

Working paper series

**Baltimore Study:
Credit Scores**

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Baltimore Study: Credit Scores

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Executive Summary

The Baltimore Project Phase II

This report builds upon the original Baltimore study by including credit score questions to the survey instrument conducted on the Phase I sample. In Phase II, we aimed to contact the participants who responded to the Baltimore telephone interview and to request their FICO credit score. The new survey questionnaire added six short questions related to the respondent's education. This report focuses on the provided FICO credit scores and their connection to indicators of wealth among four different groups of households: never-incarcerated white households (NIW), those in houses without an incarceration history identified as white; never-incarcerated black households (NIB), those in houses without an incarceration history identified as black; ever-incarcerated white households (EIW), those in houses with an incarceration history identified as white; and ever-incarcerated black households (EIB), those in houses with an incarceration history identified as black. The sample size is 51 respondents, which includes five respondents without a credit history.

To account for response bias, this report uses respondents' information from Phase I (demographics, income levels, respondent's openness, and self-reported financial status) to estimate their likelihood to respond to Phase II questions. At a base level, there appears to be a connection between credit scores, race, and incarceration history:

- Individuals in black households with an ever-incarcerated member had the lowest average and median FICO credit scores. Their scores were about 219 points lower than those of white individuals in households with no incarceration history. By group, the average FICO scores were 791 (NIW), 698 (NIB), 621 (EIW), and 573 (EIB).
- Most individuals have a checking account, and the variation across liquid assets is mainly connected to holding a savings account. The EIW group had the lowest likelihood of having a savings account.
- The prior expectation was that individuals with higher credit scores would be more likely to have tangible assets such as a home or a car. However, across black individuals and ever-incarcerated individuals, we do not identify a significant change in the average FICO score when it is only estimated among individuals with tangible assets.
- Despite their having more assets and less debt, never-incarcerated blacks possess similar average FICO credit scores to ever-incarcerated whites. This difference is 77 points on average, or less than half the difference between never-incarcerated and ever-incarcerated whites (170 points). Conversely, the difference in average credit score between blacks never-incarcerated and ever-incarcerated is 125 points.
- FICO credit scores appear to segment by group. Never-incarcerated white households are concentrated around higher asset holdings and higher FICO credit scores while ever-incarcerated black households are concentrated around lower asset holdings and lower FICO credit scores.

Introduction

The National Asset Scorecard for Communities of Color (NASCC) was developed in 2014 to respond to a research gap that existed in the data collection on U.S. household wealth. Because traditional wealth national datasets do not collect wealth-related data “disaggregated in detail by race and ethnicity at local levels,”¹ we know little about the asset and debt positions of particular fast-growing and key racial/ethnic subgroups in targeted areas. Originally, in 2013-2014, surveys were collected in 5 metropolitan areas (Boston, Miami, Tulsa, Oklahoma, and Los Angeles). Washington, D.C. was later added.

In 2017, the NASCC initiative expanded the original list of targeted metropolitan areas (Miami, Tulsa, DC, Los Angeles, and Boston) to include the city of Baltimore, Maryland. Its selection coincided with the 2015 death of Freddie Gray and the subsequent uprising in the city. For data collection here, there were two phases. During Phase I, in 2017, the project conducted phone interviews with residents in the city of Baltimore with and without incarceration history by race and ethnicity. Later, Phase II, conducted in 2019, reconnected with the first phase respondents to ask additional questions regarding individuals’ credit scores.

The original NASCC goal was to collect data on wealth inequalities (assets and debts) across racial/ethnic groups at localized areas. The areas were chosen based on their representation of hard-to-reach racial/ethnic groups and their geographic distribution. Depending on the area, further disaggregation was applied to the ancestry background questionnaire.

Unlike previous metropolitan areas, the 2017 Baltimore Project extended its focus to the evaluation of the ever-incarcerated population. The primary research question for the Baltimore Incarceration Study was as follows: *What is the financial situation for African American and white households with individual(s) who have been incarcerated, compared to those without an incarceration history?* The study looked at then-incarcerated households versus non-incarcerated households by race. The final sample for this study was 254 respondents (155 African American and 99 white respondents²).

This report expands upon the original Baltimore study by adding credit score questions to the original survey instrument conducted on the sample interviewed during Phase I. As a new phase of the Baltimore study, the purpose was to contact the participants who responded to the prior telephone interview and to request their FICO credit score. In addition, the survey questionnaire

¹ (Kijakazi, et al., 2016)

² Fourteen respondents identified multiple races. Six of these respondents self-identified as white first race, and then African American second race; one respondent self-identified as African American first race, and then as white second race. Due to the small sample, we use the first race as the first identification of race. We maintain information of multiple races as mixed race for future reference and apply it when needed.

added six short questions related to the respondent's education. This report focuses on the provided FICO credit scores and their connection to indicators of wealth among four different groups of households: never-incarcerated white (NIW) households, those in houses without an incarceration history who identify as white; never-incarcerated black (NIB) households, those in houses without an incarceration history who identify as black; ever-incarcerated white (EIW) households, those in houses with an incarceration history who identify as white; and ever-incarcerated black (EIB) households, those in houses with an incarceration history who identify as black.

The sample in this report is small due to the sensitivity of the information requested and the limited original sample from which participants were drawn. This sample size makes the analysis and comparison challenging. But this information is valuable, unique, and novel—there is no prior report focused on these groups and their financial information—and so we proceed with the analysis with caution. Our goal is not to make causal inference but to present stylized facts represented from the sample.

Basic evidence on the average FICO credit scores and the incarceration history of individuals indicates that having someone in the household who has been incarcerated corresponds to lower average FICO credit scores, which in turn leads to lower incomes, lower asset holdings, and greater, unsecured debts. However, a disturbing observation emerges from comparing never-incarcerated black households with ever-incarcerated white households. Despite their higher level of assets and lower level of debts, never-incarcerated black households have FICO score levels not that different from ever-incarcerated white households. This is not true for the reverse case, in which we compare FICO scores of never-incarcerated white and ever-incarcerated black households.

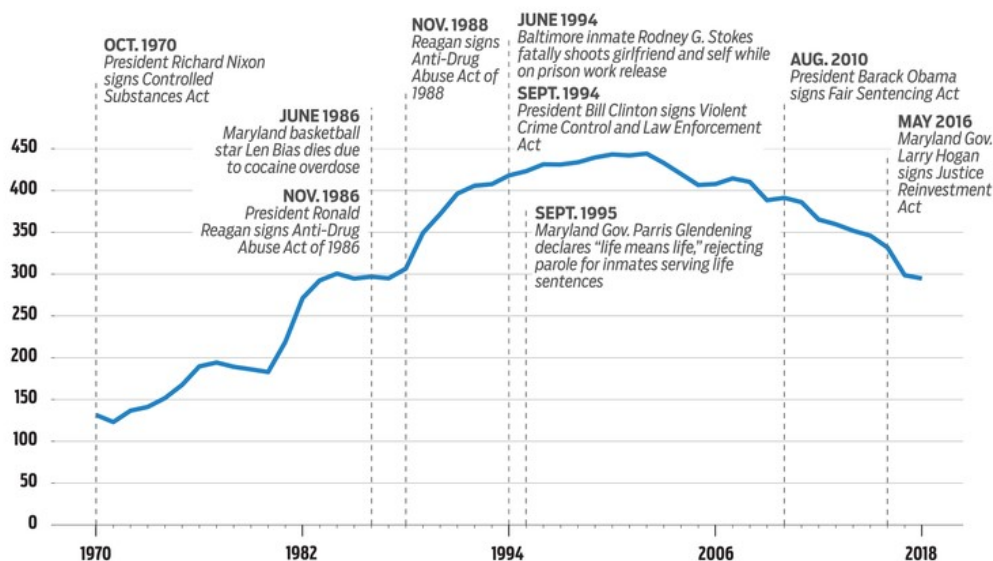
Background

Baltimore Incarceration Rate

This report compares, across black and white subjects, the credit scores of households with members who had an incarceration history and households whose members had no such history. Baltimore has a record of high incarceration rates as compared to state and national levels, as well as a persistent large gap between white and black rates. In 2016, Maryland had the 17th-lowest incarceration rate in the country, with a rate of 329 per 100,000 people sentenced to a year or more behind bars, slightly below the national average. But the city of Baltimore more than tripled the state rate at about 1,200 per 100,000 people: Nearly 1 out of 3 people in Maryland's prisons were from Baltimore. This made the city Ground Zero in the state for challenging prison policies.³

The problem also intensifies in specific areas of the city, with only five neighborhoods accounting for more than 30 percent of Baltimore's imprisoned population. Despite federal and state-level policy changes affecting incarceration rates (see Figure 1), including initiatives in 2010 and 2016 aimed at modifying incarceration procedures, a high proportion of the prison population still originates from Baltimore. Therefore, the city is a good candidate to evaluate the impact of incarceration history on wealth accumulation, wealth gaps, and disparate access to lines of credit.

Figure 1: Incarceration policies and Maryland's incarceration rate (per 100,000 residents)



Source: Vera Institute of Justice. Note: The highlighted policies are not intended to be an exhaustive representation of all policies affecting incarceration rates in the state of Maryland.

³ (Petteruti, Kajstura, Marc Schindler, & Ziedengerg, February 2015)

When we look at Baltimore’s share of the prison population in Figures 2 and 3, we see that the city’s trend dictates the trend for the state of Maryland. These figures also show that Baltimore rates are significantly higher than the state and the national prison rates. Baltimore also exhibits an overwhelming incarceration rate disparity between blacks and whites, with the black prison population outnumbering the white prison population five-to-one.

Figure 2: Baltimore, Maryland, and US incarceration rates per 100,000 residents (ages 15-64)

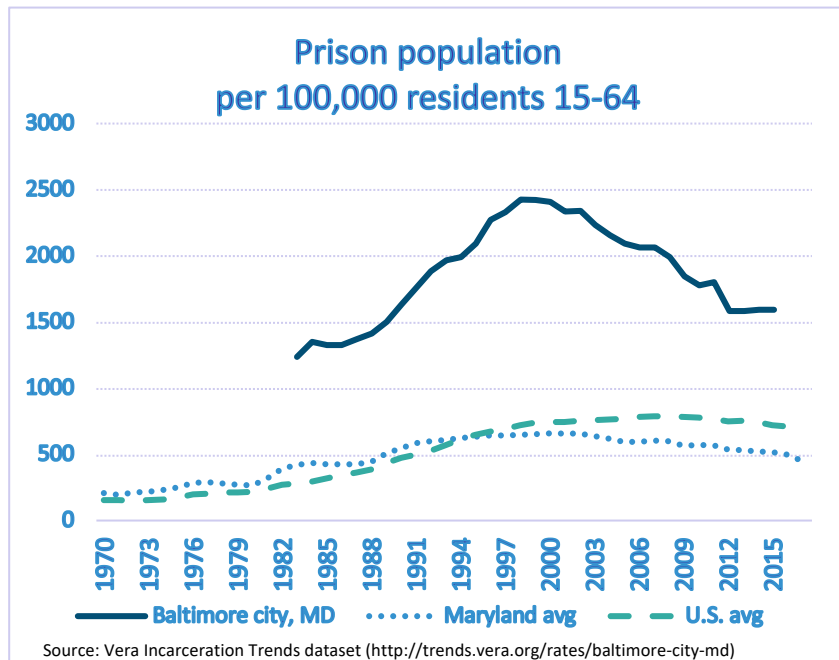
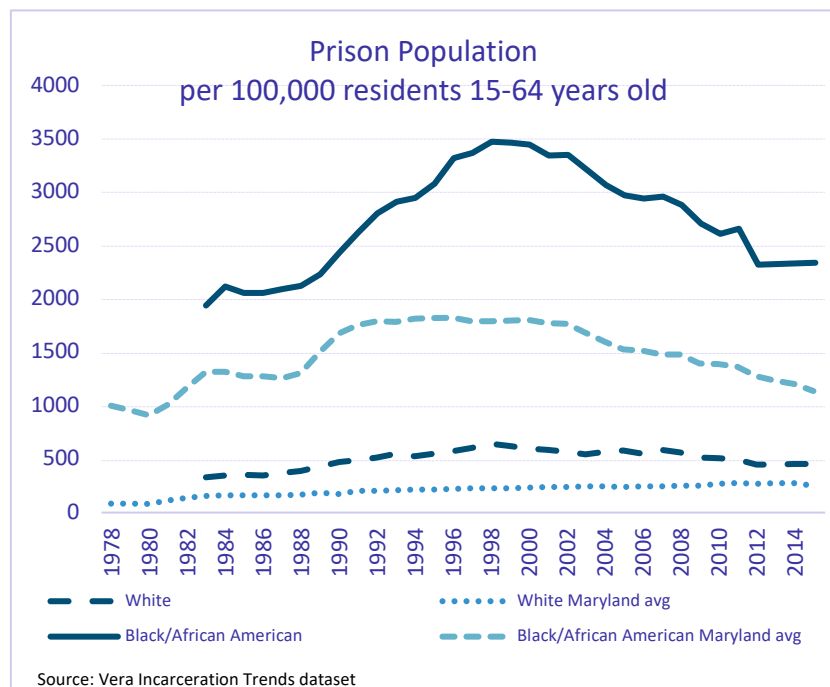


Figure 3: Baltimore and Maryland incarceration rates by race per 100,000 residents (ages 15-64)



Credit Score, Credit Invisibility, and Credit Worthiness Perception in the U.S.

Despite some widely-held notions, no one is born with a credit history and a credit score. To build a credit history, an individual needs to be able to create and use a credit line, the creation and usage of which in turn contributes to the calculation of the individual's credit scores. While there are several reported credit scores available to organizations and individuals, the formation of these estimates tends to be confusing, if not mystical, to the general public.

Despite this general misunderstanding, credit scores are widely used in the mainstream lending and housing markets, as well as in the labor market. The lack of transparency in the creation of these measures also detracts from the general public's understanding of the elements that would affect their estimates. A low credit score, or the lack of one altogether, can aggravate a downward spiral to poverty and financial instability.⁴ Hence, investigating the effect of incarceration history on credit scores (or lack of it) could shed light on the long-term financial well-being of individuals and households in high-incarceration-rate cities like Baltimore.⁵

In a series of reports, the Consumer Financial Protection Bureau's Office of Research has described the concept of "credit invisibility,"⁶ a scenario in which individuals have no credit record. A related circumstance is the condition of unscored credit for individuals for whom there is inadequate information to estimate their credit scores.

Although about 11 percent of the adult U.S. population was credit invisible in 2010, representing twenty-six million consumers, most of the "credit invisible" demographic were younger than twenty-five years old. Yet, among a more mature population, the racial/ethnic disparity persists. Around 15 percent of African Americans and Hispanics are credit invisible, while only nine percent of whites and Asians are credit invisible. Meanwhile, at least 13 and 12 percent of blacks and Hispanics, respectively, have unscored credit records, almost double the equivalent statistic for whites.

The most recent report from the Consumer Financial Protection Bureau, published in 2018, identified low-income neighborhoods as the most likely credit desert areas. The target population in this report is likely to have been concentrated in poor neighborhoods and to be either credit invisible or have unscored credit records. The importance of spatial location and individuals' access to credit and financial well-being relates to the concentration of credit-invisible individuals and those with unscored records in low-income areas. But also in these

⁴ (Dobbie, Goldsmith-Pinkham, Mahoney, & Song, 2019).

⁵ (Newville & Levin, July 2016).

⁶ (Brevoort, Grimm, & Kambara, Data Point: Credit Invisibles, May 2015; Brevoort & Kambara, CFPB Data Point: Becoming Credit Visible, June 2017; Brevoort, Clarkberg, Kambara, & Litwin, September 2018).

areas, there is a concentration of individuals with a history of incarceration. If incarceration begins at a young age, an individual does not have an opportunity to build a credit history at the age that typically the general population would be starting their own adult lives. With the revolving door dynamic presented in the prison system, by the time they can establish themselves outside prison, those with incarceration histories will not have the opportunities available to those starting their financial journey on a more “traditional” timeline.

Self-perception on creditworthiness and misprediction

Previous studies have found that blacks are more likely to mispredict their creditworthiness.⁷ Despite being more likely to have bad credit, black individuals rate their own financial status worse than observable measures predict. This wrong perception stems from black individuals being less likely to have positive lending experiences, less likely to have a credit card, and less likely to report knowledge about credit and lending terminology.⁸ Moreover, individuals who wrongly self-assess their financial status and creditworthiness are less likely to request loans and credit. Hence, by this exclusion, the estimated credit score among blacks could be downward biased, creating the perception of a less financial worthy group.

The literature also identifies a sizeable difference in credit scores between whites and blacks, on the scale of roughly 100 points. Additionally, the dispersion of credit scores is higher among white individuals.

No prior research on credit scores and credit score discrimination specifically targets individuals with an incarceration history. Combining existing data on income and racial differences, the expectation is that individuals with an incarceration history will have lower credit scores than those without an incarceration history. Furthermore, *a priori*, blacks with an incarceration history would be likely to be the group with the lowest credit score level, while whites without an incarceration history would be expected to have the highest credit score level. Concerning blacks without any incarceration history and whites with an incarceration history, the mixed evidence does not allow a clear prediction of their respective levels. This report offers preliminary evidence on these inter-group comparisons.

Trust

Trust plays a significant role in surveys when people are asked to report financial information. The significance of building up trust with respondents could be intensified when people are asked for a nuanced and not-well understood indicator, such as a credit score. For example, when asked, 70% of people in the U.S. had never heard of VantageScore, one of the other nation’s

⁷ (Ards, Ha, Mazas, & Jr., 2015)

⁸ (Robb & Robinson, 2018; Dobbie, Goldsmith-Pinkham, Mahoney, & Song, 2019; Newville & Levin, July 2016; Hanson, Hawley, Martin, & Liu, 2016)

premier credit scoring brands (Credit Card Insider Survey, 2019). The level of participants' openness toward the survey would also affect their willingness to respond to additional personal and factual questions.

Methodology and Data

In contrast with previous NASCC surveys, the goal of this study was to make a second contact with those who responded to the first phase, the Baltimore telephone interview, and request information about their FICO credit scores and basic information about the time and place of their high school education. The first phase sample consisted of 254 individuals—99 white and 155 Black or African Americans—with and without an incarceration history.

This second phase aimed to evaluate the association between credit scores and various measures of income inequality that were collected in the first phase. The survey for this phase contained six questions (see appendix) requesting direct information about the participants' FICO credit score, the year they started and ended high school, and the state and city in which they attended high school.

Individuals were approached by email or by postal mail and were given the opportunity to respond either online, by email, or by regular mail. Some individuals were approached by phone, but no respondent from the first phase of the survey was contacted more than three times.⁹ Participants were offered a gift card for a completed survey. To increase the response rate, the amount of the incentive was increased during the final stage of data collection. Twelve of the 51 participants who responded received this increased-value gift card.

As for this report, we connected the new information about individuals' FICO credit scores with their previous answers during the first phase of the Baltimore project.¹⁰ The appendix shows the full survey questionnaire related to the sections identified above.

After the initial contact period, and after reaching the maximum number of phone contact limits, the final sample of respondents was 51. The majority responded to the survey online. Table 1 shows the disaggregation by type of response, from which we computed the response rate using the AAPOR Outcome Rate Calculator (shown in Table 2)¹¹. Forty individuals originally agreed to respond to the survey but never did. They are considered implicit refusals. Meanwhile, there was

⁹ See the letter, email message, and consent form and questionnaire in the appendix for more details.

¹⁰ Variables included in this report from Baltimore project Phase I are: Household composition; Race, Ethnicity, and Ancestry; Education, Background and Family Income Structure; Participation in Labor Market; Dealing with the Economy; Income; Assets; Stocks, Mutual Funds, IRAs & Pensions; Principal residence & real estate; Vehicles; Businesses; Other debt, credit cards, loans etc.; Government & Familial financial support; Political & Religious affiliations; and Demographics. Details on this variables are included in the appendix.

¹¹ AAPOR (Version 4.0, March, 2016).

no contact information for fifty-five individuals, and fifty-seven individuals never answered our attempts to contact them.

Table 1: Disaggregated survey response

	Agreed but did not respond	Never Answered	Wrong # or Disconnected	Refused	Responded	Total
Responded by Electronic Survey/email					34	34
Responded by Letter & phone					17	17
Total	40	57	55	51	51	254

Note: Most of the respondents answered the survey electronically or by regular mail.

Table 2: AAPOR’s response rate

Response Rate	
$I / ((I+P) + (R+NC+O) + e(UH+UO))$	0.201
I=Complete Interviews	
P=Partial Interviews	
R=Refusal and break off	
NC=Non Contact	
O=Other	
UH=Unknown Household	
UO=Unknown other	

Although the response rate as calculated by AAPOR is 20.1%, we have to be cautious about reporting this rate as the final rate. Emails and letters were sent to everyone with contact information from Phase I, with an assumption that this sample was the baseline group. However, the Phase I sample is a combination of four different target groups. The sampling design attempted to find a sample that was representative of each target sub-group. Because of the difficulty of finding the target population due to its size and the similarities to what researchers call “hidden population,”¹² the sample from Baltimore Phase I is not representative of the Baltimore city population. A “hidden population” is considered as such because individuals from that population do not disclose their information due to stigma, limitations, or other barriers. Therefore, another indicator that would help determine the rate of response would separate the types of responses by each target group, and it would estimate the response rate for each group

¹² A hidden population (or hard-to-reach population) is generally categorized as one that is difficult to categorize in terms of size and characteristics since its identification relies on individuals’ willingness to disclose an unobservable status. Further, if this status is one that is socially stigmatized, individuals would have incentives to avoid disclosing this information due to fear or need of privacy (Salganik & Heckathorn, 2004).

separately. However, we did not have access to that level of survey response detail. In the Comparison of Samples section, we explore a simplified version of this indicator that estimates the proportion of respondents by each sub-group.

Overview of the Baltimore Project Phase I Sample Design

Mark and Rhodes (2017, 2019)¹³ detail the sample design of the Baltimore Phase I project. We offer a brief summary here. In general, to be eligible, individuals had to live in the city of Baltimore, be 18 years or older, and have a household member or herself with a history of conviction or had spent more than 30 days in jail, prison, or a youth correctional facility. The focused question of this project was: *What is the financial situation for African American and white households with individual(s) who have been incarcerated, compared to those without an incarceration history?*

There were four sub-groups defined as follows:

1. Never-incarcerated history white (NIW)
2. Never-incarcerated history black (NIB)
3. Ever-incarcerated history white (EIW)
4. Ever-incarcerated history black (EIB)

Further, to avoid confusion, the definition of households was included in the text of the survey instrument: *“I’d now like to ask about the people who live with you in your household. We are interested specifically in the people who live together as a family unit sharing income and expenses. This should also include people who would normally live in the household but are away for some reason such as school, the military, or prison.”*

An additional clarifying note excluded roommates and boarders in the definition of members of a household. Despite having the survey compiled at the individual level, the questions about incarceration history were actually collected at the household level. Wealth information was also computed at the household level, but credit score values and self-reported race were submitted at the individual level.

Because of the lack of baseline information on the ever-incarcerated population in Baltimore, the sample from Phase I didn’t have a target population besides the targeted sub-groups defined in the project. The final sample was supposed to represent each category as best as possible, but it represented neither the total ever-incarcerated population nor the full population in Baltimore. The sample frame first consisted of a traditional RDD approach using cell phone numbers (a random sample of 43,707 cellphone numbers) that identified individuals living in the city and oversampled low-income households. However, this attempt did not capture enough

¹³ (Marks & Rhodes, 2017; Marks & Rhodes, 2019).

incarcerated sample targets. Acknowledging that the incarcerated population is considered a hard-to-survey population, the researchers proceeded with a nonprobability method that used social media (Facebook) to recruit individuals satisfying the eligibility criteria: race and incarceration history. For this last approach, 34 interviews were completed. The recruitment and interview of new candidates stopped when (1) the study’s target for ever-incarcerated blacks was reached and (2) none of the remaining respondents were ever-incarcerated whites. The AAPOR response rate was 6.7%, with a final sample size of 254 respondents: eighty-two never-incarcerated blacks, seventy-one never-incarcerated whites, seventy-three ever-incarcerated blacks, and twenty-eight ever-incarcerated whites. Because of its limited size, this final group was the most difficult one from which to retrieve a sample.

In Phase II, we evaluated the distribution within each sub-group by category and compared these distributions of the sample in Phase I against the Phase II sample. While we cannot say anything about the proportion of these categories with respect to the population (either the total or the ever-incarcerated) in the city of Baltimore, our best-educated guess is to assume that the Baltimore Phase I sample is the best representation of each sub-population and to thus compare the responses from Phase II’s samples against Phase I’s samples.

Comparison of samples

Table 3 shows the number of responses from Phase I and Phase II for each group. The groups without an incarceration history have the largest number of respondents in Phase I. However, in Phase II, never-incarcerated whites and ever-incarcerated blacks have the highest number of respondents. The sampling fraction of never-incarcerated blacks is the smallest fraction of the four groups (about 11%), whereas the ever-incarcerated whites show the highest sampling fraction (32%).

Table 3: Number of completed interviews by race and incarcerated status

		Number of respondents		
		Phase I	Phase II	%
Never-incarcerated history	White	71	16	22.5
	Black	82	9	11.0
Incarcerated history	White	28	9	32.1
	Black	73	17	23.3
TOTAL		254	51	20.0

Note: Incarcerated status is defined as someone in the household either currently incarcerated or incarcerated in the past. Five respondents from Phase I did not have contact information available. Fourteen respondents from Phase I selected more than one race; this report uses the first race selected. Only two respondents who selected more than one race responded Phase II questionnaire.

Sampling weight estimation

Again, we assume that the sample obtained from Baltimore Phase I represents the actual population distribution for each individual sub-group. In other words, the distribution we observe of the non-incarcerated whites from the Phase I sample is not significantly different from the actual distribution of the non-incarcerated white population in Baltimore. Effectively, we assume that each sub-sample represents a different independent population.

Ideally, a sample should be a smaller representation of the population and thus display the same distribution across every indicator. In practice, however, issues like non-response and self-selection can drive sample bias and incorrectly represent certain population subgroups. To correct for these issues, we compare the Phase II sample distribution against the Phase I sample distribution across relevant/auxiliary variables from the survey. Then, we design a weighting mechanism that accounts for selection and population distribution at each sub-population, a technique similar to the design of a propensity score.

First, we make a simple comparison of the distribution of each sub-group. We call the Phase I sample, the *Full Sample*, and the Phase II sample, the *Credit Score Sample*. Table 4 shows the summary statistics comparison by sub-group.

Table 4: Summary statistics comparison by sub-population (Full Sample vs. Credit Score Sample)

	Phase I: Full Sample				Phase II: Credit Score Sample			
	Non-incarcerated history		Incarcerated history		Non-incarcerated history		Incarcerated history	
	White	Black	White	Black	White	Black	White	Black
N. obs w/ inf.	71	81	28	71	16	9	9	17
Age								
Mean	51	48	48	47	49	50	47	42*
Median	52	48	49	49	48	49	49	37*
Family Income								
Mean	92,804	38,416	37,206	27,565	134,692	62,707	43,047	28,134
Median	80,000	27,000	20,800	16,500	130,000	50,000	21,600	25,000
Percentages (%)								
Female	48	32	71	45	69	44	78	6***
High School Dropout	6	15	25	26	0***	11	11	18
Never married	32	52	43	51	25	56	44	35
Employed	77	51	43	37	88	56	56	35
No 'openness' responding survey	15	13	7	16	19	11	0***	0***
Self-reported bad financial status	24	59	75	75	6	67	78	77
Use of non-traditional	7	24	21	26	0	22	33	47

financial institutions									
Missing any bill payment	20	54	36	68	0	67	44	88	
Have Checking account	92	74	71	49	100***	78	67	58	
Have Savings account	76	50	41	38	87	78	33	53	
Own a house	68	34	32	14	81	56	22	12	
Own a car	86	52	61	27	94	78	67	47	

Source: NASCC survey, author's calculations. The difference in mean/median/proportions as compared to the target population is statistically significant at the 1%, 5%, or 10% significance level (***, **, * respectively).

Robust/bootstrap standard errors.

The main statistically significant differences between the samples are in their age (average and median), the proportion of females for the ever-incarcerated black sample, and the openness in answering the survey for both the ever-incarcerated black and white samples. Never-incarcerated whites in our sample are more likely to have a checking account and do not have a representation of high school dropouts. Despite not finding individual statistically-significant differences across other characteristics, we should consider the chance of sample selection and endogeneity in the rate of response by sub-group. The next step is to estimate a simplified model that incorporates as explanatory variables key determining elements of responding to the project's Phase II.

There are two main potential sources of bias. First, individuals are less willing to reveal direct financial information such as credit history and credit scores to random requesters. Second, even if an individual is willing to reveal this information, the disparity in the likelihood of credit invisibility and unscored records across racial and income-level groups can affect the response rate by each group.

Table 5 shows the marginal effect of the probit model that estimates the likelihood of Phase I participants responding to Phase II survey conditional on a list of relevant variables. Family income has a positive and statistically significant effect on the rate of response among blacks (both never-incarcerated and ever-incarcerated). Gender only plays a significant role among ever-incarcerated blacks: The predicted rate of response decreases by a substantial level if the respondent is a female.

Table 5: Marginal effects from Probit model

Variables	Non-incarcerated white	Non-incarcerated black	Incarcerated white	Incarcerated black
Family Income	0	0.000*	0	0.000*
	[0.000]	[0.000]	[0.000]	[0.000]
Female	0.144	0.128	0.233	-0.465***
	[0.105]	[0.110]	[0.523]	[0.105]

High School Graduate	0.266	-0.085	-0.189	-0.052
	[0.260]	[0.210]	[0.540]	[0.165]
Some or College plus	0.383	-0.139	0.281	0.111
	[0.304]	[0.232]	[0.707]	[0.166]
Employed	0.08	-0.073	0.117	-0.094
	[0.149]	[0.098]	[0.645]	[0.156]
Not openness	-0.047	0.037	-0.497	-0.359**
	[0.185]	[0.180]	[0.585]	[0.148]
Good Finance	-0.225	-0.871***	0.337	
	[0.158]	[0.097]	[1.083]	
Bad Finance	-0.363**	-0.691***	0.628	-0.071
	[0.176]	[0.148]	[0.904]	[0.134]
Poor Finance	-0.301	-0.779***	0.362	0.076
	[0.236]	[0.099]	[1.036]	[0.118]
Debt non-tradition institutions	-0.192	-0.008	0.294	0.065
	[0.211]	[0.098]	[0.449]	[0.122]
Saving	-0.193	0.08	-0.544	0.078
	[0.151]	[0.081]	[0.786]	[0.132]
Checking	0.220*	0.045	0.037	0.012
	[0.131]	[0.101]	[0.539]	[0.202]
Constant	-0.081	0.861***	-0.373	0.404***
	[0.256]	[0.226]	[0.973]	[0.151]
Observations	62	68	25	58
R-squared	0.283	0.237	0.351	0.42

Note: Author's calculation using NASCC data from Baltimore Project Phase I and Phase II. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust/bootstrap standard errors.

This model is consistent with the literature. The results show that among never-incarcerated blacks, those who perceived their financial status as bad or poor were less likely to answer the Phase II survey. If their perception was wrong, we are more likely to have information from a pool of individuals who may not represent the actual group of never-incarcerated blacks. We used the average estimated probability at the individual level as a propensity score that adjusts for this biased selection on these observables indicators. From this point forward, all estimates include the weighted results.

Assets, Debt, Net Worth, and Credit Score Estimates

Financial History

Credit scores exist to measure the creditworthiness of a potential loan applicant. In the Phase II sample, five respondents didn't have FICO credit score.¹⁴ All respondents without FICO scores have an incarceration history and are distributed similarly across race. (There is a distinct separation by gender: The unscored women are white, and the unscored men are black.) While there is no prior belief concerning gender/race differences, in the aggregate, it seems that there is some consistency with the literature regarding the higher likelihood of unscored individuals among low-income groups.

Using only the information from the respondents with FICO scores (46 participants), we estimate the summary statistics and FICO credit scores of each sub-group in Table 6. Never-incarcerated whites have the highest estimated average score (791), followed by never-incarcerated blacks (698), ever-incarcerated whites (621), and finally ever-incarcerated blacks (573).

Acknowledging these small sample sizes, it is still interesting that never-incarcerated blacks and ever-incarcerated whites have similar average credit scores. The difference between the two averages is 77 points or less than half the difference between never-incarcerated and ever-incarcerated whites (170 points).

Table 6: FICO credit scores summary statistics by group

FICO stats	Never-incarcerated white	Never-incarcerated black	Ever-incarcerated white	Ever-incarcerated black
N	16	8	7	14
Average	791	698***	621***	573***
Median	808	739***	564***	560***
SD	39	73	81	68
SE	10	26	31	18

Note: Author's calculation using NASCC data from Baltimore Project Phase I and Phase II. *** p<0.01, ** p<0.05, * p<0.1. Robust/bootstrap standard errors. Weighted results.

In Phase I, survey respondents were asked a series of questions on their ownership of assets, and debts. If they stated they owned an asset, they were then asked to estimate its value. This report connects the answers to Phase I to those who responded in Phase II and their FICO credit scores. As a general rule, the document only reports the statistics for samples with three or more

¹⁴ The sample of unscored/credit invisible individuals is too small to make conclusions about it. The average age is 55 years, and average family income is lower than \$20,000. The finding of these groups without FICO scores deserves more attention in future research.

observations.¹⁵ Because information about incarceration and wealth is available at the household levels, this report discusses and compares households instead of individuals.

Financial Assets

We observe that ever-incarcerated groups are less likely to hold saving accounts and assets in stocks, mutual funds, and investment trusts than never-incarcerated groups. Never-incarcerated white households are better positioned in terms of their financial status with respect to the other groups. Many in this group are homeowners and possess a retirement account and maintain a very high FICO credit score. However, this simply doesn't hold for never-incarcerated black households. Although they are better off than ever-incarcerated black households, their FICO credit score, on average and in the median, doesn't dramatically change based on their relative asset holding positions.

Liquid Assets

Using a measure that tells us how quickly households can convert their assets into liquid assets (e.g. cash), we can compare the capacity of each group to respond to unexpected shocks to their family income. Survey respondents were asked if they owned liquid assets in the form of checking and savings accounts. Table 7 shows the proportion of households with liquid assets and their average and median FICO scores. Notably, all the never-incarcerated white households in the sample hold some type of liquid asset, primarily a checking account, whereas 89% of this group possess a savings account. This group is followed by never-incarcerated black households (93%). For the groups with an incarceration history, less than 75% possess a savings account. Some caution is needed when comparing these percentages, as not all respondents answered the questions on liquid assets.

Nevertheless, it stands out that ever-incarcerated white households are the least likely group to have a checking and a savings account. Meanwhile, ever-incarcerated black households have the lowest FICO score among the groups. Even when considering only the ever-incarcerated black households with liquid assets, the average and median FICO score remains the same.

Table 7: Comparison of Liquid Assets holdings and FICO credit scores by group

	Liquid Assets			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	100	0	0	791	808	16
Never-incarcerated black	93	-7.3	6.0	708	739	6

¹⁵ As is the practice in this literature, we report median values in addition to average values when applicable.

Ever-incarcerated white	67	-33.4***	17.9	655	650	4
Ever-incarcerated black	74	-25.8***	10.1	571	560	8
	Checking Account			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	100	0	0	791	808	16
Never-incarcerated black	93	-7.3	6.0	708	739	6
Ever-incarcerated white	67	-33.4***	17.9	655	650	4
Ever-incarcerated black	74	-25.8***	10.1	571	560	8
	Savings Account			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	89	0	0	791	808	13
Never-incarcerated black	93	4.5	10.4	708	739	6
Ever-incarcerated white	33	-55.7***	18.8	705	730	3
Ever-incarcerated black	74	-19.1	14.0	575	560	7

Note: Author's calculation using NASCC (Baltimore Phase I and II). NIW stands for Non-Incarceration history white, SE for standard errors of the mean differences compared to NIW. *** p<0.01, ** p<0.05, * p<0.1. Robust/bootstrap standard errors. Weighted results.

Other Financial Assets: stocks, mutual funds, investment trusts, and retirement funds

For other financial assets such as stocks, mutual funds, investment trusts, and retirement funds, we find that never-incarcerated white households are more likely to have other financial assets and retirement plans. The lack of response from the other groups deters us from comparing these proportions, but we still observe that possessing other financial assets and retirement funds does not make black households' FICO scores equal to those of never-incarcerated whites. This is particularly curious given the amount of financial planning and stability needed for those who have such types of assets.

Table 8: Comparison of Other Assets holdings and FICO credit scores by group

	Other Financial Assets			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	82	0	0	788	802	13
Never-incarcerated black	45	-36.9	25.6	725	739	3
Ever-incarcerated white	-	-	-	-	-	-
Ever-incarcerated black	-	-	-	-	-	-
	IRA/ Private Annuity			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	94	0	0	794	808	13
Never-incarcerated black	69	-24.9	18.1	716	739	4
Ever-incarcerated white	-	-	-	-	-	-
Ever-incarcerated black	41	-52.8***	17.9	603	571	3

Note: Author's calculation using NASCC (Baltimore Phase I and II). NIW stands for Non-Incarceration history white, SE for standard errors of the mean differences compared to NIW. *** p<0.01, ** p<0.05, * p<0.1. Robust/bootstrap standard errors. Weighted results.

Tangible Assets

In Phase I, participants were asked questions about their car and home ownership. Table 9 providing a summary for comparison. For ever-incarcerated households, the rate of response regarding home ownership was too low to reach any conclusions. For never-incarcerated households, white households who responded as owning a home had FICO credit scores approximately 70 points higher as compared to black households, a statistically significant difference. Half of the never-incarcerated white households owning a house have excellent FICO score levels, whereas half of their black counterparts only reach subprime levels.

The report also shows that most households own at least one car, with ever-incarcerated black households being the only group with a significantly lower ownership rate compared to never-incarcerated whites. Despite the similarities in car ownership rates, still, never-incarcerated whites have significantly higher average and median FICO credit scores. As such, this type of

asset does not seem to be related to higher credit scores, a common trend in many of our comparisons. Our aim is not to make a causal inference of this relationship: Credit score levels can also affect access to lending opportunities, which can lead to ownership of tangible assets. However, looking at the FICO scores among all the household groups with tangible assets and comparing their average and median values, we can see that those possessing assets have slightly higher credit scores. Yet, that does not bring their scores to the levels of the never-incarcerated white households’.

Table 9: Comparison of Tangible Assets holdings and FICO credit scores by group

	Home Ownership			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	92	0	0	794	808	13
Never-incarcerated black	77	-15.4	15.4	754**	739**	4
Ever-incarcerated white	-	-	-	-	-	-
Ever-incarcerated black	-	-	-	-	-	-
	Car Ownership			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	99	0	0	796	808	14
Never-incarcerated black	93	-6.1	6.2	723**	739**	6
Ever-incarcerated white	75	-24.2	14.8	631***	564***	5
Ever-incarcerated black	73	-25.7***	12.0	583***	590***	7

Note: Author’s calculation using NASCC (Baltimore Phase I and II). NIW stands for Non-Incarceration history white, SE for standard errors of the mean differences compared to NIW. *** p<0.01, ** p<0.05, * p<0.1. Robust/bootstrap standard errors. Weighted results.

Unsecured Debts

Like in previous releases of NASCC, participants responded to questions on whether they were holding debts that were not supported by an underlying asset: Credit card debt, student loans, and medical debts fall into this category. The comparison of these debts also needs to consider

the type of investment and planning behind their creation. Student loans represent long-term plans, while credit card and medical debts could reflect a response to short-term shocks.

Table 10 shows the proportion of households that responded to holding any debt related to credit cards, student loans, and medical bills, and their average and median FICO credit scores. Although the proportions follow a pattern of a better debt position among never-incarcerated white households, the differences are not statistically significant. However, we see the significance in the differences in the mean and median FICO credit scores across groups, gaps that oscillate between 70 points to 220 points, on average, when comparing never-incarcerated white households versus the other groups. Something to highlight is the striking differences in FICO credit scores among those who have student loans. Although the sample is very small, it is worth noting that ever-incarcerated black households have a poor average credit score. Medical bills can only be estimated for the ever-incarcerated black households where more than half of those who responded hold medical bills.

Because of the small sample, the proportions are likely to be biased by the number of participants who responded to these questions. More discussion is needed to define these questions better such that all participants are incented to respond to them.

Table 10: Comparison of Unsecured Debts holdings and FICO credit scores by group

	Credit Card Debt			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	32	0	0	804	808	5
Never-incarcerated black	73	41.6	21.4	735***	739***	5
Ever-incarcerated white	40	8.4	23.2	636***	650***	3
Ever-incarcerated black	64	32.7	19.7	584***	590***	6
	Student Loans			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	48	0	0	819	815	7
Never-incarcerated black	47	-0.9	26.3	713***	710***	5
Ever-incarcerated white	-	-	-	-	-	-
Ever-incarcerated black	38	-10.0	22.0	551***	546***	3

	Medical Bills			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	-	-	-	-	-	-
Never-incarcerated black	-	-	-	-	-	-
Ever-incarcerated white	-	-	-	-	-	-
Ever-incarcerated black	61	61.2	15.8	592	590	7

Note: Author’s calculation using NASCC (Baltimore Phase I and II). NIW stands for Non-Incarceration history white, SE for standard errors of the mean differences compared to NIW. *** p<0.01, ** p<0.05, * p<0.1. Robust/bootstrap standard errors. Weighted results.

Mortgage Debt

Logically, those groups who are more likely to own a house would also be more likely to hold mortgage debt. The same is true for owning a car and having a car loan. Table 11 shows the comparison of the proportions of the holding of these debts. There are no significant differences between the never-incarcerated groups in terms of those holding a home mortgage and in terms of their credit scores, on average.

For auto loans, the proportional differences are not significant, but the differences of each group’s FICO credit scores, on average and at the median, are significant. However, for this question, the number of respondents declined for all groups, so these results may reflect bias arising from contacting only those who have auto loans. For small samples, this issue exacerbates the bias.

Table 11: Comparison of Mortgage Debt holdings and FICO credit scores by group

	Mortgage			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	79	0	0	791	802	11
Never-incarcerated black	77	-1.5	18.0	754	739	4
Ever-incarcerated white	-	-	-	-	-	-
Ever-incarcerated black	-	-	-	-	-	-
	Auto Loan			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	71	0	0	796	826	8
Never-incarcerated black	31	-39.8	22.5	656***	607***	4
Ever-incarcerated white	54	-17.3	26.3	636***	650***	3
Ever-incarcerated black	83	12.1	20.9	548***	546***	5

Note: Author’s calculation using NASCC (Baltimore Phase I and II). NIW stands for Non-Incarceration history white, SE for standard errors of the mean differences compared to NIW. *** p<0.01, ** p<0.05, * p<0.1. Robust/bootstrap standard errors. Weighted results.

Self-reported financial status and debt in non-traditional financial services

One interesting component of the survey from Phase I is that participants were asked about their use of non-traditional financial services. For both the incarcerated population and low-income households, these alternative services are their main access to financial resources. However, there is also the case that the market is segmented in two: one market for those who have access to traditional financial services and one for those who only have access to non-traditional financial services. Table 12 shows the proportions of self-reported financial status and the debt of non-traditional financial services. In our sample, we see that the never-incarcerated population has few, if any, respondents saying that they use non-traditional services. Contrarily, some of the ever-incarcerated households use this service. Not surprisingly, those having non-traditional financial services debts also have very poor FICO credit scores.

Table 12: Comparison of Self-reported financial status and Debt in non-traditional financial services and FICO credit scores by group

	Self-reported Bad Finance			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white	-	-	-	-	-	-
Never-incarcerated black	53	51.9	22.6	711***	755***	5
Ever-incarcerated white	78	76.6	14.8	603***	564***	6
Ever-incarcerated black	75	73.3	14.6	556***	546***	8
	Debt in non-traditional services			FICO		
	Proportion	Difference wrt NIW	SE	Average	Median	Respondents
Never-incarcerated white						
Never-incarcerated black	-	-	-	-	-	-
Ever-incarcerated white	47	-27.6	17.6	558	563	3
Ever-incarcerated black	46	-26.9	14.4	576	590	4

Note: Author's calculation using NASCC (Baltimore Phase I and II). NIW stands for Non-Incarceration history white, SE for standard errors of the mean differences compared to NIW.

Net Worth Values

After attempting to compare the holdings of assets and debts across households groups to identify patterns, the next step is to evaluate the values of these assets and debts. These results are conditioned values subject to a household having such assets and debts.

Asset Values

Looking at Table 12, we see that ever-incarcerated households have the lowest levels of liquid assets (at the median, 125 dollars and 500 dollars for the ever-incarcerated white households and the ever-incarcerated black households, respectively). If we focus now only on never-

incarcerated households, we notice that the sample of never-incarcerated black families has a balance of more than \$4,000 in liquid assets. The average is comparable to the findings from Washington, DC, where black households possess 5% of the liquid assets of white households. In this report, however, the never-incarcerated white households' median liquid assets holdings is less than half the average. Comparing median values, black households are holding 12% of the liquid assets of white households.

In terms of total assets, among never-incarcerated households, black groups hold only a third of the level for white groups. But interestingly, the group with the lowest level of total asset holdings in this sample is the ever-incarcerated white population.

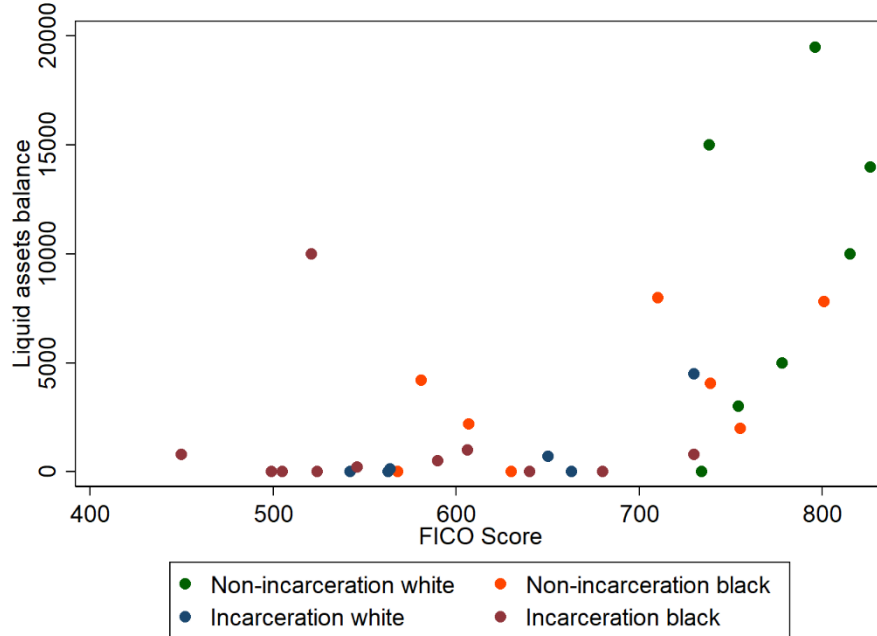
Table 12: Liquid Assets, Total Assets, and FICO credit scores by group

Liquid Assets						
Incarceration history	Never-incarcerated white	Never-incarcerated black	Ever-Incarcerated white	Ever-Incarcerated black	All	FICO
Average	77,711	4,133 ***	5,803 ***	6,354 ***	30,137	710
Median	32,000	4,050 ***	125 ***	500 ***	4,050	739
Standard Deviation	107,723	2,786	13,601	14,201	71,058	111
Standard Errors	27,814	929	4,534	3,939	10,477	20
Total Assets						
Incarceration history	Never-incarcerated white	Never-incarcerated black	Ever-Incarcerated white	Ever-Incarcerated black	All	FICO
Average	597,568	190,080 ***	81,726 ***	56,962***	270,442	703
Median	600,000	174,050 ***	6,500 ***	17,800***	174,050	734
Standard Deviation	269,950	120,465	173,600	95,655	305,245	110
Standard Errors	69,701	40,155	57,867	23,200	45,006	19

Note: Author's calculation using NASCC (Baltimore Phase I and II). NIW stands for Non-Incarceration history white, SE for standard errors of the mean differences compared to NIW. *** p<0.01, ** p<0.05, * p<0.1. Robust/bootstrap standard errors. Weighted results.

Figure 4 seeks to demonstrate the relationship between FICO scores and liquid asset holdings. It appears that each group is segmented in different regions of the graph and there exists a clear division between never-incarcerated white households and ever-incarcerated black households. Meanwhile, the other two groups are more sparsely present in the graph.

Figure 4: Relationship between Liquid Assets and Credit Score



For these two groups, their FICO credit scores seem not to be a predictor of their actual financial status. Figure 5 shows a similar relationship between their FICO credit scores and total asset holdings. Even after accounting for more sophisticated asset holdings, the segmented pattern we see in Figure 4 is mimicked in Figure 5.

Figure 5: Relationship between Total Assets and Credit Score

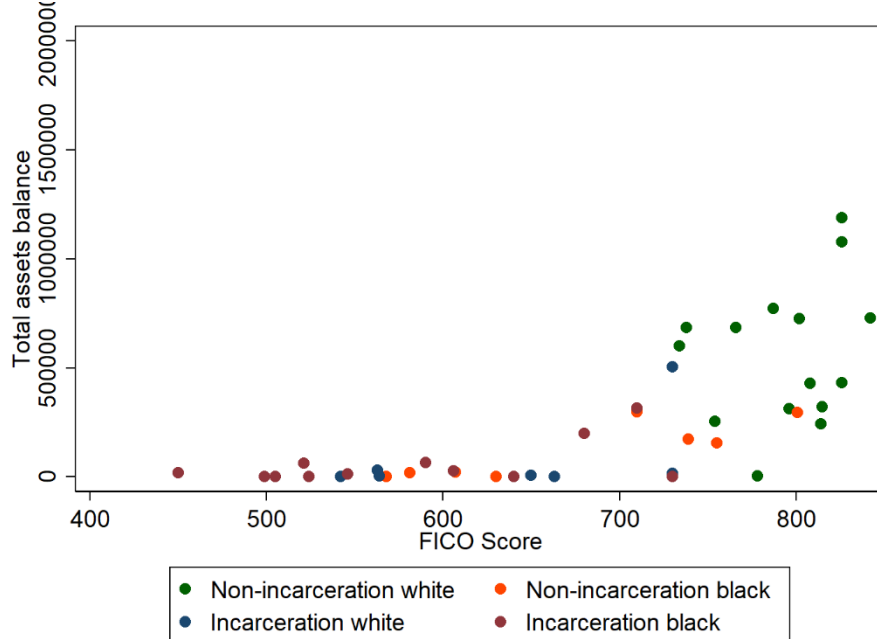
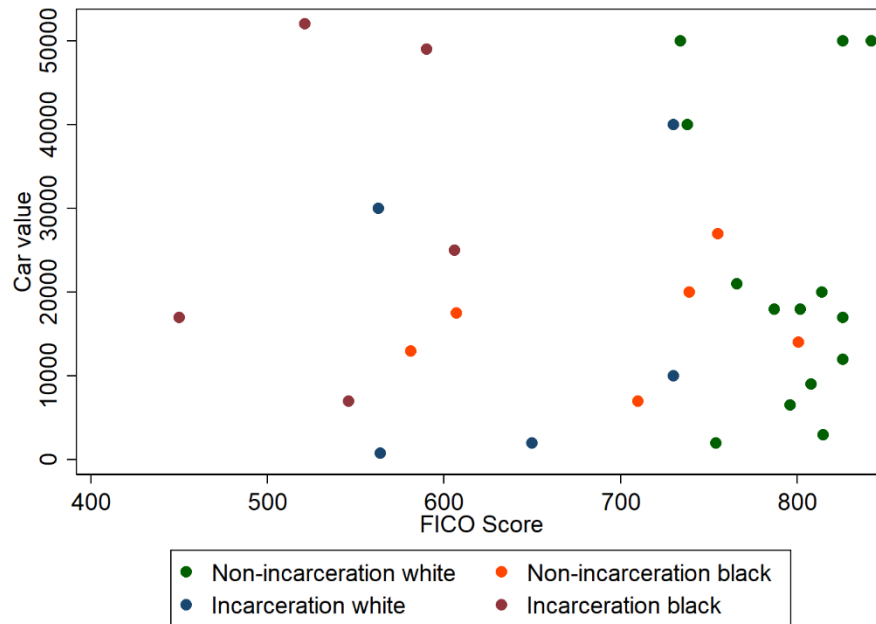


Figure 6 shows the relationship between car values and FICO credit scores. There is more variation in the values of cars, but there is no particular pattern across groups.

Figure 6: Relationship between Auto Value and Credit Scores



Non-housing Debt Values

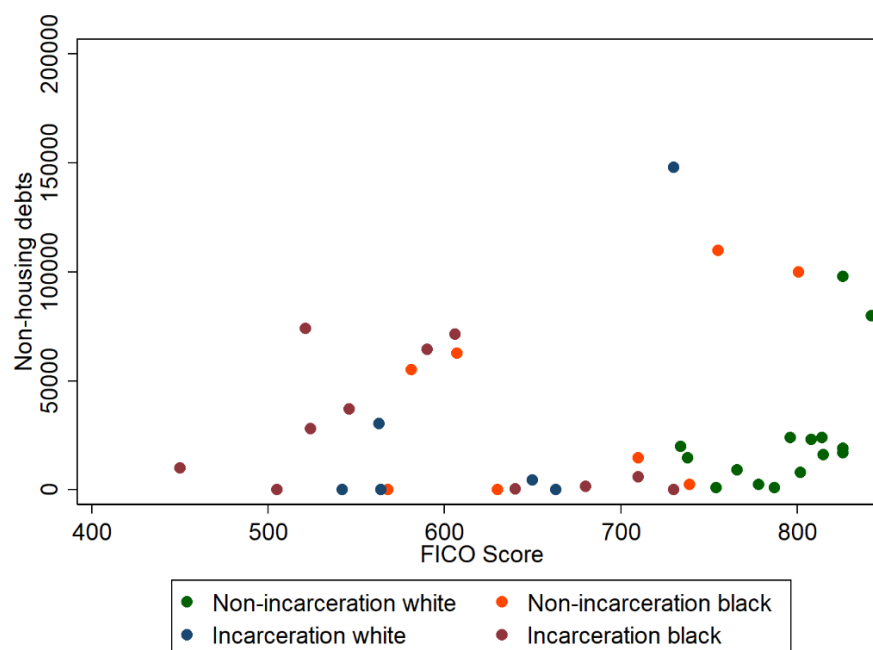
Table 13 shows the non-housing debts and the FICO credit scores by group. Despite the differences the table shows in the amounts of debt held by group, given the sample size, these differences are not statistically significant. Figure 7 displays the relationship between non-housing debt and FICO credit scores. There is no clear pattern in this potential relationship.

Table 13: Non-housing Debts and FICO credit scores by group

Non-housing Debt						
Non-incarcerated/ incarcerated history	Never- incarcerated white	Never- incarcerated black	Ever- Incarcerated white	Ever- Incarcerated black	All	FICO
Average	29,789	34,877	24,001	60,198	36,724	704
Median	20,000	2,500	0	37,200	17,000	738
Standard Deviation	31,427	44,342	50,455	127,154	72,219	113
Standard Errors	8,114	14,781	16,818	35,266	10,648	19
FICO (Average)	796	723***	635***	577***		
FICO (Median)	808	739***	650***	546***		

Note: Author’s calculation using NASCC (Baltimore Phase I and II). NIW stands for Non-Incarceration history white, SE for standard errors of the mean differences compared to NIW. *** p<0.01, ** p<0.05, * p<0.1. Robust/bootstrap standard errors. Weighted results.

Figure 7: Relationship between Non-housing Debts and Credit Scores



Implications

Credit score traditionally are used as an observable measure of the creditworthiness of potential clients. However, they also could become barriers to access to financial resources and to low-cost resources. Households with a history of incarceration generally are affected adversely by this punitive history with respect to wealth accumulation.

In this study, ever-incarcerated black households appear to be the least well-off group of the four considered. Moreover, their FICO credit scores seem to be unreflective of the actual assets they hold. Even for those possessing more sophisticated assets, their FICO credit scores were poor.

This report illuminates a community often overlooked in traditional studies. There is little published research on the wealth levels among households with incarcerated histories and also few reports or analyses on their credit scores levels (an exception is Zaw et al. 2017). This report is the first to discuss such comparisons and incorporate credit score values across these groups.

Further, by using a measure that is more observable and external to the individual like FICO credit scores, this report can identify a degree of comparability across the households in this sample. One takeaway from this analysis is that FICO scores present simply another structural barrier that people of color must clear.

Limitations and Remarks

There are important limitations to this study that need to be highlighted, the first being the sample size used in the analysis. Working with very sensitive data drives down the number of

people willing to participate and offer information about these topics. For future research working with such sensitive information, other approaches should be used in addition to email and phone communications.

Although the participants in this phase were already aware of the research because they have been contacted before, the information requested in this phase, as well as the greater degree of action required from respondents, may have discouraged responses. Furthermore, not all 51 respondents in this second phase have credit score information. Therefore, the statistical inference was challenging as we moved to more granular analyses of the groups.

The original sample from Phase I had its own complexities that migrated to this phase of the study. The original sample was created through both random digit dialing and targeted sampling. This approach, together with the dearth of substantial previous information on the ever-incarcerated population, resulted in an inability to truly and reliably derive representativeness at the population level. The comparisons in this report were done across the four groups, but no definitive conclusion could be reached on the ever-incarcerated versus the never-incarcerated population, nor about the total population of Baltimore.

If a future replication of this work is considered, researchers need to address the issues of working with what in the literature would be called a “hidden population”. With that in mind, elements and techniques addressing the challenge of working with this type of population should be built into the original sampling design.

There are also limitations associated with interviewing under-represented populations. For this report, the groups most likely to be underrepresented were ever-incarcerated women of any race and white households with an ever-incarcerated member. Although costlier, initial in-person interviews with the credit score module as part of the longer survey may have sparked a better response to these questions.

Given the literature on wealth and credit self-ranking and knowledge, it is advisable to include questions regarding these topics.¹⁶ For instance, more questions could be asked related to knowledge about interest rates, ways to accumulate wealth, and beliefs about the content of credit scores. In addition, beyond credit knowledge, there should be an open question asking respondents how they manage their finances. This type of question would allow the respondents and the researcher both to think outside the box of the traditional savings and wealth accumulation mechanisms.

If future researchers develop a plan that includes combining Phases I and II of the survey, note that the questions about credit scores do need to be located toward the end of the questionnaire,

¹⁶ (Ards, Ha, Mazas, & Jr., 2015; Brevoort, Grimm, & Kambara, Data Point: Credit Invisibles, May 2015; Dobbie, Goldsmith-Pinkham, Mahoney, & Song, 2019)

and individuals would need to have time and assistance to be able to answer these questions accurately.

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Appendix

Baltimore

NASS Qualtrics: Credit Score Email

Greetings from Duke University

About a year ago, you participated in a research study for Duke University. We called you to ask questions to help us understand how people manage their financial resources during and after the recession. Thank you so much for your previous participation!

We are now interested in investigating the general accuracy of credit scores. We are contacting you to invite you to take part in a paid (\$45) follow-up study that should only take a few minutes of your time, since this time there are only a few questions in the survey.

Key Information:

We want to link the information that you gave us in the first survey with your credit score in the last year to evaluate how precise or accurate your credit score may or may not be. If you choose to take part in this study by providing us with your credit score within 10 days of receiving this email, you will receive a Visa or Amazon gift certificate for \$45.00 by email or regular mail, and it will be sent to you within 10 -15 business days after we receive your response.

If you agree to participate, you should know the following:

- Your decision to participate and your answer will not affect your credit score.
- Your data will be kept confidential. Your name will not be associated with the research findings from this study.
- De-identified information collected in this study may be made public or used for future research purposes.
- Only the principal investigators and the research team will have access to your data.
- You may withdraw at any time before the data have been analyzed and published.
- In the survey, you will be asked to upload a screenshot or document showing your credit score.

If you don't know your credit score, the link below gives you options to access your credit score (FICO) for free. If you do not have access to a computer or you need additional assistance accessing your credit report, please contact Eugenia Conde at (919) 684-8715 or by email at eugenia.conde-dudding@duke.edu.

This study is funded by the Washington Center for Equitable Growth. If you have questions or concerns about this study, you can contact the principal investigators at Duke University, Dr. William Darity Jr. at (919) 613-7336, william.darity@duke.edu or Dr. Sarah Gaither at (919) 660-5721, sarah.gaither@duke.edu.

If you have questions about your rights as a research participant, please call the Duke University Institutional Review Board (IRB) at (919) 668-5111 during normal business hours.

You can read more about the Dr. Darity and Dr. Gaither's research at <https://socialequity.duke.edu/>

**We appreciate and value your participation at your earliest convenience.
Thank you for your time.**

The easiest way to get your FICO score is through Discover (Link below). You don't need to be a client and you don't need to enter a credit card number. I am also attaching a document with other options to get your credit score.

<https://www.creditscorecard.com/login>

View Your Free FICO Score for all 3 Credit Bureaus

Friday, February 1, 2019



There are lots of free credit scores floating around, but most of them are not the true FICO® score that lenders subscribe to and use as part of their decision.

However FICO® is working to change that by allowing banks and credit unions to give you free ongoing access to the [real score](#) they use to make lending decisions as long as you are an account holder.

The easiest place for anyone to get their free FICO® score is via the [Discover Credit Scorecard](#). You do not need to be a customer of Discover – anyone can register and get their official FICO® score for free. The data is from the Experian credit bureau.

You can also get a free Experian FICO® 8 score at freecreditscore.com. While that site used to require you to enter your credit card to get information, your FICO® score and Experian report are completely free with no credit card information needed.

To find out where to get your FICO® score from the other credit bureaus, read on.

Equifax Scores

Citibank

- **Available with:** Any Citibank branded credit card. This does not include Citibank cards with other brands like the American AAdvantage or Hilton HHonors cards.
- **Score updated:** Monthly
- **Where to find it:** On your online account or the Citi app
- [Learn more](#)

DCU Credit Union

- **Available with:** Any credit card, or a checking account with direct deposit
- **Score updated:** Monthly
- **Where to find it:** Look for an invitation in your online account
- [Learn more](#)

Huntington Bank

- **Available with:** The Huntington Voice credit card – you will get a FICO® Bankcard Score 2 from Equifax
- **Where to find it:** Log into your account and you'll see a link

PenFed

- **Available with:** PenFed members with active checking accounts, installment loans, and revolving lines of credit
- **Score updated:** When PenFed refreshes – no set schedule
- **Where to find it:** Login to your account and click 'Your FICO® Score is Ready'
- **Notes:** PenFed uses a more advanced 'Next Gen' FICO® score that has a different scale than traditional FICO® scores, with 150 as the lowest score and 950 as the highest score. Most banks use a score with a scale of 300 to 850. Because of this the score you see on PenFed's site may be higher or lower than what you see from others.

Experian Scores

Capital One and American Express regularly use Experian's FICO® among others for credit decisions.

American Express

- **Available with:** Any American Express credit card
- **Score updated:** Monthly
- **Where to find it:** On your online account

Chase

- **Available with:** Chase Slate®* accounts
- **Score updated:** Monthly
- [Learn more](#)

Discover

- **Available with:** All Discover cards and if you are not a Discover cardholder, you can sign up to get your FICO® score for free by visiting creditscorecard.com.
- **Score updated:** Monthly
- **Where to find it:** On your statement and online

First National Bank of Omaha

- **Available with:** Any credit card account
- **Score updated:** Monthly
- **Where to find it:** On your online account
- [Learn more](#)

Wells Fargo

- **Available with:** Any Wells Fargo credit card
- **Score updated:** Monthly
- **Where to find it:** On your online account

Please note: a previous version of this blog post noted that USAA provides a free FICO® credit score. USAA actually provides a free VantageScore.

TransUnion Scores

Bank of America

- **Available with:** Select credit card accounts
- **Score updated:** Monthly, with history
- **Where to find it:** Link available on your account summary page under the 'Tools and Investing' section

Barclays

- **Available with:** Any credit card account
- **Score updated:** Monthly
- **Where to find it:** Link available on your account summary page

Walmart / Sam's Club

- **Available with:** Walmart Credit Card, Walmart MasterCard, or Sam's Club Credit Card
- **Score updated:** Monthly
- **Where to find it:** At [Walmart.com/creditlogin](https://www.walmart.com/creditlogin), only if you enroll in online delivery of monthly statements

Q1.1 Baltimore NASCC- Credit Score

Welcome to the research study!
Greetings from Duke University,

We are contacting you to invite you to take part in a paid (\$45) follow-up study that should only take a few minutes of your time. We want to link the information that you gave us in the first survey with your credit score in the last year to evaluate how precise or accurate your credit score may or may not be. If you choose to take part in this study by providing us with your credit score within 10 days of receiving this email, you will receive a Visa or Amazon gift certificate for \$45.00 by email or regular mail, which will be sent to you within 10-15 business days after we receive your response.

Key Information

If you agree to participate, you should know the following:

- Your decision to participate and your answer will not affect your credit score.
- Your data will be kept confidential. Your name will not be associated with the research findings from this study.
- Only the principal investigators and the research team will have access to your data.
- You may withdraw at any time before the data have been analyzed and published.
- De-identified information collected in this study may be made public or used for future research purposes
- In the survey, you will be asked to upload a screenshot or document showing your credit score.
- If you don't know your credit score, the email you received from us, gives you options to access your credit score (FICO) for free.

If you do not have access to a computer or you need additional assistance accessing your credit report, please contact Eugenia Conde at (919) 684-8715 or by email at eugenia.condedudding@duke.edu.

This study is funded by the Washington Center for Equitable Growth. If you have questions or concerns about this study, you can contact the principal investigators at Duke University, Dr. William Darity Jr. at (919) 613-7336, william.darity@duke.edu or Dr. Sarah Gaither at (919) 660-5721, sarah.gaither@duke.edu. You can read more about the Dr. Darity and Dr. Gaither's research at <https://socialequity.duke.edu/>.

If you have questions about your rights as a research participant, please call the Duke University Institutional Review Board (IRB) at (919) 668-5111 during normal business hours.

We appreciate and value your participation at your earliest convenience.
Thank you for your time.

- I consent to take part in this study. (4)
- I do not consent; I do not wish to participate in the study. (5)

Skip To: End of Block If Welcome to the research study! Greetings from Duke University, We are contacting you to invi... = I do not consent; I do not wish to participate in the study.

Q1.2 To help us understand, the context in which you have lived, please answer the following questions:

Q1.3 In what year did you start high school? If you did not attend high school, please tell us the year you started middle School.

- Year (16) _____
 - State (19) _____
 - City (20) _____
-

Q1.4 In what year did you graduate from high school? If you did not graduate or did not go to high school, please tell us the year you stopped attending school.

- Year (16) _____
 - State (19) _____
 - City (20) _____
-

Page Break

Q1.5

Do you have a credit history?

Yes (1)

No (2)

Skip To: End of Block If Do you have a credit history? = No

Skip To: Q1.6 If Do you have a credit history? = Yes

Page Break



Q1.6 What is the number of your last FICO credit score in the last 12 months?

Note: There is a credit score called, VantageScore. That is not the score that we are requesting. Please verify that your score is called FICO.

Page Break

Q1.7

Please upload in the box below a pdf or a screenshot of your FICO score.

After you click inside the box, a window to select your document will open. If you made a mistake uploading the incorrect document or screenshot, double click the box again and select the correct one.

Page Break

Q1.8 What kind of gift card would you like to receive?

- Visa (1)**
- Amazon (2)**

End of Block: Block

Baltimore

END OF QULATRICS SURVEY MESSAGE

We thank you for your time spent taking this survey!

Your response has been recorded.

Within a few minutes, you will receive an email to which you can reply, if you want us to send your gift certificate to an address other than the email that

we have on file for you.

Baltimore

THANK YOU, EMAIL (Sent after survey completion).

Dear participant,

Thank you again for responding to our survey. The gift certificate you selected, Visa or Amazon, will be sent to the email address we have on file within 10 - 15 days business days. If would like us to send it to a different email or physical address, please reply to this email, and let us know where you prefer us send you the gift card.

We sincerely appreciate you taking the time to answer our questions.

Respectfully,

**Eugenia Conde
Research Associate
Duke University
Samuel DuBois Cook Center on Social Equity
2024 West Main Street, Bay A, Room 210b
Durham, NC 27705
Tel. (919) 684-8715**

Baltimore

NASS Qualtrics: Credit Score Letter

Greetings from Duke University

About a year ago, you participated in a research study for Duke University. We called you to ask questions to help us understand how people manage their financial resources during and after the recession. Thank you so much for your previous participation!

We are now interested in investigating the general accuracy of credit scores. We are contacting you to invite you to take part in a paid (\$45) follow-up study that should only take a few minutes of your time, since this time there are only a few questions in the survey.

Key Information

We want to link the information that you gave us in the first survey with your credit score in the last year to evaluate how precise or accurate your credit score may or may not be. If you choose to take part in this study by providing us with your credit score within 10 days of receiving this email, you will receive a Visa or Amazon gift certificate for \$45.00 by email or regular mail, and it will be sent to you within 10- 15 business days after we receive your response.

If you agree to participate, you should know the following:

- Your decision to participate and your answer will not affect your credit score.
- Your data will be kept confidential. Your name will not be associated with the research findings from this study.
- Only the principal investigators and the research team will have access to your data.
- You may withdraw at any time before the data have been analyzed and published.
- De-identified information collected in this study may be made public or used for future research purposes.
- You will be asked to send this document with your signature to give consent to participate in the study and a copy of your credit score in the stamped envelope provided.
- You also have the option of completing the survey online. For the online survey, you will need to upload a photo or screenshot of your FICO credit score.

If you don't know your credit score, the link below gives you options to access your credit score (FICO) for free. If prefer to take the survey electronically, do not have access to a computer or you need additional assistance accessing your credit report, please contact Eugenia Conde at (919) 684-8715 or by email at eugenia.conde-dudding@duke.edu.

This study is funded by the Washington Center for Equitable Growth. If you have questions or concerns about this study, you can contact the principal investigators at Duke University, Dr. William Darity Jr. at (919) 613-7336, william.darity@duke.edu or Dr. Sarah Gaither at (919) 660-5721, sarah.gaither@duke.edu.

If you have questions about your rights as a research participant, please call the Duke University Institutional Review Board (IRB) at (919) 668-511 during normal business hours.

You can read more about the Dr. Darity and Dr. Gaither's research at <https://socialequity.duke.edu/>

We appreciate and value your participation at your earliest convenience. Thank you.

Key Information

If you agree to participate, you should know the following:

- Your decision to participate and your answer will not affect your credit score.
- Your data will be kept confidential. Your name will not be associated with the research findings from this study.
- Only the principal investigators and the research team will have access to your data.
- You may withdraw at any time before the data have been analyzed and published.
- De-identified information collected in this study may be made public or used for future research purposes.
- You will be asked to send this document with your signature to give consent to participate in the study and a copy of your credit score in the stamped envelope provided.
- You also have the option of completing the survey online. For the online survey, you will need to upload a photo or screenshot of your FICO credit score.

Please sign below if you agree to participate and send us this letter with a copy of your credit scored in the stamped envelope provided.

I consent to take part in this study

Date _____

1. In what year did you start high school? If you did not attend high school, please tell us the year you started middle School.

Year _____

State _____

City _____

2. In what year did you graduate from high school? If you did not graduate or did not go to high school, please tell us the year you stopped attending school.

Year _____

State _____

City _____

**3. What is the number of your last FICO credit score in the last 12 months?
Note: There is a credit score called, VantageScore. That is not the score that we are requesting. Please verify that your score is called FICO.**

_____ (Should be three digits only)

Q1.8 What kind of gift card would you like to receive? Visa Amazon

Please sign below if you agree to participate, send us this letter and a copy of your credit scored in the stamped envelope provided.

I consent to take part in this study.
