and assisted in efforts to review the practices by which child support orders are developed for low-income men—often without any direct evidence of their potential earnings. Arrearage forgiveness efforts need to be explored for noncustodial fathers who make a good-faith effort to keep up with current orders—especially if arrears have accumulated while they were incarcerated or otherwise unable to work.

Of course, some of the employment declines we've observed here, especially among those aged 16–24, do not appear attributable to incarceration or child support policy. As indicated elsewhere (Holzer & Offner, 2004), a range of other policies would likely be needed as well to raise their employment rates. These might include efforts to improve education and training in this population as well as their incentives to accept low-wage jobs (for example, by expanding their eligibility for the EITC).

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APPENDIX

Table A1. Instrumental variables: percentages of Black men affected by year.

	All Years	1981	1989	1995
A. Prison overcrowding litigation				
Prefiling period	0.014	0.063	0.000	0.000
Filing period	0.009	0.023	0.004	0.000
Preliminary decision	0.033	0.058	0.037	0.000
Final decision	0.062	0.058	0.117	0.076
Further action	0.071	0.119	0.083	0.051
Release	0.042	0.000	0.059	0.176
B. Sentencing reforms				
Presumptive guidelines	0.102	0.001	0.063	0.155
Voluntary guidelines	0.050	0.000	0.110	0.156
Appellate review	0.103	0.000	0.143	0.272
Intermediate sanction	0.060	0.000	0.051	0.150
Abolished parole	0.093	0.001	0.079	0.206