

# Race, Wealth and Incarceration: Results from the National Longitudinal Survey of Youth

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**Abstract** Using the 1979 cohort of the National Longitudinal Study of Youth to explore the interwoven links between race, wealth and incarceration, this study examines the data on race and wealth status before and after incarceration. Data indicate that although higher levels of wealth were associated with lower rates of incarceration, the likelihood of future incarceration still was higher for blacks at every level of wealth compared to the white likelihood, as well as the Hispanic likelihood, which fell below the white likelihood for some levels of wealth. Further, we find that racial wealth gaps existed among those who would be incarcerated in the future and also among the previously incarcerated.

**Keywords** Race · Wealth · Net worth · Incarceration · Imprisonment · National Longitudinal Survey of Youth · NLSY79

## Introduction

Department of Justice estimates indicate that one in three black men born in 2001 can expect to be incarcerated in the course of their lifetimes. In comparison, the rate for Hispanic males is one in six and for white males, one in seventeen (Bonczar 2003). The rate of incarceration in the USA quadrupled over the past three decades, contributing to the oft cited statistic that the USA has 5 % of the global population but holds 25 % of the world's prisoners (Glaze and Parks 2014; Western and Pettit 2010; Mauer and King 2007).

Mass incarceration in the USA disproportionately affects African Americans, and Michelle Alexander (2012) has argued that imprisonment, de facto, is America's new system of segregation. Pettit and Western (2004) estimated that “among men born between 1965 and 1969, 3 % of whites and 20 % of blacks had served time in prison by their early thirties.” The mark of incarceration has become a normal part of life for many black men, particularly, but not exclusively, among those living in impoverished neighborhoods (Freeman 1996; Irwin and Austin 1994).

Concurrently, blacks and Hispanics on average possess only a fraction of the net worth of whites (Tippett et al. 2014; Taylor et al. 2011; Hamilton and Darity 2009). Hamilton and Darity (2009) have argued that the racial wealth gap is the most acute indicator of racial inequality. Furthermore, racial discrimination in the justice system (Moore and Elkavich 2008; Petersilia 1983; Zatz 1987) compounds the wealth disadvantage that blacks and Hispanics already face. For example, Petersilia (1983) found that blacks and Hispanics convicted of felonies were more likely than whites to receive prison sentences. Even within the same groups, discrimination is harsher toward those with more Afrocentric features (Blair et al. 2004). Within

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the criminal justice system, even death-sentencing outcomes also have a key discriminatory dimension (Eberhardt et al. 2006; Unah 2011). With wealth and race being intricately linked, and race and incarceration clearly connected, we explore how racial wealth disparity relates to the racial incarceration disparity.

As early as birth, wealth can influence the likelihood of incarceration. Growing up with less family wealth means living in poorer neighborhoods with lower-quality education (Nguyen-Hoang and Yinger 2011) and a greater exposure to high “street” crime and high imprisonment areas (Pope and Pope 2012; Leventhal and Brooks-Gunn 2011). The presence of illegal drug trafficking, youth gangs and neighbors who have experienced high incarceration rates increases the likelihood of contact with the criminal justice enforcement system.

Lack of family wealth also could mean being unable to afford additional education and delaying entering the labor market, leading to higher risks of incarceration, risks that are highly stratified by education (Pettit and Western 2004). Once involved with the criminal justice system as a defendant, low family wealth means being unable to afford the resources to navigate the criminal justice system via high-quality lawyers or the capacity to post bond. Thus, a priori, low wealth can increase the likelihood of being incarcerated.

Imprisonment, in turn, can depress wealth accumulation through a variety of factors. Involvement with the system of criminal justice increases legal debt (Harris et al. 2010), and incarceration means loss of income. During incarceration, being unable to make payments on mortgages or other debts can lead to an accumulation of interest obligations and penalties as well as a grossly diminished credit status. Incarceration also means household instability, placing an additional burden on the capacity to build assets (Zagorsky 2005).

A record of previous incarceration also has wide-ranging immediate and future consequences that affect asset-building capability over the lifetime. Such a record acts as a barrier to employment, thereby lowering earnings (Apel and Sweeten 2010; Pager 2003). Furthermore, the criminal “credential” (Pager 2007) associated with incarceration impedes wealth accumulation through stigmatization, poor credit access and lack of access to supportive social institutions (Brayne 2014; Maroto 2014; Wildeman 2014; Goffman 2009). With 1 out of 35 adults in the USA having been incarcerated previously, the effect on wealth outcomes is a major social concern.

Although the “mark” of incarceration has a negative impact on all, the impact of previous incarceration is not equivalent across all groups. For example, Pager (2003) uses evidence from a set of field experiments to demonstrate that when presented with a black male job applicant who reported prior incarceration, employers were twice as

likely *not* to offer the applicant a call back for a job interview than a similarly qualified white male applicant who also reported prior incarceration. Moreover, the likelihood of a call back actually was slightly higher for white males reporting previous incarceration than black males reporting *no* incarceration record whatsoever.

Disparate patterns of incarceration across races also may exacerbate racial inequality. Indeed, Schneider and Turney (2015) found that higher incarceration rates depress black homeownership rates and widen black-white disparities in homeownership. Prior research has shown that previous incarceration is associated with substantially lower levels of wealth (Maroto 2014), estimating that respondents who had previously been incarcerated had an average of \$42,000 less wealth (in 2010 dollars) than their peers who never had experienced incarceration. Although Maroto (2014) controlled for race in her model, the analysis did not examine differential effects due to race. In this paper, we explicitly look at racial wealth differences between those previously incarcerated and never incarcerated. Additionally, since the expectation is that low wealth increases the likelihood of being incarcerated, we hypothesize that those who experience incarceration had less wealth at the baseline and that the inverse also should hold; that is, those with less wealth at the baseline collectively experience higher rates of incarceration.

Using the National Longitudinal Survey of Youth 1979 (NLSY79), we present descriptive statistics on personal net worth stratified by race and incarceration status. We investigate the collective wealth positions of those who experience incarceration in the future (future “incarcerates”) compared to those who do not and separately calculate the likelihood of incarceration at various levels of initial wealth. Using the latest NLSY79 data—2012 wealth positions (Bureau of Labor Statistics, U.S. Department of Labor 2012), we examine the recent status of those previously and never incarcerated, in relation to race and other possible factors. In the “Discussion” section that concludes the paper, we speculate about reasons for the patterns of racial wealth trajectories with respect to incarceration, discuss limitations of our study and consider implications as well as future directions for investigation.

## Data Description

The NLSY79 is a large national panel dataset that contains both incarceration and prior wealth data at an individual or family level, enabling us to examine the net worth positions of individuals before and after incarceration. An ongoing longitudinal stratified probability survey, the NLSY79 contains a nationally representative cross-sectional group. The survey also oversamples respondents

from economically deprived groups, called the supplemental subsample.

The survey cohort consists of 12,686 young men and women who were 14–22 years old when they were first interviewed in 1979. The respondents were interviewed annually from 1979 until 1994 and biennially thereafter. The NLSY79 had retention rates, excluding the deceased, exceeding 90 % for 1979–1994, exceeding 80 % for 1996–2010 and just below 80 % for 2012.

Over the years, there have been several changes in the eligibility criteria for the subsamples. Because the majority of the 1280 participants in the military supplement were dropped by the 1985 survey, the total number of eligible respondents at the beginning of the 1985 survey was 11,607. Additionally, after the 1990 survey, “non-black non-Hispanic” members of the supplemental subsample were no longer eligible, bringing the total to 9964 in 1991.

For this study, respondents were stratified racially based on their answers to questions about their only or primary racial and ethnic origins.<sup>1</sup> Among those placed in the aggregate categories of American Indian, Asian/Pacific Islander, black, Hispanic, white, other and none, there are too few observations for analyses on group-specific levels of wealth except for black, Hispanic and white respondents. Therefore, we restrict our analyses in this study to those three groups.

Beginning in 1985, when all respondents had turned 20, the NLSY79 reported values of assets and debts. The family data collected in 1985 included the value of an owned home or apartment, monetary assets, farm, business, and real estate properties, vehicles, other owned items valued at more than \$1000, and debt owed. In 1990, the wealth data also included the value of common stock and bonds, rights to estates and trusts, and the amount the respondent would have left if debts were paid off. Starting from 1994, the amount of money in IRA, 401Ks and CDs also were included in the data.

Using these recorded data, survey investigators in 2008 publically released respondent net worth variables, produced by summing all asset values and subtracting debts in each year, with missing asset and debt values imputed, providing an estimate of the wealth of each respondent. Although the estimate is generally of family net worth, since a respondent would include the home or assets co-owned with a spouse, the estimate would not be expected to include parental assets. Thus, a respondent’s net worth as reported would be individual wealth if unmarried and

family wealth if married. For this study, all reported net worth values are adjusted to 2012 dollars.

As shown in Table 1, for all those who had their wealth recorded in 1985, estimated cross-sectional mean wealth was \$36,291 and median wealth was \$8946. Including all other subsamples—the economically disadvantaged supplement and the military supplement—lowered mean wealth to \$32,758 and median wealth to \$7455. To account for oversampling and other differences in the probability of selection, we use NLSY79 sample weights in calculations of all wealth statistics.

Incarceration information was obtained in a somewhat indirect fashion. Survey participants only were asked extensive questions related to crime and sentencing history in 1980. However, the NLSY recorded the respondent’s type of residence at the time of each survey, including whether it was a jail or prison. In addition, being incarcerated as a “Reason for Non-Interview” was coded distinctly starting from 2004. Combining these three measures, we constructed a variable of whether a respondent was ever incarcerated. Because of the nature of these data, incarceration may be understated and likelihoods underestimated, since incarceration between surveys was not captured.

Incarceration for both genders are captured in the survey and analyzed in this paper. Although there are differences in incarceration outcomes by gender, patterns of wealth relationships between groups are essentially the same for both males and females. Females, who comprise approximately 10 % of those who were incarcerated by 1990 and 11 % of those who were incarcerated by 2012, generally had less wealth. Examining only males or females using the same analytical frame in this study leads to slightly higher wealth for males in most groups, but the net worth positions by race and incarceration outcomes are similar for the two genders. However, female outcomes for future incarceration projected from wealth prior to incarceration by race were qualitatively different from male outcomes in all cases where we had adequate numbers to draw conclusions. For these cases, we only present gender-specific results.<sup>2</sup>

In order to assess the wealth positions of the various groups demarcated by race and incarceration experience, we use wealth at the quartiles and at the 90th percentile for each group. Given the skewness in wealth distributions and the use of top-codes to protect the anonymity of respondents, we rely primarily on quartiles to compare group differences in wealth.<sup>3</sup>

<sup>1</sup> NLSY79 respondents were separated into three major racial/ethnic groups by survey screeners: Hispanic, black and non-black, non-Hispanic. The “non-black, non-Hispanic” group includes American Indians, Asians, Asian Indians, Pacific Islanders and other non-white identities, including those who self-identified as black or Hispanic (Light and Nandi 2007).

<sup>2</sup> For all results, male-only, female-only or combined estimates are available by request from the authors.

<sup>3</sup> To protect the identities of those in the survey, wealth data in the NLSY79 were top-coded so that values in the top two percentiles

**Table 1** Distributions of net worth by race and incarceration experience, 1985

Population	# of Obs	Percentile				
		25th	50th	75th	90th	Mean
Cross section	5582	\$1555	\$8946	\$28,329	\$74,550	\$36,291
All	10,573	\$852	\$7455	\$25,134	\$68,373	\$32,758
<i>Never previously incarcerated—black, Hispanic and white</i>						
All	8602	\$854	\$7455	\$25,560	\$69,864	
<i>Will be incarcerated 1986–1990</i>						
Black	85	\$0	\$53	\$4686	\$13,206	
Hispanic	23	\$0	\$0	\$6816	\$8520	
White	22	\$107	\$1491	\$14,271	\$25,241	
All incarcerated 1986–1990	130	\$0	\$852	\$5921	\$17,466	
<i>Will be incarcerated 1991–2012</i>						
Black	111	\$0	\$682	\$4903	\$15,230	
Hispanic	45	\$0	\$2130	\$6390	\$14,250	
White	45	\$2343	\$7881	\$21,300	\$566,676	
All incarcerated 1986–2008	201	\$0	\$4047	\$12,993	\$40,683	
<i>Never incarcerated (to 2012)</i>						
Black	2309	\$0	\$1385	\$8158	\$22,578	
Hispanic	1486	\$2	\$4594	\$16,614	\$47,401	
White	4476	\$2130	\$10,437	\$33,015	\$81,579	

All calculations use NLSY79 sample weights, and wealth is adjusted to 2012 dollars. Means data only available for entire sample due to top-coding. Never incarcerated (to 2012) includes members of the economically disadvantaged “supplemental subsample” dropped after 1990, who may have their future incarceration statuses understated

## Results

In the following sections, we present the results split into three categories: wealth before incarceration, wealth in 1985 and likelihood of future incarceration and wealth after incarceration.

### Wealth Before Incarceration

By 1985, when NLSY79 wealth data were first collected, 426 respondents, or 3.67 % of all eligible respondents, previously had been incarcerated. In order to examine wealth positions before the impact of incarceration, we limit our analyses in this section to only those who had not been incarcerated at that time. In Table 1, we report the

distributions of NLSY respondent net worth in 1985 by race and incarceration experience. For each group, distributions are assessed by wealth values at the quartiles and at the 90th percentile. The median wealth of all blacks, Hispanics and whites with no known history of imprisonment was \$7455 in 1985.

Stratifying by race, we separate incarceration experience into three categories: incarceration in the next 5 years (before a supplemental subsample was dropped), incarceration only in the next 6–27 years (maximum data) and never incarcerated. Since all respondents were in their 20 s in 1985, the next 5 years represent not only incarceration in the short term but also incarceration for the respondents in their young adulthood. The second group of future incarcerated, those who were incarcerated in the interval 1991–2012, would have experienced incarceration for the first time in the transition from young adulthood to middle age.

For each subgroup, we also assess the collective wealth distribution through the values at the quartiles and 90th percentile. Compared to their racial peers who never report having been incarcerated, future incarcerated had less wealth in 1985 at the median and at the 75th percentile. Those who faced incarceration sooner, within 5 years, also had less wealth at the median and at the 75th percentile, and at the 90th percentile compared with those who were

Footnote 3 continued

would be assigned a capped value for each year. Until 1994, asset values were capped and top-coded, whereas afterward, the top two percent of valid values for net worth were averaged, and that average replaced all values in the top range. Although this change would allow for valid estimations of mean wealth for the total population, no distinctions were made based on race. With uneven numbers of observations from each racial group top-coded, and the true values lost, calculations of racial mean wealth based on the data would not be valid. However, racial wealth data at the quintiles and quartiles, including the median, were unaffected by this top-coding; thus, we examine group wealth distributions through those measures.

incarcerated in the later period, 1991–2012. But these relationships do not hold across racial lines. For example, white eventual incarcerated had slightly more median wealth (\$1491) than blacks who never were incarcerated (\$1385).

Not all future incarcerated were economically disadvantaged in 1985. Of the whites who would be incarcerated in the far future, wealth at the 90th percentile was actually the top-code for the year, meaning that several white future incarcerated probably were in the top two percentiles of wealth at the time. Similarly in other years, although it was rare, future incarcerated from all three races were found with top-coded wealth before incarceration.<sup>4</sup>

Even among those who would face incarceration in the future, racial wealth disparities were present, with white future incarcerated starting with more wealth in 1985 than their black and Hispanic counterparts. At all quartiles and at the 90th percentile, white reported wealth levels were several multiples those of blacks and Hispanics, indicating that eventual incarcerated from different groups also came from different wealth backgrounds. In several years in addition to 1985, we find that white future incarcerated had more wealth at the median than blacks who never were incarcerated (see Fig. 1). Among future incarcerated, although blacks consistently had less wealth at the median than whites, Hispanics had more wealth at the median compared to whites in several years, especially after 1990. Thus, wealth was unevenly distributed across incarceration status, and even among those with similar incarceration experiences, wealth was unevenly distributed across race.

After establishing differences in wealth between the groups even among future incarcerated, we stratify by race to determine whether future incarcerated started with lower net worth. Figure 1 displays the median wealth positions for males in each of the three groups, in every year in which wealth was recorded in the NLSY79 up to the year 2000.<sup>5</sup> Although female future incarcerated similarly had lower net worth before incarceration compared to their never-incarcerated peers, the number of observations was too few for analysis. Males who would experience future incarceration consistently had lower median wealth, and this relationship remains true when we stratify by race. However, this does not hold true across racial lines: white future prisoners in some years had more wealth at the median than blacks who would never experience incarceration. For example, in 1985 and 1989, white male future incarcerated had \$3621 and \$2590 more net worth at the

medians, respectively, compared against black males who would never be incarcerated.

Similar gaps also persisted at the 75th percentile of wealth when examining only males or males and females combined, with future incarcerated again consistently having lower wealth. At the 25th percentile, where wealth was typically close to zero or negative, future incarcerated wealth was equal to or lower than that of their counterparts. However, again, there were disparities by race. In some cases, white future incarcerated had more wealth at the 25th and 75th percentile compared with blacks and Hispanics who never were incarcerated. Of course, in general, the evidence indicates that those who faced incarceration in the future began with lower wealth positions than those who would not.

### Wealth Position in 1985 and Likelihood of Future Incarceration

Since those who do experience incarceration came from backgrounds with lower levels of wealth, we examine whether racial incarceration rate disparities can be explained by racial wealth disparities. To calculate the risk or likelihood of future incarceration in relation to wealth, we start with the wealth positions of a sample of persons who have never been incarcerated at the baseline. At the time of the 1985 survey, about 5 % of blacks, 4 % of Hispanics and 2.5 % of whites in the NLSY79 had experienced incarceration.

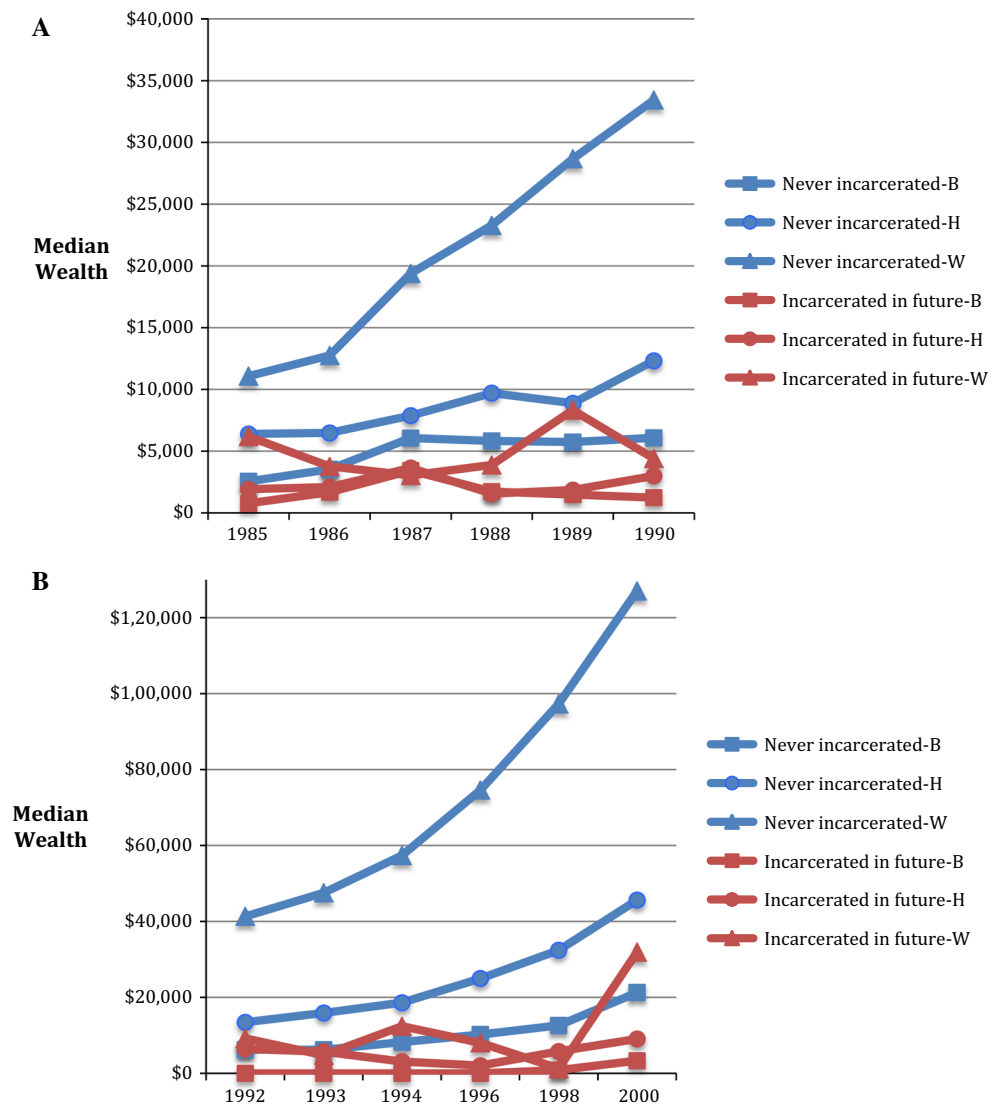
Selecting those who were not incarcerated by 1985 and their wealth levels as the starting point, we calculate the likelihood of incarceration by race within five and within 27 years. Using wealth at the deciles for blacks, Hispanics and whites combined, wealth levels in 1985 are split into ten groups. Additionally, because the rates of future incarceration were disparate between the genders, we analyze males and females separately. Likelihoods for each racial and wealth subgroup are equal to the percent of the respondents who were found incarcerated in future survey years. The number of observations for each race and wealth bracket is included in Appendix Table 5 tabulations to indicate robustness of the likelihoods.

In the 5-year likelihoods for males, presented in Fig. 2a, all three groups had similar outcomes at the top and bottom levels of wealth. The incarceration likelihoods were highest for those with little to no wealth, with the likelihood falling with increasing wealth. For blacks, the drop in incarceration rates with increasing wealth was most pronounced, with those in the second and third deciles having likelihoods nearly twice as high as those in the middle deciles of the wealth distribution. At the top deciles, Hispanic future incarceration rates decrease to levels similar to white incarceration rates. At very high levels of wealth—in the

<sup>4</sup> Although, of course, since we cannot know the nature of the crime, it may have been the criminal activity that led to the wealth accumulation and later imprisonment.

<sup>5</sup> Although the gaps and trends did persist, data for 2004 and 2008 are omitted as the # of observations in some categories were too few.

**Fig. 1 a** Median wealth by race and future incarceration—males (1985–1990). **b** Median wealth by race and future incarceration—males (1992–2000). *Notes:* Calculations use NLSY79 sample weights. Wealth is adjusted to 2012 dollars. The years are unevenly spaced in time, as wealth data were not collected consistently in the NLSY79



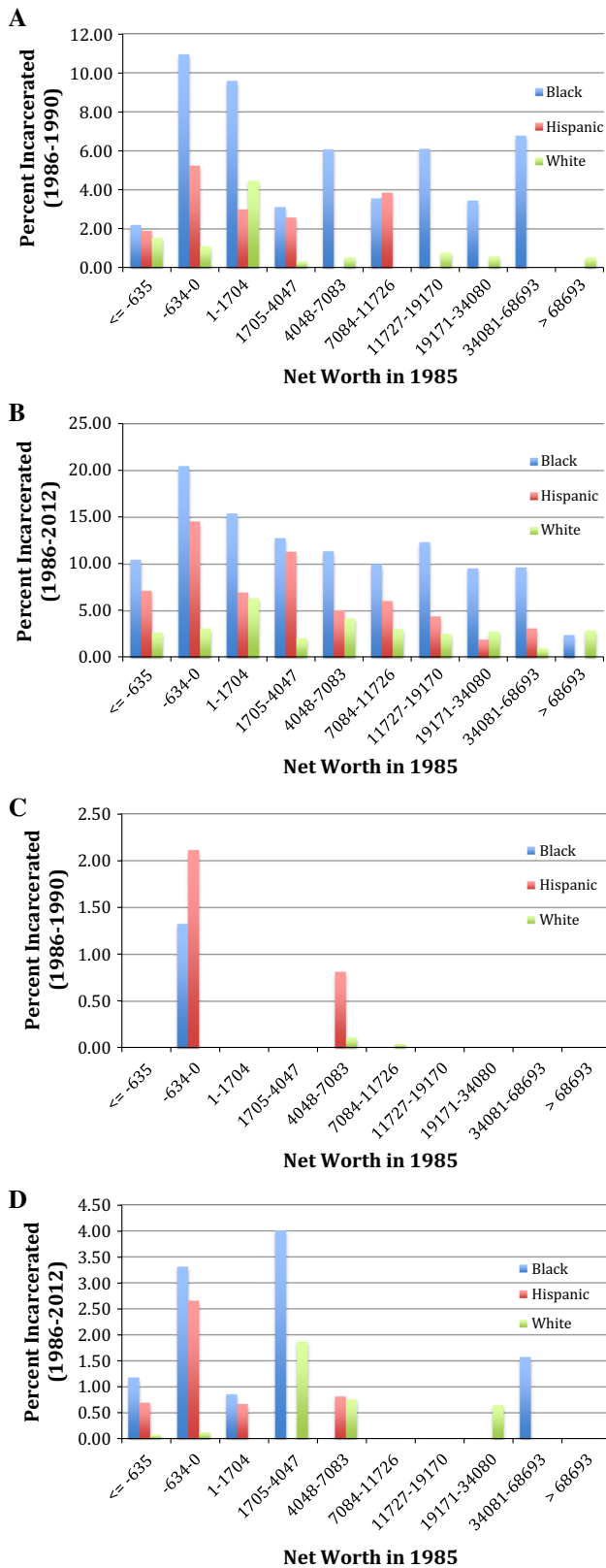
top decile—racial incarceration rates converge for the 5-year likelihoods.

The 27-year incarceration likelihoods for males, illustrated in Fig. 2b, which exclude the NLSY79 economically disadvantaged supplement dropped in 1990, present longer-term incarceration odds, including through the cohort’s middle age years. Black males had the highest rate of incarceration at all levels of wealth, and Hispanics had the second highest at most levels of wealth. The long-term black and Hispanic likelihoods decrease for those in the middle deciles, compared to those who had little or no wealth in 1985.

It is important to note that in these 27-year likelihood estimates, economically disadvantaged blacks and Hispanics are overrepresented, and thus, the differences in likelihoods also may be affected by other related

economic factors such as income. In the short- and long-term likelihoods for males, Hispanic rates of incarceration are similar to white rates at higher levels of wealth at the baseline, but black rates of incarceration remain higher than those of whites. Even so, it is clear that for males of all races, higher wealth is associated with lower likelihoods of future incarceration. Although racial disparities in incarceration seem to converge for males in the top decile of wealth, given the small sample sizes, this finding is inconclusive.

For females, however, we find the convergence in racial incarceration likelihoods more pronounced. In the 5-year outcomes, shown in Fig. 2c, short-term black and Hispanic female likelihoods were highest in the little-debt to zero wealth category—similar to males. However, after the 60th percentile of wealth, no females were found incarcerated in



**Fig. 2 a** Five-year percentage likelihood of incarceration—males. **b** 27-Year (maximum data\*) percentage likelihood of incarceration—males. **c** Five-year percentage likelihood of incarceration—females. **d** 27-Year (maximum data\*) percentage likelihood of incarceration—females. *Notes* Calculations use NLSY79 sample weights and wealth levels, adjusted to 2012 dollars, are partitioned into the sample’s deciles. Missing bars represent zero percentage. \*Does not include members of the supplemental subsample dropped after 1990, as underestimation of their incarceration rates would disproportionately affect white rates

the short term, indicating a convergence in racial incarceration likelihoods.

In the 27-year likelihoods for females, presented in Fig. 2d, convergence in racial rates was also evident, with females in four of the five top deciles of the wealth distribution experiencing no incarceration in the future. The data suggest that for females, after a threshold level of wealth is reached, racial likelihoods of incarceration may be similar. But, differences between incarceration outcomes for the wealthy and less wealthy are undeniably disparate.

Although more pronounced for females, at higher levels of wealth, the likelihood of incarceration falls for all racial groups. Yet, for comparable levels of wealth in 1985, when the respondents were entering young adulthood, blacks, Hispanics and whites still had disparate likelihoods of incarceration. As a result, we find that wealth is relevant to the prospect of incarceration, particularly when stratified by race, and that racial incarceration disparities persist even for individuals with similarly situated family wealth positions.

### Wealth After Incarceration

Once incarcerated, in the NLSY79 surveys, a number of respondents were actually interviewed while in jail or prison and a number of those respondents reported their assets information. Due to the nature of the setting, reported data may be irregular, not the least due to the difficulty of attempting to recall financial details about outside assets. Still, as one of the few sources of data for wealth during imprisonment, we examine the results separately. While some respondents reported on their wealth while being incarcerated only once, there were respondents who reported wealth while under incarceration in several of the survey years. For some incarcerated who were interviewed for consecutive surveys, reported wealth levels did fluctuate. As

expected, those in jail or prison typically had few or no assets, and their wealth levels were markedly low.

Compared with the cross-sectional median wealth of the entire NLSY cohort, incarcerated reported far less wealth, with a majority of the incarcerated in every year reporting zero or negative net worth. In later years, when the overall NLSY79 cohort became middle aged, they also had accumulated more wealth, whereas respondents under incarceration had zero or close-to-zero wealth. Among all of the concurrently incarcerated, with such low wealth reported each year, we observed no consistent racial wealth differences. In some years, relative racial wealth positions were reversed—that is, black incarcerated at the 50th or 75th

percentile had the highest wealth compared to their Hispanic or white incarcerated counterparts. In 1985, black incarcerated had \$1278 at the median, whereas Hispanics and whites had \$0; in 1990, whites interviewed in jail reported \$933 at the 75th percentile, compared to their black counterparts who reported \$3325. In most years, the median wealth for all races was at parity at *zero*. As such, observations from the NLSY79 suggest that wealth is reduced to little or nothing for all persons while in jail or prison, thereby eliminating racial differences in wealth during the period of incarceration.

Using wealth data collected when the respondents were no longer imprisoned at the time of interview, Table 2

**Table 2** Distribution of wealth of previously and never incarcerated

	# of Obs	Percentile			
		25th	50th	75th	90th
<i>1985</i>					
Previously incarcerated 1985					
Black	85	0	0	2758	6177
Hispanic	50	0	1576	6876	28,372
White	103	0	1491	6390	14,277
All previously incarcerated 1985	238	0	1065	6369	13,419
Never incarcerated 1985					
Black	2505	0	1278	7668	22,052
Hispanic	1554	0	4260	15,549	46,008
White	4543	2130	10,224	32,823	81,579
All never incarcerated 1985	8602	854	7455	25,560	69,864
<i>2000</i>					
Previously incarcerated 2000					
Black	174	0	3	9443	46,218
Hispanic	82	1064	8512	29,792	168,910
White	83	0	8645	65,170	249,774
All previously incarcerated 2000	339	0	3325	43,907	102,903
Never incarcerated 2000					
Black	1956	665	15,428	70,490	160,132
Hispanic	1216	5365	42,826	127,680	320,530
White	2986	36,110	126,217	304,570	627,760
All never incarcerated 2000	6158	17,955	94,430	250,802	565,317
<i>2012</i>					
Previously incarcerated 2012					
Black	231	0	0	18,500	97,800
Hispanic	92	0	1400	43,800	431,000
White	87	-563	5000	50,000	124,337
All previously incarcerated 2012	410	0	1000	39,500	123,000
Never incarcerated 2012					
Black	1891	0	16,200	107,400	258,295
Hispanic	1156	1825	53,000	205,700	540,000
White	2716	41,000	192,300	480,000	1,006,500
All never incarcerated 2012	5763	16,000	140,000	398,000	862,200

All calculations use NLSY79 sample weights, and reported wealth is adjusted to 2012 dollars. Previously incarcerated samples do not include respondents currently incarcerated



reports the distribution of wealth by race and previous incarceration status in 1985, 2000 and 2012. As shown by the differences between wealth distributions of the previously and never incarcerated, prior incarceration is clearly associated with lower wealth levels. However, again, there are important racial dynamics.

For instance, in 1985 the median wealth of white previous incarcerated was slightly higher than the median wealth of blacks who had never been incarcerated before. This phenomenon was observed in several years—1989 (\$6845 vs \$3515), 1996 (\$9052 vs \$7008) and 1998 (\$11,280 vs \$8460). Among the previously incarcerated, at each wealth quartile, blacks consistently reported having less wealth than Hispanics, while whites reported more wealth than Hispanics in most years.

Differences in wealth levels also emerge among former incarcerated when length of time from last incarceration is considered. Table 3 reports the latest reported NLSY79 wealth levels of previous incarcerated separated by year of last known incarceration. The first group is comprised of former incarcerated who were last incarcerated in the 1990s and 2000s through 2008, but not in the 2010 or 2012 survey years. Thus, they have likely been out of jail or prison for 2 or more years, and their wealth trajectory has had some time to recover from the period of incarceration, when most had zero or little wealth with few prospects for wealth building. The second group of previous incarcerated had been incarcerated in the 1980s, when they were mostly in their 20s or late teens, and had not been incarcerated since.

**Table 3** Post-incarceration wealth by time of last incarceration and race, 2012

	# of Obs	Percentile			
		25th	50th	75th	90th
<i>Last known incarceration 1991–2008 (4+ years ago)</i>					
Black	169	0	0	15,400	91,900
Hispanic	59	0	0	10,340	46,000
White	37	0	5000	36,000	78,000
Total	265	0	500	25,200	81,300
<i>Last known incarceration &lt;1990 (22+ years ago)</i>					
Black	46	0	3687	62,500	125,000
Hispanic	31	0	41,000	355,600	1,201,637
White	43	–563	13,900	94,500	170,897
Total	120	0	13,900	94,500	170,897
<i>Never incarcerated</i>					
Black	1891	0	16,200	107,400	258,295
Hispanic	1156	1825	53,000	205,700	540,000
White	2716	41,000	192,300	480,000	1,006,500
Total	5763	16,000	140,000	398,000	862,200

All calculations use NLSY79 sample weights, and wealth is adjusted to 2012 dollars

Those who were incarcerated recently consistently had less wealth than those who were incarcerated more than two decades ago. Specifically, within the same race, those who were more recently incarcerated had less wealth at the median, the 75th percentile and the 90th percentile. Although the 80s incarcerated were clearly better off than the later incarcerated group, they were still worse off than those who were never been incarcerated. Black respondents in this group had the lowest median wealth compared to both white respondents, who had over three times as much, and Hispanic respondents—who were actually doing better than their white counterparts. Although the years since incarceration may have helped wealth trajectories recover, the previously incarcerated remain a disadvantaged group and have a disproportionately low share of wealth.

## Discussion

Our post-incarceration findings are consistent with previous research (especially Maroto 2014): A previous record of incarceration is associated with substantially lower wealth levels, and previously incarcerated blacks have significantly less wealth than previously incarcerated whites. Additionally, as the data in the NLSY79 demonstrate, low wealth is associated with an increase in the likelihood of incarceration, which in turn can depress wealth accumulation. Conversely, future incarcerated had less wealth at the baseline than those who would never be incarcerated. Although we do find that this is not true across races; in some years blacks who never had been incarcerated had less median wealth than whites who had been incarcerated. This may be because blacks and Hispanics generally have low wealth in comparison with whites (Tippett et al. 2014; Taylor et al. 2011; Hamilton and Darity 2009; Gittleman and Wolff 2004), or because whites are more dominant in terms of wealth such that even future incarcerated possessed more wealth to start with.

Separating by race, we showed that blacks had lower odds of incarceration in the short term, in their early twenties to thirties, when they possessed more wealth. The odds of such incarceration for black males who possessed as little as \$2000 in 1985 were only half the odds for black males who possessed very little or no wealth and collectively had an incarceration rate of 10 % in the next 5 years. For black females, possessing more wealth meant virtually eliminating incarceration chances in the short term. In the long term as well as short term, having more wealth at the baseline was associated with lower incarceration rates in the future, for all races. Accordingly, we find that not only is wealth relevant to the prospect of incarceration, race and gender also interact with wealth prior to incarceration.

Between races, we find that at low levels of wealth both blacks and Hispanics still had a higher incarceration rate than whites. At higher levels of wealth at the baseline, although the black-white incarceration disparity was reduced for males, it was not eliminated. One explanation for the differential odds of incarceration between races may be that even while having similar wealth levels, individuals still may have disparate economic situations, through income, extended family wealth or differential exposure to discrimination. Personal and family human capital levels such as education, job experience and social connections also may differ greatly among those with similar wealth levels. Therefore, observed racial differences in male incarceration rates despite similar wealth levels may be explained once those factors are taken into account.

We do observe that for Hispanic males starting with higher levels of wealth, odds of incarceration are similar to those of white males at comparable wealth levels. Why Hispanic males experience this convergence but not black males, we leave to further study. For females, we find that after some point of wealth, the likelihood of incarceration changes little as wealth grows and is not different for the races. Our results suggest the same may be true for males at a much higher level of wealth, but additional data would be required for conclusive evidence, due to the lack of black male observations at the very high levels of net worth.

We acknowledge other limitations in our study that may be addressed by further study. Although we are able to examine the relationship between incarceration and personal wealth, we note that impact on extended family wealth is obviously salient, but we find insufficient data to

examine this issue fully. In some cases, data regarding females with respect to wealth and incarceration were also insufficient, limiting our analyses, in these cases, only to males. In addition, we do not find consistent results of the impact of different lengths of time spent incarcerated, but increased length has been reported to be associated with lower wealth (Maroto 2014).

The reasons for which respondents were incarcerated also may be salient, but were not available in the NLSY79 data. These limitations invite further study through the collection and use of additional data sources, particularly for unpacking the economic impact of incarceration on the broader household as well as for studying the impact of disparate, and possibly racially relevant, reasons for incarceration.

With disparity strongly pronounced between blacks, Hispanics and whites with respect to wealth and incarceration, we have identified salient relationships to improve our understanding of the interacting forces. Additionally, considering the interaction of race with wealth and incarceration makes clear the disparities we present in Fig. 1, establishing that those who experience incarceration come from a lower wealth background compared to those who do not. Together, the results suggest that when it comes to wealth and incarceration outcomes, the disadvantages of being black or Hispanic compound the disadvantages of asset poverty.

## Appendix

See Tables 4, 5, 6, 7 and 8.

**Table 4** Tabulations—median wealth by race and future incarceration

	1985	1986	1987	1988	1989	1990	1992	1993	1994	1996	1998	2000
Black—never incarcerated	\$2556	\$3533	\$6060	\$5820	\$5735	\$6079	\$6232	\$6201	\$8215	\$10,220	\$12,603	\$21,280
# of Obs	1026	1012	998	987	996	996	976	973	924	909	857	824
Black—incarcerated in future	\$767	\$1672	\$3434	\$1727	\$1480	\$1232	\$0	\$0	\$0	\$0	\$846	\$3325
# of Obs	175	152	133	128	111	88	68	64	56	44	31	23
Hispanic—never incarcerated	\$6390	\$6479	\$7878	\$9700	\$8880	\$12,320	\$13,448	\$15,900	\$18,600	\$24,966	\$32,430	\$45,619
# of Obs	688	665	643	635	650	641	656	634	620	598	585	539
Hispanic—incarcerated in future	\$1917	\$2090	\$3636	\$1552	\$1850	\$2992	\$6396	\$5724	\$3100	\$2044	\$5781	\$9044
# of Obs	60	57	47	50	44	41	29	26	22	16	13	8
White—never incarcerated	\$11,076	\$12,749	\$19,392	\$23,280	\$28,675	\$33,440	\$41,328	\$47,541	\$57,350	\$74,606	\$97,290	\$127,015
# of Obs	2165	2113	2080	2060	2051	2052	1673	1661	1608	1580	1519	1460

**Table 4** continued

	1985	1986	1987	1988	1989	1990	1992	1993	1994	1996	1998	2000
White— incarcerated in future	\$6177	\$3762	\$3030	\$3880	\$8325	\$4400	\$9184	\$4770	\$12,400	\$8030	\$1269	\$31,920
# of Obs	58	54	46	45	35	32	25	24	18	15	11	7

All calculations use NLSY79 sample weights, and wealth is adjusted to 2012 dollars. Family wealth includes any co-owned assets with spouse but not parental wealth. The years are unevenly spaced in time, as wealth data were not collected consistently in the NLSY79. Although the gaps and trends did persist, data for 2004, 2008 and 2012 are omitted as the # of observations in some categories were fewer than 5

**Table 5** Tabulations—5-year percentage likelihood of incarceration based on 1985 wealth (incarcerated 1986–1990)—males

Percentiles of 1985 net worth	0–10	11–20	21–30	31–40	41–50	51–60	61–70	71–80	81–90	91–100
Values	≤−635	−634 to 0	1–1704	1705–4047	4048–7083	7084–11,726	11,727–19,170	19,171–34,080	34,081–68,693	>68,693
Black	2.21	10.95	9.58	3.12	6.08	3.56	6.10	3.45	6.78	0.00
N	107	310	156	142	121	128	92	70	38	37
Hispanic	1.90	5.24	3.00	2.58	0.00	3.86	0.00	0.00	0.00	0.00
N	63	118	70	95	81	112	72	51	47	39
White	1.56	1.11	4.47	0.35	0.55	0.00	0.78	0.59	0.00	0.54
N	213	150	178	249	224	221	261	248	251	228

**Table 6** Tabulations—27-year (maximum data) percentage likelihood of incarceration based on 1985 wealth (incarcerated 1986–2012)—males

Percentiles of 1985 net worth	0–10	11–20	21–30	31–40	41–50	51–60	61–70	71–80	81–90	91–100
Values	≤−635	−634 to 0	1–1704	1705–4047	4048–7083	7084–11,726	11,727–19,170	19,171–34,080	34,081–68,693	>68,693
Black	10.47	20.48	15.41	12.78	11.38	9.99	12.34	9.54	9.65	2.43
N	107	310	156	141	121	128	92	70	38	37
Hispanic	7.16	14.56	6.98	11.32	5.07	6.05	4.41	1.94	3.14	0.00
N	63	118	70	92	79	112	71	51	47	39
White	2.70	3.13	6.36	2.06	4.21	3.08	2.55	2.80	1.02	2.92
N	162	103	138	193	193	186	226	203	208	193

Calculations use NLSY79 sample weights and wealth levels, adjusted to 2012 dollars, are partitioned into the sample's deciles

Does not include members of the supplemental subsample dropped after 1990, as underestimation of their incarceration rates would disproportionately affect white rates

**Table 7** Tabulations—5-year percentage likelihood of incarceration based on 1985 wealth (incarcerated 1986–1990)—females

Percentiles of 1985 net worth	0–10	11–20	21–30	31–40	41–50	51–60	61–70	71–80	81–90	91–100
Values	≤−635	−634 to 0	1–1704	1705–4047	4048–7083	7084–11,726	11,727–19,170	19,171–34,080	34,081–68,693	>68,693
Black	0.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	159	442	183	111	137	77	66	59	45	25
Hispanic	0.00	2.11	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.00
N	95	149	112	95	78	79	51	54	55	38
White	0.00	0.00	0.00	0.00	0.11	0.05	0.00	0.00	0.00	0.00
N	286	156	238	227	211	239	224	235	234	270

**Table 8** Tabulations—27-year (maximum data) percentage likelihood of incarceration based on 1985 wealth (incarcerated 1986–2012)—females

Percentiles of 1985 net worth	0–10	11–20	21–30	31–40	41–50	51–60	61–70	71–80	81–90	91–100
Values	≤-635	-634 to 0	1-1704	1705-4047	4048-7083	7084-11,726	11,727-19,170	19,171-34,080	34,081-68,693	>68,693
Black	1.18	3.31	0.86	4.01	0.00	0.00	0.00	0.00	1.57	0.00
N	159	442	182	111	137	77	65	59	45	25
Hispanic	0.69	2.66	0.67	0.00	0.81	0.00	0.00	0.00	0.00	0.00
N	94	149	110	94	78	79	51	54	54	38
White	0.08	0.13	0.00	1.87	0.76	0.00	0.00	0.65	0.00	0.00
N	205	113	173	175	162	188	173	184	190	207

Calculations use NLSY79 sample weights and wealth levels, adjusted to 2012 dollars, are partitioned into the sample's deciles

Does not include members of the supplemental subsample dropped after 1990, as underestimation of their incarceration rates would disproportionately affect white rates

## References

- Alexander, M. (2012). *The new Jim Crow: Mass incarceration in the age of colorblindness*. New York: The New Press.
- Apel, R., & Sweeten, G. (2010). The impact of incarceration on employment during the transition to adulthood. *Social Problems*, 57(3), 448–479.
- Blair, I. V., Judd, C. M., & Chapleau, K. M. (2004). The influence of afrocentric facial features in criminal sentencing. *Psychological Science*, 15(10), 674–679.
- Bonzar, T. C. (2003). *Prevalence of imprisonment in the U.S. population, 1974–2001*. Washington, DC: Bureau of Justice Statistics.
- Brayne, S. (2014). Surveillance and system avoidance criminal justice contact and institutional attachment. *American Sociological Review*, 79(3), 367–391.
- Bureau of Labor Statistics, U.S. Department of Labor. (2012). *National longitudinal survey of youth 1979 cohort, 1979-2010 (rounds 1–24)*. Produced and distributed by the Center for Human Resource Research, The Ohio State University. <https://www.nlsinfo.org/>.
- Eberhardt, J. L., Davies, P. G., Purdie-Vaughns, V. J., & Johnson, S. L. (2006). Looking deathworthy: Perceived stereotypicality of black defendants predicts capital-sentencing outcomes. *Psychological Science*, 17(5), 383–386.
- Freeman, R. B. (1996). Why do so many young american men commit crimes and what might we do about it? *The Journal of Economic Perspectives*, 10(1), 25–42.
- Gittleman, M., & Wolff, E. N. (2004). Racial differences in patterns of wealth accumulation. *Journal of Human Resources*, 39(1), 193–227.
- Glaze, L. E., & Parks, E. (2014). *Correctional populations in the United States, 2013*. Washington, DC: Bureau of Justice Statistics.
- Goffman, A. (2009). On the run: Wanted men in a Philadelphia ghetto. *American Sociological Review*, 74(3), 339–357.
- Hamilton, D., & Darity, W. (2009). Race, wealth, and intergenerational poverty. *American Prospect*, 20(7), A10–A12.
- Harris, A., Evans, H., & Beckett, K. (2010). Drawing blood from stones: Legal debt and social inequality in the contemporary United States. *American Journal of Sociology*, 115(6), 1753–1799.
- Irwin, J., & Austin, J. (1994). *It's about time: America's imprisonment binge*. Belmont, CA: Wadsworth.
- Leventhal, T., & Brooks-Gunn, J. (2011). Changes in neighborhood poverty from 1990 to 2000 and youth's problem behaviors. *Developmental Psychology*, 47(6), 1680.
- Light, A., & Nandi, A. (2007). Identifying race and ethnicity in the 1979 National Longitudinal Survey of Youth. *Population Research and Policy Review*, 26(2), 125–144.
- Maroto, M. L. (2014). The absorbing status of incarceration and its relationship with wealth accumulation. *Journal of Quantitative Criminology*, 31(2), 207–236.
- Mauer, M., & King, R. S. (2007). *Uneven justice: State rates of incarceration by race and ethnicity*. Washington, DC: Sentencing Project.
- Moore, L. D., & Elkavich, A. (2008). Who's using and who's doing time: Incarceration, the war on drugs, and public health. *American Journal of Public Health*, 98(5), 782.
- Nguyen-Hoang, P., & Yinger, J. (2011). The capitalization of school quality into house values: A Review. *Journal of Housing Economics*, 20(1), 30–48.
- Pager, D. (2003). The mark of a criminal record. *American Journal of Sociology*, 108(5), 937–975.
- Pager, D. (2007). *Marked: Race, crime, and finding work in an era of mass incarceration*. Chicago, IL: University of Chicago.
- Petersilia, J. (1983). *Racial disparities in the criminal justice system*. Santa Monica, CA: Rand Corporation.
- Pettit, B., & Western, B. (2004). Mass imprisonment and the life course: Race and class inequality in US incarceration. *American Sociological Review*, 69(2), 151–169.
- Pope, D. G., & Pope, J. C. (2012). Crime and property values: Evidence from the 1990s crime drop. *Regional Science and Urban Economics*, 42(1), 177–188.
- Schneider, D., & Turney, K. (2015). Incarceration and black–white inequality in homeownership: A state-level analysis. *Social Science Research*, 53, 403–414.
- Taylor, P., Kochhar, R., Fry, R., Velasco, G., & Motel, S. (2011). *Wealth gaps rise to record highs between whites, blacks, and hispanics* (Vol. 26). Washington, DC: Pew Research Center.
- Tippett, R., Jones-DeWeever, A., Rockey Moore, M., Hamilton, D., & Darity, W. (2014). *Beyond broke: Why closing the racial wealth gap is a priority for national economic security*. Center for

- Global Policy Solutions and the Duke University Research Network on Ethnic and Racial Inequality.
- Unah, I. (2011). Empirical analysis of race and the process of capital punishment in North Carolina. *Michigan State Law Review*, 2011, 609–658.
- Western, B., & Pettit, B. (2010). Incarceration & social inequality. *Daedalus*, 139(3), 8–19.
- Wildeman, C. (2014). Parental incarceration, child homelessness, and the invisible consequences of mass imprisonment. *The ANNALS of the American Academy of Political and Social Science*, 651(1), 74–96.
- Zagorsky, J. L. (2005). Marriage and divorce's impact on wealth. *Journal of Sociology*, 41(4), 406–424.
- Zatz, M. S. (1987). The changing forms of racial/ethnic biases in sentencing. *Journal of Research in Crime and Delinquency*, 24(1), 69–92.