

BANKRUPTCY IN BLACK AND WHITE: THE EFFECT OF RACE AND BANKRUPTCY CODE EXEMPTIONS ON WEALTH

Matthew Bruckner
Raphaël Charron-Chénier
Jevay Grooms*

ABSTRACT

Bankruptcy law in the United States is race-neutral on its face but, in practice, race matters in bankruptcy outcomes. Our original research provides an empirical look at how the facially neutral laws that allow debtors to retain assets in bankruptcy cases result in disparate outcomes for Black and white debtors. Racial differences in asset retention in bankruptcy cases play a role in perpetuating wealth inequality between Black and white debtors.

Existing bankruptcy data lacks individual-level characteristics such as race, which inhibits researchers' ability to adequately assess biases or unintended consequences of laws and policies on subsets of the population. Thus, we construct a novel data set using bankruptcy data from Washington D.C. in 2011 and imputing race. The

* Valuable support was provided by the Society of Actuaries (“SOA”), who funded our data collection effort. Members of the SOA Project Oversight Group, including Brian Bayerle, Patrick Fillmore, Robert M. Gomez (chair), Andrew Melnyk, Colin M. Ramsay, Anna M. Rappaport, and John W. Robinson, provided valuable insights and comments on several earlier drafts. Lisa S. Schilling also provided extensive feedback on several earlier drafts. Research assistance, analysis, and coding were done by Howard students Frank Emeni, Ria Melhotra, James “Jay” Ramger, Trenten Swinton, and Bridget Warlea. For comments, ideas, suggestions, and feedback, we are also grateful to Ed Boltz, and comments received at the 2023 Consumer Law Scholars Conference (especially from our discussants, Mechele Dickerson and William Organek), the 2023 Law and Society Conference, the Wharton-Harvard Insolvency and Restructuring Conference, and at a faculty colloquium hosted at Howard University School of Law. An earlier version of this Article was originally presented as a research report for the SOA. That paper is available as Matthew Adam Bruckner, Raphaël Charron-Chénier & Jevay Grooms, *Race, Wealth and Bankruptcy Code Exemptions in Washington DC*, SOC’Y OF ACTUARIES RSCH, INST. (Apr. 2022), <https://www.soa.org/resources/research-reports/2022/race-wealth-bankruptcy/>. In many instances, this Article is substantially similar to our earlier report, but we do not provide quotation marks (or citations) every time this Article makes a similar point or uses the same language as that report. We encourage readers to cite this Article in lieu of that working paper.

data demonstrates that facially race-neutral bankruptcy laws contribute to racially disparate outcomes by allowing white debtors to keep larger amounts of both personal and real property.

First, exemption laws allow every bankruptcy filer to retain some personal property even if they do not repay their creditors in full. At the median, white filers in the District of Columbia claimed \$10,150 in exemptions, relative to \$8,359 for Black filers. In other words, the median white filer kept roughly \$1,800 more of their property than Black filers, despite reporting similar overall personal property values.

Second, exemption laws allow every bankruptcy filer to retain some (or all) equity in their home. Unlike personal property, where Black and white debtors enter bankruptcy with about the same amount of property, white debtors enter bankruptcy with more home equity than Black debtors (\$585,000 compared with \$251,600 at the median). Unsurprisingly, then, white debtors also leave bankruptcy with more home equity (e.g., the median Black filer retains roughly 80% less in home equity than white filers).

Although bankruptcy laws do not inflate the value of white filers' personal or real property values relative to Black debtors, our exemption rules contribute to white debtors leaving bankruptcy with greater wealth than Black debtors. By protecting certain assets like home equity, which are unevenly distributed in our sample across Black and white debtors, bankruptcy law appears to play a role in perpetuating wealth inequality. Even where assets are more evenly distributed, as personal property was in our sample, bankruptcy law leaves Black debtors with a less robust "fresh start" than white debtors.

TABLE OF CONTENTS

INTRODUCTION	219
I. BACKGROUND	221
A. <i>The Racial Wealth Gap</i>	221
B. <i>Literature Review</i>	223
II. EXEMPTION LAW AND CONSUMER BANKRUPTCY BASICS..	229
III. DATA ANALYSIS	233
A. <i>Descriptive Statistics</i>	235
B. <i>Analyzing Homestead Exemptions</i>	240
1. Homestead Values as Reported on Schedule A	242
2. Homestead Exemptions Claimed on Schedule C...	243
C. <i>Analyzing Schedule B's Personal Property Exemptions</i>	245
1. Personal Property Values as Reported on Schedule B	245

2. Personal Property Exemptions Claimed on Schedule C.....	250
CONCLUSION	255
APPENDIX A: ADDITIONAL TABLES.....	258
APPENDIX B: THE DATASET	263
A. <i>Data Entry Work</i>	264
B. <i>Constructing a Race Variable and our Proxying for Race</i>	267
C. <i>Data Limitations</i>	269

INTRODUCTION

In the United States, debtor-creditor laws produce racially disparate outcomes despite being facially race neutral. Exemption laws are no different. This Article is among the first to examine the racially disparate results of applying race-neutral exemption laws in bankruptcy, results anticipated by Professor Mechele Dickerson in two ground-breaking articles on how race matters to bankruptcy law.¹

Among other results, we find that exemption laws advantage white debtors relative to Black² debtors by allowing homeowners and holders of certain personal property to retain some or all their equity in those assets when they exit bankruptcy. Some of these racial differences might be explained by higher asset values at the time white and Black debtors enter bankruptcy. For example, white debtors tend to have more equity in their homes when they enter bankruptcy and so they leave bankruptcy with substantially more home equity than Black debtors. However, white debtors in our sample retain a larger percentage of their motor vehicles' value than Black debtors despite reporting lower values of this type of personal property when they filed bankruptcy. In these ways, exemption

1. Professor Mechele Dickerson argued that exemption laws were likely to cause racially disparate outcomes. See Mechele Dickerson, *Race Matters in Bankruptcy*, 61 WASH. & LEE L. REV. 1725 (2004); Mechele Dickerson, *Race Matters in Bankruptcy Reform*, 71 MO. L. REV. (2006). For additional citations, see *infra* note 22. All subsequent citations to Dickerson refer to both pieces.

At least one paper has quantified the percentage of filers with retirement accounts and the value of those accounts, but the authors do not separate out those numbers by the race or ethnicity of the person who holds those accounts. See Pamela Foohey, Robert M. Lawless & Deborah Thorne, *Portraits of Bankruptcy Filers*, 56 GA. L. REV. 573, 604 tbl.2 (2022) [hereinafter *Portraits*] (providing evidence of the rates of retirement account ownership by debtors and the value of those accounts).

2. As described more fully in Appendix B, when we describe a person as Black or white in this Article, we mean that they are presumed Black or white because their BISG probability score for that group exceeds 50%. The BISG methodology is explained below. See notes 171-176 and the accompanying discussion. We limited our analysis to filings of Black and white debtors because of the very small numbers of Asian/Asian American, Hispanic, Latino, and Indigenous filers in our sample.

laws appear to aid white debtors over Black debtors in retaining wealth post-bankruptcy.³

In her earlier work, Professor Mechele Dickerson argued that bankruptcy law favors certain white debtors over debtors from other racial groups by, among other things, allowing debtors to retain their equity in assets that white debtors are more likely to own.⁴ This Article provides some of the first empirical evidence for Professor Dickerson's theory by examining the role that exemptions (the method for providing preferential treatment to certain assets in bankruptcy) play in perpetuating or increasing wealth inequality across Black and white Americans. This Article details the frequency and value of real and personal property ownership in bankruptcy for residents of Washington, D.C. in 2011, including homes, vehicles, retirement accounts, apparel, jewelry, cash and cash equivalents, and other household goods. The first two—houses and cars—turn out to be the most important.

This Article offers two primary contributions. First, we created a new dataset based on a random sample of bankruptcy petitions drawn from the United States Bankruptcy Court for the District of Columbia, all of which were filed in 2011. This dataset will be made available to other researchers in the future.⁵ Second, we describe and quantify racial disparities in bankruptcy cases that exist despite our facially neutral exemption laws.

The remainder of the Article proceeds as follows. In Section I, we provide some background, both on the racial wealth gap and on the relevant existing literature. In Section II, we provide an overview of consumer bankruptcy law with a focus on the distinctions between chapter 7 and chapter 13. In Section III, we provide our data analysis, including a separate analysis for real and personal property. The most important personal property categories are vehicles and retirement accounts. A conclusion follows. Additional tables are available in Appendix A, and Appendix B provides additional details about our dataset, including its limitations and how we estimated the racial identity of debtors in our sample.

3. See *infra* Section IIIB-C. Professor Mechele Dickerson has argued that bankruptcy law favors certain white debtors over other racial groups by, among other things, allowing debtors to retain their equity in assets that white debtors are more likely to own. See Dickerson, *supra* note 1 (reviewing the types of assets given preferential treatment in bankruptcy and the prevalence of these assets held by various racial groups outside of bankruptcy).

4. See Dickerson, *supra* note 1; *infra* notes 21-23.

5. Interested researchers should contact Dr. Charron-Chénier.

I. BACKGROUND

A. *The Racial Wealth Gap*

This Article explores wealth differences between Black and white Washingtonians who filed for bankruptcy in the District of Columbia in 2011. Before doing so, however, we note the pre-existing disparities in Black and white wealth in America, generally. The racial wealth gap has always existed in America. According to data from the Survey of Consumer Finances, the median white household in America has a net household wealth that is more than eight times greater than the median Black household.⁶ This stark disparity is true across the spectrum of income distribution in the United States. For example, one study found that more than 96% of the top 1% of the nation's wealthiest Americans were white and just under 2% Black.⁷ Conversely, this same study found that white households near poverty hold \$18,000 in wealth compared to zero dollars in wealth for comparable Black households.⁸

In Washington, D.C., the wealth gap between Black and white households was greater than the national wealth divide. According to a report from the Urban Institute, white households in the District of Columbia had a net worth more than eighty times greater than the typical Black household.⁹ Put differently, the racial wealth gap was nearly ten times

6. The Survey of Consumer Finances is conducted triennially. In 2010, the median white family had a net worth of \$152,880 compared to a net worth of \$18,730 for the median Black family (an 816% difference). In 2013, the gap widened to a 1085% difference between the median net worth of white (\$155,830) and Black (\$14,360) households. See *Survey of Consumer Finances, 1989-2022*, FED. RSRV (Oct. 18, 2023), https://www.federalreserve.gov/econres/scf/dataviz/scf/chart/#range:1989,2019;series:Net_Worth;demographic:racecl4;population:all;units:median (reporting data inflated to 2019 dollars).

7. William Darity Jr., Darrick Hamilton, Mark Paul, Alan Aja, Anne Price, Antonio Moore & Caterina Chiopris, *What We Get Wrong About Closing the Racial Wealth Gap*, SAMUEL DUBOIS COOK CTR. ON SOC. EQUITY (Apr. 2018), <https://socialequity.duke.edu/wp-content/uploads/2019/10/what-we-get-wrong.pdf>.

8. *Id.*; see also *Disparities in Wealth by Race and Ethnicity in the 2019 Survey of Consumer Finances*, FED. RSRV. (2020), <https://www.federalreserve.gov/econres/notes/feds-notes/disparities-in-wealth-by-race-and-ethnicity-in-the-2019-survey-of-consumer-finances-20200928.htm> (defining wealth as “the difference between families’ gross assets and their liabilities”); Ellora Derenoncourt, Chi Hyun Kim, Moritz Kuhn & Moritz Schularick, *Wealth of Two Nations: The U.S. Racial Wealth Gap, 1860–2020* (Nat’l Bureau of Econ. Rsch., Working Paper No. 30101, 2022), https://www.nber.org/system/files/working_papers/w30101/w30101.pdf (finding that this racial wealth gap holds, but narrows to 6 to 1 when examining wealth per capita compared to households).

9. Kilolo Kijakazi, Rachel Marie Brooks Atkins, Mark Paul, Anne E. Price, Darrick Hamilton & William A. Darity, Jr., *The Color of Wealth in the Nation’s Capital*, URB. INST.

larger in the District of Columbia than exists nationally. The Urban Institute reported on the value of various categories of personal property, with white families being more likely than Black families to have vehicles,¹⁰ retirement funds,¹¹ liquid assets,¹² checking accounts,¹³ and other financial assets, such as stocks, bonds and mutual funds.¹⁴ In the aggregate, the median value of liquid assets owned by U.S. Black households was only \$5,000 and merely \$2,100 for African Black households.¹⁵ By contrast, white “households had the highest median value of liquid assets,” at \$65,000.¹⁶

The Urban Institute authors also focused on homeownership rates and home values. They reported that Washingtonians—both Black and white—own homes at higher rates than people in other regions.¹⁷ Although white Washingtonians are more likely to own homes than Black Washingtonians, the racial homeownership gap is smaller in the District than it is nationally.¹⁸ This is important because home ownership has traditionally been an important path to wealth building in this country and

vii (Nov. 2016), <https://www.urban.org/sites/default/files/publication/85341/2000986-the-color-of-wealth-in-the-nations-capital.pdf> (In 2013–14, “the typical white household in D.C. had a net worth of \$284,000. Black American households, in contrast, had a net worth of \$3,500.”).

10. *Id.* at 54 (“Car ownership was high among all groups in Washington, D.C. U.S. Black households had the lowest rate of car ownership (78.0 percent) while all other groups had car ownership rates above 90 percent.”).

11. *Id.* at 48 (“For most groups in the District, the share of households owning individual retirement accounts or private annuities was larger than the share owning stocks White (64.2 percent) . . . households had the highest ownership rates. U.S. Black households (26.4 percent)[] [and] African Black households (28.6 percent) . . . had significantly lower rates of ownership than other groups.”).

12. *Id.* at 47 (“Nearly all White households in Washington, D.C. (97.0 percent), possessed liquid assets U.S. Black (79.2 percent), African Black (78.5 percent), and Latino (86.0 percent) households had lower shares of liquid asset ownership.”).

13. *Id.* (“Fewer U.S. Black households (67.7 percent) owned checking accounts than White households (91.8 percent). African Black and Latino households were also less likely than Whites to have checking accounts. However, the differences were not statistically significant.”).

14. *Id.* (“All non-White groups in the NASCC sample reported lower shares of households that own other financial assets, such as stocks, bonds, and mutual funds While 52.8 percent of White households owned stocks, only 18.6 percent of U.S. Black, 14.6 percent of African Black.”).

15. *Id.* at 55.

16. *Id.*

17. *Id.*

18. *Id.* at 51–52 (“Homeownership rates vary widely by race and ethnicity in Washington, D.C. Seventy-eight percent of White households owned their homes Black and Latino households had the lowest homeownership rates. Only 58.4 percent of U.S. Black, 46.1 percent of African Black, and 49.7 percent of Latino households reported owning a home.”).

has, therefore, been an important component of the racial wealth gap.¹⁹ Unfortunately, the Urban Institute also reports that the homes of Black families in the District are valued “significantly lower” than those owned by white families.²⁰

B. Literature Review

Unfortunately, administrative data does not capture racial and ethnic dynamics of bankruptcy. The most important source of this data is the Consumer Bankruptcy Project (“the CBP”).²¹ As a result, the empirical literature on bankruptcy law and race is limited.²² Thus, the literature on

19. See *infra* Section IIIB (discussing our findings about home ownership rates by race in our data).

20. Kijakazi et al., *supra* note 9, at vii. (“The typical home value for Black households in D.C. is \$250,000, about two-thirds of the home value for White and Latino households.”).

21. Foohey et al., *Portraits*, *supra* note 1, at 575 n.3 (“Although bankruptcy touches the lives of many Americans, the only systematic data collection about bankruptcy filers comes from the Consumer Bankruptcy Project (CBP),” which is “an on-going, long-term research project studying persons who file bankruptcy” that has proceeded in iterations; the current iteration is from 2013 through 2019. For details about the CBP, see *Welcome to the Consumer Bankruptcy Project*, CONSUMER BANKR. PROJECT, <http://www.consumerbankruptcyproject.org/>).

22. See Abbye Atkinson, *Race, Educational Loans & Bankruptcy*, 16 MICH. J. RACE & L. 1 (2010); Foohey et al., *Portraits*, *supra* note 1, at 583–84 n.31 (citing race scholarship including Pamela Foohey, Robert M. Lawless & Deborah Thorne, *Driven to Bankruptcy*, 55 WAKE FOREST L. REV. 287 (2020) and Elizabeth Warren, *The Economics of Race: When Making It to the Middle Is Not Enough*, 61 WASH. & LEE L. REV. 1777 (2004)); Dickerson, *supra* note 1; Dov Cohen, Robert M. Lawless & Faith Shin, *Opposite of Correct: Inverted Insider Perceptions of Race and Bankruptcy*, 91 AM. BANKR. L. J. 623, 631–33 (2017); cf. AM. BANKR. INST., FINAL REP. OF THE ABI COMM’N ON CONSUMER BANKR., 159 (2019), <https://www.nclc.org/wp-content/uploads/2022/08/rpt-abi-commission-on-consumer-bankruptcy.pdf> (“(a) The empirical evidence establishes that African American bankruptcy debtors are both disproportionately more likely to file chapter 13 cases than debtors of other races and disproportionately less likely to obtain a discharge.”); Edward J. Janger, *Consumer Bankruptcy and Race: Current Concerns and a Proposed Solution*, 33 LOY. CONSUMER. L. REV. 328 (2021); Edward R. Morrison, Belisa Pang & Antoine Uettwiller, *Race and Bankruptcy: Explaining Racial Disparities in Consumer Bankruptcy*, 63 J. L. ECON. 269 (2020); Dov J. Cohen & Robert M. Lawless, *Less Forgiven? Race and the Bankruptcy System*, in BROKE: HOW DEBT BANKRUPTS THE MIDDLE CLASS (Katherine Porter ed., 2012); Paul Kiel & Hannah Fresques, *Data Analysis: Bankruptcy and Race in America*, PROPUBLICA (Sept. 27, 2017), <https://static.propublica.org/projects/bankruptcy-methodology/BankruptcyAndRaceInAmerica.pdf>; Pamela Foohey, Robert M. Lawless, Katherine Porter & Deborah Thorne, “No Money Down” *Bankruptcy*, 90 S. CAL. L. REV. 1055 (2017) (analyzing data from the 2007 and 2013–2015 CBPs to detail racial disparities in chapter choice and its intersection with attorneys’ fees and payment timing); Sara Sternberg Greene, Parina Patel & Katherine Porter, *Cracking the Code: An Empirical Analysis of Bankruptcy Success*, 101 MINN. L. REV. 1031 (2017) (assessing based on people who filed in 2007 the predictors of obtaining a discharge in chapter 13); Jean Braucher, Dov Cohen & Robert M. Lawless, *Race, Attorney*

bankruptcy, race, and wealth is even less prevalent.²³ Still, our Article intersects with three strands of extant literature.

First, this Article adds to the empirical literature assessing whether bankruptcy filers are abusing the consumer bankruptcy system. There is a long-standing concern that some people engage in strategic, financial calculations when filing bankruptcy instead of filing bankruptcy because of true financial need;²⁴ that a large volume of bankruptcy filings in times of prosperity are explainable only if people are using bankruptcy as “a means of

Influence, and Bankruptcy Chapter Choice, 9 J. EMPIRICAL LEGAL STUD. 393 (2012) (documenting disparities in chapter filing based on race and connecting the disparity to attorneys’ influence in chapter choice); Lois R. Lupica, *The Costs of BAPCPA: Report of the Pilot Study of Consumer Bankruptcy Cases*, 18 AM. BANKR. INST. L. REV. 43 (2010) (detailing changes in attorneys’ fees and outcomes in light of the 2005 amendments to the Bankruptcy Code); Rory Van Loo, *A Tale of Two Debtors: Bankruptcy Disparities by Race*, 72 ALBANY L. REV. 231 (2009) (finding that Black debtors are 40% and Latinx debtors are 43% less likely than white debtors to receive a discharge in chapter 13 after controlling for variables that may influence the incidence of discharge); Angela Littwin, *The Do-It-Yourself Mirage: Complexity in the Bankruptcy System*, in BROKE: HOW DEBT BANKRUPTS THE MIDDLE CLASS 85-100 (Katherine Porter ed., 2012) (relying on 2007 CBP data to detail the characteristics of debtors who succeed without an attorney); Sumit Agarwal, Souphala Chomsisengphet, Robert McMenamin & Paige Marta Skiba, *Dismissal with Prejudice? Race and Politics in Personal Bankruptcy* (2012), <https://ssrn.com/abstract=1633083> (predicting dismissal rates based on debtor household’s race).

23. See, e.g., Foohey et al., *Portraits*, *supra* note 1; Nathaniel Pattison & Richard M. Hynes, *Asset Exemptions and Consumer Bankruptcies: Evidence from Individual Filings*, 63 J. L. AND ECON. 557, 558 (2020) (“This paper investigates how [homestead] exemptions shape access to bankruptcy.”); see also Sumit Agarwal, Chunlin Liu & Lawrence Mielnicki, *Exemption Laws and Consumer Delinquency and Bankruptcy Behavior: An Empirical Analysis of Credit Card Data*, 43 Q. REV. ECON. AND FIN. 273 (2003) (“In this paper, we examine how homestead, personal property, and garnishment exemption laws affect consumer’s delinquency and bankruptcy behavior by focusing on the credit card market.”); Kartik Athreya, *Fresh Start or Head Start? Uniform Bankruptcy Exemptions and Welfare*, 30 J. ECON. DYNAMICS AND CONTROL 2051 (2006); Jeremy Berkowitz & Richard Hynes, *Bankruptcy Exemptions and the Market for Mortgage Loans*, 42 J. L. AND ECON. 809 (1999).

24. Judge Edith H. Jones & Todd J. Zywicki, *It’s Time for Means-Testing*, 1999 BYU L. REV. 177, 177 (1999) (“In an era of low unemployment, steady economic growth, and general prosperity,” the authors find it “jarring” and “disturb[ing]” that there was a “record number of bankruptcy filings.”); Pamela Foohey, Robert M. Lawless, Katherine Porter & Deborah Thorne, *Life in the Sweatbox*, 94 NOTRE DAME L. REV. 219, 229-30 (2018) [hereinafter *Sweatbox*] (discussing the long-standing unverified narratives about people allegedly filing “bankruptc[ies] of convenience”) (citing numerous sources); Judith Benderson, *Introduction: A History of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005*, 54 U.S. ATT’Y BULL. 1, 1 (2006), <https://www.justice.gov/sites/default/files/usao/legacy/2006/09/07/usab5404.pdf> (“The controversy within the bankruptcy community was, and continues to be, whether or not it is too easy for individual debtors to ‘abuse’ the bankruptcy system. Abuse is defined as discharging debts which debtors theoretically could afford, at least in part, to pay. All sides provided anecdotes, but few official statistics existed to support them.”).

violating promises willy-nilly.”²⁵ Creditors, particularly the major credit card lenders, pushed this narrative when lobbying for major changes to the bankruptcy code that were eventually enacted in 2005. They asserted that many “bankruptcy filers were opportunists who borrowed without intending to repay and harmed other borrowers by filing when they had not experienced an adverse shock.”²⁶ And Congress took heed.²⁷ The 2005 revisions to the Bankruptcy Code—one of the most significant overhauls of the bankruptcy system—were even called the Bankruptcy Abuse Prevention and Consumer Protection Act (“BAPCPA”).²⁸ Even the order of the words in the Act’s title demonstrates that Congress’ primary concern was preventing bankruptcy abuse.²⁹

In this Article, we contribute to this debate by examining debtors’ assets rather than their income and expenses. It is difficult to obtain data on the assets of individual debtors (though aggregate data is available) and, therefore, this approach is fairly uncommon.³⁰ As one research team noted, “assets and asset exemptions received virtually no attention in the bankruptcy debates.”³¹ That said, some other scholars have previously used homeownership as a proxy for wealth generally and have used this data to

25. Jones & Zywicki, *supra* note 24, at 181.

26. Michelle J. White, Personal Bankruptcy Law: Abuse Prevention Versus Debtor Protection (Oct. 2006) (unpublished working paper) (<https://econweb.ucsd.edu/~miwhite/white-bapcpa.pdf>); *see also* Timothy Layton, Frank McIntyre & Daniel Sullivan, Did BAPCPA Deter the Wealthy? The 2005 Bankruptcy Reform’s Effect on Filings Across the Income and Asset Distribution (Nov. 12, 2010) (unpublished working paper) (available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1708119%20) (“The Bankruptcy Abuse Prevention and Consumer Protection Act (BAPCPA) was intended to decrease ‘bankruptcy abuse,’ by which the authors were not simply referring to fraud, but rather the filing of Chapter 7 bankruptcies by high income or wealthy individuals who could potentially repay some debts under a Chapter 13 filing.”).

27. The way to prevent abuse, according to BAPCPA, was to means-test access to bankruptcy. 151 Cong. Rec. S1779 (daily ed. Feb. 28, 2005) (remarks of Sen. Specter calling the means-test the “heart” of BAPCPA); *see also* Jones & Zywicki, *supra* note 24, at 184 (“What matters is an individual’s ability to repay. Those who can make some repayment . . . are expected to do so”); Ronel Elul & Narayanan Subramanian, *Forum-Shopping and Personal Bankruptcy*, 21 J. FIN. SRVS. RSCH. 233, 240 (2002).

28. Foohey et al., *Sweatbox*, *supra* note 24, at 221 (describing the 2005 amendments as “a major amendment”).

29. Matthew Notowidigdo, *Assessing the Bankruptcy Law of 2005*, NW. INST. FOR POL’Y RSCH. (Dec. 16, 2019), <https://www.ipr.northwestern.edu/news/2019/assessing-the-bankruptcy-law-of-2005.html> (“The new law was designed to deter people from pursuing bankruptcy by making filing for it more difficult and expensive, as well as less financially advantageous.”).

30. Robert M. Lawless, Angela Littwin, Katherine M. Porter, John A.E. Pottow, Deborah K. Thorne & Elizabeth Warren, *Did Bankruptcy Reform Fail? An Empirical Study of Consumer Debtors*, 82 AM. BANKR. L.J. 349, 364 (2008).

31. *Id.* at 364.

study bankruptcy filing patterns.³² By contrast, our study allows us to study debtors' wealth directly and, therefore, adds to the literature.³³

Second, our Article also adds to the "thin" literature on automobile ownership and financial distress.³⁴ In *Driven to Bankruptcy*, the authors "describe the relationship between automobile ownership, financial distress, and bankruptcy" and they "identify a subset of debtors, constituting about a third of bankruptcy filers, who come to bankruptcy owning automobiles and little else."³⁵ These automobile bankruptcies are more likely to be filed

32. Layton et al., *supra* note 26 ("We also find that neighborhoods with less homeownership, and hence presumably fewer assets saw a 22% larger rise in the fraction of their filings that were under Chapter 13."). Cf. Lawless et al., *supra* note 30, at 353 ("In short, with each succeeding study over the past twenty-five years of the Consumer Bankruptcy Project, the data show that the families filing for bankruptcy are in ever-increasing financial distress. The 2005 amendments did nothing to halt this trend."); Pattison & Hynes, *supra* note 23 (finding increasing homestead exemptions increases the number of bankruptcy filings (mostly) by people who can protect all of the equity in their home "likely reflect[ing] the fact that the bankruptcy trustee can force a sale of the debtor's home if a Chapter 7 debtor has any non-exempt home equity. Thus, homestead exemptions seem to alter access to a 'fresh start' primarily by determining whether a household can retain its home through a Chapter 7 bankruptcy.").

33. See *infra* note 126 and accompanying discussion (reporting our findings that debtors generally report owning approximately \$10,000 of personal property at the time of their bankruptcy filings). Our finding aligns with the results found in Lawless et al., *supra* note 30, at 368-73 (finding that the financial health of debtors in bankruptcy is poor and has been growing worse over time as measured by median net worth (and several other measures)). Our results also align with previous research that finds there are no (non-exempt) assets to liquidate and distribute to creditors in the "vast majority" of cases. See JOHN M. BARRON & MICHAEL E. STATEN, PERSONAL BANKRUPTCY: A REPORT ON PETITIONER'S ABILITY TO REPAY 2 (1997), <https://govinfo.library.unt.edu/nbrc/report/g2b.pdf> ("[T]he vast majority of debtors who filed under Chapter 7 in 1996 and no (non-exempt) assets to liquidate."); see also Elul & Subramanian, *supra* note 27, at 234-35 (discussing the use of means-testing in BAPCPA); LOIS R. LUPICA, THE CONSUMER BANKRUPTCY CREDITOR DISTRIBUTION STUDY (2013), http://abi-org.s3.amazonaws.com/Endowment/Research_Grants/Creditor_Distributions_ABI_Final.pdf (asserting that less than 6% of Chapter 7 consumer bankruptcy cases have assets to distribute to creditors); Dalié Jiménez, *The Distribution of Assets in Consumer Chapter 7 Bankruptcy Cases*, 83 AM. BANKR. L. J. 795, 806-07 (2009) (finding that assets were distributed in only 7% of cases (and the median creditor received an 8% distribution)); Katherine Porter, *The Pretend Solution: An Empirical Study of Bankruptcy Outcomes*, 90 TEX. L. REV. 103, 116 (2011) ("Because of relatively generous exemption levels, about 96% of consumer Chapter 7 cases are 'no-asset' distributions . . ."); Foohey et al., *Sweatbox*, *supra* note 24, at 241 (finding that consumer debtors generally have very few assets at the time of their bankruptcy filing and ascribing their financial woes to waiting longer to file for bankruptcy).

34. Foohey et al., *Driven to Bankruptcy*, *supra* note 22, at 288-89, 293-94 ("there is a noticeable and significant hole in the literature about consumer bankruptcy dealing with cars and auto loans as a component of filings."). Cf. Kate Elengold, *Debt and Physical Mobility*, __ CAL. L. REV. __ (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4366039 (examining debt policy's effect on physical mobility by race).

35. Foohey et al., *Driven to Bankruptcy*, *supra* note 22, at 287, 289.

by African-American debtors.³⁶ The authors found that African-American debtors are less likely to own cars (82.1%) than non-African-American households in bankruptcy (89.1%), but that African-American debtors are more likely to own cars (55.1%) if they don't also own a house (53.8%).³⁷

Despite high rates of car ownership, the authors reported that slightly less than a quarter (22.4%) of debtors claim an automobile exemption.³⁸ In terms of value, the median chapter 7 car-owning filer's "most valuable automobile . . . is worth approximately \$5400, which is roughly in the same price range as the trade-in values for a typical five-year-old Ford Focus or a six-year-old Toyota Corolla."³⁹ The median chapter 13 car-owning filer's "most valuable car is worth \$8,928, which is closer in value to a two-year-old Ford Focus or three-year-old Toyota Corolla."⁴⁰ As a percentage of their total assets, "the median household that filed bankruptcy in our sample entered bankruptcy with cars accounting for about 20 percent of their total assets, and the average household came to bankruptcy court with cars as one-third of their total assets."⁴¹ When broken down by chapter choice, "despite having less valuable cars, chapter 7 filers have more of their wealth concentrated in cars than chapter 13 filers (23.2 percent versus 13.8 percent)."⁴² Additionally, "[t]he median car owner who claimed an exemption had \$2,932 of equity in the claimed car that was exempt from the bankruptcy estate. Chapter 13 filers are more likely to have nonexempt car equity they would lose in a chapter 7 filing (26.1 percent versus 20.4 percent); chapter 13 filers also have higher average amounts of nonexempt car equity (\$1268 versus \$720). (The medians in both chapters are zero)."⁴³

Unusually, the authors of *Driven to Bankruptcy* also examined the debtors' race and how it intersected with their findings. The authors reported that "African American households enter bankruptcy with slightly more valuable cars at the median,"⁴⁴ And that "[a]lthough African American households are less likely to own cars than other households, this reverses when homeownership is removed from the analysis, and African American households are more likely to own a car if they do not own a

36. *Id.* at 322.

37. *Id.* at 323.

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.* at 323 tbl.6.

42. *Id.* ("This effect is most likely due to the higher concentration of homeowners in chapter 13, and indeed it reverses when looking at only non-homeowners.")

43. *Id.*

44. *Id.*

home.”⁴⁵ As reported below, our results sometimes align but sometimes differ from theirs.⁴⁶

Third, our work intersects with the limited research on race and bankruptcy. That work has been limited because it is difficult to test some theories about bankruptcy filers empirically. Individual-level bankruptcy data of any sort are not readily available to analyze.⁴⁷ Researchers without access to data from the Consumer Bankruptcy Project have needed to rely on creative empirical strategies, including surveys of bankruptcy professionals, online experiments, administrative data from specific metropolitan areas, and court records.⁴⁸ For this reason, an important goal of this project is to help address this problem by creating a unique dataset with which these empirical questions regarding race and bankruptcy can be examined.

In 2018, Professors Robert Lawless and Angela Littwin reported on existing race-related bankruptcy research in *Local Legal Culture from R2D2 to Big Data*.⁴⁹ In *Local Legal Culture*, the authors describe the history of race-related bankruptcy research, which they suggest first began to appear in the early 1990s. They focus on the overrepresentation of Black (and sometimes Latino) debtors in chapter 13 cases, cases “that take[] more time, cost[] more money, and [have] a significantly lower discharge rate.”⁵⁰ In subsequent work with Professors Braucher and Cohen, Professor Lawless and co-authors reported that Black debtors are likely to fare worse than

45. *Id.*

46. See *infra* notes 128–32, 135, 140–41.

47. For details about the CBP, see CONSUMER BANKRUPTCY PROJECT, <http://www.consumerbankruptcyproject.org/>.

48. CBP data are not publicly available.

49. Robert M. Lawless & Angela Littwin, *Local Legal Culture from R2D2 to Big Data*, 96 TEX. L. REV. 1333 (2018), <https://texaslawreview.org/local-legal-culture-from-r2d2-to-big-data/>.

50. *Id.* (“These patterns remained even when controlling for income, homeownership, and a variety of other factors associated with chapter 13. Research from the 2007 CBP additionally controlled for judicial district and found that the correlations between chapter 13 and black debtors remained significant. An article based on the 2007 and 2013–2015 CBPs found that judicial districts with high chapter 13 rates significantly correlated with the overrepresentation of Black debtors in chapter 13—and that the effect of judicial district became more pronounced once researchers controlled for debtor financial variables associated with chapter 13.”). This finding aligns with research by Professors Michelle White and Robert Chapman, which found “that the percentage of African-American debtors in a county’s population was associated with a statistically significant increase in the proportion of chapter 13 cases,” but finding “no statistically significant relationship between African-Americans and chapter 7 filings. *Id.* (discussing work by Michelle J. White in *Personal Bankruptcy under the 1978 Bankruptcy Code: An Economic Analysis*, 63 IND. L. J. 1, 48 (1987) and Robert B. Chapman in *Missing Persons: Social Science and Accounting for Race, Gender, Class, and Marriage in Bankruptcy*, 76 AM. BANKR. L. J. 347, 387 n.226 (2002) (“Using data from the 1991 CBP, Chapman found that although African-Americans appeared to be overrepresented in consumer bankruptcy, they were not overrepresented in chapter 7, which implied that they were overrepresented in chapter 13.”)).

similarly situated white debtors because chapter 13 cases are more likely than chapter 7 cases to end without the debtor receiving a discharge.⁵¹

Professor Pamela Foohey's work found that Black churches—those “[c]hurches with predominately Black membership”—appear “in Chapter 11 [bankruptcy] more than three times as often as they appear among churches across the country.”⁵² And Professor A. Mechele Dickerson's work, which drew on summary statistical data (rather than bankruptcy petitions), argued that the bankruptcy system is more likely to benefit white debtors than Black debtors.⁵³ Finally, one of the most interesting research projects to date in this area is from Professors Pamela Foohey, Robert M. Lawless, and Deborah Thorne. Their article *Portraits of Bankruptcy Filers*⁵⁴ found that “Black households file bankruptcy at more than twice the rate they appear in the general population.”⁵⁵

In this strand of literature, research has generally shown that Black debtors and entities affiliated with Black people (e.g., Black-owned businesses) fare worse in the bankruptcy process than their white counterparts.⁵⁶ Our contribution to the literature is to look at differences by race in bankruptcy exemptions, which has only been theorized but never empirically examined. And, as reported below, we also discuss how Black debtors appear to fare worse in bankruptcy than their white peers. Before we report our findings, however, it may be useful to introduce consumer bankruptcy. Readers that are already familiar with consumer bankruptcy may wish to skip to Section III.

II. EXEMPTION LAW AND CONSUMER BANKRUPTCY BASICS

“From 2009 to 2018 alone, over 11 million individuals filed bankruptcy.”⁵⁷ And, in 2021, there were approximately 400,000 new

51. For more information on the differences across chapters, *see infra* notes 61–66 and the accompanying discussion.

52. Pamela Foohey, *Lender Discrimination, Black Churches, and Bankruptcy*, 54 HOUS. L. REV. 1079, 1079 (2017).

53. *See* Dickerson, *supra* note 1.

54. Foohey et al., *Portraits*, *supra* note 1.

55. *Id.* at 625–26 (citing Lawless & Littwin, *supra* note 49) (detailing racial disparities in filing chapter 7 and 13 based on filings between 2012 and 2016).

56. *E.g.*, Braucher et al, *supra* note 22 (finding that Black debtors are steered toward filing bankruptcy under chapter 13 even though approximately two-thirds of those cases end without the debtor receiving a discharge).

57. Foohey et al., *Portraits*, *supra* note 1, at 575 (“[B]etween 2009 and 2018 alone, over 11 million individuals filed bankruptcy.”).

bankruptcy filings.⁵⁸ Nevertheless, some scholars have suggested that many people that would likely benefit from bankruptcy do not file for various reasons.⁵⁹ Unfortunately, the benefits of bankruptcy are not evenly distributed among racial groups.⁶⁰ To understand why, we briefly explain some bankruptcy basics.

There are two primary options for individuals who seek debt relief through bankruptcy: chapter 7 and chapter 13.⁶¹ Historically, chapter 7 is favored by approximately two-thirds of consumer debtors.⁶² In chapter 7 cases, the debtor keeps their future income but turns over certain current assets to their creditors.⁶³ By contrast, in chapter 13 cases, debtors may keep

58. 400,000 bankruptcy filings represents “the lowest annual rate since the enactment of the Bankruptcy Code.” Bob Lawless, *Bankruptcy Filing Rate Is Lowest Since Bankruptcy Code’s Enactment—The Question Is Why*, CREDIT SLIPS (Dec. 27, 2021, 8:30AM), <https://www.creditslips.org/creditslips/2021/12/bankruptcy-filing-rate-is-lowest-since-bankruptcy-codes-enactment-the-question-is-why-.html>.

59. See Michelle White, *Why Don’t More Households File for Bankruptcy?*, 14 J. L. ECON. & ORG. 205 (1998), <https://econweb.ucsd.edu/~miwhite/white-jleo-reprint.pdf> (claiming that “A much higher fraction of U.S. households would benefit financially from bankruptcy than actually file. While the current bankruptcy filing rate is about 1% of households each year, I calculate that at least 15% of households would benefit financially from filing and the actual figure would be several times higher if most households plan in advance for the possibility of filing.”) The author also discusses two reasons for “missing” bankruptcy filings, including when creditors do not take legal action against debtors (who then “get the benefit of default without bearing the cost of a bankruptcy filing,” and the option value of a future bankruptcy filing.); Jason Iuliano, *An Empirical Assessment of Student Loan Discharges and the Undue Hardship Standard*, 86 AM. BANKR. L. J. 495, 499 (2012) (describing the failure of student loan borrowers to seek to discharge their student loans in bankruptcy the “central flaw” of the student loan discharge process).

60. “Black Americans are overrepresented among bankruptcy filers.” Alicia Louise Duncombe, *Race and the Educational Disparities in Midlife Bankruptcy Filings*, M.A. Thesis (2020), <https://repositories.lib.utexas.edu/bitstream/handle/2152/87144/DUNCOMBE-THESIS-2020.pdf?sequence=1&isAllowed=y>; Foohey et al., *Portraits*, *supra* note 1, at 625 (“Black households file bankruptcy at more than twice the rate they appear in the general population.”). Our own data is that 74% of filers in D.C. in 2011 were Black, compared to 50.7% of the population in 2010 being recorded as Black. See *infra* note 91 and accompanying discussion; see also Appendix B.

61. Individuals can also file under other chapters, including chapter 11 and 12, but the bulk of individual debtors file under chapters 7 and 13. See Foohey et al., *Portraits*, *supra* note 1, at 630. In our dataset, chapter 7 cases make up approximately 84% of all cases.

62. *Id.*

63. Lawless & Littwin, *supra* note 49, at 1355 (“[U]nder chapter 7, debtors liquidate all of their nonexempt property and receive a discharge of most unsecured debts.”); see also Barron & Staten, *supra* note 33, at 1-2 (“[T]he vast majority of debtors who filed under Chapter 7 in 1996 and no (non-exempt) assets to liquidate.”); Lois R. Lupica, *The Consumer Bankruptcy Fee Study: Final Report*, 20 AM. BANKR. INST. L. REV. 17, 49 (2012) (finding that “With respect to the pre-BAPCPA chapter 7 cases studied, 9.9% were asset cases and 90.1% were no-asset cases. Of the cases filed pre-BAPCPA in the sample, 92.5% of all asset cases and 98.8% of all no-asset cases concluded in a discharge. Of the post-BAPCPA chapter

most of their current assets but they must use certain future income to repay their creditors.⁶⁴ As a practical matter, however, there may be little difference in creditor recovery rates if a chapter 13 debtor lacks any “disposable income” or a chapter 7 debtor lacks any non-exempt property.⁶⁵ Whichever chapter a person chooses, however, a debtor usually starts their bankruptcy case by filing a petition with the bankruptcy court.⁶⁶

Filing a bankruptcy petition creates the so-called “bankruptcy estate,” which comprises all the debtor’s assets at the time of filing.⁶⁷ The estate’s assets—all of the debtors’ houses, vehicles, retirement accounts, jewelry, clothing, guns, pets, furniture, and virtually everything else—may be used to satisfy a debtor’s creditors.⁶⁸ Debtors must disclose these assets on a form called a schedule.⁶⁹ Where there are substantial assets, these assets are often sold, and the proceeds are distributed to creditors of a chapter 7 debtor in partial satisfaction of the debts owed to the creditors. The remainder of the debtor’s debts are then discharged and need not be repaid.

However, whether they file under chapter 7 or chapter 13, debtors may keep some amount of their property, referred to as exempt property.⁷⁰ In cases where debtors do not own substantial assets, this might result in no recovery for creditors, even in a chapter 7 case where creditors are supposed to be repaid from the debtor’s current assets instead of future income.⁷¹

7 cases examined, 10.6% were asset cases, and 89.4% were no-asset cases. Of these cases, 95.8% of asset cases, and 97.2% of no-asset cases ended with a discharge.”).

64. Lawless & Littwin, *supra* note 49, at 1355 (“chapter 13 . . . requires debtors to pay all of their disposable income over a period of three to five years [and] does provide tools for some consumers trying to save their homes and a broader discharge than chapter 7.”).

65. 11 U.S.C. § 1325(b)(2).

66. Involuntary bankruptcy petitions are possible but are very rare. See Richard M. Hynes & Steven D. Walt, *Revitalizing Involuntary Bankruptcy*, 105 IOWA L. REV. 1127 (2020) (“Involuntary petitions filed by creditors now account for less than 0.05 percent of all petitions.”).

67. See 11 U.S.C. § 541(a).

68. See *id.*

69. Debtors list all their legal and equitable interests in a residence, building, land, or similar property (including burial plots) on Schedule A. Personal property is listed on Schedule B. These forms are available at <https://www.uscourts.gov/forms/individual-debtors/schedule-ab-property-individuals>.

70. For this reason, we do not separately analyze chapter 7 and chapter 13 petitions.

71. Several reasons can be identified to allow debtors to keep some amount of their property even though they owe their creditors more than they can repay: (1) debtors deprived of all their food, shelter, and clothing would probably need to turn to others for assistance; and (2) some assets are worth far more to the debtor than they are to the creditor. To this second point, if creditors were allowed to seize and sell assets with substantial sentimental value but low economic value, debtors might be willing to pay their creditors a significant amount to keep them, hindering their return to an economically productive life. See Elul & Subramanian, *supra* note 27, at 233 (“One of the foundations of modern

Exemption laws limit the amount of property a debtor may retain on a category-by-category basis.⁷² In the District of Columbia (like in many states), debtors may choose between federal exemptions and the District exemptions, depending on which are more favorable to the debtor.⁷³ In the District of Columbia, the choice often depends on how much equity a debtor has in their home. This is because the District exemptions allow debtors to exempt all the equity in their homes,⁷⁴ but federal law currently allows a debtor to retain only approximately \$25,000 in home equity.⁷⁵

In exchange for giving their nonexempt property, if any, to creditors, the remainder of a debtor's unsecured⁷⁶ debts are discharged (i.e., forgiven) and need not be repaid.⁷⁷ As a result, "[c]hapter 7 is considered to be most useful to people with few assets of value that they want to keep, with considerable unsecured debts that they hope to discharge, and without home ownership."⁷⁸

bankruptcy law is the idea that certain property should be exempt from seizure by creditors. Several justifications have been advanced for this principle. From the point of view of efficiency, by retaining access to tools of his trade the debtor is better able to repay his creditors and also continue as a productive member of society; in addition, restricting garnishment of wages allows him to retain his incentive to work. Appeals to equity and fairness are also made, in that debtors have the right to a 'fresh start' with a certain minimal level of assets and also that certain items have little resale value for creditors but retain great sentimental or practical value for the debtors (such as used household effects, wedding rings).")

72. See, e.g., 11 U.S.C. § 104(b); D.C. Code § 15-501(a) (1981).

73. Some states do not allow debtors to choose the federal exemptions. See Cara O'Neill, *The Federal Bankruptcy Exemptions*, NOLO (Sept. 23, 2022), <https://www.nolo.com/legal-encyclopedia/federal-bankruptcy-exemptions-property.html>; Andrea Wimmer, *Federal Bankruptcy Exemptions Explained*, UPSOLVE (March 31, 2022), <https://upsolve.org/learn/federal-chapter-7-bankruptcy-exemptions/>.

74. A very limited number of jurisdictions allow unlimited homestead exemptions, including Arkansas, Florida, Iowa, Kansas, Oklahoma, South Dakota, Texas, and the District of Columbia. Victor D. López, *State Homestead Exemptions and Bankruptcy Law: Is it Time for Congress to Close the Loophole?*, 7 RUTGERS BUS. L. J. 143, 149-65 tbl. 1 (2010). Homestead exemptions are limited to \$189,050 unless debtors have owned their homes for at least forty months (1215 days) at the time they file for bankruptcy. 11 U.S.C. § 522(p).

75. This number increases every three years and was closer to \$20,000 in 2011. 11 U.S.C. § 104(b).

76. Personal liability on secured debts is also discharged but not the in rem liability. In other words, a secured creditor's lien remains on the property, and they may be able to repossess that property if the debtor defaults on their repayment obligations.

77. Some debts are nondischargeable and must be repaid anyway. See 11 U.S.C. §§ 523, 727. Student loans are probably the best known of these nondischargeable debts. See 11 U.S.C. § 523(a)(8); see also Matthew Bruckner, Brook Gotberg, Dalíé Jiménez & Chrystin Ondersma, *A No-Contest Discharge for Uncollectible Student Loans*, 91 U. COLO. L. REV. 183, 205-29 (2020) (suggesting how to fix our broken student loan system).

78. See Foohey et al., *Portraits*, *supra* note 1, at 594.

By contrast, chapter 13 debtors must give creditors their future “disposable income” over a three- to five-year period.⁷⁹ Only after they have completed their plan payments do chapter 13 debtors receive a discharge of their remaining debts. “In return, the debtor keeps all property, regardless of exemptions, and is allowed to use the property during the pendency of the case.”⁸⁰ Many debtors who have a house or car they want to keep will use chapter 13.⁸¹ Debtors can pay their attorneys over time in a chapter 13 case, but they generally have to pay their chapter 7 attorneys in full before the case begins.⁸²

Unfortunately, this narrative about chapter choice being simply about which deal is preferable to the debtor is complicated by the fact that far more chapter 7 cases result in a discharge than do chapter 13 cases. Only about one-third of chapter 13 cases end with the debtor receiving a discharge of their remaining debts.⁸³ For the other two-thirds of cases, debtors do not receive the anticipated debt forgiveness and remain “personally liable for all debts not paid during the chapter 13 case, potentially including additional accrued interest and fees.”⁸⁴

III. DATA ANALYSIS

As discussed further in Appendix B, the Article relies on a sample of 501 bankruptcy petitions drawn from the 959 petitions filed in Washington, D.C. in 2011.⁸⁵ For analyses, we narrowed our focus to those debtors who claimed consumer debts only. For this reason, we dropped 48 petitions that reported business-related debt.⁸⁶ This reduced our sample to

79. See 11 U.S.C. § 1322(a)4); see also *id.* at 593.

80. Foohey et al., *Portraits*, *supra* note 1, at 594.

81. Cara O’Neill, *Your Car in Chapter 13 Bankruptcy*, THE BANKRUPTCY SITE, <https://www.thebankruptcysite.org/resources/bankruptcy/chapter-13/your-car-and-loan-chapter-13-bankruptcy.html> (last visited March 15, 2023).

82. Foohey et al., “*No Money Down*”, *supra* note 22, at 1058.

83. See Foohey et al., *Portraits*, *supra* note 1, at 594. Chapter 13 plans fail for many reasons, including the debtor’s lack of resources, disruptions in income and expenses, insufficient advanced planning and, sometimes, by design. See Carron Armstrong, *Why Do So Many Chapter 13 Cases Fail?*, THE BALANCE (July 12, 2021), <https://www.thebalance.com/why-do-so-many-chapter-13-cases-fail-316195>.

84. Foohey et al., *Portraits*, *supra* note 1, at 594-95.

85. See *infra* note 153.

86. We also dropped a single petitioner, Kenneth D. Conner, who did not indicate the nature of his debts. Bankruptcy petitions ask debtors whether their debts are “primarily consumer debts” as defined in 11 U.S.C. § 101(8) (“incurred by an individual primarily for a personal, family, or household purpose”) or whether they are “primarily business debts” that were “incurred to obtain money for a business or investment or through the operation of the business or investment.” See Official Form 101: Voluntary Petition for Individuals Filing Bankruptcy, U.S. Courts, https://www.uscourts.gov/sites/default/files/b_101.pdf.

453 observations. For analyses that involved the debtor's race, we only retained petitions for which we could impute race with an at least 50% probability. This required us to exclude 13 additional petitions. We also excluded 54 petitions that were identified as Hispanic, Asian and Pacific Islander, or American Indian and Alaska Native. Thus, for analyses that rely on race, our final analytic sample includes 386 debtors, of which 326 are estimated to be Black, and 60 are estimated to be white.⁸⁷

Research indicates that throughout the U.S., the rate of bankruptcy filings is higher for Black individuals than white.⁸⁸ For example, in 2017 ProPublica asserted that consumer bankruptcy filings were more frequent in majority Black zip codes compared to majority white zip codes.⁸⁹ This was further echoed by Jonathan Fisher's 2019 research using data from 1994-2009, which found that bankruptcy filers in the U.S. were more likely to be Black.⁹⁰ This holds true in our sample as well. Roughly 72% of debtors in our full sample are Black, a proportion that is less than one and a half times as large as the Black share of D.C. residents.⁹¹ Although this is lower than some other researchers have found,⁹² the difference may be attributable to the large share of Black residents in D.C. relative to other cities.

To understand the role bankruptcy may play in generating or maintaining racial disparities in wealth, we provide four sets of descriptive analyses. First, we compare Black and white debtors across select variables to understand how the Black and white petitioners differ on relevant

87. Additionally, twenty-nine debtors report no exempt assets on their Schedule C. 62% of these filers are white, and 38% are Black. We retained these filers in our sample, as they report other debts or assets.

88. Foohey et al., *Portraits*, *supra* note 1, at 625-26 n.153 ("Most notably, Black households are significantly over-represented in the consumer bankruptcy system relative to their share of the population. Thirteen percent of the population identifies as Black or African American. Black households file bankruptcy at more than twice the rate of their incidence in the population."); Aisha Al-Muslim, *Black People More Likely to File for More Expensive Bankruptcy Option, Experts Say*, WALL ST. J. PRO. BANKR. (Nov. 12, 2020), https://www.wsj.com/articles/black-people-more-likely-to-file-for-more-expensive-bankruptcy-option-experts-say-11605227346?st=d1tmurb06wdouhs&reflink=desktopweb_share_permalink (discussing research reporting Black debtors are often steered toward more expensive bankruptcy options, resulting in higher costs and less relief); Morrison et al., *supra* note 22.

89. Kiel & Fresques, *supra* note 22.

90. Jonathan Fisher, *Who Files for Bankruptcy in the United States?* 53 J. CONSUMER AFF. 2003, 2013 (2019).

91. See Appendix B. "Full sample" refers to all non-business bankruptcies, including those petitions identified as Asian or Pacific Islander, Native American, Alaskan Native, and Hispanic/Latino, and those for which no racial identify could be estimated with at least 50% probability.

92. Foohey et al., *Portraits*, *supra* note 1; see also Fisher, *supra* note 90.

dimensions (Section III.A).⁹³ Next, given the importance of housing wealth as a component of overall household wealth, we examine racial differences in homestead exemptions (III.B). We then provide descriptive analyses of the personal property Black and white households claim to own on Schedule B of their bankruptcy petitions (III.C.1). We end with descriptive analyses of claimed exemptions for those assets, as reported on Schedule C (III.C.2). Results of relevant statistical significance tests are reported in Table A3 of Appendix A.

A. Descriptive Statistics

This Section provides descriptive statistics for key variables comparing white and Black bankruptcy filers in our data. For most variables, we report both mean and median values. Mean values allow straightforward tests of statistical significance, while median values provide useful estimates of central tendency for skewed distributions (as is the case for most of the variables reported).⁹⁴

Black debtor profiles are similar to those of white debtors across several key variables in our sample. 85% of Black filers report consulting with an attorney compared to 90% of white filers,⁹⁵ and 13% of white filers

93. Not all filers reported information for all categories. When data are missing, we do not assume zero; means are calculated using available data. Zeros are used only if they were recorded on the bankruptcy file.

94. Methods exist to compute significance tests of differences between median (or other quantiles). However, these methods (such as quantile regression) typically require larger sample sizes than ours to obtain efficient standard error estimates. We therefore opted to perform statistical tests on differences of means, but chose to report medians given the skewed nature of the data.

95. Our sample is representative of the filings in D.C. that year, where 111 of 773 (15%) chapter 7 and 18 of 154 (11%) of chapter 13 cases were filed pro se. It is also similar to the results reported by other researchers. *Cf.* Foohey et al., *Portraits*, *supra* note 1, at 589 (reporting that, in CBP data, 88% of filers are represented); Barron & Staten, *supra* note 33, at 15 (“The large majority of debtors in both chapters (88 percent of Chapter 7s, 93 percent of Chapter 13s) hired an attorney to assist them with the bankruptcy petition.”); SPECIAL COMMITTEE ON RACE AND ETHNICITY, REPORT OF THE SPECIAL COMMITTEE ON RACE AND ETHNICITY TO THE D.C. CIRCUIT TASK FORCE ON GENDER, RACE, AND ETHNIC BIAS, 64 GEO. WASH. L. REV. 189, 268–69 (1996) (finding “pro se filers are 18 percent white, 78 percent black, 0.4 percent American Indian, 1.2 percent Asian, and 5 percent Hispanic” and “[w]hen compared with the general population (66% black, 30% white), blacks are overrepresented (78% of petitioners) and whites underrepresented (18%) among bankruptcy court pro se petitioners.”); *see also* Chapman, *supra* note 50, at 386 n.224. *Cf.* Van Loo, *supra* note 22, at 243 (“Lack of legal representation likely explains some of the disparity in completion rates. The numbers for Chapter 13 support the inference that black and Hispanic debtors were less often represented and that this lack of representation contributed to lower completion rates. Whereas 98.4% of dismissed white debtors had attorneys, only 94.8% of blacks and 94% of Hispanics had attorneys. These rates of representation

reported filing jointly with a partner or spouse relative to 10% of Black filers.⁹⁶ 10% of Black filers report a prior bankruptcy case compared to 15% of white filers.⁹⁷ T-tests comparing proportions across Black and white filers indicate that none of these differences are statistically significant.

Debtors in our sample report a monthly mean income of approximately \$3,316 (median = \$2,852).⁹⁸ Black debtors report lower monthly incomes (mean = \$3,223, median = \$2,820) than white debtors (mean = \$4,043, median = \$3,069).⁹⁹ As reported in Table A3 of Appendix

differ starkly from successful debtors: every single one of the 207 black, Hispanic, and white debtors who obtained a discharge were represented by an attorney.”).

96. This is substantially lower than found by prior researchers. For example, the CBP reported a joint filing rate of 24% across both chapters 7 and 13. See Foohey et al., *Portraits*, *supra* note 1, at 624 tbl.6; see also Barron & Staten, *supra* note 33, at 15 tbl.3 (reporting that 33.5% of chapter 7 petitions and 28.7% of chapter 13s were jointly filed). In many ways, we should expect the joint filing rate to be even lower for Black debtors relative to white ones because of differences in marriage rates. See DOROTHY A. BROWN, *THE WHITENESS OF WEALTH* 56-57 (2021) (discussing how the tax code disadvantages married Black people and noting that “the vast majority of Black taxpayers are single . . . less than one-third of black adults are married compared with 54 percent of whites.”). The lack of a larger difference may imply that bankruptcy law doesn’t work as well for single Black people as it does for single white people.

97. Our data are substantially different from past studies in several respects and similar in one. We find a much smaller difference between the number of repeat filers than the CBP. They found Black debtors were eighteen percentage points more likely to have a prior bankruptcy filing but we found only a three percentage point increase. Theodore Eisenberg, *The CBP Race Study: A Pathbreaking Civil Justice Study and Its Sensitivity to Debtor Income, Prior Bankruptcy, and Foreclosure*, 20 AM. BANKR. INST. L. REV. 683, 696 (2012) (discussing CBP data showing that 28% of Black debtors and 10% of white debtors had a prior bankruptcy filing). This difference was largely driven by differences in the number of prior bankruptcy filings by Black debtors (28% v. 10%) and not by the number of prior bankruptcy filings by white debtors (10% v. 15%). *Id.*; see generally Barron & Staten, *supra* note 33, at 15 (“Just over 3 percent of Chapter 7 debtors had been in bankruptcy prior to filing in 1996; over 25 percent of Chapter 13 debtors had been in bankruptcy court before.”).

98. Cf. Foohey et al., *Sweatbox*, *supra* note 24, at 235 (reporting that, “[i]n the Current CBP, the median household has . . . a low monthly income of around \$2650.”). See also Barron & Staten, *supra* note 33, at 15 (reporting on the percentage of debtors with wage income at the time of their bankruptcy filing).

99. The racial income disparity in our data set is substantially smaller than the disparity in D.C. that year, suggesting that Black and white bankruptcy filers are more economically similar to each other than to the D.C. population. In 2011, the mean (annual) income for Black Washingtonians was \$24,792 but was \$72,162 for white Washingtonians. See *Mean Income in the Past 12 Months (In 2011 Inflation-Adjusted Dollars)*, U.S. CENSUS BUREAU, [https://data.census.gov/table?q=S1902:+MEAN+INCOME+IN+THE+PAST+12+MONTHS+\(IN+2021+INFLATION-ADJUSTED+DOLLARS\)&g=040XX00US11&tid=ACSST1Y2011.S1902](https://data.census.gov/table?q=S1902:+MEAN+INCOME+IN+THE+PAST+12+MONTHS+(IN+2021+INFLATION-ADJUSTED+DOLLARS)&g=040XX00US11&tid=ACSST1Y2011.S1902). Median incomes that year were \$39,302 for Black Washingtonians but \$105,366 for white Washingtonians. See *Median Income in the Past 12 Months (In 2011 Inflation-Adjusted Dollars)*, U.S. CENSUS BUREAU, <https://data.census.gov/table?q=S1903&g=040XX00US11&tid=ACSST1Y2011.S1903>.

A, the difference in the mean incomes of Black and white debtors is not statistically significant ($p = 0.12$).

Debtors are instructed to report average monthly income for the calendar year when reporting monthly income. On an annual basis, the income for all D.C. filers is roughly \$39,788 at the mean (\$34,228 at the median).¹⁰⁰ In 2011, this would put the petitioners in our sample above the federal poverty line (\$22,350 for a household of four)¹⁰¹ but substantially below the median household income (\$63,124).¹⁰²

Table 2 provides additional information on annualized income for Black and white petitioners. As estimates from the table suggest, at least three-quarters of bankruptcy filers of either race in our sample have an income that falls below the median income for D.C. overall. For Black petitioners, as many as 90% of filers report an income below the D.C. median (\$63,124). To provide a comparison, median annualized rent in D.C. that year was \$15,576 (\$1,313/month).¹⁰³ In other words, the median debtor in our sample would spend roughly 45% of their annual salary in rent (assuming they pay the median rent). Overall, these estimates indicate that the median debtor in our sample tends to be poverty-adjacent,

100. Annualizing reported income figures seems reasonable because the instructions for Schedule I (where debtors report their income) indicate the following: “One easy way to calculate how much income per month is to total the payments earned in a year, then divide by 12 to get a monthly figure. For example, if you are paid seasonally, you would simply divide the amount you expect to earn in a year by 12 to get the monthly amount.” *Bankruptcy Forms for Individuals*, U.S. BANKR. CT. (Dec. 2015), https://www.uscourts.gov/sites/default/files/instructions_individuals.pdf.

101. Petitions do not provide information on the household size of filers. Therefore, we use the average D.C. household information to gauge the poverty line. The average household in D.C. in 2011 was slightly more than two individuals (2.15), the average family household for married couples was slightly more than three individuals (3.03), and the average family household for married couples of unmarried heads of household was approximately 3.5 individuals (depending on whether the household was led by an unmarried man or woman). Using the poverty line for household sizes of four therefore provides a conservative estimate of poverty for our sample. *The 2011 HHS Poverty Guidelines*, U.S. DEP’T OF HEALTH AND HUM. SERVS., <https://aspe.hhs.gov/2011-hhs-poverty-guidelines>.

102. *District of Columbia’s Household Income at \$63,124 in 2011, American Community Survey Shows*, U.S. CENSUS BUREAU (Sept. 19, 2012), https://www.census.gov/newsroom/releases/archives/american_community_survey_acs/cb12-r25.html (press release) (“The median household income in Washington, D.C., was \$63,124 in 2011, compared with the national figure of \$50,502 . . .”) (defining household income as “the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not.”).

103. See *Washington District of Columbia Residential Rent and Rental Statistics*, DEP’T OF NOS., <https://www.deptofnumbers.com/rent/district-of-columbia/washington/> (drawing from <https://www.census.gov/programs-surveys/acs/>).

meaning their income is closer to the poverty line than to the median income for the area.¹⁰⁴

Table 2. Selected income percentiles among debtors

	Minimum	25 th	50 th (median)	75 th	90 th	Maximum
Overall	\$1,476	\$23,745	\$34,228	\$48,168	\$69,224	\$240,000
Black	\$1,476	\$24,001	\$33,834	\$46,521	\$65,855	\$240,000
White	\$2,400	\$27,516	\$36,828	\$56,311	\$76,163	\$234,295

Black and white filers also differ along other measures of socioeconomic status. A statistically significant difference is observed in mean reported monthly expenditures ($p < 0.05$) among Black and white filers, with Black filers spending roughly \$1,000 less than white filers at the mean (\$376 less at the median) (illustrated in Figures 2a and 2b). Although we observe a substantial difference in the mean reported assets of Black and white filers (\$170,381 vs. \$225,405), the difference is not statistically significant (p -value = 0.24). Lack of significance despite the large difference in mean values is likely due to the large variances in reported asset levels caused by the skew in the debt distribution and the relatively small number of white filers in our sample (see table 3).

As shown in Figure 2a, white filers report \$4,561 in mean expenditures monthly (median = \$3,486), compared with \$3,554 for Black filers (median = \$3,110). This mean difference amounts to roughly \$12,150 annually. For white filers, the mean ratio of monthly expenditures to monthly income is 2.42 (1.03 at the median). The mean expenditure-to-income ratio for Black filers is lower at 1.26 (1.06 at the median). In other words, the average bankruptcy filer's financial condition is highly precarious, with expenditures greater than income. Even relatively small, unexpected expenditures could overwhelm available resources.¹⁰⁵

As shown in Figure 2b, white filers report \$385,555 in debt at the mean (median = \$133,392), compared with \$251,427 for Black filers (median = \$118,502).¹⁰⁶ For both groups, these debt levels are substantially

104. See Warren, *supra* note 22, at 1780-82 (discussing bankruptcy as a middle class phenomenon and writing, "That is, about 91% to 93% of bankrupt white families, Hispanic families, and black families were solidly middle class."); cf. AMARTYA SEN, DEVELOPMENT AS FREEDOM (1999) (discussing poverty in relative terms).

105. Barron & Staten, *supra* note 33, at 31 (reporting that "[a]bout 56% of the Chapter 7 sample had zero dollars of income left after subtracting their declared living expenses each month. In contrast, the mean annual income net of living expenses (including mortgage payments) for the top 10% of all Chapter 7 debtors was \$9,340, an amount which presumably could be applied toward payment of non-housing debt.").

106. Foohey et al., *Sweatbox*, *supra* note 24, at 235 (reporting that, "[i]n the Current CBP, the median household has total debts of just over \$100,000.").

higher than reported assets. White filers report a mean of \$225,405 in assets (median = \$24,854), compared with \$170,366 for Black filers (median = \$30,326). The considerable difference across mean and median debts and assets for both groups indicate skew in the distribution of these quantities across debtors.

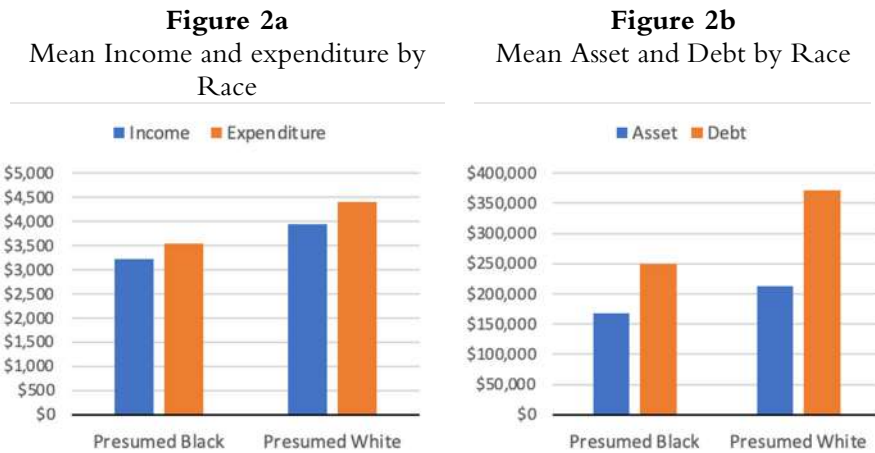


Table 3. Selected asset and debt percentiles among debtors

	Minimum	25 th	50 th (median)	75 th	90 th	Maximum
Debt						
Overall	\$377	\$46,407	\$133,382	\$369,859	\$619,539	\$3,751,656
Black	\$377	\$42,800	\$118,389	\$338,337	\$578,213	\$3,459,812
White	\$16,891	\$77,049	\$133,392	\$483,053	\$908,867	\$3,751,656
Assets						
Overall	\$0	\$7,301	\$29,586	\$307,639	\$452,910	\$1,934,528
Black	\$0	\$7,293	\$30,767	\$290,654	\$430,209	\$1,934,528
White	\$595	\$7,145	\$24,854	\$372,685	\$779,969	\$1,157,211

In our sample, roughly 84% of all personal bankruptcy filers opted for chapter 7, with the rest opting for chapter 13. This is similar to trends for all D.C. bankruptcy filings in 2011, in which 83% of the 927 personal

bankruptcy petitions were chapter 7 filings.¹⁰⁷ But it is a higher percentage of chapter 7 cases than historic trends in other jurisdictions.¹⁰⁸

We observe a small (and non-statistically significant) difference in the proportion of Black and white debtors who opted for a chapter 13 bankruptcy (18% for white filers vs. 16% for Black filers).¹⁰⁹ Descriptively, this is inconsistent with the findings of previous researchers who found that Black filers are “much more likely” to file chapter 13 relative to white filers.¹¹⁰

B. Analyzing Homestead Exemptions

In this Section, we analyze data from debtors’ Schedules A and C. Schedule A provides information on the value of debtors’ “homestead”: real property, land and personal property used as a residence (e.g., an RV), and burial plots held at the time of filing.¹¹¹ Schedule C provides

107. These data were made available via the U.S. Bankruptcy Court of the District of Columbia. *2011 Bankruptcy Statistics*, U.S. BANKR. CT., <https://www.dcb.uscourts.gov/2011-bankruptcy-statistics>; see Van Loo, *supra* note 22, at 234 (“Blacks chose Chapter 13 with much higher frequency than did whites and Hispanics: of those debtors choosing Chapter 7 and Chapter 13 bankruptcy, 61.8% of blacks chose Chapter 13, compared to 29.4% of Hispanics and 20.5% of whites.”); see also Kiel & Fresques, *supra* note 22 (reporting that “From 2008 – 2015, 72% filings in white zip codes were under Chapter 7, white debtors in Black zip codes chose Chapter 7 only 49% of the time.”).

108. For example, writing in 2011, Katie Porter asserted that chapter 7 accounts for “about two-thirds of consumer filings in recent years” and noting the rate of chapter 13 filings was 38% in 2006–07, 31% in 2008 and 26.5% in 2009. Katherine Porter, *The Pretend Solution: An Empirical Study of Bankruptcy Outcomes*, 90 TEX. L. REV. 103, 107, 116 (2011) (“For the last two decades, approximately one-third of all consumer filings have been in chapter 13.”); see also Barron & Staten, *supra* note 33, at *1 (“About 66 percent of all petitioners in the US opt for Chapter 7, a proportion that has remained remarkably stable for the past 15 years, despite periodic changes in the federal statutes (most recently in 1994) to encourage Chapter 13 repayment plans.”); Elul & Subramanian, *supra* note 27, at 234 (“Chapter 7 bankruptcy proceedings, which make up roughly 70% of all personal bankruptcy filings.”).

109. Cf. Will Dobbie & Jae Song, *Debt Relief and Debtor Outcomes: Measuring the Effects of Consumer Bankruptcy Protection*, 105 AM. ECON. REV. 1272, 1280 (2015) (finding that 74.2 percent of chapter 7 filers are white and only 13.3 percent are Black. By contrast, 55.8 percent of Chapter 13 filers are white and 33.95 percent are Black.).

110. See, e.g., Braucher et al., *supra* note 22 (“African Americans are much more likely than their non-African-American counterparts to file chapter 13 (vs. chapter 7).”); Dobbie & Song, *supra* note 109.

111. Schedule A relates to property covered by 11 U.S.C. § 522(d)(1). That section covers “The debtor’s aggregate interest . . . in real property or personal property that the debtor or a dependent of the debtor uses as a residence, in a cooperative that owns property that the debtor or a dependent of the debtor uses as a residence, or in a burial plot for the debtor or a dependent of the debtor.” For the sake of simplicity, we refer to this throughout as real property.

information on filers' claimed homestead exemptions—the value of this property they aim to keep after bankruptcy. Homeownership plays a significant role in wealth building. The U.S. Census Bureau estimates that the median wealth of homeowners is nearly ninety times greater than nonhomeowners'.¹¹² Subsection IV.B.1 details home values identified on filers' Schedule A. Although we do not explicitly report outstanding debts on the residence, subsection IV.B.2 details the value (equity) of debtors' homestead exemption claims.

Fewer than half of all debtors in our sample report owning real property (usually homes) in their Schedule A filings. Notably, 48% of Black debtors report owning any homestead property but only 32% of white debtors do so.¹¹³ Yet on average, Black filers who own homestead property report lower property values than white filers (42% lower at the mean, 47% lower at the median).¹¹⁴ White debtors report homesteads valued at \$589,174 at the mean (median \$585,000), whereas Black debtors report homesteads valued at \$286,653 (median \$251,600).¹¹⁵ The difference across

112. Donald Hays & Briana Sullivan, *2017 DATA SHOW HOMEOWNERS NEARLY 89 TIMES WEALTHIER THAN RENTERS*, U.S. CENSUS BUREAU (Nov. 16, 2020), <https://www.census.gov/library/stories/2020/11/gaps-in-wealth-of-americans-by-household-type-in-2017.html>.

113. Our data for Black debtors is similar to the results reported elsewhere (~50%), but our white debtors' homeownership rate is low compared to those results. Other researchers generally break out their results by chapter type instead of by race. See Foohey et al., *Sweatbox*, *supra* note 24, at 234 (50% of debtors in the 2007 CBP and 44.7% in the current CBP data owned homes); Lawless et al., *supra* note 30, at 367 ("about half of the bankrupt families are not homeowners."); Dobbie & Song, *supra* note 109, at 1280 (reporting on research finding that "51 percent of Chapter 13 filers are homeowners"); Barron & Staten, *supra* note 33, at *15 ("Only 39 percent of Chapter 7 debtors owned real property (primary residence or other real estate), compared to 62 percent of Chapter 13 debtors."); Pattison & Hynes, *supra* note 23 (For "Chapter 7 cases . . . 52% report having no real estate assets. For Chapter 13 cases . . . 28% report having no real estate assets.").

It's surprising that Black homeownership exceeds white homeownership in our sample. Compare Foohey et al., *Driven to Bankruptcy*, *supra* note 22 at 323 (discussing "African Americans' lower homeownership rate in the overall population."), with Warren, *supra* note 22, at 1779 ("Hispanic and black homeowners face sharply increased risks of filing for bankruptcy as compared to their white counterparts.").

114. Jonathan Rothwell & Andre M. Perry, *How Racial Bias in Appraisals Affects the Devaluation of Homes in Majority-Black Neighborhoods*, BROOKINGS INST. (Dec. 5, 2022), <https://www.brookings.edu/research/how-racial-bias-in-appraisals-affects-the-devaluation-of-homes-in-majority-black-neighborhoods/> (discussing the role of home appraisal bias in undervaluing houses in majority-Black neighborhoods).

115. Given the local real estate market, it is not surprising that D.C. homeowners that file bankruptcy own more expensive homes than a national sample of bankruptcy filers. Cf. Lawless et al., *supra* note 30, at 365 ("The median home listed in a bankruptcy petition in 2001 was valued at \$103,700, while the median home in 2007 was \$110,400.64. While this difference is not statistically significant, the variation widens with the comparison of mean home prices. From 2001 to 2007, mean home value jumped from \$118,800 to \$143,400,

these means is statistically significant ($p < 0.05$), as reported in Table A3 of Appendix A.

Of the debtors who report a homestead on Schedule A, roughly the same proportion of Black and white filers claim some portion of it as an exempt asset on their Schedule C (62% of Black and 68% of white debtors). These exemptions typically represent the value of home equity that filers seek to retain after bankruptcy. The size of the exemption claimed, however, differs substantially across Black and white filers. Among those who claim exemptions, white debtors claim exemptions valued at \$285,451 at the mean (median = \$259,406), whereas Black debtors claim mean homestead exemptions valued at \$109,469 (median = \$21,625). Overall, white filers are expected to leave bankruptcy with homestead property valued at roughly two and half times the value retained by Black households at the mean (and at roughly twelve times at the median). The difference across these means is statistically significant under a one-tail test ($p = 0.036$) but not a two-tail test, as reported in Table A3 of Appendix A. Put differently, at the mean, Black filers do not retain \$217,308 in homestead value in their bankruptcy cases (median = \$195,350) while white filers do not retain \$393,865 (median = \$325,594).

In summary, on a nominal basis, white filers have more non-exempt homestead assets. In part, this is likely because Black filers own less expensive homes than white filers when they file bankruptcy and borrow more heavily to purchase those homes in the first instance.¹¹⁶ Notably, Black filers retain a smaller percentage of their value when they exit bankruptcy. The gap between the property values reported as of the petition date by Black and white debtors and the assets these debtors seek to retain vis-à-vis their homestead exemption grows by roughly ten percentage points at the mean (and roughly 34 percentage points at the median).

1. Homestead Values as Reported on Schedule A

In the District of Columbia, debtors may choose to use the generally applicable federal exemptions or the District-specific exemptions. These are quite similar in most respects. The most significant difference is that, in 2011, the federal exemptions limited debtors to retaining a maximum of \$20,000 in their homestead and the District had no maximum homestead exemption.¹¹⁷

a statistically significant increase that is pushed by a larger number of higher-priced homes in 2007.”)

116. See *infra* Table A1.

117. For ease of understanding, we sometimes refer to a debtor as retaining their home equity. Although the homestead exemption is broader than that, “[o]f individuals with real

As reported in the previous Section, white debtors enter bankruptcy reporting higher homestead values on average.¹¹⁸ This remains true across type of exemption claimed.¹¹⁹ Among filers reporting any homestead assets, white filers who chose the federal exemptions report homesteads valued \$208,442 greater at the mean than Black filers, a 77% difference. At the median, the estimates are \$328,850 and 130% respectively. For filers opting for the D.C. exemption, white debtors report homesteads valued at \$358,742 greater (116% more) than Black debtors at the mean. Equivalent estimates at the median are \$429,170 and 163% respectively.

2. Homestead Exemptions Claimed on Schedule C

Given D.C.'s unlimited¹²⁰ homestead exemption, we expect that debtors claiming the D.C. exemptions would claim larger homestead exemptions than debtors claiming the federal exemption. Indeed, at the mean, Black filers who choose the D.C. exemption claimed a homestead exemption valued 2.1 times greater than the homestead of Black filers who choose federal exemptions (9.5 times greater at the median). In comparison, whites filing D.C. exemptions claim 3.1 times the homestead value of whites filing federal exemptions (8.0 times at the median). The difference between the mean exemption claimed for white and Black debtors grows from \$53,166 for those claiming the federal exemption (median = \$33,713) to \$240,114 for those claiming the D.C. exemption (median = \$251,400).¹²¹

Note that in some instances the claimed homestead exemption may exceed the maximum permissible exemption. To ensure we are accurately

property, the primary home comprises 97% of the total value of real property" reported on the debtor's schedules. Pattison & Hynes, *supra* note 23.

Specifically, the law provides that debtors may retain their "aggregate interest . . . in real property or personal property that the debtor or a dependent of the debtor uses as a residence, in a cooperative that owns property that the debtor or a dependent of the debtor uses as a residence, or in a burial plot for the debtor or a dependent of the debtor." See 11 U.S.C. § 522(d)(1). The D.C. exemption is similar. See D.C. Code § 15-501(a)(14) (1981) (allowing an exemption in the "debtor's aggregate interest in real property used as the residence of the debtor, or property that the debtor or a dependent of the debtor in a cooperative that owns property that the debtor or a dependent of the debtor uses as a residence, or in a burial plot for the debtor or dependent of the debtor, except nothing relative to these exemptions shall impair the following debt instruments on real property: deed of trust, mortgage, mechanic's lien, or tax lien").

118. See *supra* note 116 and the accompanying discussion.

119. See *infra* Table A1 in Appendix A.

120. But see 11 U.S.C. § 522(p) (limiting homestead exemptions to \$125,000 unless debtors have owned their homes for at least forty months (1215 days) at the time they file for bankruptcy.).

121. See *infra* Table A2.

describing the data collected, which can include filing errors, we do not alter the reported values or set a maximum.¹²²

Overall, then, these estimates indicate the following:

1. A greater proportion of Black debtors report owning a home than white debtors (48% compared to 32%) in our sample, but median homestead values among homeowners are considerably higher for whites (\$585,000) than Blacks (\$251,600).
2. Similar proportions of Black and white homeowners claim a homestead exemption (roughly two-thirds), but the median claimed exemption value for white debtors is roughly twelve times larger than the median value claimed by Black debtors (\$259,406 vs. \$21,625).
3. As a result, Black debtors are expected to leave bankruptcy with homesteads values roughly 10% of those of white debtors at the median (38% at the mean), even though Black debtors entered bankruptcy with homesteads valued at roughly 42% that of white debtors at the median (48% at the mean).

122. For example, at the median, white debtors who opt for a federal exemption claim a home value of \$45,463, yet the federal limit for a single filer on their homestead exemption is generally \$20,000. Although joint filers may stack their exemptions and claim \$40,000, the median claimed exemption still exceeds that amount. Sometimes it appears that debtors asserted the D.C. exemptions but checked the box to indicate that they were asserting the federal exemptions. Other debtors appear to be asserting an exemption in property that is jointly held with another person, such as a tenancy by the entirety. Whether the court ultimately validated this claimed exemption is not contained in our dataset. Thus, we report only the data reported by the debtors themselves. With a larger dataset, we might exclude some of these observations. But, given the small size of our sample, we do not exclude observations because of possible inaccuracies with the debtors' reporting. See, e.g., Pattison & Hynes, *supra* note 23, at 564 (Tenancy by the entirety is another form of asset protection that is available to some people. "In its strongest form, the doctrine completely protects property held as tenancy by the entirety from creditors who have a claim against just one spouse. If, for example, a wife, but not the husband, was liable for a large tort judgment or business obligation and the couple had no other significant debts, tenancy by the entirety would operate as an unlimited homestead exemption. However, this would not be true if the spouses were jointly liable, if the wife's obligation were for federal taxes, or if their state adopted a weaker form of the doctrine."); J. Traczynski, *Personal Bankruptcy, Asset Risk, and Entrepreneurship: Evidence from Tenancy by the Entirety Laws*, 62 J. L. & ECON. 151 (2019); 34 ACTEC J. 210 (2009), <https://fredfranke.com/wp-content/uploads/2019/10/02-Asset-Protection-and-Tenancy-by-the-Entirety.pdf>.

C. Analyzing Schedule B's Personal Property Exemptions

1. Personal Property Values as Reported on Schedule B

In addition to homesteads, debtors must identify any personal property they own when filing for bankruptcy.¹²³ This is reported on Schedule B and includes (but is not limited to) jewelry, clothing, cash, retirement accounts, and livestock.¹²⁴ Although not all petitioners owned a homestead, all petitioners in our sample claimed at least some personal property. At the median, Black filers report amounts of (non-homestead) personal property similar to white filers: \$10,516 for Black filers compared to \$10,367 for white filers.¹²⁵

This similarity in reported personal property is striking because most research suggests that white families typically own a wider and more highly valued array of personal property than Black families.¹²⁶ This may suggest that the distribution of personal property among Black and white D.C. households is more equal than the national average. Alternatively, it could also potentially suggest that personal property ownership is less useful for avoiding bankruptcy for Black households than for white households in D.C., resulting in a more equal distribution of personal property *among petitioners*, even if the inequalities identified in broader research still hold for D.C. households.¹²⁷ Without comparable personal property data for

123. See *Bankruptcy Forms for Individuals*, *supra* note 100; see also *Chapter 13 – Bankruptcy Basics*, U.S. CTS. (Apr 1, 2023), <https://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics/chapter-13-bankruptcy-basics>; see also *Chapter 7 – Bankruptcy Basics*, U.S. CTS. (Apr. 1, 2023), <https://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics/chapter-7-bankruptcy-basics>.

124. *Official Form 106A/B*, U.S. CTS. (Apr. 1, 2023), https://www.uscourts.gov/sites/default/files/form_b106ab.pdf.

125. Given the usually small number of filers reporting any given personal item, estimates of value for any given type of personal property are particularly vulnerable to outliers. Given this, in this Section, we opt to only report medians as our measure of central tendencies for personal property values and claimed exemptions. Mean values for total personal property assets are \$26,806 for Black households and \$17,624 for white households.

This is lower than reported by other researchers who found that the median debtor owned \$13,200 in personal property. See Lawless et al., *Did Bankruptcy Reform Fail?*, *supra* note 30, at 367 (“In other words, apart from their homes, these debtors own very little; the \$13,200 median package of non-home assets includes the value of all cars, furniture, clothes, tools, books, pets, savings, retirement accounts, lawnmowers, wedding rings, cash on hand, and other valuables.”).

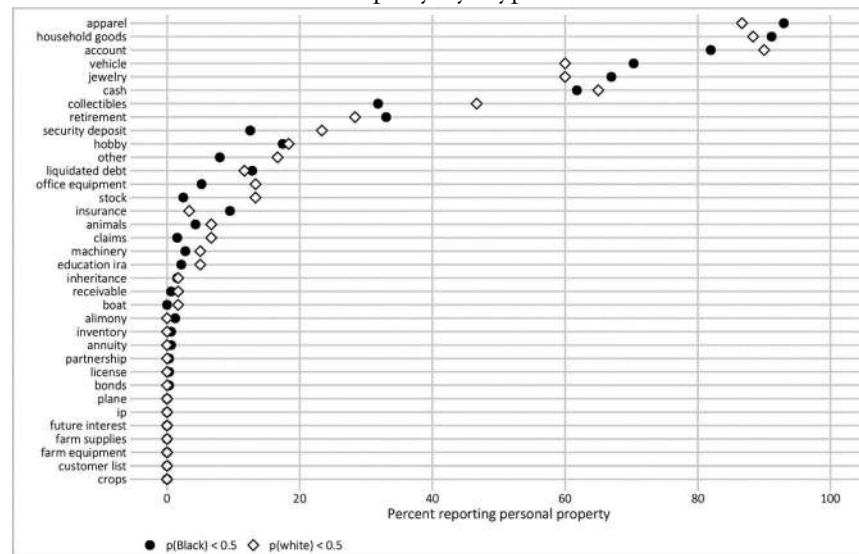
126. See *supra* notes 12–15.

127. If bankruptcy filings are predicted by job loss, divorce, surprise medical bills, and similar causes, then having slightly more clothing is unlikely to help. However, having more cash or money in a checking account ought to help, at least at the margins. See, e.g.,

non-petitioners in D.C., adjudicating between these alternative explanations is impossible.

In bankruptcy, debtors report personal property in 35 individual categories (see Table A4 in Appendix A for detailed definitions of each category). Because different exemptions rules apply for each type of property, examining the distribution of filers' personal property across these categories is important. Differences in the kind and amount of property owned at the time of a bankruptcy filing directly impact how much property debtors can exempt. Figure 3 provides information on the types of personal property Black and white filers tend to claim. The figure shows the percentage of filers who report non-zero property values for a given personal property category.

Figure 3
Estimated Proportion of Filers Reporting Any
Personal Property by Type and Race



Note: Categories of personal property are further described in Table A1 in Appendix A.

Figure 3 suggests the following two substantive conclusions. First, the most frequently reported types of personal property are clothing; household goods (which includes electronics); checking, savings and other

David U. Himmelstein, Deborah Thorne, Elizabeth Warren & Steffie Woolhandler, *Medical Bankruptcy in the United States, 2007: Results of a National Study*, 122 AM. J. MED. 741 (2009).

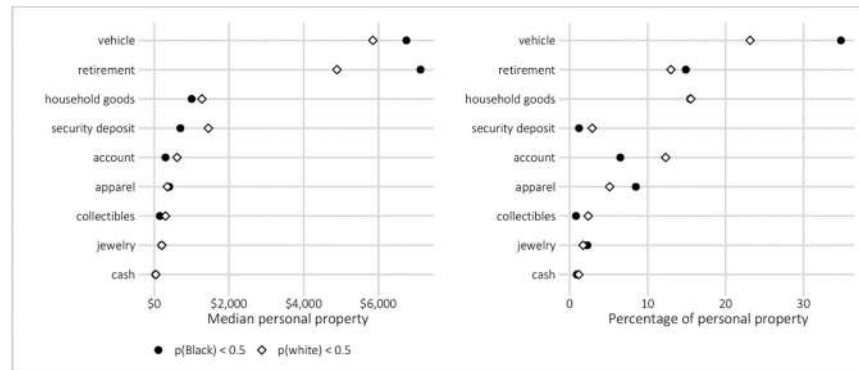
financial accounts; vehicles;¹²⁸ jewelry; and cash. Over half of filers report ownership of each of these categories individually. Next in frequency are collectibles (e.g., antiques, stamps, and art) and retirement accounts (IRA, employer-based, Keogh, and others), which are reported by more than roughly a quarter of filers. All other types of property are reported by fewer than a quarter of filers.

Secondly, the estimates also suggests that for the most frequently reported property categories—those reported by at least a quarter of filers—Black filers tend to be slightly more likely than white filers to report a given property type. Checking and other accounts as well as cash on hand are exceptions, with white filers reporting property ownership at greater (accounts) or similar (cash) rates. For less prevalent property categories—those that are held by fewer than a quarter of filers—the opposite pattern tends to hold, with white filers being slightly more likely to report those property types.

Figure 4 provides information on claimed property values among filers. The left panel provides median property values for those reporting nonzero values of that property. The right panel provides the average share of filers' total claimed property value that the property type represents. The sample for this panel is all filers. For example, an estimate of 30 for household goods would indicate that, on average, household goods make up 30% of all personal property value the average petitioner brings into bankruptcy with them. For both panels, only categories of property for which at least 20% of filers report owning the property type are shown.

128. In our data, vehicle ownership is less common than reported in Foohey et al., *Driven to Bankruptcy*, *supra* note 22. There, the authors report vehicle ownership rates of 82.1% for African American debtors and 89.1% for non-African American households in bankruptcy. *Id.* And it's our data that appears to be the outlier. *See id.* ("Across all filers, 84.7 percent own cars, as compared to 84.8 percent of SCF respondents. The median bankruptcy filer has one car with the median joint bankruptcy filing of a married couple having two cars. Both are the same as the corresponding median SCF households." And "The percentage of chapter 7 filers with cars, notably, is the same as in Culhane and White's study of chapter 7 filers from 1995, which is the only data point of comparison from prior literature."). This is likely because DC's public transportation system is more robust than other parts of the United States, making car ownership less important.

Figure 4
Estimated Median Property Values (Left) and Estimated Share of Total Reported Personal Property (right) by Type and Race



Note: Categories of personal property are further described in Table A1 in Appendix A.

Estimates from Figure 4 suggest that, by value, vehicles and retirement accounts together make up the largest average value of total property reported, for both Black and white filers. For all other types of goods, median reported values tend to be low (typically under \$1,000). Trends across Black and white filers indicate that more of Black filers' property is held as vehicles (23% for whites, 33% for Blacks) and, to a lesser extent, as retirement accounts (13% for whites, 15% for Blacks) and apparel (5% for whites, 8% for Blacks).¹²⁹ With the exception of these three categories plus household goods and checking or cashing accounts, most property types make up a small share of total reported personal property values (less than 5% each).

Black filers tend to report greater median property values for vehicles (\$6,815)¹³⁰ and retirement accounts (\$7,542) than white filers (\$5,850 and

129. Cf. Foohey et al., *Driven to Bankruptcy*, *supra* note 22, at 323 tbl.6 (finding that, as a percentage of debtors' total assets, "the median household that filed for bankruptcy in our sample entered bankruptcy with cars accounting for about 20 percent of their total assets, and the average household came to bankruptcy court with cars as one-third of their total assets."). When broken down by chapter choice, these authors also report that "despite having less valuable cars, chapter 7 filers have more of their wealth concentrated in cars than chapter 13 filers (23.2 percent versus 13.8 percent)." *Id.* ("This effect is most likely due to the higher concentration of homeowners in chapter 13, and indeed it reverses when looking at non-homeowners only.").

130. Although not directly comparable because they use 2019 values, Pamela Foohey, Robert M. Lawless, and Deborah Thorne provide a relevant comparison in *Driven to Bankruptcy*, *supra* note 22. There, the authors find that the median chapter 7 car-owning filer's "most valuable automobile . . . is worth approximately \$5400, which is roughly in the same price range as the trade-in values for a typical five-year-old Ford Focus or a six-year-old

\$4,889, respectively).¹³¹ Otherwise, reported property values are similar for Black and white filers across all property types.

Estimates from Schedule B, then, suggest the following:

1. The two most valuable types of personal property Washingtonians report owning at the time they file bankruptcy are vehicles and retirement assets. The reported median values among filers who own these types of personal property are relatively high (\$6,595 in vehicle assets and \$7,123 in retirement assets), especially when compared with other types of property. And a relatively large portion of filers hold these types of personal property (70% of filers report vehicle assets and 31% report retirement assets).
2. Black filers report having higher median retirement asset values (54% more) and vehicle values (16% more) than white filers.
3. The proportion of filers who hold personal property as household goods, financial accounts, and apparel is large (more than 80% for each category). Yet these constitute a relatively low proportion of total personal property reported for the average filer (below roughly 15% for each category individually). The median property value for each category is also relatively small (less than roughly \$1,000 each category).

Overall, these trends suggest that, for D.C. filers at least, vehicles and retirement assets may play an important role in the bankruptcy process and could potentially account for some racial differences in retained assets after bankruptcy.¹³² Other categories of personal goods, however, are unlikely to play a major role given the small values petitioners hold for these

Toyota Corolla.” *Id.* They also find that the median chapter 13 car-owning filer’s “most valuable car is worth \$8928, which is closer in value to a two-year-old Ford Focus or three-year-old Toyota Corolla.” *Id.*

131. Given the racial wealth gap, we thought it was surprising that Black debtors reported owning cars valued at approximately 25% more than white debtors. However, it aligns with the work of previous researchers, who also found that Black debtors owned “slightly more valuable cars at the median.” *Id.* at 322.

132. Our results align with the work of prior researchers. *See id.* at 322-23 (“Although African American households are less likely to own cars than other households, this reverses when homeownership is removed from the analysis, and African American households are more likely to own a car if they do not own a home.”).

property types. The next Section explores this in greater detail by focusing on claimed exemptions.

2. Personal Property Exemptions Claimed on Schedule C

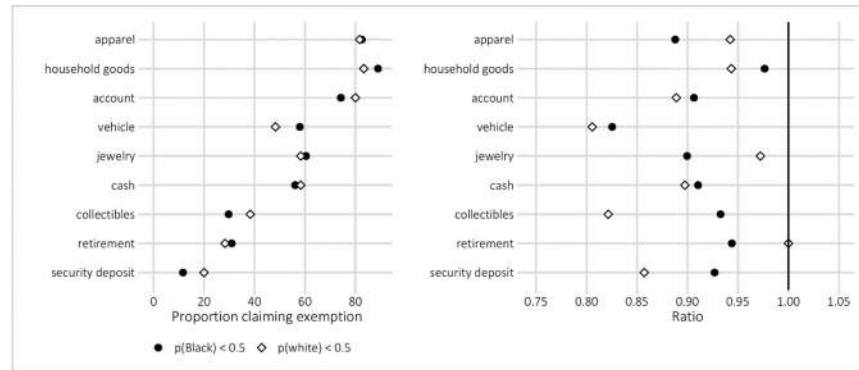
In chapter 7 cases, debtors with personal property that exceeds any applicable exemptions may keep only their exempt property when they complete their bankruptcy case; any property beyond the exemption limits is used to repay creditors. The amount of personal property debtors may exempt varies by type of property, by filing status, and by the exemption regime claimed (i.e., federal versus D.C.).

Schedule C is where filers claim the property they intend to exempt (i.e., keep). At the median, Black filers in the District of Columbia claimed \$8,359 in personal property exemptions and white filers claimed \$10,150.¹³³ The median white filer, in other words, sought to retain roughly \$1,800 more of their property than Black filers, despite reporting similar overall personal property values on Schedule B and despite Black filers reporting 54% higher median retirement asset values and 16% higher vehicle values than white filers.

The left panel of Figure 5 shows what proportion of filers claimed exemptions for each of the allowable categories of personal property. The right panel of Figure 5 provides the ratio of the proportion of filers claiming an exemption to the proportion of filers claiming property for each property type. For example, an estimate of 0.8 for a given property type indicates that 80% of petitioners who reported nonzero property value for this type of property also claimed an exemption. For both panels, only property types where at least 20% of filers report non-zero values are shown.

133. These estimates refer to personal property exemptions only. For estimates of Schedule C claimed exemptions that also include homestead exemptions, see Table A2.

Figure 5
 Estimated Proportion of Filers Claiming Exemption (Left) and
 Estimated Ratio Of Exemption Claims to Property Claims (Right) by
 Type and Race



Note: Categories of personal property are further described in Table A4 in Appendix A.

The left panel of Figure 5 indicates that, unsurprisingly, filers mostly claim exemptions in those same property categories they report assets; the rank order for types of property by proportion of filers claiming an exemption and by proportion of filer reporting the property in the first place are nearly the same. For most property types, the proportion of filers claiming exemptions is slightly lower than the proportion claiming property, but for all property types in the figure at least 80% of asset holders claim an exemption. For most categories, Black filers are either slightly more likely than or as likely as white filers to claim an exemption, with the notable exception of retirement assets where all white filers claim exemptions, but roughly 5% of Black filers do not. Black filers are also less likely to claim apparel and jewelry as exempt.

Focusing on the key property categories highlighted in the previous section, the estimates in the right panel of Figure 5 suggest that roughly 60% of filers claimed vehicle exemptions.¹³⁴ This is true for both Black and white filers. This result diverges substantially from those reported by other researchers.¹³⁵ Nearly all Black filers (95%) who report retirement accounts also claim an exemption for it, and all white filers claiming retirement assets also claimed exemptions. Similarly, roughly 80% of both Black and white

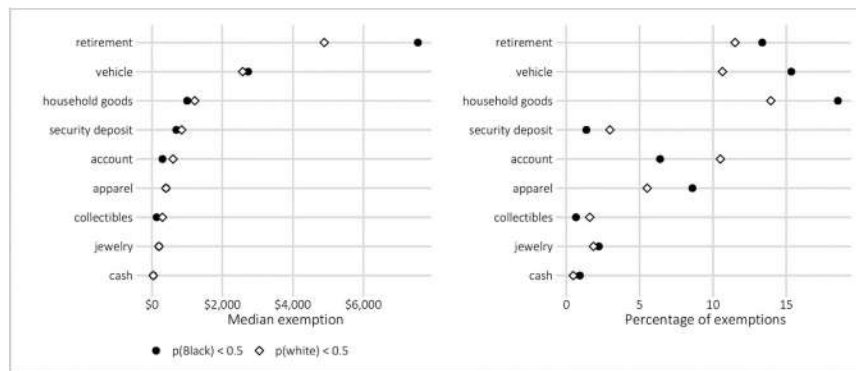
134. Recall that only 68% of filers report owning one or more vehicles at the time of their bankruptcy filing. See *supra* Fig. 3.

135. See Foohey et al., *Driven to Bankruptcy*, *supra* note 22, at 315 (finding that slightly less than a quarter (22.4%) of debtors claim an automobile exemption despite high rates of car ownership). The reasons for this difference are unclear.

filers claim an exemption for financial accounts, for household goods, and for apparel.

The left panel of Figure 6 provides median exemption values claimed by filers with nonzero exemption claims, again focusing on the most frequently claimed property types. The right panel of Figure 6 shows the average proportion that each type of exemption represents (out of total exemptions claimed) across all filers. Total exemptions were obtained by summing all individually reported exemptions on Schedule C.

Figure 6
Estimated Median Exemptions (Left) and Estimated Share of Total Reported Exemptions (Right) by Type and Race



Note: Categories of personal property are further described in Table A4 in Appendix A.

The left panel of Figure 6 shows that exemptions claimed are relatively small—under \$1,250—for all but two property types: vehicles and retirement accounts. Of these two, the average claimed exemptions for retirement accounts are much larger. The right panel of Figure 6 suggests that most exemptions by value pertain to vehicles, retirement accounts, and household goods, followed by exemptions for security deposits, financial accounts, and apparel. Black filers tend to hold either more of their exemptions as retirement, vehicle, household goods, and apparel, while white households disproportionately hold exemptions in security deposits and cash account—although the overall racial differences are small. For Black filers, household goods make up on average 19% of all claimed property exemptions by value, compared to 14% for white filers. For apparel, the corresponding estimates are 9% (Black) and 6% (white). For nonretirement accounts, the estimates are 6% (Black) and 11% (white).

Retirement assets are the largest exemption category (by dollar value). The proportion of all petitioners claiming an exemption in a retirement account is similar for Black and white debtors, at roughly 30% for both groups. This is surprising because in general white, non-Hispanic Americans

are much more likely to have a retirement savings account (68%) than Black Americans (41%).¹³⁶ Out of petitioners who report any retirement assets, all white filers claim an exemption, while 95% of Black filers do.

Exemptions claimed for retirement accounts were larger than other exemptions in our sample for other property. As reported in Table 4, Black filers claimed roughly \$7,543 in exemptions at the median for retirement accounts, compared with roughly \$4,889 for white filers. Black filers, then, claim roughly \$2,650 more in retirement asset exemptions than white filers.¹³⁷ The claims exactly match median reported asset amounts, meaning that at the median both Black and white petitioner exempt all retirement assets, and the observed difference in exemptions is fully explained by the difference in assets reported.

This Black-white difference in retirement account exemptions is notable because the gap in retirement assets we find is in the opposite direction relative to the gap that exists outside of bankruptcy.¹³⁸ Outside of bankruptcy, Black filers had between three and four times smaller retirement account values than white households.¹³⁹ By contrast, in our sample, Black households enter (and leave) bankruptcy with more retirement assets.

136. See Monique Morrissey, *The State of American Retirement Savings*, ECON. POL'Y INST. (Dec. 10, 2019), <https://www.epi.org/publication/the-state-of-american-retirement-savings/#chart10>. It's possible that this is because of the prevalence of pensions offered by the federal government. In other words, it may be unique to the Washington, D.C. area.

137. See *infra*, Table 4.

138. According to the Federal Reserve, in 2010, the median Black, non-Hispanic household had approximately \$21,210 in their retirement accounts and the median white, non-Hispanic household had approximately three times more (\$63,630). In 2013, the median Black, non-Hispanic household's retirement savings fell slightly to approximately \$20,870 but the median white, non-Hispanic household saw their retirement savings grow substantially to approximately \$83,460 (a 400% difference). See *Survey of Consumer Finances*, FED. RSRV. (Apr. 1, 2023), [https://www.federalreserve.gov/econres/scf/dataviz/scf/table/#series:Retirement_Accounts;demographic:racecl4;population:all;units:median](https://www.federalreserve.gov/econres/scf/dataviz/scf/table/#series:Retirement_Accounts;demographic:racecl4;population:all;units:median; see also Morrissey, supra note 136 (reporting that the median savings in retirement accounts for Black households in 2016 was $24,317 but was $64,695 for white households)); see also Morrissey, *supra* note 136 (reporting that the median savings in retirement accounts for Black households in 2016 was \$24,317 but was \$64,695 for white households).

In addition to the much smaller disparity between Black and white households, we report substantially lower retirement account balances for both racial groups. One possible explanation for the lower values we find is that debtors may withdraw retirement savings prior to their bankruptcy filing to try to head off an immediate financial crisis. Alternatively, debtors may use their retirement savings to pay their bankruptcy attorneys or important creditors.

139. *Id.*

Table 4. Estimated Median Retirement Account Values and Median Exemptions

	Black	White	Black-White Gap	Black-White Ratio
Assets Reported	\$7,543	\$4,889	-\$2,654	1.54
Exemptions Claimed	\$7,543	\$4,889	-\$2,654	1.54

Vehicle assets are the other property type most commonly held and claimed as exempt. As reported in the previous section, Black filers report approximately \$6,815 in vehicle assets at the median, but only seek to exempt \$2,728. By contrast, white filers report lower vehicle values (\$5,850) but claim nearly identical exemptions (\$2,575). Put differently, white debtors claim a larger percentage of their vehicles' value as exempt and as a result retain similar value as Black filers in absolute terms, despite holding lower valued assets.¹⁴⁰

Table 5. Estimated Median Vehicle Value and Median Exemption

	Black	White	Black-White Gap	Black-White Ratio
Assets Reported	\$6,815	\$5,850	-\$965	1.16
Exemptions Claimed	\$2,728	\$2,575	-\$153	1.06

Estimates of exemptions claimed on Schedule C, then, suggest the following:

1. White filers claim approximately \$1,791 more in total exemptions than Black filers at the median (\$28,359 at the mean).

140. Cf. Foohey et al., *Driven to Bankruptcy*, *supra* note 22, at 315 (reporting that “[t]he median car owner who claimed an exemption had \$2932 of equity in the claimed car that was exempt from the bankruptcy estate. Chapter 13 filers are more likely to have nonexempt car equity they would lose in a chapter 7 filing (26.1 percent versus 20.4 percent); chapter 13 filers also have higher average amounts of nonexempt car equity (\$1268 versus \$720). (The medians in both chapters are zero.)”).

2. Retirement accounts make up a large portion of retained property value for filers (median claimed exemption of \$7,124). And 31% of filers claim an exemption in a retirement account.
3. Vehicle exemptions are claimed by 58% of filers, and their exemption claims are also sizeable (\$2,744 at the median).
4. Exemptions claimed show relatively few racial differences in retained value across the different categories of goods and assets, especially relative to the value of assets held. Racial differences are greatest at the median for retirement exemptions (\$6,595 for Black filers compared to \$4,889 for white filers).
5. Exemptions claimed for retirement accounts and vehicles are higher for Black households than white households. These trends are notable in that they are opposite in direction to the disparity that exists outside of bankruptcy, where white households hold more assets on average, and opposite to the overall trend for total personal exemptions in our sample, as noted above.
6. Given the low value of exempt property, the data suggest that the median bankruptcy filer is a struggling person or household, not an abuser of the bankruptcy system.¹⁴¹

CONCLUSION

This is the first law review article (to our knowledge) to empirically examine bankruptcy exemptions by the debtor's race, which builds on Professor Dickerson's theoretical work on these issues.¹⁴² To identify a debtor's race, we created a novel dataset based on a sample of bankruptcy petitions in the District of Columbia for 2011 and imputed petitioner race using surname and zip code.

The lack of racial identifiers in bankruptcy filings or administrative data pertaining to bankruptcies limits the scope of research on race-neutrality in bankruptcy law. Traditionally, some governing bodies did not

141. Foohey et al., *Driven to Bankruptcy*, *supra* note 22, at 327 (Given the reported value of the vehicles, data suggests that these are "vehicles owned by households struggling to get by, not reckless spenders who file [bankruptcy] the first moment they feel distressed.").

142. Dickerson, *supra* note 1.

prioritize collecting consistent and reliable racial data, for example the Social Security Administration and Centers for Medicare & Medicaid Services. Unfortunately, this lack of prioritization turns a blind eye to the role systemic racism has played in our institutional structures and individual biases and limits the research efforts to explore the concern further. Conversely, there are instances when individual-level characteristics are not collected—allegedly to mitigate any repercussion of biases in decision making.¹⁴³

The inability to identify individual-level characteristics that may impact one's economic or social well-being inhibits researchers' ability to adequately assess biases or unintended consequences of laws or policies on subsets of the population. Moreover, given the historical context of racial and ethnic oppression, the lack of administrative data on race and ethnicity is particularly disconcerting as it makes it difficult to assess progress regarding racial oppression and discrimination.

We report several novel results, which relate to both real and personal property. Regarding real property ownership, Black bankruptcy filers in our sample are more likely than white filers to disclose owning real property (often homes) at the time they file for bankruptcy. This result differs from other studies of homeownership rates in the District of Columbia (and nationwide).¹⁴⁴ As for the value of those homes, there are notable differences between the median value of homesteads owned by Black and white bankruptcy filers at the time of their bankruptcy filing. White bankruptcy filers report median homestead values (\$585,000) that are \$333,400 larger than the median homestead value of Black bankruptcy filers in our sample (\$251,600).¹⁴⁵

The choice of applicable exemption law also mattered. Bankruptcy filers of any race who claim the D.C. bankruptcy exemptions, which allow a filer to keep all their home equity, report \$34,250 greater homestead values at the median than filers that claim the federal exemptions, which are more limited.¹⁴⁶ Racial differences within our sample reveal a wide gulf between Black and white filers that is masked by a focus on aggregate statistics. When claiming the D.C. homestead exemption, Black bankruptcy filers claim homesteads that are \$9,930 higher at the median, but white bankruptcy filers claim homesteads that are \$110,250 higher.¹⁴⁷

143. It is important to note these are not the views of the authors; they are rather the existing explanations often stated. Opponents to this thought would argue not collecting the information is dangerous and the proper response would be protocols to inhibit racial, sexual, gender, or other forms of discrimination.

144. See *supra* notes 18–19 and accompanying text.

145. See *infra* Table A1.

146. This statistic aggregates all filers in our sample and is not limited to Black and white filers.

147. See *infra* Table A1.

Regardless of which exemptions filers selected, there were notable differences between the median claimed homestead exemptions of Black and white bankruptcy filers. Black bankruptcy filers exempted \$100,250 more when asserting the D.C. exemptions (\$112,000) instead of the federal exemptions (\$11,750).¹⁴⁸ By contrast, white filers reported a \$317,937 difference at the median between the federal exemptions (\$45,463) and the D.C. exemptions (\$363,400).¹⁴⁹ In short, our facially neutral bankruptcy laws facilitate white filers leaving bankruptcy with greater wealth than Black filers.

Regarding personal property, we find that Black filers report roughly similar median personal property values at the time of their bankruptcy filing. This is surprising, because earlier research led us to expect that Black bankruptcy filers would own fewer assets to begin with. Somewhat less surprising was that the median white bankruptcy filer sought to exempt roughly \$1,800 more personal property relative to Black filers, even though they entered bankruptcy with similar personal property assets.

However, there were some notable differences across assets in the size of exemptions claimed. At the median, Black bankruptcy filers held and exempted more retirement assets (roughly 54% more) than white filers. The disparity for retirement assets is striking given that overall Black filers exempt less personal property than white filers, and that nationally Black households tend to hold much fewer retirement assets than white households. Black and white filers claimed similar exemptions for vehicles, which is notable given that at the median, Black bankruptcy filers report higher vehicle asset values going into bankruptcy.¹⁵⁰ As a result, facially neutral bankruptcy laws allowing filers, whether Black or white, to exempt certain personal property may facilitate white filers leaving bankruptcy with more wealth than Black filers.

Our ability to generalize from our data to the rest of the country is limited given its geographic focus on Washington, D.C. In future work, we hope to obtain a larger sample to determine whether our results hold over time and in other jurisdictions. It is vital to understand how existing social and legal structures relate to the racial wealth gap, particularly because the racial wealth gap has not narrowed substantially in the last seventy years and is reminiscent of the Jim Crow-era wealth gap.¹⁵¹

148. See *infra* Table A3.

149. See *infra* Table A3.

150. Presumably because they own cars that are more likely to be subject to a lien.

151. Derenoncourt et al., *supra* note 8, at 2.

APPENDIX A: ADDITIONAL TABLES

Tables A1 reports mean and median values of debtors' homesteads and homestead exemptions by racial groups and type of exemption pursued (D.C. versus federal).¹⁵²

Table A1

Reported Homestead (Schedule A), by exemption type given Race

	Federal Exemption			D.C. Exemption		
Race of Debtors	Mean Values	Median Values	Number of Observations	Mean Values	Median Values	Number of Observations
All Debtors	\$285,935	\$269,000	105	\$366,830	\$303,250	97
Black Debtors	\$271,122	\$253,900	78	\$310,149	\$263,830	75
White Debtors	\$479,564	\$582,750	8	\$668,891	\$693,000	11

Table A2

Reported Homestead Exemption (Schedule C), by exemption type given Race (Filers with non-Zero Exemptions only)

	Federal Exemption			D.C. Exemption		
Race of Debtors	Mean Values	Median Values	Number of Observations	Mean Values	Median Values	Number of Observations
All Debtors	\$76,214	\$13,288	61	\$176,645	\$108,377	66
Black Debtors	\$69,530	\$11,750	48	\$147,059	\$112,000	51
White Debtors	\$122,696	\$45,463	5	\$387,173	\$363,400	8

152. The number of Black and white filers who claimed a homestead in their petition was 159 and 27, but the total number who opted for a federal or D.C. exemption was 156 and 26.

Table A3
Differences of Means by Race

	Black			White			
	Means	Medians	Number of Observations	Means	Medians	Number of Observations	p-value (two-tailed test of mean equality)
Income	\$3,223	\$2,820	303	\$4,043	\$3,069	49	0.115
Expenditure	\$3,554	\$3,109	306	\$4,561	\$3,496	54	0.046
Assets	\$170,366	\$30,767	310	\$225,405	\$24,854	55	0.244
Debt	\$251,427	\$118,389	310	\$385,555	\$133,392	55	0.111
Schedule A-Homestead	\$286,653	\$251,600	156	\$589,174	\$585,000	19	0.000
Schedule C Total	\$56,613	\$9,357	307	\$89,096	\$11,450	55	0.257
Homestead	\$109,469	\$21,625	99	\$285,451	\$259,406	13	0.072
Apparel	\$638	\$400	269	\$511	\$400	49	0.141
Jewelry	\$385	\$200	197	\$268	\$200	35	0.033
Retirement Savings	\$26,001	\$7,543	101	\$15,808	\$4,889	17	0.153

Cash	\$128	\$40	183	\$54	\$40	35	0.166
Checking or Savings Account	\$889	\$300	242				
Vehicle	\$3,496	\$2,728	189	\$1,200	\$600	48	0.264
Schedule B Total	\$27,273	\$11,276	312	\$21,301	\$11,923	56	0.378
Apparel	\$614	\$400	303	\$536	\$350	52	0.403
Jewelry	\$365	\$199	219	\$288	\$200	36	0.221
Retirement Savings	\$25,249	\$7,543	107				
Cash	\$131	\$34	201	\$15,808	\$4,889	17	0.174
Checking or Savings Account	\$915	\$297	264	\$510	\$40	39	0.423
Vehicle	\$8,799	\$6,815	229	\$1,486	\$610	54	0.074
				\$9,928	\$5,850	36	0.682

Table A4
Types of Personal Property Reported

Type of Personal Property as Described in Schedule B	Label Used in Figures
Cash on hand.	cash
Checking, savings or other financial accounts, certificates of deposit, or shares in banks, savings and loan, thrift, building and loan, and homestead associations, or credit unions, brokerage houses, or cooperatives.	account
Security deposits with public utilities, telephone companies, landlords, and others.	security deposit
Household goods and furnishings, including audio, video, and computer equipment.	household goods
Books, pictures and other art objects, antiques, stamp, coin, record, tape, compact disc, and other collections or collectibles.	collectibles
Wearing apparel.	apparel
Furs and jewelry.	jewelry
Firearms and sports, photographic, and other hobby equipment.	hobby
Interests in insurance policies. Name insurance company of each policy and itemize surrender or refund value of each.	insurance
Annuities.	annuity
Interests in an education IRA as defined in 26 U.S.C. § 530(b)(1) or under a qualified State tuition plan as defined in 26 U.S.C. § 529(b)(1). Give particulars. (File separately the record(s) of any such interest(s). 11 U.S.C. § 521(c).)	education IRA
Interests in IRA, ERISA, Keogh, or other pension or profit-sharing plans. Give particulars.	retirement
Stock and interests in incorporated and unincorporated businesses.	stock
Interests in partnerships or joint ventures. Itemize.	partnership
Government and corporate bonds and other negotiable and nonnegotiable instruments.	bonds
Accounts receivable.	receivable
Alimony, maintenance, support, and property settlements to which the debtor is or may be entitled. Give particulars.	alimony
Other liquidated debts owed to debtor including tax refunds. Give particulars.	liquidated debt

Equitable or future interests, life estates, and rights or powers exercisable for the benefit of the debtor other than those listed in Schedule A–Real Property.	future interest
Contingent and noncontingent interests in estate of a decedent, death benefit plan, life insurance policy, or trust.	inheritance
Other contingent and unliquidated claims of every nature, including tax refunds, counterclaims of the debtor, and rights to setoff claims. Give estimated value of each.	claims
Patents, copyrights, and other intellectual property. Give particulars.	IP
Licenses, franchises, and other general intangibles. Give particulars.	license
Customer lists or other compilations containing personally identifiable information (as defined in 11 U.S.C. § 101(41A)) provided to the debtor by individuals in connection with obtaining a product or service from the debtor primarily for personal, family, or household purposes.	customer list
Automobiles, trucks, trailers, and other vehicles and accessories.	vehicle
Boats, motors, and accessories.	boat
Aircraft and accessories.	plane
Office equipment, furnishings, and supplies.	office equipment
Machinery, fixtures, equipment, and supplies used in business.	machinery
Inventory.	inventory
Animals.	animals
Crops—growing or harvested. Give particulars.	crops
Farming equipment and implements.	farm equipment
Farm supplies, chemicals, and feed.	farm supplies
Other personal property of any kind not already listed. Itemize.	other

APPENDIX B: THE DATASET

This Article uses an original dataset compiled from a random sample of bankruptcy petitions filed in 2011 in the United States Bankruptcy Court for the District of Columbia. We use a sample of 501 bankruptcy petitions, out of a total of 959 petitions filed that year.¹⁵³ Jialan Wang, Assistant Professor of Finance at Gies College of Business at the University of Illinois Urbana-Champaign, originally obtained the petitions from the Public Access to Court Electronic Records (PACER) website as part of an unrelated project.¹⁵⁴ Professor Wang generously provided us access to the bankruptcy petitions themselves, as well as to summary of schedules and all debtors' schedules (including any amended schedules).¹⁵⁵ Other documents were also occasionally available.

We opted to analyze 2011 bankruptcy filings because they were the most recent filings made available to us that also occurred within a period that we deem roughly representative of the overall D.C. bankruptcy trends. In particular, the 2011 filing occurred substantially after the last major revision to the Bankruptcy Code (the 2005 amendments, which dramatically altered filing patterns in 2004–2006)¹⁵⁶ and a few years after the Great Recession (which was also associated with atypical filing patterns).¹⁵⁷

153. *Report on Bankruptcy Case Filings, January – December 2011*, U.S. BANKR. CT. FOR THE D.C., https://www.dcb.uscourts.gov/sites/dcb/files/stats_dec2011.pdf (reporting 959 total bankruptcy filings in the district in 2011, including 773 chapter 7 petitions, 154 chapter 13 petitions and 32 chapter 11 petitions). By contrast, the FJC reports 962 total cases for 2011, of which 775 were chapter 7 (80.56%) and 155 were chapter 13 (16.1%). *IDB Bankruptcy 2008-present*, FED. JUD. CTR., https://www.fjc.gov/research/idb/interactive/21/IDB-bankruptcy?circuits%5B%5D=00&districts%5B%5D=90&orgflchp%5B%5D=7&orgflchp%5B%5D=11&orgflchp%5B%5D=13&DOCKET=&gen=0&snapshot=All&snapfile=2&ntrdbt=All&filedate_op=between&filedate%5Bvalue%5D=&filedate%5Bmin%5D=1%2F1%2F2011&filedate%5Bmax%5D=12%2F31%2F2011&closedt_op=%3E&closedt%5Bvalue%5D=&closedt%5Bmin%5D=&closedt%5Bmax%5D=&items_per_page=25&antibot_key=f6b99bce6cc751c6716e2f0b89773e15.

154. Pub Access to Ct. Elec. Rec., <https://pacer.uscourts.gov/> (last visited March 15, 2023) (on file with author); Jialan Wang, UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN GIES COLLEGE OF BUSINESS (last visited March 15, 2023), <https://giesbusiness.illinois.edu/profile/jialan-wang>.

155. If the file contained a debtor's amended schedules, we used the values provided by the debtor on that amended schedule.

156. During this time, bankruptcy filings in D.C. dropped by 71%. *Report on Bankruptcy Case Filings*, *supra* note 153, at 2.

157. *Id.* *Report on Bankruptcy Case Filings*, U.S. BANKR. CT. (2011), <https://www.dcb.uscourts.gov/sites/dcb/files/Filing%20Statistics%202011.pdf>. The main page only goes back a handful of years, but other reports can be found by using the same URL and replacing the last four digits before “.pdf” with the desired year.

The District was chosen as the main geographic focus due to demographic concerns. D.C., affectionately known as “Chocolate City” since the release of the song by the band Parliament in 1975, has a population that is currently 41% Black. Since 1973, the city has also exclusively had Black mayors. The Black political leadership and substantial Black population mean that bankruptcy laws in D.C. could come close to a “best case scenario” in terms of bankruptcy designs that do not exacerbate racial inequities. As such, we considered D.C. a conservative test case for our purposes. Two of the authors also reside in D.C., which helped contextualize some of the nuances of the data.

When filing for bankruptcy, debtors need to provide a substantial amount of personal (e.g., name, address, Social Security number, etc.) and financial (e.g., assets and liabilities, monthly income and expenses) information.¹⁵⁸ For this project we focused in particular on the reported value of the debtor’s real and personal property at the time the bankruptcy case was filed and on the property debtors claimed as exempt.¹⁵⁹

A. Data Entry Work

Generally, the entire set of documents available for each debtor was between thirty-eight and fifty-two pages. Because the petitions sampled came from the same court in the same year, these PACER documents generally followed a similar structure. These documents, however, were typically only available as PDF scans of original handwritten petitions or PDF copies of electronically submitted documents. As a result, a significant part of our work consisted in converting the PACER petitions to a machine-readable spreadsheet format.

Because the order in which individual sections of documents were included varied across individual PDFs, and because petitions usually included multiple PDF files (including amended documents), contained handwritten information, and did not always include the same set of elements (e.g., a debtor’s attorney sometimes included a disclosure of attorney compensation as the first page in the file), the data-coding process could not be automated.

Under the supervision of Matthew Bruckner, two research assistants were hired from Howard University School of Law’s second year class to convert each bundle of PDF documents to a spreadsheet-format dataset.¹⁶⁰

158. *Official Form 101: Voluntary Petition for Individuals Filing for Bankruptcy*, U.S. BANKR. CT. (2022), https://www.uscourts.gov/sites/default/files/b_101.pdf (Official Form 101 is the Voluntary Petition for Individuals Filing for Bankruptcy).

159. As a result, any changes made to the debtor’s claimed exemptions because of objections from a trustee or otherwise may not be fully captured in our data.

160. Three students were initially hired but one had to drop off the effort.

Coders were asked to retrieve information for up to eighty-nine variables per debtor. Professor Bruckner established coding guidelines and reviewed them with students. Students then individually coded five petitions. Professor Bruckner reviewed their work and guidelines were amended as appropriate. For the remaining petitions, students encountering issues not covered in the guidelines would request feedback on a one-off basis, and updated guidelines would be shared with the entire team as needed.

From each petition, coders collected information about the debtor (e.g., name and address) and about their bankruptcy case (e.g., whether the debtor had filed a previous bankruptcy, whether the debtor was represented by an attorney or assisted by a petition preparer, which chapter of the bankruptcy code the case was filed under, and whether the case involved primarily business or consumer debts). Coders also collected information from the statistical summary of certain liabilities, the summary of schedules, and Schedules A, B, C, F, I, and J.¹⁶¹

Coders used Schedules A and B to collect debtors' financial information, and in particular, information on assets held at the time of filing. For example, coders collected information on checking account ownership and, if the debtor owned a checking account, coders recorded the amount of money in that account. Coders also collected information on a variety of other assets, such as household goods, furniture, clothing, appliances, books, animals, crops, and jewelry. If debtors had these assets, coders entered the value the debtors listed for such items on their schedules.

Coders used Schedule C to collect information on debtors' claimed exemptions. Coders used the description of the item provided by debtors to code the exemption into one of the thirty-five categories of assets listed in Schedule B (see Table A4 for list), and then listed the value of the claimed exemption. For example, a debtor might enter bankruptcy with a 1992 Toyota Camry with a fair market value of \$2,375 listed in their Schedule B. Under 11 U.S.C. §522(d)(2), a debtor filing for bankruptcy in 2011 was allowed to keep up to \$3,225 in equity in one motor vehicle.¹⁶² If debtors claimed that exemption on their Schedule, the coders included it in our dataset as an "automobiles, trucks, trailers, and other vehicles and accessories" exemption. Coders also noted whether the debtor claimed the District of Columbia or federal exemptions.

161. These data may be made available to other researchers upon request to the authors.

162. Exemption amounts are updated every three years pursuant to 11 U.S.C. § 104 "to reflect the change in the Consumer Price Index for All Urban Consumers, published by the Department of Labor, for the most recent 3-year period ending immediately before January 1 preceding such April 1, and (2) to round to the nearest \$25 the dollar amount that represents such change." For a debtor filing in 2011, the applicable exemption amounts are set forth in 75 F.R. 8747, which was effective as of Apr. 1, 2010.

Although not used in this Article, coders also collected some information on the nature of the debtor's unsecured debts and on reported expenditures.

To promote accurate data entry, each coder independently coded all 501 petitions in our sample. For handwritten petitions especially, values inputted by petitioners could sometimes be difficult to ascertain. Once each coder had individually collected all the relevant data, Raphaël Charon-Chénier compared duplicate entries for consistency and returned non-matching entries to coders for recoding against the original petitions. An initial comparison of debtor's names (which was necessary to match entries across duplicate files) found approximately 110 nonmatches across 501 debtors. These were due primarily to minor typographical errors or inconsistent use of middle names and other designations (e.g., Jr.). Given the importance of debtors' names for our project,¹⁶³ both coders checked every nonmatching petition against the original record and made corrections where necessary. We repeated the process until we had 100% agreement by both coders on all debtors' names.¹⁶⁴

Once the duplicate datasets could be matched by debtor name, the remaining variables were compared. That comparison revealed mismatches on 3,778 individual data cells out of a total of 23,700, a roughly 16% error rate. Most mismatches appear to be the result of typographical errors or arose because of unclear information on the petitions themselves.¹⁶⁵ Mismatches were distributed roughly evenly across debtors, with nearly every debtor (480 of 501) having a mismatch across at least one variable coded. Half of the entries had mismatches across four or fewer variables, and 90% had mismatches across fewer than ten. As before, each mismatched data cell was flagged, and each coder was instructed to compare entries against the original record and make a correction if appropriate.¹⁶⁶

Some variables we had initially planned to use in analyses proved to have particularly high coder error rates. For instance, coders were asked to identify the amount of medical debt listed on debtors' Schedule F. Some debtors describe medical debt clearly, listing specific liabilities as "medical debt." Other entries, however, might list a veterinary hospital or a medical device as the liability source. Coders' judgements sometimes varied as to whether the liability should be included as medical debt. Out of concern

163. See *infra* notes 172-77.

164. Strictly speaking, this does not necessarily entail coders recording the information accurately in every instance. Agreement could also be reached if both coders made the exact same error. While not impossible, however, this seems unlikely.

165. Another common source of error was when one coder failed to use an amended schedule that was filed separately.

166. In this phase, to accelerate the process, each coder was responsible for recoding half of the data collection. Because coders did not review each other's work at this stage, this could increase the chances that some errors remain in the dataset and were undetected.

for the accuracy of our dataset, we ultimately opted not to include variables on student, medical, and credit card debt that were derived from information provided in Schedule F.¹⁶⁷

Additionally, the authors re-reviewed all the underlying documents related to retirement savings after our initial analysis suggested that there might be data anomalies. For example, in an earlier draft, we reported that the median Black debtor was not exempting all their retirement savings, despite having the legal right to do so.¹⁶⁸ This process uncovered a few errors, which we corrected for this draft.

B. Constructing a Race Variable and our Proxying for Race

Bankruptcy petitions do not require debtors to identify themselves by race or ethnicity. To determine a likely racial identifier for debtors, we use the Bayesian Improved Surname Geocoding (“BISG”) approach.¹⁶⁹ The BISG uses surname and geographic location to estimate a racial proxy. Census data is used to obtain an aggregate measure of racial and ethnic identity for a list of roughly half of all U.S. surnames (151,671 surnames totaling about 294 million individuals).¹⁷⁰ This information is combined with Census data on the racial and ethnic composition of the population across five-digit zip codes.¹⁷¹ The information is combined using Bayes’ theorem to obtain a probability that a given debtor identifies as being of a given racial or ethnic group.

The BISG was initially developed in 2009, and in 2014 the Consumer Financial Protection Bureau (the “CFPB”) published a methodological brief on “Using publicly available information to proxy for unidentified race and ethnicity.”¹⁷² The BISG method improves on previous

167. Student debt information was also provided directly in a different schedule. We retained this variable.

168. Matthew Adam Bruckner, Raphaël Charron-Chénier & Jevay Grooms, *Race, Wealth and Bankruptcy Code Exemptions in Washington DC*, SOC’Y OF ACTUARIES RSCH, INST. (Apr. 2022), <https://www.soa.org/resources/research-reports/2022/race-wealth-bankruptcy/>.

169. Marc N. Elliott, Peter A. Morrison, Allen Fremont, Daniel F. McCaffrey, Philip Pantoja & Nicole Lurie, *Using the Census Bureau’s Surname List to Improve Estimates of Race/Ethnicity and Associated Disparities*, HEALTH SERVS. AND OUTCOMES RSCH. METHODOLOGY 69, 69-83 (2009).

170. The data indicates, for example, that in the 2010 Census roughly 560,000 people reported the last name “Clark”. Of these, 74% reported their race as white, 19% reported their race as Black, and 2.5% reported their ethnicity as Hispanic.

171. To learn more about the step-by-step process, see *Using Publicly Available Information to Proxy for Unidentified Race and Ethnicity*, CONSUMER FIN. PROT. BUREAU (2014), https://files.consumerfinance.gov/f/201409_cfpb_report_proxy-methodology.pdf.

172. *Id.* (In Table 2 on page 14 they reported white individuals self-report being white 82.9% of the time, while BISG predicted individuals to be white 79.7% of the time. Conversely using the surname-only technique white was predicted 75.4% of the time and geography-only white was predicted 78.6% of the time.).

approaches to imputing race and ethnicity by using both surname and zip code methods simultaneously. Elliott et al., (2009) found that BISG affords a 41% efficiency gain compared to surname-only methods, and an over 100% efficient gain relative to geocoding-only techniques.¹⁷³

For each debtor, the BISG provides a probability estimate of racial identification. For our analyses, we created a race proxy using a 50% probability threshold: debtors were assigned a proxy race or ethnicity only if their probability of belonging to a given racial or ethnic group was estimated to be at least 50%. In our sample, after excluding business-related filings, 13 petitions did not meet this 50% threshold and were therefore not retained for analyses. We were unable to use a higher threshold, as some other researchers have done,¹⁷⁴ given the limited number of filings in our sample. Using a 90% threshold, for example, would have required excluding nearly half of the petitions from analysis.

Using this method, we estimate that roughly 74% of debtors in our sample are Black, 14% are white and 12% fall into another category.¹⁷⁵ Proxy race estimates for the full sample of non-business filers can be found in Table B1, below. Our analyses focus on Black and white filers only. Estimates from the 2010 U.S. Census Bureau indicate that 37.5% of D.C. residents are (non-Hispanic) white and 45% are (non-Hispanic) Black.¹⁷⁶ White filers are therefore underrepresented and Black filers overrepresented relative to the D.C. population.¹⁷⁷ This is consistent with previous research that finds Black debtors tend to be overrepresented among bankruptcy filers relative to their share of the population. The disparity in our sample (one and a half times) is smaller than that reported by other researchers, however, who note that Black filers tend to be overrepresented in bankruptcy by a factor of two to three times.¹⁷⁸

173. See Elliott et al., *supra* note 169 (providing evidence of the usefulness of BISG).

174. See Agarwal et al., *supra* note 22, at 9.

175. The “other” category includes Asian or Pacific Islander, Native American, Alaskan Native and Hispanic/Latino.

176. *Decennial Census of Population and Housing Datasets*, U.S. CENSUS BUREAU (2010), <https://www.census.gov/programs-surveys/decennial-census/data/datasets.2010.html>.

177. *Id.* According to data from the 2010 U.S. Census, D.C.’s population was 50.7% Black that year. See Joy Phillips, Ph.D., *District of Columbia Black Population Demographic Characteristics*, D.C. OFF. OF PLAN. (Feb. 2012), <https://planning.dc.gov/sites/default/files/dc/sites/op/publication/attachments/District%2520of%2520Columbia%2520Black%2520Population%2520Demographic%2520Characteristics.pdf>.

178. Foohey et al., *Portraits*, *supra* note 1, at 579 (“Black households file bankruptcy at more than twice the rate they appear in the general population.”); Greene, Patel & Porter, *supra* note 22, at 1056 (“[Blacks are] twice as likely to file chapter 13, even when controlling for homeownership and other legal, geographic, and socioeconomic factors.”); Warren, *supra* note 22, at 1786 (“black families more than three times more likely to file than white families.”).

Table B1
Proxy Race Estimates using BISG

Race or Ethnicity	50% Threshold		70% Threshold	
	N	Proportion $p < 0.5$	N	Proportion $p < 0.7$
Black	326	0.74	286	0.74
White	60	0.14	45	0.12
Other	54	0.12	52	0.14
Below threshold	13	-	70	-
Total	440	1	384	1

C. Data Limitations

Given the richness of our data relative to other available bankruptcy datasets—in particular, our ability to examine assets and exemptions both in the aggregate and for particular categories of goods and services—our primary aim in this project is to provide a descriptive overview of petitions for D.C. residents who filed for bankruptcy in 2011.¹⁷⁹ Our conclusions, however, are limited to this particular sample. We avoid overarching claims about D.C. bankruptcies in other years or bankruptcies in other jurisdictions.

Bankruptcy petitions suffer from occasional missing data issues. Filers occasionally leave off some information requested by bankruptcy forms. Generally, we treat blank entries as a missing value, and therefore exclude these data points from the specific estimates that would make use of them (i.e., we use pairwise rather than listwise deletion). To help readers understand where missing cases were excluded, we report sample sizes used for different estimates; see, for example, Table A3 in Appendix A. For some specific estimates from Schedules B and C, blank entries on petitions are generally used to indicate the absence of an asset or the failure to claim an exemption. For these schedules, we coded blank entries as valid zeros. If some entries were left blank as an oversight rather than to indicate lack of assets or exemptions, this could potentially bias our estimates downward.

Bankruptcy filers are likely to commit some errors and omissions (involuntary or otherwise) when preparing their petitions. As bankruptcy cases move forward, these errors or omissions may be corrected. These corrections, however, may not be reflected in our data. Such entry errors by the original petitioner may account for slight discrepancies we observed across some estimates. Given our limited sample size, we opted not to drop petitioners with inconsistent answer patterns. Instead, we indicate via

179. These data were made available via the U.S. Bankruptcy Court of the District of Columbia. *2011 Bankruptcy Statistics*, *supra* note 107.

footnote whenever an apparent data discrepancy arises because of likely filer error and, where possible, exclude that data point from relevant analyses. Given the legal ramifications of dissimulating information on these petitions, we believe most errors are unintentional. Given the incentives filers have to report correctly and the large number of filers with bankruptcy counsel, we also believe errors are likely limited in numbers.