Baltimore Study: Credit Scores

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Contents

Executive Summary

The Baltimore Project Phase II

This report extends the original Baltimore study by adding credit score questions to the 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 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 different groups of households: 1. Never-incarcerated white households (NIW), those in houses without an incarceration history identified as white; 2. Never-incarcerated black households (NIB), those in houses without an incarceration history identified as black; 3. Ever-incarcerated white households (EIW), those in houses with an incarceration history identified as white; and 4. Ever-incarcerated black households (EIB), those in houses with an incarceration history identified as black. The sample size is 51 respondents, with 5 respondents without a credit history.

To account for response bias, this report estimates adjustment weights using Phase I respondents' information and their likelihood to respond to Phase II based on demographics, income levels, respondent's openness, and self-reported financial status. At the level of basic relationships, there seems to be a connection between credit scores and incarcerated history and race.

- **Individuals in households with an incarcerated history (ever-incarcerated) had the lowest average and median FICO credit scores.** Their scores were about 250 points lower than white individuals in households with no incarceration history. The average FICO score by groups is 791 (NIW), 698 (NIB), 621 (EIW), and 572 (EIB).

- **Most individuals have a checking account. The variation across liquid assets is mainly connected to holding a savings account.** The group with the lowest likelihood of having a savings account is the EIW.

- **Although it would have been expected that individuals with higher credit scores would have been more likely to have tangible assets** such as a home or a car, in the case of black individuals and ever-incarcerated individuals, the analysis does not identify a significant change in the average FICO report when it is only estimated among individuals with tangible assets.

- **Despite having more holdings on assets and less debt, never-incarcerated blacks and ever-incarcerated whites are not that different in terms of average FICO credit scores.** Their difference is 77 points on average, which is less than half the difference between never-incarcerated and ever-incarcerated whites (170 points). The difference in average credit score between blacks never-incarcerated and ever-incarcerated is 125 points.

- **There seems to be a segmentation of FICO credit scores by group.** Never-incarcerated white households are concentrated around higher assets holdings and higher FICO credit scores while ever-incarcerated white households are concentrated around lower assets holdings and lower FICO credit scores.

Introduction

The National Asset Scorecard for Communities of Color was developed in 2014 to respond to a research gap that existed in the national data collection on household wealth in the country. 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 debts 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). Later, Washington, DC, was added.

In 2017, the National Asset Scorecard for Communities of Color (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 death of Freddy Gray and the following uprising in the city in 2015. For this city, there have been two phases. For 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 NAASC goal was to collect data on wealth inequalities (assets and debts) across race/ethnic groups at localized areas. The areas were selected based on racial/ethnic diversity representation of a hard-to-reach group and geographic representation. Depending on the area, further disaggregation was added 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 main research question for the Baltimore Incarceration Study 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?* The study looked at then incarcerated households versus non-incarcerated households by race. The final sample for this study was 254 respondents (156 African American and 98 white respondents[2]).

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 Baltimore telephone interview and to request their FICO credit score. In addition, the 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 different groups of households: 1. Never-incarcerated white households, those in houses without an incarceration history identified as white; 2. Never-incarcerated black households, those in houses without an incarceration history identified as black; 3. Ever-incarcerated white households, those in houses with an incarceration history identified as white; and 4. Ever-incarcerated black households, those in houses with an incarceration history identified as black.

The sample in this report is small due to the sensitivity of the information requested and the original sample from which participants were drawn. This sample size makes the analysis and comparison challenging because the variation in the outcome can skew the statistics to offer different conclusions. We proceed with the analysis with caution. Nevertheless, the information is valuable and unique. No previous study focuses on these groups and their financial information. Our goal is to present stylized facts that can be extracted from the sample, not to make causal inferences.

[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, and one respondent self-identified as African American first race, and then white as 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.

Basic evidence on the average FICO credit scores and the incarceration history of inviduals indicates that having someone in the household with an incarceration history is related to lower average FICO credit scores, that also connects with lower income, lower asset holdings, and higher unsecure debts. However, a disturbing observation emerges from comparing never-incarcerated black households with ever-incarcerated white households. Despite the higher level on asset holdings and lower 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 of never-incarcerated white and ever-incarcerated black households.

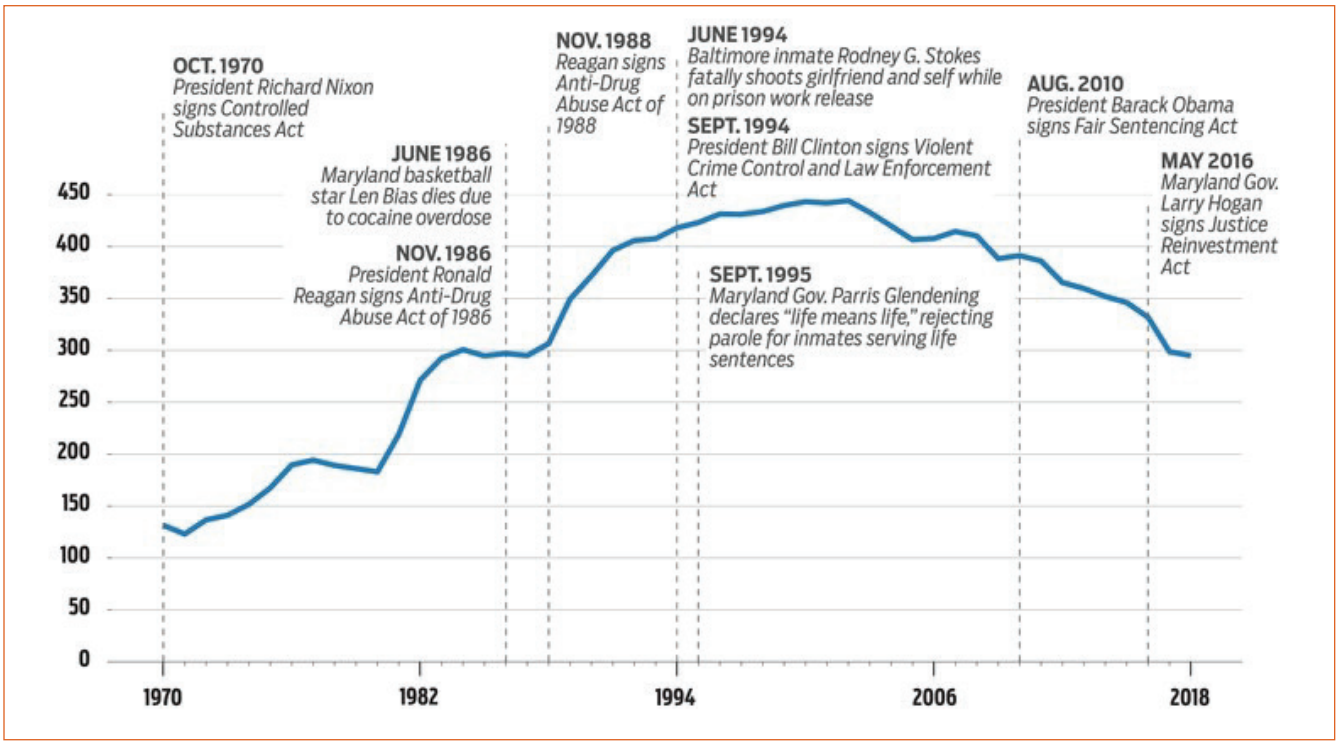
Background

Baltimore Incarceration Rate

The focus of this report is on comparison of households, by race, with members who had and did not have an incarceration history. Baltimore city has a record of high incarceration rates compared to state and national levels and a record of a large gap between white and black rates. Overall, 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. Yet, Baltimore city more than tripled the state rate at about 1,200 per 100,000 people (almost 1 out of 3 people in Maryland's prisons were from the city of Baltimore). This made made the city Ground Zero in the state for challenging prison policies.[3]

The problem intensifies in a few of the city's neighborhoods. Only five of the neighborhood are the source of more than 30 percent of Baltimore's imprisoned population. Despite federal and state-level policy changes affecting incarceration rates (see Figure 1), with two initiatives in 2010 and 2016 directed at modifying incarceration procedures, the policies did not address the high proportion of the prison population originating from Baltimore city. Therefore, the city is a good candidate to evaluate the impact of incarceration history on wealth accumulation, disparities, and access to lines of credit.

FIGURE 1: Incarceration-related policies and Maryland's incarceration rate trends



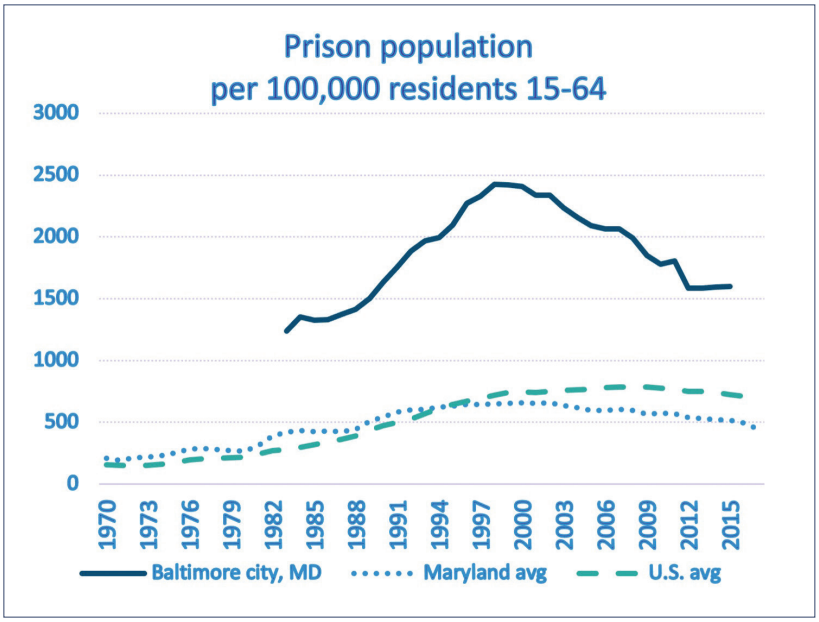
Source: Vera Institute of Justice. Note: The highlighted policies are not intended to be an exhaustive representation of all policies affecting incarceration rates in the state of Maryland.

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

Taking a direct look at Baltimore's share of the prison population, Figures 2 and 3 show that Baltimore's trend dictates the trend for the state of Maryland, and they also show that

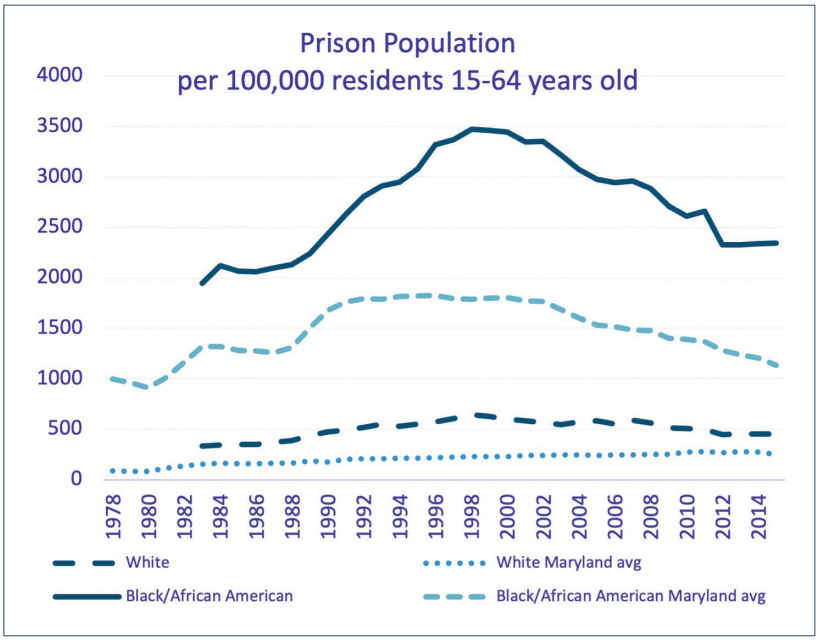
Baltimore rates are significantly higher than the state and the national prison rates. Baltimore also shows an overwhelming incarceration rate disparity between blacks and whites, with the black prison population being five times greater than the white prison population.

Figure 2: Baltimore, Maryland, and US average prison population per 100,000 residents (ages 15-64)



Source: Vera Incarceration Trends dataset (http://trends.vera.org/rates/baltimore-city-md)

FIGURE 3: Baltimore, Maryland, and US average prison population per 100,000 residents (ages 15-64)



Source: Vera Incarceration Trends dataset

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

Despite some widely held beliefs to the contrary, 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. This way, the creation and usage of this credit develop individuals' credit histories and the computation of their credit scores. There are several reported credit scores available to organizations and individuals. The creation of these estimates tends to be confusing, and, sometimes, even considered mystical, to the general public.

Despite this general misunderstanding regarding credit scores, they are widely used in the mainstream market of lending, housing, and even in the labor market. The lack of transparency in the creation of these measures also affects the general public's understanding of the elements that would affect their estimates. A low credit score, or 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 rates cities like Baltimore.[5]

In a series of reports, the Consumer Financial Protection Bureau's Office of Research described "credit invisibility.[6] Credit invisibility relates to the case where individuals have no credit record. A related circumstance is a 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 (26 million consumers), most of the credit invisibles were younger than twenty-five years of age. 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 proportion of whites. The most recent report 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 invisibles or have unscored credit records.

The importance of spatial location and individuals' access to credit and financial well-being connects with the concentration of credit invisibles and individuals with unscored records in low-income areas. But also in these areas, there is a concentration of individuals with a history of incarceration. If incarceration starts 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 for those starting their financial journey at a typical age.

Self-perception on creditworthiness and false prediction

The literature has found that blacks are more likely to predict incorrectly their own creditworthiness.[7] Despite being more likely to have bad credit, black individuals rate their own financial status worse than observable measures predict. This misperception connects with black individuals being less likely to have positive lending experiences, to have a credit card, and to report knowledge about borrowing and lending terminology.[8] The other relevant consequence of individuals wrongly self-assessing their financial status and creditworthiness is they are also the ones less likely to request loans and credits. Hence, by this exclusion, the estimated credit score among blacks could be biased downward, creating the perception of a less financial worthy group.

[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).

[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)

These conditions also coincide with a sizeable difference in credit scores between whites and blacks, about a 100 point difference. It also indicates that the dispersion of credit scores is higher among white individuals.

There is no literature on credit scores and credit score discrimination that specifically targets individuals with an incarceration history. Combining existing data on income and racial differences, the expectation is that individuals with 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 incarceration history and white with incarceration history, the mixed evidence does not afford a clear path to speculate about their levels. This report offers preliminary evidence on the levels and comparisons between these groups.

Trust

Trust has a significant value 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 mistify indicator, such as a credit score. For example, 70% of people in the U.S. never heard of VantageScore, one of the other nation's premier credit scoring brands (Credit Card Insider Survey, 2019). The level of participants' openness toward the survey would affect their willingness to respond to more personal and factual questions too.

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 time and place of high school education. The first phase sample consisted of 97 white and 156 Black or African Americans with and without incarceration history.

The goal was to evaluate the association between credit scores and various measures of income inequality that were collected in the first phase and that were comparable with previous wealth and income analysis related to the NASCC. The survey for this phase contained six questions (See details in appendix) requesting direct information about the participants' FICO credit score, the year they started and ended high school, and state and city where they went to high school.

Individuals were approached by email or by postal mail and were given the opportunity to respond via online, by email, or by regular mail. Some individuals were approached by phone, but no more than three contacts were performed with each respondent to the first phase of the survey (see the letter, email message, and consent form and questionnaire in the appendix). 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 the data collection. Twelve of the 51 participants who responded received this increased-value gift card.

As for this report, the previous variables from phase 1:a) Household composition b). Race, Ethnicity, & Ancestry c) Education, Background & Family Income Structure d) Participation in Labor Market e) Dealing with the Economy f) Income g) Assets h) Stocks, Mutual Funds, IRAs & Pensions i) Principal residence & real estate j) Vehicles k) Businesses l) Other debt, credit cards, loans etc. m) Government & Familial financial support n) Political & Religious affiliations o) Demographics.

After the initial contact period, and exhausting the 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. We compute the response rate using the AAPOR Outcome Rate Calculator (Table 2)[9]. Forty individuals originally agreed to respond to the survey but never did. They are considered implicit refusals. Meanwhile, there was 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.

[9] AAPOR (Version 4.0, March, 2016).

TABLE 2: AAPOR's response rate 3

Response Rate 3	
I/((I+P) + (R+NC+O) + e(UH+UO)) **I**=Complete Interviews **P**=Partial Interviews **R**=Refusal and break off **NC**=Non Contact **O**=Other **UH**=Unknown Household **UO**=Unknown other	**0.201**

Although the response rate, according to AAPOR response rate 3, 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. This strategy assumed then that this sample was the baseline group. However, Phase I sample is a combination of 4 different target groups. The goal of the sampling design was 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', the sample from Baltimore Phase I is not representative of the Baltimore city population. 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 separately. The main researcher of this report did not have access to that level of survey response detail. For that reason, the section Comparison of Samples discusses a simplified version of this indicator that estimates the proportion of respondents by each sub-group. However, before going deeper into this discussion, we offer some important insights about the Baltimore Phase I sample.

Overview of the Baltimore Project Phase I Sample Design

Mark and Rhodes (2017, 2019)[10] explain with detail the sample design of the Baltimore Phase I project. Here, this section intends to offer a brief summary. In general, to be eligible, individuals had to live in the area of Baltimore City, 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. Incarcerated history white (IW)
4. Incarcerated history black (IB)

[10] (Marks & Rhodes, 2017; Marks & Rhodes, 2019).

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."*

There was also an additional clarification that excluded roommates and boarders in the definition of members of a household. Notice that despite having the survey compiled at the individual level, the questions about incarcerated or never-incarcerated history is actually collected at the household level. Wealth information is also computed at the household level. Yet, credit score values and self-reported race are submitted at the individual respondent level. As we move beyond this point, we need to keep this in mind when comparing the values of our variables of interest.

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 not to represent neither the total ever-incarcerated population nor the full population in Baltimore city. The sample frame first consisted of a traditional RDD approach using cell phone numbers (random sample of 43,707 cellphone numbers) that identified individuals living in the city and oversampled low-income households. This attempt was not enough to capture the incarcerated sample targets. Given 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 had been reached and (2) none of the remaining respondents were ever-incarcerated whites. The AAPOR response rate 3 was 6.7%, with a final sample size of 254 respondents. Eighty-two never-incarcerated blacks, seventy-one never incarcerated whits, seventy-three ever-incarcerated blacks, and twenty-eight ever-incarcerated whites. Because of its size, this group was the most difficult one to retrieve a sample.

With this in mind, we can now follow our discussion of Phase II by evaluating the distribution within each sub-group by category (variable) and by comparing these distributions of the sample in Phase I against the sample in Phase II. However, as noted before, we cannot say anything about the proportion of these categories with respect to the population (total or the ever-incarcerated) in the city of Baltimore. Given this limitation, our best-educated guess is to assume that the Baltimore Phase I sample is the best representation of each sub-population (sub-group) and to 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 projects by each group. The groups without incarceration history have the largest number of respondents in Phase I. However, in Phase II, never-incarcerate whites and incarcerated blacks have the highest number of respondents. Now, comparing the number of responses between the two phases, the sampling fractions of never-incarcerated blacks is about 11%, the smallest fraction of the four groups. Meanwhile, incarcerated-history whites show the highest sampling fraction (32%). Although for this last group we are dealing with a very small sample, we still gain confidence (precision) in our estimates when the sample captures a larger fraction of the group we are defining as the population.

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

As we pointed out before, we assume that the sample obtained from Baltimore Phase I represents the actual population distribution for each individual sub-group. That is, the distribution we observe of the non-incarcerated whites from the Phase I's sample is not significantly different from the actual distribution of the non-incarcerated history white population in the city of Baltimore. In effect, what we are assuming is that each sub-sample represents a different independent population.

In an ideal scenario, a sample should be a smaller representation of the population and, hence, displaying the same distribution of this population for every indicator. In practice, however, different issues would hinder this outcome. Non-response and self-selection are the more common issues that can drive sample bias and to incorrectly represent certain groups in the population. To correct for these issues, this report compares 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. We use a common correction technique that works like a weighting mechanism assigning an adjustment weight to each respondent. The technique is similar to the design of a propensity score.

Before estimating the sample weight, 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. This gives us an idea of the possible sources of biases in the smaller 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 financial institutions	7	24	21	26	0	22	33	47
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.

With the limitation of having a small sample, the main differences between the samples that are statistically significant are age (average and median), female ration, and openness in answering the survey for ever-incarcerated black samples. Meanwhile, 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, the literature advises us to 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.

The potential sources of bias can be two-fold. On the one hand, in general, individuals are less willing to reveal direct financial information such as credit history and credit scores to random requesters. On the other hand, 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 stastitically significant effect on the rate of response among blacks (never-incarcerated and ever-incarcerated). Gender only plays a significant role among ever-incarcerated blacks, decreasing the rate of response 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]	

Variables	Non-incarcerated white	Non-incarcerated black	Incarcerated white	Incarcerated black
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.

The model also demonstrates consistency with prior literature. Among never-incarcerated blacks, those who pervieved their financial status being 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 use the average estimated probability at the individual level as a propensity score that adjusts for this biased selection. From this point forward, all estimates include the weighted results.

Assets, Debt, Net Worth, and Credit Score Estimates

Financial History

The original goal of credit scores is to measure the creditworthiness of a potential loan applicant. Although they are used, frequently, to determine applicants' credit eligibility, as pointed out previously, there are several respondents who are unscored. In the Phase II sample, five respondents lacked a FICO credit score.[11] All respondents without FICO scores have incarceration history and are distributed similarly across race.

However, there is a distinct separation by gender, with all women being incarceration-white while all males being incarceration-black. While there is no prior belief concerning gender/race differences, for 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 of each sub-group. Table 6 shows the summary statistics of FICO credit scores by group. If we were to rank the groups, never-incarcerated whites and blacks would occupy the first and second places, while ever-incarcerated whites and blacks would be placed in third and fourth place, respectively.

With the reservation that small samples impose, it is interesting that never-incarcerated blacks and ever-incarcerated whites are not that different in terms of average credit scores. Their difference is 77 points on average, which is less than half the difference between never-incarcerated and ever-incarcerated whites (170 points). The difference in average credit score between blacks never-incarcerated and ever-incarcerated is 125 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.

[11] 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 that $20,000. The finding of these groups without FICO scores deserves more attention in future research.

In Phase I, survey respondents were asked a series of questions on ownership, assets, and debts. If they responded owning an asset, they were asked to estimate its value. This report connects the answers to Phase I from 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 observations. Also, as it has been the practice in this literature, we report median values in addition to average values when applies. Because information about incarceration and wealth are at the household levels, this report discusses and compares households instead of individuals.

Financial Assets

Overall, we can say that ever-incarcerated groups are less likely to hold saving accounts and assets in stocks, mutual funds, and investment trust than never-incarcerated groups. Never-incarcerated white household are better positioned in terms of their financial status with respect to the other groups. Most of this group are homeowners and have a retirement account and maintain a very good to excellent FICO credit score. The story is not the same 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 get dramatically change for their asset holding positions.

Liquid Assets

Using a measure that tells us how quickly households can convert their assets into cash (liquid assets), allow us to compare the capacity 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. It shows that all the never-incarcerated households in the sample hold some type of liquid asset, primarily a checking account. While 89% of this group holds a savings account. This group is followed by never-incarcerated black households (93%). For the groups with an incarceration history, the likelihood of having a savings account is below 75%. Some caution is needed when comparing these percentages. Not all respondents answered the questions on liquid assets. So, the differences are cautiously significant, but the representativity of these sub-groups is not clear.

Nevertheless, it stands out that ever-incarcerated white households are the least likely group to have a checking and a savings account. Yet, this group is not the one with the lowest average and median FICO score. Ever-incarcerated black households have the lowest FICO score among the groups. This is also the only group that does not display an increase in the average FICO scores when the holding of liquid assets is considered.

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

Liquid Assets				FICO		
	Proportion	Difference wrt NIW	SE	Average	Median Respondents	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
Check Account				**FICO**		
	Proportion	Difference wrt NIW	SE	Average	Median Respondents	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	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. However, the lack of response from the other groups deters us from comparing these proportions. The holding of other financial assets and retirement funds does not make black households' FICO scores equal to never-incarcerate 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	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	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 ownership of a home and cars. For ever-incarcerated households, the rate of response was too low to make any possible comparison. Table 9 shows the comparison rates and scores. For never-incarcerated households, white households who responded owning a home have statistically higher FICO credit scores compared to black households. A difference above 70 points of their FICO scores. Half of the never-incarcerated households owning a house have excellent FICO score levels. For their black counterparts, half only reach subprime levels.

With respect to owning a car, the report shows that most households own at least one car, with ever-incarcerated black households being the only group with a statistically significant lower ownership rate compared to never-incarcerate whites. Despite the similarities in car ownership rates, still, never-incarcerate whites have statistically significant higher average and median FICO credit scores. So, having this type of asset does not seem to be related to higher credit scores. We keep seeing this trend in most of our comparisons. Our point is not to make a causal inference about this relationship, since credit score levels also can affect access to borrowing opportunities, leading to ownership of tangible assets. When we examine FICO scores of persons owning tangible assets and make within-group comparisons, we can see that those with these assets have slightly higher credit scores. Yet, that does not make their scores similar to the group with the best scores, 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	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	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

In parallel with previous NASCC, participants indicated whether they were holding debts that were not supported by an underlying asset. Credit card debt, student loans, and medical debts enter in this group. The comparison of these debts also needs to consider the type of investment and planning behind their creation. Student loans are representing long-term plans, while credit card and medical debts could respond 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 detect statistical significance in differences in the mean and median FICO credit scores across groups. Gaps 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 difference in FICO credit scores among those who have student loans.

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. In future studies, these questions should be improved in their wording to increase the response rate.

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	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	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	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

By default, 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 FICO credit scores, on average and at the median, are significant. However, for this question, the number of respondents declined for all groups, so bias arises 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	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	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 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 into two different markets: one 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 the never-incarcerate population has few or none; respondents said they use non-traditional services. In contrast, among the ever-incarcerated households some use this service. Not surprisingly, those having non-traditional financial services debts also have very poor FICO credit score.

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	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	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 their assets and debts values. These results are conditioned on a household having such assets and debts.

Asset Values

Looking at Table 12, the ever-incarcerated households have the lowest balance in their liquid assets (125 dollars and 500 dollars for half of 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 above $4,000 of liquid assets. The average is comparable to the findings from Washington, DC, with black households holding 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. In Baltimore, at the medians, black households hold 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 assets holdings in this sample is ever-incarcerated white households.

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

Liquid Assets						
	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
Media	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						
	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
Media	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 assets 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-incarcerate black households. Meanwhile, the other two groups are more sparsely present in the graph.

For these two groups, their FICO credit scores seem not to be a predictor of the actual financial status.

Figure 5 shows a similar relationship between the FICO credit scores and total assets holdings. Even after accounting for more sophisticated assets holdings, the segmented pattern we see in Figure 4 is mimic in Figure 5.

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 4: Relationship Liquid Assets and Credit Score

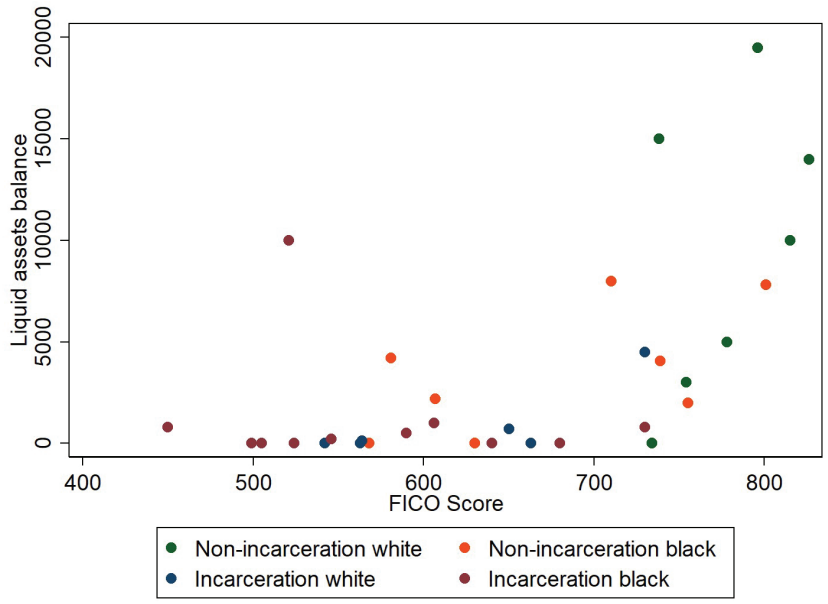


FIGURE 5: Relationship Total Assets and Credit Score

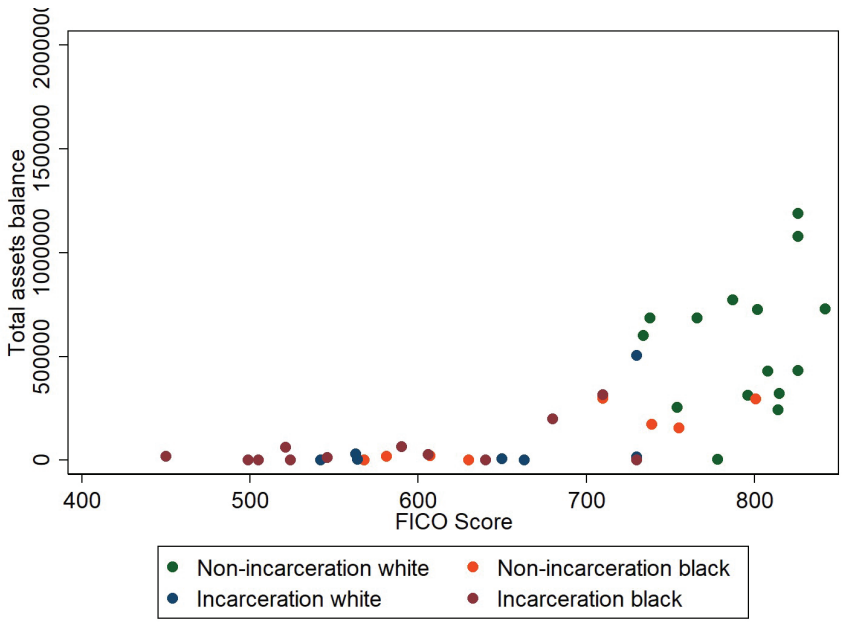
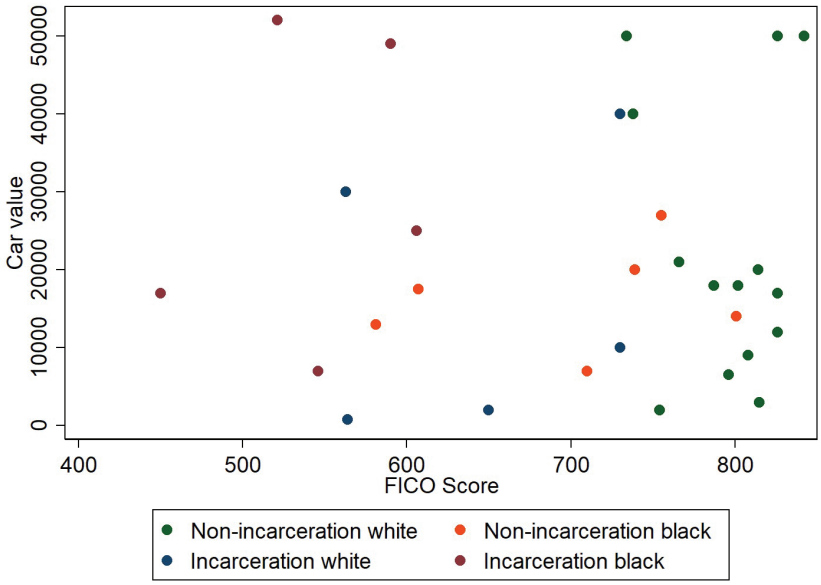


FIGURE 6: Relationship Auto Value and Credit Scores



Non-housing Debt Values

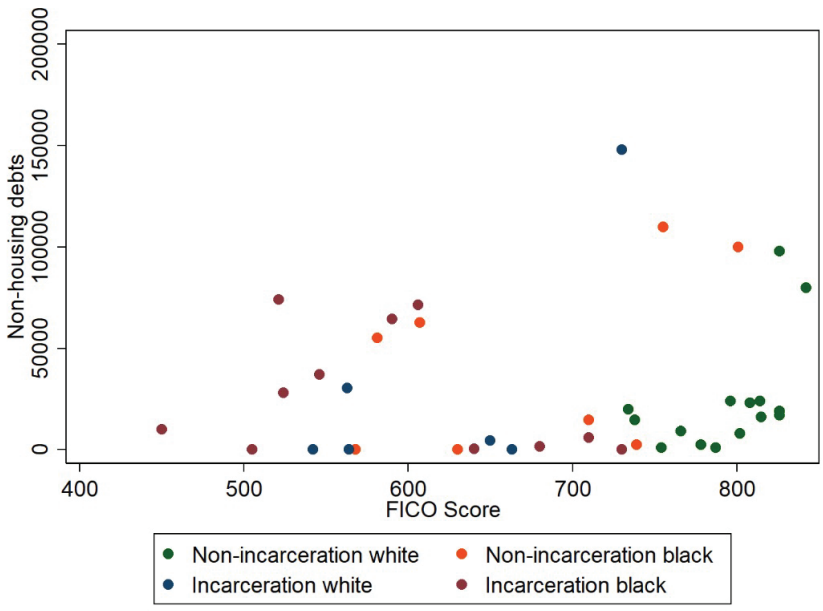
Table 13 shows the non-housing debts and the FICO credit scores by group. Despite the differences the table shows in the amounts of debts held by group, given the sample size, these differences are not statistically significant. Figure 6 displays the relationship between non-housing debts and FICO credit 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
Media	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 6: Relationship Non-housing Debts and Credit Scores



Implications

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

In this study, the sample of ever-incarcerated black households represent the worst off group among all groups. Moreover, the FICO credit scores seem to be unresponsive to the actual assets held by those in this group. Even for those holding 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 zero reports or analyses on their credit scores levels (an exception is Zaw et al. 2017). This report is the first in discussing these comparisons and incorporating credit score values across these groups.

Further, by using a measure that is more observable and external to the individual like the FICO credit scores, this report can identify a degree of comparability across the households in this sample. One take away from this analysis is that FICO scores do not fall short in also being part of the structural barriers to people of color.

Limitations and Remarks

There are important limitations to this study that need to be highlighted. The first, obviously, concerns 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 subsequent contact, the greater degree of action required from respondents may have discouraged responses. In additin, not all 51 respondents in this second phase have credit score information. Therefore, the statistical inference was challenging as we moved to more sliced versions 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 a combination of random digit dialing and targeted sampling. This approach, together with the lack of substantial previous information on the ever-incarcerated population, resulted in not having a truly reliable way to 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-incarcerate population, nor about the total population of the city 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. Despite the greater expense there may have been a better response to the credit score questions via face to face interviews with the credit score module as part of the longer survey—rather than functioning as a later add-on.

Given the literature on wealth and credit self-ranking and knowledge, it is advisable to include questions regarding these topics.[12] For instance, more questions could be asked connected 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 people how they manage their finances. This type of question would allow the respondents, and the researcher, to think outside the box of the traditional savings and wealth accumulation mechanisms.

If a plan includes combining Phase I and Phase II survey instruments, the questions about credit scores do need to be located toward the end of the questionnaire, and individuals would need to have time and assistance to be able to answer these questions accurately.

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

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Appendix

Appendix 5

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, 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 y our 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. 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.

O I consent to take part in this study. (4)

O 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.

O Year (16) _____

O State (19) _____

O 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.

O Year (16) _____

O State (19) _____

O City (20) _____

Q1.5 Do you have a credit history?

O Yes (1)

O 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

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.

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.

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

- O Visa (1)
- O Amazon (2)

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.

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- 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.

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Key Information

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- 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? O Visa O 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. _____

THE
SAMUEL DUBOIS COOK
CENTER ON SOCIAL EQUITY
AT DUKE UNIVERSITY

https://socialequity.duke.edu/