The Costs of Bankruptcy Misperceptions*

Samuel Antill† Eleanor Jenke‡ Raymond Kluender§

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Abstract

Chapter 7 personal bankruptcy provides remarkably generous debt relief. Why do so few consumers file for bankruptcy? Surveying high-debt individuals, we show that their top concerns about bankruptcy are factually inaccurate: they dramatically underestimate the generosity of Chapter 7 and overestimate credit score consequences. In a randomized controlled trial, we correct bankruptcy misperceptions for randomly selected high-debt individuals. The effects of our information provision treatment persist for months, causing study participants to take action toward filing for bankruptcy. Thus, bankruptcy misperceptions deter filings. This finding implies that marginal filers–whose mistaken beliefs make them indifferent between filing or not–should realize a substantial net financial benefit from filing. In a separate natural experiment, we confirm this implication. Using novel data on prospective filers, we show that the marginal filer increases net worth by $46,971. Finally, in a stylized model, we show that fixing misperceptions can improve social welfare, without credit market consequences, by improving debt relief allocation.

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†Finance Unit, Harvard Business School (email: santill@hbs.edu)

‡Economics Department, Harvard University (email: ejenke@hbs.edu)

§Entrepreneurial Management Unit, Harvard Business School and NBER (email: rkluender@hbs.edu).

1 Introduction

The average individual filing for Chapter 7 bankruptcy erases approximately $115,000 of debt (US Courts, 2023). While some filers must surrender personal assets to repay creditors, 93% retain all of their assets. In spite of these generous terms, only 0.1% of adults file for Chapter 7 bankruptcy each year.[1] Given that 47% of U.S. adults experience daily stress about their debts,[2] why do so few file for bankruptcy? Surveying high-debt individuals, we provide a novel explanation for this puzzle: U.S. adults have no idea how generous bankruptcy is. In a randomized controlled trial (RCT), we show that bankruptcy misperceptions are ubiquitous. Correcting misperceptions causes a meaningful fraction of participants to take action toward filing for bankruptcy. Our findings suggest that bankruptcy misperceptions deter filings.

Specifically, we partner with a credit reporting agency to survey high-debt individuals who could potentially benefit from bankruptcy. In an ongoing RCT, we survey 245 individuals to understand their beliefs and concerns about bankruptcy. To begin our analysis, we directly ask participants what concerns would prevent them from filing for bankruptcy. In contrast to common wisdom, only 5% of individuals view stigma as a primary bankruptcy deterrent. Instead, roughly 29% of individuals are primarily concerned that a bankruptcy will prevent them from accessing credit in the future. Another 46% of individuals worry a bankruptcy will fail to erase debt or cause them to surrender assets.

In a second step, we show that these common bankruptcy concerns are based on incorrectly pessimistic beliefs. We ask participants a series of questions to test their understanding of bankruptcy. While official data show that only 7% of filers surrender any assets, 96% of survey participants believe the risk of asset forfeiture is far higher. Likewise, 98% of participants underestimate the likelihood of successfully erasing debt. Participants are also

[1] In the 12 months preceding June 2025, 320,007 individuals filed for Chapter 7 bankruptcy. See https://www.uscourts.gov/data-news/data-tables/2025/06/30/bankruptcy-filings/f-2. The U.S. population at the same time is roughly 342 million.

[2] See https://www.cbsnews.com/news/nearly-50-of-borrowers-stress-about-debts-daily-what-to-do-about-yours-now/. The *average* household below the poverty line has over $28,000 in dischargable debt. See Table 4 at https://www.census.gov/data/tables/2022/demo/wealth/wealth-asset-ownership.html.

incorrectly pessimistic about credit score consequences. Thus, participants' main concerns about bankruptcy are based on highly inaccurate beliefs about bankruptcy statistics.

In a third step, we show causal evidence that these bankruptcy misperceptions deter filings. After measuring bankruptcy knowledge, we randomly assign participants to groups and provide each group with different facts. A control group learns a placebo fact about labor markets. A "credit access" group learns that the average filer's credit score increases by 80 points in the year after a Chapter 7 filing (Jagtiani and Li, 2013). A "net worth" treatment group learns that only 7% of filers surrender any assets and 96% of filers successfully erase all dischargeable debt. Finally, a "combined" treatment group learns all of the bankruptcy facts mentioned above. Thus, our RCT allows us to randomly correct bankruptcy misperceptions.

We show that providing bankruptcy statistics increases interest in bankruptcy, as measured in the final portion of our survey. Treated participants are 63% more likely to state a willingness to consider bankruptcy in the next year. Roughly 13% of treated participants click on a link to bankruptcy information at the end of the survey. Finally, we use an incentive-compatible mechanism to measure willingness to pay for bankruptcy information: participants enter a lottery and choose whether they prefer a lottery prize of $30 or a prize involving further information about bankruptcy. Our treatment increases willingness to pay for bankruptcy information (i.e., willingness to forgo $30) by 67%. Our preliminary evidence suggests that the net worth treatment is more impactful than the credit access treatment.

We conclude our RCT analysis with a follow up survey that participants complete two months after the initial survey. While this follow up survey is in progress, preliminary evidence suggests that our treatment persistently reduces bankruptcy misperceptions and increases interest in bankruptcy. Most notably, our net worth treatment already has a statistically significant effect causing participants to "take action toward bankruptcy:" they have formed a plan to file in the next year or started to fill out bankruptcy forms.

Our RCT results show that potential filers avoid bankruptcy due to incorrect pessimism. This finding implies that a *marginal filer*, whose incorrect beliefs make them indifferent

between filing or not, should enjoy a substantial realized benefit from filing for bankruptcy. We test this implication in a novel setting. We partner with Upsolve, a 501(c)(3) nonprofit that provides software to help debtors complete bankruptcy filing forms without hiring an attorney.[3] Upsolve provides a free substitute for bankruptcy attorneys, which typically cost around $2,000 (O'Neill, 2023).

Several features of the Upsolve dataset are useful for quantifying the marginal filer's bankruptcy benefit. First, we observe both filers and *prospective filers who did not file*, enabling a rich characterization of who follows through on filing conditional on considering bankruptcy as an option. Specifically, we observe 18,055 Upsolve users who completed their bankruptcy filing paperwork with an average financial benefit from filing of $42,189, only 52% of whom file. Second, the bankruptcy filing petition and associated schedules include much more complete and granular data on prospective filers' debts, assets, income, and expenses than virtually any other dataset on household finances. By partnering with Upsolve, we are able to supplement this rich data with a survey of their users' financial lives and reasons for considering bankruptcy. Third, Upsolve serves a large number of debtors in difficult financial circumstances who would meaningfully benefit from debt relief through bankruptcy but may be marginally deterred by barriers to filing. In particular, we estimate the causal effect of the $338 court fee on whether a debtor files using variation in eligibility for a waiver of the filing fee. We observe a significant number of debtors around the eligibility threshold, which is set at 150 percent of the Federal Poverty Level (FPL).

To measure the marginal filer's gain from filing, we use a regression discontinuity (RD) design around the fee waiver eligibility threshold and estimate that debtors are 7.8 percentage points (14%) more likely to file when they qualify for a waiver of the $338 filing fee in our preferred instrumental variables (IV) estimate. In our first stage, we estimate a stark 89.1 percentage-point increase in fee waiver applications for prospective bankruptcy filers below the FPL threshold. We find no evidence of bunching or differences in prospective filers'

[3]Upsolve's bankruptcy filing tool is similar to tax preparation software such as TurboTax, H&R Block, or IRS Free File.

characteristics around the threshold, supporting the validity of the research design. Our RD results are broadly robust to the included controls, bandwidth selection, kernel weights, and functional form. This effect is remarkably large given that waiver-ineligible non-filers above the threshold (150–250% of the FPL) have an estimated $46,971 of dischargeable debt on average (median $36,613) and the filing fee is just $338. Thus, consistent with misperceptions distorting filing decisions, the marginal filer erases $46,971 of debt.

Finally, we model the welfare implications of our results. Filers potentially impose negative externalities on nonfilers by increasing the costs of credit and other costs associated with maintaining the bankruptcy system. In this sense, a policy aimed at increasing overall filing rates through information provision could backfire. However, we show that an alternative policy could improve the *allocation* of debt relief without changing overall filing rates by simultaneously fixing misperceptions and reducing bankruptcy generosity. We show that such a policy improves welfare; conversely, bankruptcy misperceptions reduce welfare by distorting the allocation of bankruptcy debt relief to high debt individuals.

Contribution to the Literature: To our knowledge, we are the first to show that (i) a large fraction of high-debt individuals underestimate the benefits of personal bankruptcy and (ii) these misperceptions meaningfully deter those individuals from filing. These novel main results contribute to a long literature studying personal bankruptcy (Gross and Souleles, 2002; Keys, Mahoney and Yang, 2023; Indarte, 2023; Gross, Kluender, Liu, Notowidigdo and Wang, 2021; Argyle, Iverson, Nadauld and Palmer, 2020; Argyle, Indarte, Iverson and Palmer, 2023; Dobbie, Goldsmith-Pinkham and Yang, 2017; Dobbie and Song, 2020, 2015; Dobbie, Goldsmith-Pinkham, Mahoney and Song, 2020; White, 1998; Lee, 2023; Domowitz and Sartain, 1999; Gross, Notowidigdo and Wang, 2014; Severino, Brown and Chakrabarti, 2026).[4]

[4]In addition, our experimental design is similar to the design used to study perceptions of corporate bankruptcy in Bernstein, Colonnelli, Hoffman and Iverson (2023).

2 Institutional Details on Bankruptcy

2.1 U.S. Bankruptcy Code

The U.S. bankruptcy code includes two chapters to discharge eligible debts through personal bankruptcy. We focus on Chapter 7, the most popular chapter.[5] In Chapter 7, a debtor discharges eligible debts and, in exchange, forfeits their non-exempt assets to repay creditors (US Courts, 2024c). Eligible debts typically include credit card debt, medical debt, utility bills, auto loans, personal loans, and payday loans.[6] Asset exemptions protect certain assets from being forfeited. Exemptions, which are specified both federally and by state, typically protect one's primary residence ("homestead"), motor vehicle, household essentials, health aids, jewelry, and professional implements. In addition, federal and most state exemptions include a "wildcard" exemption that protects some otherwise non-exempt property. Due to these generous rules, the average Chapter 7 debtor discharges $115,000 of debt (US Courts, 2023).[7] Debtors who discharge their debt through Chapter 7 are ineligible to file again for eight years and their credit reports include a bankruptcy flag for ten years (US Courts, 2024d).

Bankruptcy Statistics: According to official comprehensive data from the Federal Judicial Center (FJC), only 7% of consumer Chapter 7 cases are asset cases: those in which the consumer surrenders assets to the trustee, who sells them to repay creditors (Antill, 2024). According to the same data, 96% of consumer Chapter 7 filers successfully obtain a discharge. According to Jagtiani and Li (2015), the average Chapter 7 filer's credit score increases by 80 points in the year after filing.

[5] In Chapter 13 "reorganization", a debtor keeps their assets but establishes a judge-approved repayment plan: the debtor partially repays debts over three to five years. In 2023, 58% of bankruptcy filers chose Chapter 7 (US Courts, 2023).

[6] Secured debts are not discharged if the underlying collateral is retained (e.g., an auto loan linked to an exempt vehicle). Some other categories of debt, such as student loans or domestic support obligations, are typically not discharged either.

[7] Surrendered nonexempt assets are sold by a trustee to repay creditors, see Antill (2024) for details.

Bankruptcy Access: Access to Chapter 7 is limited in a few ways. First, a prospective filer must pass the "means test," which prohibits high-income individuals from filing for Chapter 7. This test was instituted in 2005 under the Bankruptcy Abuse Prevention and Consumer Protection Act (BAPCPA). Second, the filer must complete the required forms.[8] Third, the filer must pay the upfront costs of filing: (1) approximately $100 for mandatory pre-filing education courses,[9] (2) the court fee of $338,[10] and (3) attorney fees of approximately $2,000 if the debtor chooses to hire an attorney (O'Neill, 2023). Most filers work with an attorney, but 6.5% percent of filers file *pro se* (i.e., on one's own behalf) (Federal Judicial Center, 2024).

The Fee Waiver: Low-income filers can apply for a waiver of the $338 court filing fee. Specifically, a filer whose income is below 150% of the federal poverty line (FPL) is eligible to apply for a court fee waiver (US Courts, 2024b). If they are ineligible for a waiver, a filer may request to pay the $338 fee in up to four installments. The last installment must be paid within 120 days of the filing date (US Courts, 2024a).

2.2 Upsolve

We partner with Upsolve, a 501(c)(3) nonprofit organization that provides free online resources to help debtors in the United States understand their debt relief options, dispute or negotiate their debt, or file for personal bankruptcy. Most users arrive at Upsolve's website through web searches that lead them to their online resources, which include attorney-written

[8] Required forms include: (1) a voluntary petition which initiates the bankruptcy filing; (2) schedules of assets, liabilities, income, and expenses; (3) a statement of financial affairs which covers any legal proceedings, property transfers, and other relevant financial activities; and (4) a statement of current monthly income used to confirm eligibility under the means test (US Courts, 2024c).

[9] BAPCPA requires filers to complete a credit counseling and post-filing debtor education course. Different course providers charge different fees. Regardless of the provider, debtors with incomes below 150% of the FPL are eligible to apply for a course-fee waiver for these courses. We do not observe these course-fee waivers in our data.

[10] The $338 court fee consists of a $245 filing fee, a $78 administrative fee, and a $15 trustee surcharge, payable upon filing the petition. The Chapter 7 court fee is constant throughout our study period. The fee was last adjusted in December 2020, increasing from $335 to $338 (Rao, 2020).

articles on debt- and bankruptcy-related topics such as asset exemptions, debt collection practices, and wage garnishment.

Upsolve's leading service is a "TurboTax for Bankruptcy" application that helps qualified users prepare their Chapter 7 bankruptcy filing forms without incurring the cost of an attorney.[11] The application auto-populates users' Chapter 7 paperwork using their responses to a detailed questionnaire that covers sources of income, secured and unsecured debts, real and personal assets, expenses, and household characteristics.[12] At the end of the questionnaire, the application automatically assesses users' eligibility for the fee waiver and helps users complete the filing fee waiver application form. Roughly 17,000 debtors have discharged more than $750 million of debt using Upsolve's bankruptcy filing application since its founding in 2016.

Upsolve offers a valuable setting to study the bankruptcy filing decision. We observe all components of 18,055 users' filing forms, including asset and liability-level information. We also observe their demographics and motivations for filing, as measured in an intake survey. While all users in our sample completed their filing paperwork, only 9,356 (52%) ultimately filed, allowing us to compare filers and non-filers. We observe the same detailed information for both sets of users and can thus can explore a large set of observable factors that influence the filing decision. Further, 62% of users have incomes below the fee waiver eligibility threshold (150% FPL), which provides identifying variation for our regression discontinuity (RD) design. Debtors filing using Upsolve comprise 15% of *pro se* Chapter 7 filers over our sample period and 20% of *pro se* filers who do not own a home and filed individually.

[11] Access to the application is limited to debtors with comparatively simple bankruptcy cases, excluding debtors who own homes, plan to file jointly with a spouse, or are involved in personal injury lawsuits. The tool also does not serve users with high incomes that are likely to fail the means test. Upsolve instead connects these users with a bankruptcy attorney in their area.

[12] To assist users with filling out the questionnaire, Upsolve pulls their most recent credit report and pre-populates some fields.

3 Randomized Controlled Trial

We are currently running a randomized controlled trial (RCT) to establish the importance of bankruptcy misperceptions. The trial was preregistered and IRB approved.[13]

3.1 Experiment details

We partner with a major credit reporting bureau to obtain email addresses corresponding to individuals who are likely to benefit from bankruptcy. Our final sample includes individuals that meet the following criteria: (1) they do not own real estate, eliminating the risk of losing a home in bankruptcy; (2) they have never filed for bankruptcy before; (3) they expect that they will never fully repay their debts; and (4) they have at least $10,000 in total debt. Additionally, individuals must pass rigorous attention checks to be included in the final sample. Thus, we confirm that individuals are carefully reading questions. We obtain complete survey responses from 245 individuals who meet these criteria.

After consenting to participate and passing attention checks, participants provide information about their debts and assets. Participants provide their: (1) income; (2) expected income trajectory (increasing or decreasing); (3) debts outstanding by category, including auto loans, medical debt, credit card debt, student loans, payday loans, or other debts; and (4) the values of any vehicles they own.

Next, participants indicate how likely they would be to consider bankruptcy. Participants answer on a numeric scale from 1 (zero chance) to 7 (extremely likely). We then provide participants with a list of potential concerns they might have about filing for bankruptcy. Participants indicate their top concern they would have about filing for bankruptcy.

In the next section of the survey, we ask participants questions to test their understanding of bankruptcy. We ask participants to provide their best guesses and not search the internet for answers. We begin with one question unrelated to bankruptcy: what percentage of working-age adults are currently working or looking for work? As we describe below, we

[13] See https://www.socialscienceregistry.org/trials/15378.

use this question to make our control group comparable to our treatment groups. We then provide a brief summary of Chapter 7 bankruptcy and ask questions about bankruptcy. The rest of the questions relate to bankruptcy: (1) do you think you would have to surrender any assets if you filed for Chapter 7 bankruptcy? (2) what fraction of Chapter 7 filers surrender any assets? (3) in what fraction of cases does the filer erase all of their dischargeable debt (medical debt, credit card debt, or pay day loans)? and (4) what is the average filer's credit score one year after filing relative to their credit score at filing?

At this point in the experiment, participants are randomly assigned to one of four groups: (1) a control group, which learns the labor-market participation rate; (2) a "credit treatment" group, which learns that the average filer's credit score increases by 80 points after filing for bankruptcy (Jagtiani and Li, 2015); (3) a "net worth" treatment group, which learns that 7% of filers surrender any assets and 96% of filers receive a debt discharge; and (4) a "both" treatment group, which learns all of the bankruptcy facts mentioned above. Participants are told the facts corresponding to their randomly assigned group. Participants must successfully reiterate the facts that we provide to complete the survey.

We then measure outcomes. First, we measure the "stated interest" in bankruptcy: we repeat the earlier question asking how likely the participant would be to consider bankruptcy on a scale from 1 to 7. Second, we estimate the participant's willingness to pay for bankruptcy information. We ask participants whether they prefer to receive (1) additional information about bankruptcy or (2) a $30 prize.[14] To incentivize participants to honestly report their preference, we tell participants that they have a chance of receiving their preferred choice. Finally, all treatment-group participants are given a link to the Upsolve website at the end of the survey. Our third outcome is an indicator equal to one if they click on the link.

In the final section of our survey, we ask questions about demographics and prior experience with bankruptcy.

Roughly two months after participants take the survey, they receive an invitation to con-

[14]The additional information about bankruptcy is a link to the Upsolve website providing facts about bankruptcy in their state (e.g., asset exemptions).

duct a follow up survey. Participants who pass attention checks complete a short follow up survey. First, we ask the same bankruptcy knowledge questions to test whether participants retain the facts that we tell them. Finally, we ask participants whether they have taken one of the following actions since taking our initial survey: (1) spoken with a bankruptcy attorney; (2) made a plan to file for bankruptcy within the next year; or (3) started inputting information into Upsolve to prepare bankruptcy paperwork. We define a variable "Demonstrated Interest" equal to one if the participant answers that they have taken any of these actions. As of now, 139 of the 245 individuals in our sample have completed follow up surveys.

3.2 Experiment Results

3.2.1 Concerns about filing

For each potential concern about filing, Table 1 lists the fraction of participants who rank that concern as their highest concern. Roughly 29% of participants are primarily concerned that a bankruptcy filing will prevent them from accessing credit in the future. Another 37% are primarily concerned that a bankruptcy will not work, leaving them with debt. Roughly 14% believe a bankruptcy would be too expensive and 10% are primarily concerned about surrendering assets.

It is worth noting that many of the rational explanations for avoiding bankruptcy that the literature has studied do not appear to concern survey respondents. While the literature emphasizes the negative stigma of filing for bankruptcy, only 5% of participants are primarily concerned about others finding out about their filing. Only 3% consider the fact that a bankruptcy could prevent them from filing at a future date.

3.2.2 Bankruptcy misperceptions

Table 1 shows that many high-debt individuals are concerned that a bankruptcy might not work and could lead to asset forfeiture and limited credit access. How warranted are

these concerns? To answer this question, we examine participants' reported beliefs about bankruptcy statistics related to these concerns.

Figure 1 provides a histogram of responses regarding the probability of surrendering assets. Blue bars indicate the frequency (on the y axis) with which participants report each probability on the x axis. The vertical black line at 7% marks the correct answer. The figure shows that the vast majority (96%) of participants overestimate the probability that a Chapter 7 filer surrenders assets. The median participant overestimates the likelihood of surrendering assets by 43 percentage points.

Figure 2 provides a histogram of responses regarding the probability of successfully discharging debt in Chapter 7. Blue bars indicate the frequency (on the y axis) with which participants report each probability on the x axis. The vertical black line at 96% marks the correct answer. The figure shows that the vast majority (98%) of participants underestimate the probability that a Chapter 7 filer erases debt. The median participant underestimates the likelihood of obtaining a debt discharge by 46 percentage points.

Finally, Figure 3 provides a histogram of responses regarding the change in credit score that the average filer experiences in the year after filing for bankruptcy. Blue bars indicate the frequency (on the y axis) with which participants report each credit-score change on the x axis. The vertical black line at 80 points marks the correct answer. The figure shows that 73% of participants are incorrectly pessimistic about how a bankruptcy impacts credit scores. The median participant believes that the average filer's credit score *drops* by 33 points; Jagtiani and Li (2015) show that the average filer's credit score *increases* by 80 points.

In summary, participants are very concerned that a bankruptcy will fail to erase debt, lead to asset forfeiture, and negatively impact their credit scores. Based on their incorrect understanding of bankruptcy statistics, participants dramatically overestimate the likelihood of these negative events associated with filing. In this sense, concerns about bankruptcy are inconsistent with the reality of bankruptcy outcomes.

3.2.3 The causal effects of correcting bankruptcy misperceptions

Next, we estimate the effects of our randomized information treatments. We estimate a participant-level regression in which the outcome is a measure of interest in bankruptcy (e.g., clicking on the link to the Upsolve website). The key independent variables are indicators for the three treatment groups. We omit the indicator for the control group. We include the following control variables: (1) the participant's reported beliefs regarding credit score changes, asset forfeiture rates, and discharge rates; (2) the participant's indicated interest in bankruptcy at the *start* of the survey, as an integer variable taking values from one to seven; (3) fixed effects for the participant's selected age bin; (4) fixed effects for the participant's selected education bin; (5) an indicator equal to one if the participant lacks liquidity to pay for an unexpected $400 expense; and (6) the participant's total debt across all categories. We use robust standard errors.

Our first outcome variable is an indicator equal to one if the participant indicates they are interested in bankruptcy at the *end* of the survey. Following our pregistration, we use a binary variable equal to one if participant selects a value from 5 (somewhat likely) to 7 (extremely likely) when asked if they would consider bankruptcy in the next year. We regress this outcome on the treatment indicators and the control variables listed above. Column (1) of Table 2 presents the results. Our net worth treatment, which informs participants about the true rates of asset forfeiture and debt discharge, increases interest in filing by 20.9 percentage points (54% of the dependent variable sample mean). Our credit access treatment, which informs participants about the average credit score impact, increases interest by 13.8 percentage points. Finally, our combined treatment which includes all the above facts has the strongest effect, increasing interest in filing by 24.6 percentage points.

Our second outcome variable is an indicator equal to one if the participant would prefer to receive information about bankruptcy as a lottery prize, rather than $30. Column (2) of Table 2 shows that our net worth treatment increases the fraction of participants willing to forgo $30 for bankruptcy information by 16 percentage points (67% of the dependent variable mean).

Interestingly, the other treatments have much smaller statistically insignificant impacts.

Our final outcome variable is an indicator equal to one if the participant clicks the link to Upsolve at the end of the survey. This variable should be interpreted with caution. We do not provide the link to the control group, which implies that this outcome variable is always equal to zero for the control group. Nonetheless, it is informative to see how often treated individuals are sufficiently interested to explore further information about bankruptcy. Column (3) of Table 2 shows that 13% of the "both" treatment group click the link and 13% of the net worth treatment group do so. Only 10% of the credit access group click the link.

Together, these results suggest that correcting misperceptions about bankruptcy increases individuals' stated interest in filing for bankruptcy. Information also increases demonstrated interest: treated individuals forgo a $30 prize to instead obtain further bankruptcy information. The patterns suggest that concerns about bankruptcy's net worth implications are stronger than concerns about credit access impacts.

3.2.4 Followup survey

We are still actively collecting responses to our follow up survey; only 139 of the 245 individuals have completed it. However, we already have 18 participants with a demonstrated interest in bankruptcy: they have spoken to a bankruptcy attorney, formed a plan to file, or started the Upsolve process to produce bankruptcy paperwork.

In Table 3, we explore how the randomized interventions in our initial experiment impact responses in the follow up survey two months later. Other than the change in sample (139 individuals who completed the follow up survey) and the change in outcome variables, the regressions are identical to those described in Table 2.

In Column (1), we see that our net worth treatment increases the fraction of participants who have taken action toward bankruptcy (e.g., speaking to an attorney) by 13 percentage points. The effect is marginally statistically significant, which is unsurprising given our

incomplete survey population. The other treatments have smaller, positive, statistically insignificant coefficients.

In the third and fourth columns of Table 3, we see that our information treatments in the initial survey continue to affect bankruptcy beliefs in the follow up survey. The third column shows that participants in the credit access treatment group believe that credit scores are 105 points higher after bankruptcy, relative to the control group. Loosely speaking, the median belief about the impact of bankruptcy filings on credit scores shifts from a 33 point decline to a 72 point increase; this is quite close to the 80 point increase documented by Jagtiani and Li (2013). The fourth column of Table 3 shows that participants in the net worth treatment believe they are 13 percentage points more likely to obtain a debt discharge in bankruptcy, relative to the control group. Both the third and fourth columns show that the combined treatment has a similar but smaller effect correcting misperceptions. Finally, participants in our net worth treatment report a lower likelihood of surrendering assets, though this effect is not statistically significant.

In summary, our followup survey shows promising evidence that the randomized interventions in our initial survey persistently correct misperceptions and increase interest in bankruptcy. We intend to eventually merge this survey data with credit report data to determine the extent to which our treatments drive actual bankruptcy filings.

4 Natural Experiment

Our first set of results show that bankruptcy misperceptions deter filings. An implication of this finding is that a marginal filer–whose incorrect beliefs make them indifferent between filing or not–enjoys a substantial realized benefit after filing. We now test this in a novel setting: a regression discontinuity (RD) design in a sample of prospective filers provided by Upsolve.

4.1 Data

We obtained deidentified data on 18,055 users who completed the bankruptcy filing forms using Upsolve's application between September 2021 and May 2025. We observe each field required to complete the forms including income, expenses, account-level assets and debts, and household structure. We also observe responses to an intake survey that asks users about: (i) their motivations for considering bankruptcy, (ii) the other actions they have taken to improve their financial situation, (iii) whether they would file in the absence of Upsolve, and (iv) basic demographic questions. Upsolve tracks whether users applied for a fee waiver, whether they ultimately filed for bankruptcy, and whether filers received a discharge.[15]

Table 4 presents Upsolve user characteristics and how these characteristics correlate with decisions to file. The average Upsolve user is 42 years old, unmarried (80.9%), and female (62.0%). Nearly half (42.8%) have dependents and 32.1% receive some form of government benefits. Upsolve users are more likely to be Black (30.6%) than the national population. Filers tend to be older and are less likely to be married or have dependents. They are also more likely to receive government benefits. The most commonly cited reasons for considering bankruptcy are falling behind on bills (64.1%), job loss (37.3%), irresponsible spending (36.8%), and medical bills (24.3%).

Prospective filers face extreme financial hardship. The average Upsolve user has $80,366 in total debt, of which $48,218 is likely dischargeable through bankruptcy. In other words, by filing for bankruptcy, the average Upsolve user could discharge an amount of debt equal to over two years of their income.

[15] We do not observe whether users ultimately received a filing fee waiver, or whether they applied for or received fee waivers for the pre-filing credit counseling or post-filing debtor education courses. Some providers automatically waive these fees if the US Bankruptcy Court waived the debtor's filing fee, while others require eligible debtors to complete a form requesting a fee waiver.

4.2 Empirical Framework

We use an RD design to estimate the causal effect of the $338 filing fee on the decision to file for bankruptcy. Our design exploits the threshold for fee waiver eligibility—income equal to 150% of the FPL. At this threshold, we estimate the discontinuity in applications for the fee waiver (and thus exposure to the filing fee). The running variable (income as a percentage of the FPL) is recorded when Upsolve evaluates the prospective filer's eligibility for the fee waiver, and users are notified of their eligibility after completing the questionnaire. Applying for the fee waiver is optional, but Upsolve automatically screens users for eligibility and 94% of eligible users complete the paperwork to apply. For a small number of users, eligibility can change (e.g., if they wait to file and their income shifts above or below the threshold). To account for this imperfect compliance, we use a "fuzzy RD design": we instrument for fee waiver applications using an indicator for whether the user's reported income exceeds 150% of the FPL.We estimate a two-stage least squares regression with the following first and second stage equations:

$$W_i = \alpha_0 + \alpha_1 E_i + \alpha_2(FPL_i - 150) + \alpha_3 E_i \times (FPL_i - 150) + \alpha_4 X_i + \gamma_s + \delta_t + \varepsilon_i \qquad (1)$$

$$F_i = \beta_0 + \beta_1 \hat{W}_i + \beta_2(FPL_i - 150) + \beta_3 E_i \times (FPL_i - 150) + \beta_4 X_i + \gamma_s + \delta_t + \varepsilon_i. \qquad (2)$$

In these equations, i indexes users, FPL_i is income as a percentage of FPL, E_i is an indicator for waiver eligibility (determined by $\mathbf{1}[FPL_i < 150]$), and W_i is an indicator for fee waiver application. Our outcome variable is F_i, an indicator for filing for bankruptcy. The running variable, $(FPL_i - 150)$, represents the percentage-point distance from the 150% eligibility threshold. The vector X_i contains controls for user characteristics. We include year-month fixed effects (δ_t) and state fixed effects (γ_s). Our coefficient of interest is β_1, the effect of receiving the fee waiver ($\hat{W}_i$) on filing (F_i).

Our baseline specification uses a 100 percentage-point bandwidth (50–250% of the FPL), assumes linear relationships above and below the threshold, and uses uniform kernel weights.[16] We control for the number of days the user spent on the questionnaire, the log of each category of debt, the log of each category of assets, demographics, and indicators for users' reasons for considering bankruptcy. The demographic controls include a linear term for age (along with an indicator for age missing) and indicators for gender (female, other, or missing; male omitted), race (Black, Hispanic or Latino, other, or missing; white omitted), having dependents, being married, renting housing, having unstable housing, and receiving government income.

Our identifying assumption is that, absent the discontinuity in fee waiver eligibility, the filing rate and any relevant factors for the filing decision would trend smoothly through the discontinuity. In Appendix B, we show three tests that support this assumption. First, we present the McCrary (2008) and Cattaneo et al. (2020) tests for manipulation of the running variable, which could suggest selection into eligibility for the fee waiver. We find no evidence of bunching around the threshold, which is visually evident in Figure 4 and confirmed by the tests presented in Appendix Figure 9 (p-values of 0.240 and 0.270, respectively). We also assess whether covariates trend smoothly through the discontinuity by estimating equations (1) and (2) with each of the covariates listed above as the dependent variable. These results are shown in Appendix Table 9. As one would expect by random chance given the large number of tests, a small handful of covariates (2 out of 35) have statistically significant discontinuities at the threshold. We plot these covariates in Figure 10 and note that discontinuities at 150% of FPL are not visually pronounced. Further, as described above, we flexibly control for these and other covariates. These controls *strengthen* our main estimates, rather than weakening them as one would expect if the changes in filing behavior were caused by factors other than the fee waiver.

[16] Given our relatively limited sample size of 18,055 users, we select a 100 percentage-point bandwidth to increase precision while avoiding bias from users with incomes far from the threshold. In particular, zero-income users account for 18% of the full sample.

In Table 5 we sequentially add controls for state and year-month fixed effects, debt, assets, demographics, and reasons for filing, controlling for questionnaire completion time in all specifications (our baseline specification in column (6) includes all controls). In Appendix B, we also show robustness to alternate RD specifications. To evaluate the bias-variance tradeoff, we vary the bandwidth from 10 to 150 percentage points and apply triangular kernel weights, which are inversely proportional to the distance from the threshold. This bandwidth range includes the mean squared error (MSE) optimal bandwidth, based on the algorithm from Calonico et al. (2020), which we calculate as 39.8 and 43.5 percentage points when using uniform and triangular kernels, respectively.

4.3 Results on Predictors of the Filing Decision

We leverage our unique data to provide new descriptive evidence on two long-standing questions. First, what are the most important reasons debtors consider filing for bankruptcy? Second, why do so few debtors who would benefit follow through on filing?

There is widespread debate over the reasons debtors file for bankruptcy. We collect the self-reported reasons for considering bankruptcy in an intake survey of Upsolve users. This new dataset provides a larger sample of filers than the Consumer Bankruptcy Project (CBP), which has been recognized as the only systematic data collection on bankruptcy filers (Foohey et al., 2021). Table 4 Panel D summarizes these responses.[17] The most common reasons for considering bankruptcy are being behind on bills (64.1%), job loss (37.3%), and spending irresponsibly (36.8%). Medical reasons are often portrayed as a leading cause (Himmelstein et al., 2009, 2019), but only a quarter of Upsolve users list medical bills as a reason. Of those users, it comprises just 7.0% of outstanding debt, suggesting that medical bills play a meaningful role but are not themselves the leading cause of bankruptcy, as is frequently claimed.[18] Sickness and disability, income loss, and wage garnishment also appear to play

[17] Appendix Table 10 shows the most common combinations of reasons and Appendix Table 11 shows the composition of debt by reason for considering bankruptcy.

[18] See, for example, "Health Care Costs Number One Cause of Bankruptcy for American Families" at the

meaningful roles as triggers for considering bankruptcy.

Table 4 displays this information for the full sample, filers, and non-filers (Columns 1-3), the t-test of the difference in means (Columns 4-5), and the coefficient from a regression of an indicator for filing on the explanatory variable, controlling for income. Several relationships are worth highlighting. Surprisingly, not all debts are positively correlated with following through on filing in the Upsolve sample. Credit card and medical debt are strongly positively associated with filing, while auto debt and debt in collections are *negatively* associated with filing. The auto debt relationship may reflect an aversion to asset forfeiture, as these loans are secured by a vehicle and only dischargeable if the vehicle is surrendered. Debt in collections may be less of a factor because little of this debt is ever repaid and it has smaller financial consequences than other types of debt (Kluender et al., 2024). Upsolve users with more assets, particularly liquid assets, are much more likely to file, indicating that available resources may be an important driver of filing. Conditional on income, individuals who receive income from government benefits are more likely to file, potentially reflecting heightened economic need or lower perceived stigma associated with debt relief. Among the reasons for considering bankruptcy, job loss is the strongest predictor of filing. The other reasons for filing are largely similar across filers and non-filers.

Finally, we can reduce the dimensionality of this exercise and estimate the elasticity of the filing decision to the prospective financial gain from filing. Figure 5 Panel A plots the distribution of the financial benefit, defined as dischargeable debt minus non-exempt assets and the cost of filing. The mean financial benefit is \$42,189 and the median benefit is \$31,575. Given the low incomes within our sample (average monthly household income of \$2,006), even those with smaller benefits may significantly increase their net worth by filing. Panel B shows that the financial benefit is strongly associated with the decision to file: a 10% increase in the benefit of filing increases the likelihood of filing by 0.6 percentage points (+1.2%). Our results echo the Fay et al. (2002) result in a much larger sample of marginal

American Bankruptcy Institute. See Dobkin et al. (2018) for some of the limitations of relying only on self-reports of filers.

bankruptcy filers and a different bankruptcy policy regime.[19]

4.4 Effects of the Filing Fee

Figure 4 presents the first- and second-stage estimates from our baseline RD specification. Panel A presents the distribution of income, with the colors of the bars indicating who opted to apply for a fee waiver (red), apply to pay the fee in installments (blue), or pay the fee in full (green). Panel B plots the first-stage effect of income on application for the filing fee waiver, as estimated in equation (1). Users just below the threshold are 89.1 percentage points more likely to apply for the fee waiver than those just above the threshold. The majority of prospective filers who are ineligible for the fee waiver apply to pay the filing fee in installments rather than upfront, which provides a partial remediation of the liquidity barrier to filing for those above the threshold. As a result, we will understate the impacts of the $338 filing fee on the filing rate relative to a world in which the fee must be paid in full by everyone who does not receive a waiver.

Panel C of Figure 4 presents the second-stage estimates of the fee waiver on bankruptcy filing, as estimated in equation (2). We observe a positive relationship between income and filing below the fee waiver eligibility threshold that flattens above the threshold, and a clear discontinuity in filing at threshold. The $338 filing fee significantly reduces the likelihood of filing by 7.8 percentage points (14%, p-value < 0.001). We emphasize that this estimate reveals an extraordinary degree of sensitivity to the financial barriers prospective filers face in order to obtain debt relief. Non-filers just above the eligibility threshold forgo $46,971 of debt relief on average. This sensitivity would be difficult to generate in any theoretical model that does not include misperceptions, extreme binding liquidity constraints, or perceived nonfinancial costs, like stigma, that generate ambivalence toward filing (making individuals

[19] Using the Panel Study of Income Dynamics from 1984 to 1995, Fay et al. (2002) show that a $1,000 higher financial benefit is associated with a 0.021 percentage-point (+7%) higher probability of filing. In the Upsolve sample, a $1,000 higher financial benefit (+2.4%) is associated with a 0.131 percentage-point (+0.3%) higher probability of filing. We observe 9,356 bankruptcy filings compared to the 254 in their sample.

more sensitive to small marginal barriers).

Our results are broadly robust to alternative specifications. Table 5 presents how our results change when we incrementally add controls for demographics, debt, assets, and reasons for considering bankruptcy (our baseline specification in column (5) includes the full set of controls). The RD estimate generally increases in magnitude with the number of controls, varying from 7.4 to 8.3 percentage points, and it remains significant at the 1% level. In Appendix Figure 11, we vary the bandwidth from 10 to 150 percentage points and test triangular kernel weights. Under both kernels, the RD estimate holds steady between 6.5 and 9.5 percentage points until the bandwidth falls below 25 percentage points, after which the small sample size introduces noise. The 95% confidence interval around the estimate predictably widens with narrower bandwidths. The RD estimate remains significant at the 5% level up to a 35 percentage-point bandwidth in the uniform kernel specification and up to a 40 percentage-point bandwidth in the triangular kernel specification. Our estimate remains robust at the MSE-optimal bandwidth under both kernels (39.8 percentage points for uniform and 43.5 for triangular).[20]

5 Welfare Analysis in a Simple Model

5.1 Overview

This section presents a simple theoretical model to understand the welfare implications of our empirical analysis. There is one period. There are many heterogeneous households. Some households receive a private benefit from filing for bankruptcy. These households do not internalize that filing for bankruptcy can impose a negative externality on other households (e.g., higher interest rates).[21] A social planner chooses the cost of filing for bankruptcy. A

[20]Detailed regression output and RD plots are shown for selected bandwidths (149, 100, 75, and 50 percentage-point and MSE-optimal) are shown in Appendix Table 12 and Appendix Figure 12.

[21]Our results continue to hold if we instead assume that bankruptcy filings create a positive externality. We focus on negative externalities because the positive-externality version is mechanical: the interventions we consider lead to more bankruptcy filings, so welfare is automatically improved unless there is some offsetting

low filing cost lets more households realize private bankruptcy benefits. A high filing cost raises government revenue and mitigates the negative externality associated with bankruptcy filings.

We introduce two frictions in this model. First, some households are liquidity constrained: they cannot file for bankruptcy, regardless of their potential benefit from filing. Note that we assume the planner can raise filing costs without exacerbating liquidity constraints by allowing for deferred payment or changing the dischargeability of tax claims. In this sense, our liquidity constraints correspond to constraints on paying lawyers. Second, some households underestimate the potential benefits they would receive from filing for bankruptcy.

We prove that both of these frictions harm welfare. Specifically, easing liquidity constraints or educating households about bankruptcy benefits would improve welfare. While both of these interventions lead to more bankruptcy filings, a social planner can mitigate the associated negative externality by increasing the filing cost (or lowering the dischargeability of tax claims). Intuitively, these frictions lead to the "wrong" households filing for bankruptcy. A planner can improve welfare because the marginal bankruptcy that is induced by reducing frictions creates a larger welfare benefit than the marginal bankruptcy that is prevented by raising filing costs. In this sense, liquidity constraints and bankruptcy misinformation are inefficient because they distort the allocation of bankruptcy relief.

5.2 Model Assumptions and Results

There is a unit continuum of households. A social planner chooses the cost c of filing for bankruptcy. Each household i has a private net benefit $B_i - c$ from filing for bankruptcy, where B_i is uniformly distributed on $[B_L, B_H]$ for parameters $B_L < 0 < B_H$.

A fraction μ_L of households are liquidity constrained. Specifically, if the binary random variable $L_i \sim \text{Bernoulli}(\mu_L)$ is equal to one, then household i cannot file for bankruptcy.

A fraction $\mu_M \in [0, 1/2]$ of households are misinformed about bankruptcy. Specifically,

negative externality.

if the binary random variable $M_i \sim \text{Bernoulli}(\mu_M)$ is equal to one, then household i believes its private net benefit from filing is $B_i - c - \lambda_M$ for a parameter $\lambda_M \geq 0$. We assume B_H is sufficiently large that $B_H - c - \lambda_M > 0$ for the planner's optimal c, so some misinformed households file for bankruptcy. We assume that B_i, L_i, M_i are mutually independent.

Given these assumptions, household i files for bankruptcy if $L_i = 0$ and $B_i - c - M_i\lambda_M > 0$. The fraction $F(c)$ of households that file for bankruptcy is thus given by

$$F(c) \equiv \mathbb{P}\left(B_i - c - M_i\lambda_M > 0 \text{ and } L_i = 0 \right) = (1 - \mu_L)\frac{B_H - c - \mu_M\lambda_M}{B_H - B_L}.$$

The planner collects $F(c) \times c$ in filing fees and redistributes $F(c) \times c$ to all households. In other words, the planner can lower taxes overall if they collect more filing-fee revenue.

Finally, there is a negative externality $-X(F(c))$ if a fraction $F(c)$ of households file for bankruptcy, where $X : [0, 1] \to [0, \infty)$ is continuously differentiable. This represents, for example, a deterioration of credit markets that could arise if too many households file for bankruptcy.

The social planner chooses the filing cost c to maximize welfare:

$$\text{Welfare} \equiv \max_c \quad \underbrace{F(c) \times c}_{\text{Filing-fee revenue}} \quad - \quad \underbrace{X(F(c))}_{\text{Credit-market externality}} \quad + \underbrace{\mathbb{E}\big[(B_i - c) \times \mathbf{1}\left(\text{ Household i files }\right)\big]}_{\text{Private bankruptcy benefit}}.$$

Proposition 1. *Welfare is decreasing in μ_M: fixing misinformation about bankruptcy improves welfare. Further, if B_H is sufficiently high, then welfare is decreasing in μ_L: easing liquidity constraints improves welfare.*

The proof appears in Appendix A. In summary, we show that fixing bankruptcy misperceptions can improve welfare by reallocating debt relief, even if the overall filing rate is held fixed to avoid negative credit market consequences.

6 Conclusion

Chapter 7 bankruptcy provides remarkably generous debt relief. Why do so few high-debt households file for bankruptcy? Surveying high-debt individuals, we show that their top concerns about bankruptcy are factually inaccurate: they dramatically underestimate the generosity of Chapter 7 and overestimate credit score consequences. In a randomized controlled trial, we correct bankruptcy misperceptions for randomly selected high-debt individuals. Our information provision treatment substantially increases interest in bankruptcy and the effects persist for months. Thus, bankruptcy misperceptions deter filings. This finding implies that marginal filers–whose mistaken beliefs make them indifferent between filing or not–should realize a substantial net financial benefit from filing. In a separate natural experiment, we confirm this implication. Using novel data on prospective filers, we show that the marginal filer increases net worth by $46,971. Finally, in a simple model, we study the welfare implications of these bankruptcy misperceptions. We show that fixing misperceptions can improve social welfare, without credit market consequences, by improving debt relief allocation.

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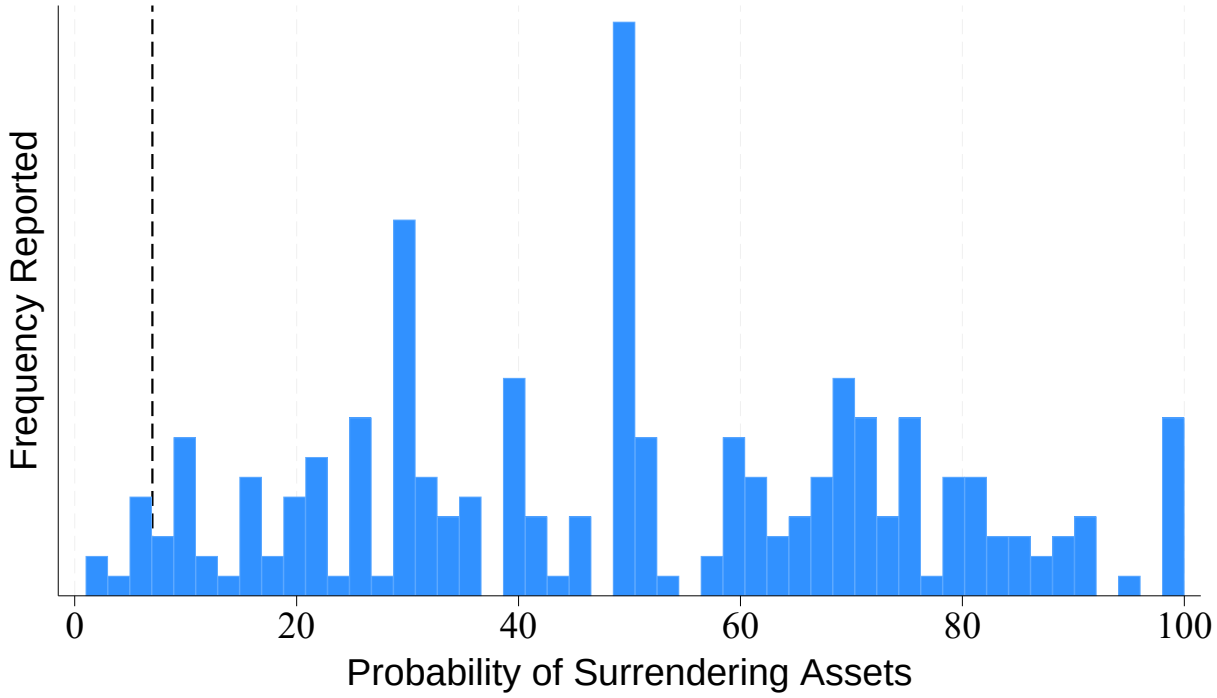
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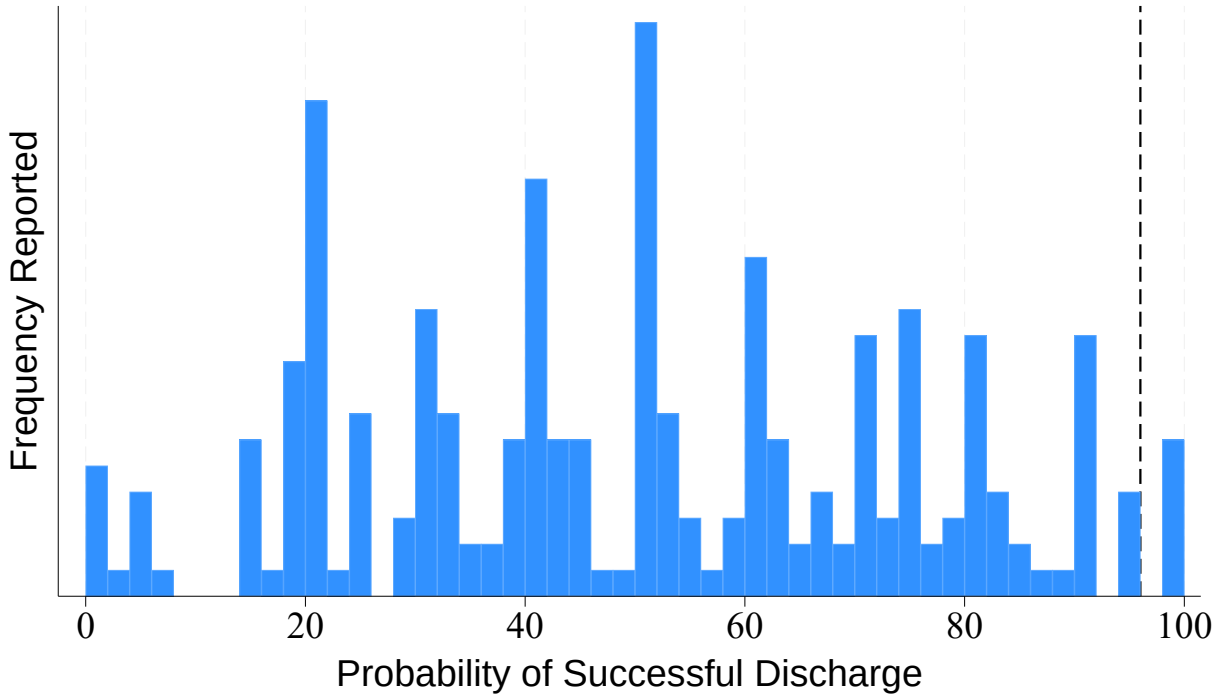
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Figure 1: Beliefs About the Share of Filers Surrendering Assets



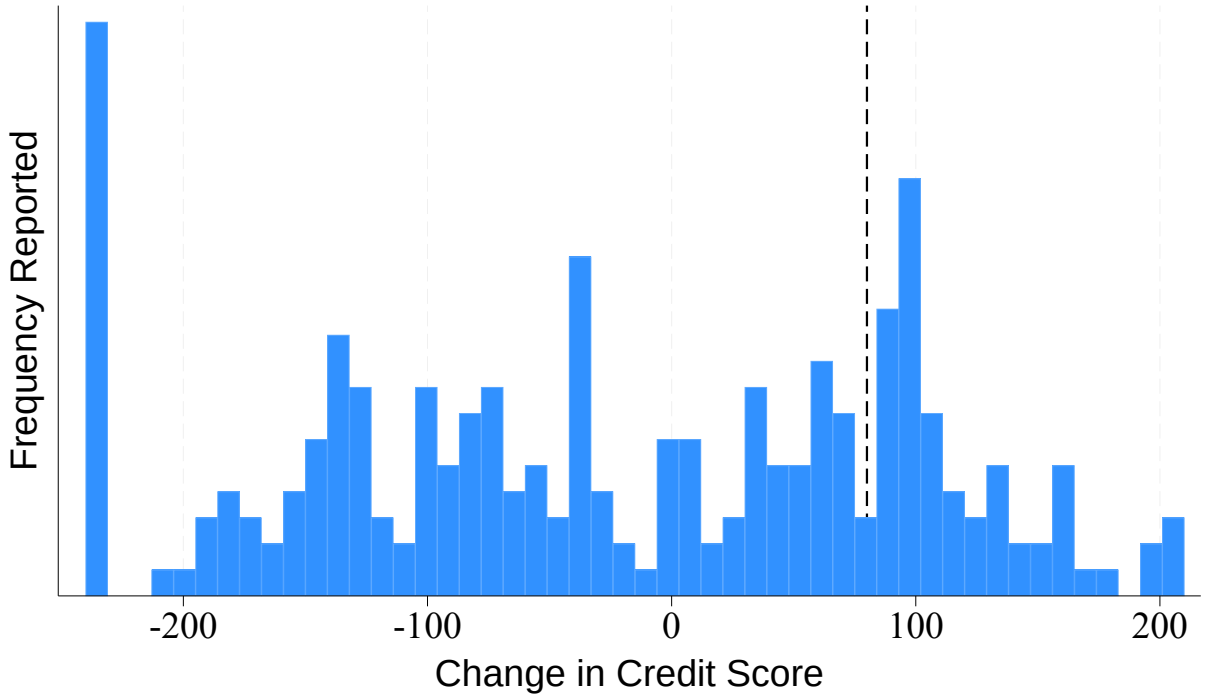
Notes: This figure provides a histogram of responses regarding the probability of surrendering assets. Blue bars indicate the frequency (on the y axis) with which participants report each probability on the x axis. The vertical black line at 7% marks the correct answer.

Figure 2: Beliefs About the Share of Filers with Successful Discharge



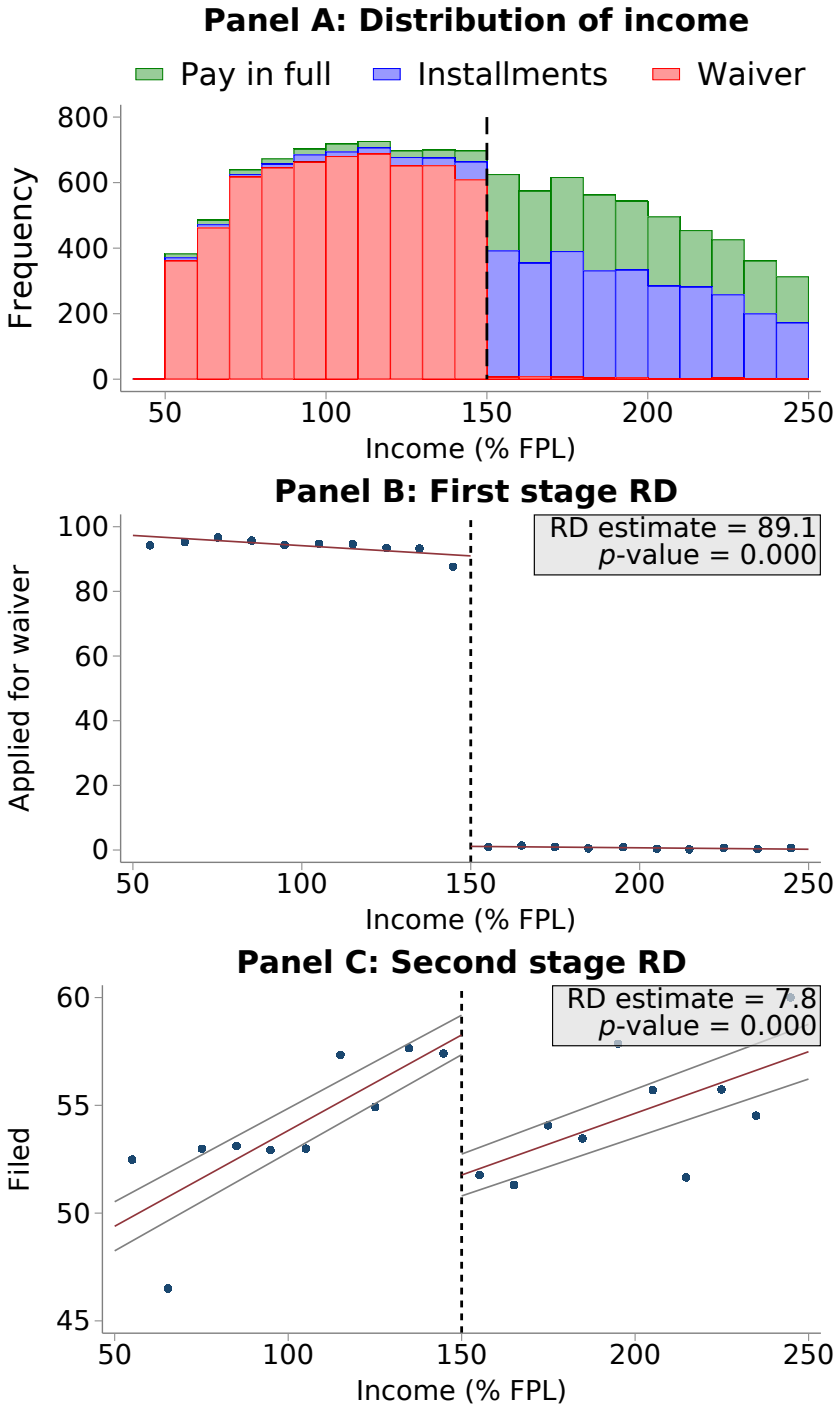
Notes: This figure provides a histogram of responses regarding the probability of obtaining a debt discharge in Chapter 7 bankruptcy. Blue bars indicate the frequency (on the y axis) with which participants report each probability on the x axis. The vertical black line at 96% marks the correct answer.

Figure 3: Beliefs About the Credit Score Impact of Bankruptcy



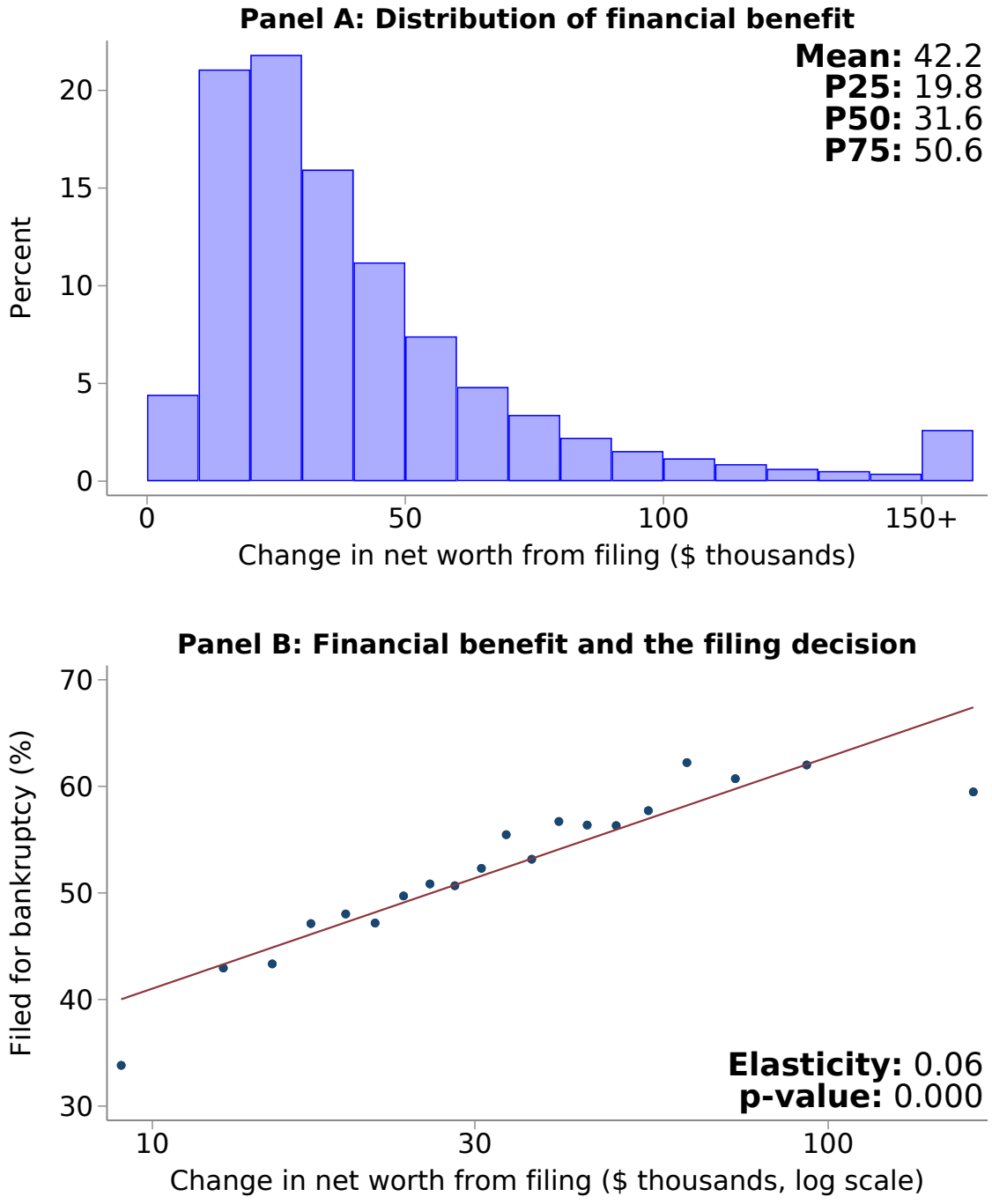
Notes: This figure provides a histogram of responses regarding the change in credit score that filers experience in the year after Chapter 7 filing. Blue bars indicate the frequency (on the y axis) with which participants report each credit score change on the x axis. The vertical black line at 80 points marks the correct answer.

Figure 4: Distribution of Applicant Income and Regression Discontinuity Estimation



Notes: Panel A presents the distribution of income as a percent of the FPL within a 100 percentage-point bandwidth, highlighting users who applied for a fee waiver, applied to pay the fee in installments, or opted to pay the fee in full. Panel B shows the first-stage effect of fee-waiver eligibility (income below 150% FPL) on fee waiver application, and Panel C shows the second-stage effect on filing for bankruptcy. We control for questionnaire completion time, state and year-month fixed effects, debt, assets, demographics, and reasons for considering bankruptcy. The RD estimate and corresponding p-value is included in the top right of panel C. Dots show the mean waiver application and filing rates for 20 quantile income bins. Solid lines are fitted values from first-order polynomials, and gray lines represent 95% confidence intervals.

Figure 5: Upsolve Financial Benefit from Filing and the Filing Decision



Notes: Figure shows the distribution of Upsolve users' financial benefit from filing (Panel A) and the relationship between the financial benefit (on a log scale) and the likelihood of filing (Panel B). The financial benefit from filing is the change in net worth one would experience if they filed for Chapter 7 bankruptcy. The financial benefit is deflated to August 2024 prices and winsorized the at the 99$^{\text{th}}$ percentile. In Panel B, the binned scatterplot includes 20 quartile bins, and the red line represents a fitted line from the regression of the filing decision on log financial benefit. The estimated elasticity and p-value from this regression are in the bottom right of the plot.

Table 1: Top concern about filing for bankruptcy

It might not work	36.6%
I might lose access to credit after filing	28.76%
It would be too expensive	14.38%
I might have to surrender property	9.8%
People might find out that I filed	5.23%
Filing now would prevent me from filing in the future	2.61%
It might take a long time	2.61%

Notes: We list potential concerns about bankruptcy and ask participants to choose their top concern. Each row lists a concern and the fraction of participants for whom this concern is the most worrying.

Table 2: Information provision and interest in bankruptcy

	Interest in Filing	WTP for Info	Click Link
	(1)	(2)	(3)
Net Worth Treat	0.2092***	0.1613**	0.1315***
	(0.0683)	(0.0730)	(0.0485)
Net Worth + Credit Treat	0.2462***	-0.0169	0.1297***
	(0.0599)	(0.0711)	(0.0452)
Credit Access Treat	0.1383**	0.0036	0.1008**
	(0.0680)	(0.0786)	(0.0414)
Observations	245	245	245
Dependent mean	0.390	0.240	0.0900

Notes: We report robust standard errors. See the main text for the control variables and dependent variable definitions.

Table 3: Persistent Effects of Information Provision

	Bankruptcy Action	Surrender Belief	Credit Belief	Discharge Belief
	(1)	(2)	(3)	(4)
Net Worth Treat	0.13*	-4.80	27.19	13.60**
	(0.07)	(6.06)	(24.83)	(6.11)
Net Worth + Credit Treat	0.04	-9.39	72.20***	13.06**
	(0.06)	(6.45)	(24.56)	(5.65)
Credit Access Treat	0.03	0.67	104.51***	-0.14
	(0.07)	(6.02)	(25.55)	(5.41)
Observations	139	139	139	139
Dependent mean	0.130	39.27	567.4	64.76

Notes: We report robust standard errors. See the main text for the control variables and dependent variable definitions.

Table 4: Summary Statistics and Predictors of Filing

	Means			t-test		Filed $\sim X_i$	
	Full sample	Filers	Non-filers	Difference	p	Coefficient[1]	p
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Demographics and household characteristics							
Age (years)	41.7	42.7	40.6	2.1	0.000	0.1	0.000
Male (%)	36.7	37.3	36.2	1.1	0.146	1.0	0.199
Female (%)	62.0	61.6	62.4	-0.8	0.273	-0.8	0.295
Black (%)	30.6	31.0	30.1	0.9	0.238	0.8	0.329
Hispanic or Latino (%)	13.1	12.8	13.4	-0.6	0.221	-1.7	0.141
White (%)	57.8	57.4	58.3	-0.9	0.268	-1.3	0.090
Has dependents (%)	42.8	41.1	44.6	-3.5	0.000	-3.4	0.000
Married (%)	19.1	17.6	20.7	-3.0	0.000	-5.1	0.000
Government benefits (%)	32.1	33.0	31.1	1.9	0.006	4.8	0.000
Monthly household income ($)	2,006	2,059	1,948	110	0.000	.	.
Panel B: Household assets							
Total assets ($)	13,553	14,142	12,920	1,222	0.000	2.4	0.000
Liquid financial assets ($)	475	513	434	78	0.000	2.9	0.000
Vehicle assets ($)	6,859	7,157	6,538	619	0.000	0.6	0.000
Panel C: Household debt							
Total debt ($)	80,366	84,955	75,427	9,528	0.000	5.3	0.000
Unsecured debt ($)	71,288	76,423	65,763	10,660	0.000	5.8	0.000
Dischargeable debt ($)	48,218	51,974	44,176	7,797	0.000	8.8	0.000
Alternative debt ($)	456	492	417	75	0.003	0.4	0.001
Auto debt ($)	13,519	12,875	14,213	-1,338	0.000	-0.6	0.000
Credit card debt ($)	17,769	20,596	14,728	5,868	0.000	2.9	0.000
Debt in collections ($)	5,721	5,916	5,511	405	0.007	-0.7	0.000
Medical debt ($)	1,834	2,024	1,630	394	0.001	1.0	0.000
Student debt ($)	23,380	24,680	21,981	2,698	0.000	0.1	0.341
Other debt ($)	15,394	16,179	14,551	1,628	0.001	0.3	0.000
Panel D: Reasons for considering bankruptcy							
Behind on bills (%)	64.1	62.7	65.7	-3.0	0.000	-2.2	0.022
Lost job (%)	37.3	37.4	37.3	0.1	0.924	3.0	0.001
Spent irresponsibly (%)	36.8	35.8	37.8	-2.0	0.009	-1.6	0.064
Medical bills (%)	24.3	23.1	25.7	-2.6	0.000	-2.0	0.049
Sick or disabled (%)	22.3	21.8	22.9	-1.0	0.118	0.8	0.438
Hours or pay cut (%)	20.0	20.2	19.9	0.3	0.656	1.9	0.070
Wages garnished (%)	12.6	12.5	12.7	-0.2	0.709	0.1	0.928
Divorce (%)	11.1	10.6	11.7	-1.0	0.041	-1.6	0.214
Other reason (%)	51.0	51.2	50.8	0.4	0.637	1.5	0.079
Observations							
N	18,055	9,356	8,699				

Notes: Columns (1) to (3) present summary statistics for the full Upsolve sample, those who file for bankruptcy, and those who do not file. Columns (4) and (5) report the difference in means between filers and non-filers and the p-value from the difference in means t-test. Columns (6) and (7) report the estimated coefficient from an OLS regression of an indicator for filing on the respective characteristic, controlling for income as a percent of the FPL (n Panel E, we additionally control for the number of reasons for considering bankruptcy that the user reported). Users who do not report gender, ethnicity, age, or reasons for considering bankruptcy are excluded from the respective statistics and regressions. The variables in Panels C and D are winsorized at the 99^{th} percentile conditional on being non-zero.
[1]For dollar-based variables, we apply a log transformation before estimating the coefficient. We add one before taking the log to avoid dropping zeroes.

Table 5: Estimated Effect of the Fee Waiver on the Decision to File

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Reduced form (Filed ~ Below 150% FPL)						
Below 150% FPL (E_i)	6.6	6.9	7.4	7.4	7.2	6.9
	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Panel B: First stage (Waiver ~ Below 150% FPL)						
Below 150% FPL (E_i)	89.8	89.3	89.3	89.3	89.1	89.1
	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Panel C: Second stage (Filed ~ $\tilde{Waiver}$)						
Waiver ($\hat{W}_i$)	7.4	7.8	8.3	8.3	8.1	7.8
	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
R^2	0.003	0.018	0.047	0.054	0.064	0.070
Observations						
N	11,390	11,390	11,388	11,388	11,388	11,388
Controls						
Questionnaire duration	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	No	Yes	Yes	Yes	Yes	Yes
State FE	No	Yes	Yes	Yes	Yes	Yes
Debt	No	No	Yes	Yes	Yes	Yes
Assets	No	No	No	Yes	Yes	Yes
Demographics	No	No	No	No	Yes	Yes
Reasons	No	No	No	No	No	Yes

Notes: Table presents linear RD estimates from the Upsolve fuzzy RD model outlined in equations (1) and (2), using a 100-percentage-point bandwidth. Columns incrementally control for questionnaire completion time, state and year-month fixed effects, debt, assets, demographics, and reasons for considering bankruptcy (these controls are outlined in Section 4.2). For each specification we present first-stage (Panel B) and second-stage (Panel C) estimates, as well as reduced-form estimates from the OLS regression of filing on fee waiver eligibility (Panel A). Robust standard errors and p-values are reported in parentheses and square brackets, respectively, below the point estimates. At the bottom of Panel C we present the R^2 from the second-stage model.

A Proof of Model Proposition

Recall: The social planner chooses the filing cost c to maximize welfare:

$$\text{Welfare} \equiv \max_{c} \quad \underbrace{F(c) \times c}_{\text{Filing-fee revenue}} \quad - \quad \underbrace{X(F(c))}_{\text{Credit-market externality}} \quad + \underbrace{\mathbb{E}\big[(B_i - c) \times \mathbf{1}\left(\text{ Household i files }\right)\big]}_{\text{Private bankruptcy benefit}}.$$

Proposition 1. *Welfare is decreasing in μ_M: fixing misinformation about bankruptcy improves welfare. Further, if B_H is sufficiently high, then welfare is decreasing in μ_L: easing liquidity constraints improves welfare.*

Proof:

The c terms in the welfare expression cancel. We are left with

$$\begin{aligned}
&- X(F(c, \mu_M, \mu_L)) + (1 - \mu_L) \left(\mu_M \int_{c+\lambda_M}^{B_H} \frac{b}{B_H - B_L} db + (1 - \mu_M) \int_{c}^{B_H} \frac{b}{B_H - B_L} db \right) \\
&= -X(F(c, \mu_M, \mu_L)) + (1 - \mu_L) \left(\mu_M \frac{B_H^2 - (c + \lambda_M)^2}{2(B_H - B_L)} + (1 - \mu_M) \frac{B_H^2 - (c)^2}{2(B_H - B_L)} \right).
\end{aligned}$$

Differentiate with respect to c:

$$-X'(F(c, \mu_M, \mu_L)) F_c(c, \mu_M, \mu_L) + (1 - \mu_L) \left(\mu_M \frac{-(c + \lambda_M)}{(B_H - B_L)} + (1 - \mu_M) \frac{-c}{(B_H - B_L)} \right) = 0.$$

Noting that $F_c = -(1 - \mu_L)/(B_H - B_L)$, this simplifies to

$$X'(F(c, \mu_M, \mu_L)) = c + \mu_M \lambda_M.$$

This is optimal because the second derivative is always negative so long as $X'' \geq 0$

$$-X''(F(c, \mu_M, \mu_L))(F_c(c, \mu_M, \mu_L))^2 + \frac{-(1 - \mu_L)}{(B_H - B_L)} < 0.$$

Let $c^*(\mu_M, \mu_L)$ denote the value satisfying this equation. Now, differentiate the planner objective with respect to μ_L:

$$\begin{aligned}
&- X'(F(c^*, \mu_M, \mu_L)) \left(F_c(c^*, \mu_M, \mu_L) c^*_{\mu_L} + F_{\mu_L}(c^*, \mu_M, \mu_L) \right) \\
&- \left(\mu_M \frac{B_H^2 - (c^* + \lambda_M)^2}{2(B_H - B_L)} + (1 - \mu_M) \frac{B_H^2 - (c^*)^2}{2(B_H - B_L)} \right) \\
&+ c^*_{\mu_L} (1 - \mu_L) \left(\mu_M \frac{-(c^* + \lambda_M)}{(B_H - B_L)} + (1 - \mu_M) \frac{-c^*}{(B_H - B_L)} \right).
\end{aligned}$$

Applying the first order condition for the optimal c^* (Envelope theorem),

$$-X'(F(c^*,\mu_M,\mu_L))F_{\mu_L}(c^*,\mu_M,\mu_L) - \left(\mu_M \frac{B_H^2-(c^*+\lambda_M)^2}{2(B_H-B_L)} + (1-\mu_M)\frac{B_H^2-(c^*)^2}{2(B_H-B_L)} \right).$$

Note that $F_{\mu_L} = -\left(\frac{B_H-(c^*+\mu_M\lambda_M)}{B_H-B_L} \right)$, so this simplifies to

$$X'(F(c^*,\mu_M,\mu_L))\left(B_H-(c^*+\mu_M\lambda_M) \right) - \frac{1}{2}\left(B_H^2-(c^*)^2-2\mu_M c^*\lambda_M-\mu_M\lambda_M^2 \right).$$

Applying the condition that $X' = c^*+\mu_M\lambda_M$, and omitting the $*$ superscript,

$$(c+\mu_M\lambda_M)\left(B_H-(c+\mu_M\lambda_M) \right) - \frac{1}{2}\left(B_H^2-c^2-2\mu_M c\lambda_M-\mu_M\lambda_M^2 \right).$$

Expanding terms,

$$cB_H - c^2 - c\mu_M\lambda_M + \mu_M\lambda_M B_H - c\mu_M\lambda_M - \mu_M^2\lambda_M^2 - \frac{B_H^2}{2} + \frac{c^2}{2} + \mu_M c\lambda_M + \frac{\mu_M\lambda_M^2}{2}.$$

Cancelling terms,

$$cB_H - \frac{c^2}{2} - c\mu_M\lambda_M + \mu_M\lambda_M B_H - \mu_M^2\lambda_M^2 - \frac{B_H^2}{2} + \frac{\mu_M\lambda_M^2}{2}.$$

Note that

$$\frac{1}{2}(B_H-c-\lambda_M\mu_M)^2 = \frac{B_H^2+c^2}{2} - B_H c + \frac{\lambda_M^2\mu_M^2}{2} - \lambda_M\mu_M(B_H-c),$$

so the derivative is

$$-\frac{1}{2}(B_H-c-\lambda_M\mu_M)^2 + \frac{\mu_M\lambda_M^2}{2}\left(1-\mu_M \right).$$

The first term is negative while the second term is bounded by $\lambda_M^2/8$. Note that $c-\lambda_M\mu_M = X'$ is bounded, so this is negative for large B_H.

Next, differentiate with respect to μ_M:

$$-X'(F(c^*,\mu_M,\mu_L))\left(F_c(c^*,\mu_M,\mu_L)c^*_{\mu_M} + F_{\mu_M}(c^*,\mu_M,\mu_L) \right) + (1-\mu_L)\left(\frac{-\lambda_M^2-2c^*\lambda_M}{2(B_H-B_L)} \right)$$
$$+ c^*_{\mu_L}(1-\mu_L)\left(\mu_M\frac{-(c^*+\lambda_M)}{(B_H-B_L)} + (1-\mu_M)\frac{-c^*}{(B_H-B_L)} \right).$$

Once again, we can apply Envelope theorem to get

$$-X'(F(c^*,\mu_M,\mu_L))F_{\mu_M}(c^*,\mu_M,\mu_L) + (1-\mu_L)\left(\frac{-\lambda_M^2-2c^*\lambda_M}{2(B_H-B_L)} \right).$$

Noting that $F_{\mu_M} = -(1-\mu_L)\lambda_M/(B_H - B_L)$ and $X' = c^* + \mu_M\lambda_M$,

$$(c^* + \mu_M\lambda_M)\lambda_M - (\frac{\lambda_M^2}{2} + c^*\lambda_M) = \lambda_M^2(\mu_M - \frac{1}{2}) < 0.$$

B Appendix Tables

Table 6: Summary Statistics of Upsolve Users vs. All Chapter 7 Filers

	Upsolve			FJC	
	All (1)	Non-Filers (2)	Filers (3)	Ch. 7 (4)	Ch. 13 (5)
Panel A: Filing characteristics (%)					
Chapter 7	.	.	99.9	100.0	0.0
Applied for waiver	59.0	60.1	58.0	.	.
Received fee waiver	.	.	.	4.0	0.0
Pro se	.	.	98.7	6.7	7.5
Panel B: Filing outcomes (%)					
Discharged	.	.	92.9	95.0	3.5
Panel C: Monthly income ($)					
Monthly household income	2,006	1,948	2,059	3,772	5,215
Panel D: Assets ($)					
Total assets	13,553	12,920	14,142	86,880	171,553
Panel E: Debts ($)					
Total debt	80,366	75,427	84,955	128,198	181,299
Secured debt	8,497	8,813	8,204	59,036	130,320
Unsecured priority debt	3,701	3,441	3,942	2,402	4,504
Unsecured non-priority debt	67,299	61,977	72,245	67,775	59,565
Panel F: Region (%)					
Northeast	14.2	13.6	14.8	11.4	10.2
Midwest	23.7	25.2	22.3	27.6	22.2
South	33.5	34.8	32.2	35.6	55.9
West	28.7	26.5	30.7	24.8	9.9
Observations					
N	18,055	8,699	9,356	913,910	605,202

Notes: Table compares Upsolve filers and non-filers to individuals in the Federal Judicial Center (FJC) Integrated Database who filed for personal bankruptcy (Federal Judicial Center, 2024). The FJC sample is limited to individuals with consumer debt who filed new Chapter 7 or 13 bankruptcy cases between September 1, 2021 and March 31, 2025. Income, assets, and debts are deflated to August 2024 prices and winsorized at the 99^{th} percentile. For the Upsolve sample, monthly income, assets, and debt are as of the Upsolve interview date. For the FJC sample, data are as of the closing date if the bankruptcy case is closed, and they are as of March 31, 2025 if the bankruptcy case is still pending.

Table 7: Summary Statistics and Predictors of Filing

	Means			t-test		Filed $\sim X_i$	
	Full sample	Filers	Non-filers	Difference	p	Coefficient[1]	p
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Demographics and household characteristics							
Age (years)	41.7	42.7	40.6	2.1	0.000	0.1	0.000
Male (%)	36.7	37.3	36.2	1.1	0.146	1.0	0.199
Female (%)	62.0	61.6	62.4	-0.8	0.273	-0.8	0.295
Black (%)	30.6	31.0	30.1	0.9	0.238	0.8	0.329
Hispanic or Latino (%)	13.1	12.8	13.4	-0.6	0.221	-1.7	0.141
White (%)	57.8	57.4	58.3	-0.9	0.268	-1.3	0.090
Has dependents (%)	42.8	41.1	44.6	-3.5	0.000	-3.4	0.000
Married (%)	19.1	17.6	20.7	-3.0	0.000	-5.1	0.000
Rents housing (%)	53.2	54.7	51.6	3.0	0.000	1.9	0.012
Unstable housing (%)	3.6	2.9	4.5	-1.6	0.000	-10.0	0.000
Government benefits (%)	32.1	33.0	31.1	1.9	0.006	4.8	0.000
Monthly household income ($)	2,006	2,059	1,948	110	0.000	.	.
Panel B: Household assets							
Total assets ($)	13,553	14,142	12,920	1,222	0.000	2.4	0.000
Liquid financial assets ($)	475	513	434	78	0.000	2.9	0.000
Vehicle assets ($)	6,859	7,157	6,538	619	0.000	0.6	0.000
Panel C: Household debt							
Total debt ($)	80,366	84,955	75,427	9,528	0.000	5.3	0.000
Unsecured debt ($)	71,288	76,423	65,763	10,660	0.000	5.8	0.000
Dischargeable debt ($)	48,218	51,974	44,176	7,797	0.000	8.8	0.000
Alternative debt ($)	456	492	417	75	0.003	0.4	0.001
Auto debt ($)	13,519	12,875	14,213	-1,338	0.000	-0.6	0.000
Credit card debt ($)	17,769	20,596	14,728	5,868	0.000	2.9	0.000
Debt in collections ($)	5,721	5,916	5,511	405	0.007	-0.7	0.000
Medical debt ($)	1,834	2,024	1,630	394	0.001	1.0	0.000
Personal loans ($)	2,128	2,319	1,923	396	0.000	-0.1	0.329
Priority claims ($)	3,701	3,942	3,441	501	0.047	0.5	0.000
Student debt ($)	23,380	24,680	21,981	2,698	0.000	0.1	0.341
Other debt ($)	9,566	9,918	9,187	731	0.045	0.3	0.000
Panel D: Reasons for considering bankruptcy							
Behind on bills (%)	64.1	62.7	65.7	-3.0	0.000	-2.2	0.022
Lost job (%)	37.3	37.4	37.3	0.1	0.924	3.0	0.001
Spent irresponsibly (%)	36.8	35.8	37.8	-2.0	0.009	-1.6	0.064
Medical bills (%)	24.3	23.1	25.7	-2.6	0.000	-2.0	0.049
Sick or disabled (%)	22.3	21.8	22.9	-1.0	0.118	0.8	0.438
Hours or pay cut (%)	20.0	20.2	19.9	0.3	0.656	1.9	0.070
Wages garnished (%)	12.6	12.5	12.7	-0.2	0.709	0.1	0.928
Divorce (%)	11.1	10.6	11.7	-1.0	0.041	-1.6	0.214
Other reason (%)	51.0	51.2	50.8	0.4	0.637	1.5	0.079
Observations							
N	18,055	9,356	8,699				

Notes: Columns (1) to (3) present summary statistics for the full Upsolve sample, those who file for bankruptcy, and those who do not file. Columns (4) and (5) report the difference in means between filers and non-filers and the p-value from the difference in means t-test. Columns (6) and (7) report the estimated coefficient from an OLS regression of an indicator for filing on the respective characteristic, controlling for income as a percent of the FPL (n Panel E, we additionally control for the number of reasons for considering bankruptcy that the user reported). Users who do not report gender, ethnicity, age, or reasons for considering bankruptcy are excluded from the respective statistics and regressions. The variables in Panels C and D are winsorized at the 99^{th} percentile conditional on being non-zero.
[1]For dollar-based variables, we apply a log transformation before estimating the coefficient. We add one before taking the log to avoid dropping zeroes.

Table 8: Composition of Assets and Exemption Status

	Covered by exemption			Distribution of non-zero assets ($)			
	Federal (1)	State (2)	N (3)	Mean (4)	P25 (5)	P50 (6)	P75 (7)
Panel A: Vehicles							
Vehicles	✓	✓	11,860	10,442	2,789	6,561	15,051
Total			**11,860**	**10,442**	**2,789**	**6,561**	**15,051**
Panel B: Other personal assets							
Books	✓	✓	3,349	134	41	90	158
Clothes	✓	✓	18,042	283	100	197	338
Collectibles			2,204	321	65	151	339
Electronics	✓	✓	17,178	839	284	591	1,134
Farm animals	✓	✓	58	573	41	113	233
Non-farm animals	✓	✓	7,195	139	10	59	124
Firearms		✓	1,740	389	154	260	459
Furniture	✓	✓	13,648	562	133	319	702
Health aids	✓	✓	2,680	190	21	62	156
Instruments	✓	✓	1,707	244	59	108	245
Mobile homes		✓	137	7,100	516	1,750	8,450
Recreational items			3,516	208	45	103	218
Tools of the trade	✓	✓	1,498	1,486	308	736	1,477
Wedding rings	✓	✓	2,463	396	68	160	498
Other jewelry	✓	✓	7,935	169	42	100	199
Other personal items			549	1,592	211	505	1,231
Total			**18,055**	**2,120**	**695**	**1,438**	**2,657**
Panel C: Liquid financial assets							
Liquid financial assets		✓	18,055	475	39	160	522
Total			**18,055**	**475**	**39**	**160**	**522**
Panel D: Other financial assets							
College savings accounts	✓	✓	58	4,059	60	519	3,503
Domestic support	✓	✓	906	18,411	2,708	9,593	24,627
Government benefits	✓	✓	55	10,324	998	2,952	11,970
Government payments			3,611	1,863	1,255	1,278	1,833
Health savings accounts		✓	919	381	21	114	445
Illiquid investments			786	915	19	124	568
Insurance	✓	✓	2	158,066	52,582	158,066	263,551
Intangible assets		✓	261	943	5	97	441
IRAs	✓	✓	785	4,719	46	313	2,715
Retirement plans	✓	✓	3,988	8,683	636	2,370	8,645
Rental security deposit		✓	5,885	1,179	516	958	1,577
Other deposits			958	270	123	206	315
Other claims			474	5,101	313	1,068	3,485
Other financial assets			8,516	49	1	1	13
Total			**14,033**	**5,049**	**239**	**1,278**	**3,500**
Observations							
N			18,055				

Notes: Table shows the number of Upsolve users with each category (in bold) and sub-category (not in bold) of assets, along with the distribution of asset values among asset holders. The "Covered by Exemptions" columns indicate whether (1) the asset sub-category is covered by the federal exemptions and (2) the asset sub-category is covered by an exemption in at least one state. Asset categories (e.g., other personal assets) and sub-categories (e.g., clothes) are winsorized at the 99^{th} percentile conditional on being positive.

Table 9: Test for Covariate Balance

	Means			Linear RD	
	Full sample	50-150% FPL	150-250% FPL	Estimate	p-value
	(1)	(2)	(3)	(4)	(5)
Panel A: Demographics and household characteristics					
Has dependents (%)	48.1	52.5	42.4	1.7	0.408
Age (years)	28.6	28.9	28.2	0.8	0.370
Age missing (%)	33.4	33.0	33.8	-0.4	0.826
Female (%)	59.8	62.2	56.7	2.0	0.314
Other gender (%)	1.1	1.0	1.1	-0.1	0.836
Missing gender (%)	8.2	8.1	8.3	-0.8	0.505
Married (%)	21.0	22.2	19.4	4.6	0.005
Black (%)	27.6	28.0	27.1	1.9	0.302
Hispanic or Latino (%)	11.7	11.5	11.9	-0.1	0.930
Other race or ethnicity (%)	5.6	5.6	5.6	-0.8	0.394
Missing race or ethnicity (%)	9.2	9.0	9.3	-2.0	0.091
Rents housing (%)	57.9	53.7	63.4	0.6	0.767
Unstable housing (%)	2.4	2.8	1.8	-0.8	0.159
Government benefits (%)	29.4	42.6	12.4	4.9	0.003
Panel B: Log assets					
Vehicle assets	6.1	5.7	6.6	0.2	0.172
Liquid financial assets	5.0	4.8	5.3	-0.1	0.076
Other personal assets	7.2	7.1	7.3	0.0	0.731
Other financial assets	5.3	4.9	5.8	0.0	0.796
Panel C: Log debt					
Alternative debt	1.4	1.3	1.5	0.0	0.987
Auto debt	6.1	5.9	6.4	0.1	0.472
Debt in collections	5.4	5.6	5.3	-0.0	0.942
Credit card debt	8.6	8.4	8.8	-0.2	0.109
Medical debt	2.4	2.2	2.6	0.0	0.860
Personal loans	2.3	2.2	2.6	0.1	0.648
Priority claims	2.0	1.8	2.3	-0.0	0.962
Student debt	5.0	4.8	5.3	-0.1	0.532
Other debt	5.6	5.6	5.7	0.1	0.644
Panel D: Reasons for considering bankruptcy					
Behind on bills (%)	56.6	56.0	57.3	-3.3	0.101
Lost job (%)	25.0	26.8	22.6	-0.8	0.632
Spent irresponsibly (%)	32.9	29.9	36.7	-2.1	0.270
Sick or disabled (%)	18.1	20.1	15.6	-0.7	0.633
Wages garnished (%)	13.1	13.8	12.2	0.5	0.692
Hours or pay cut (%)	19.1	19.4	18.7	-1.7	0.285
Divorce (%)	9.8	9.9	9.7	0.6	0.650
Medical bills (%)	21.9	20.7	23.3	-2.0	0.228
Missing reasons (%)	12.3	12.1	12.4	1.1	0.403
Panel E: Time to complete questionnaire					
Days to finish questionnaire	42.9	42.9	42.9	1.7	0.728
Observations					
N	11,390	6,175	5,215		

Notes: Table presents summary statistics for the full Upsolve sample and users within the left and right 100-percentage point bandwidths. The four rightmost columns report coefficients on an indicator for fee-waiver eligibility (income below 150% FPL) and p-values from our baseline RD specification, using a 100-percentage point bandwidth and excluding the fixed effects and controls.

Table 10: Top Combinations of Reasons for Considering Bankruptcy

	Behind on bills (1)	Lost job (2)	Spent irresponsibly (3)	Medical bills (4)	Sick or disabled (5)	Hours or pay cut (6)	Wages garnished (7)	Separation or divorce (8)	Other reason (9)	N (10)	(%) (11)	Filers (12)	(%) (13)	Filed (%) (14)
1.									✓	3,188	17.7	1,791	19.1	56.2
2.	✓									1,065	5.9	587	6.3	55.1
3.	✓		✓							1,050	5.8	522	5.6	49.7
4.	✓	✓								905	5.0	456	4.9	50.4
5.		✓								743	4.1	397	4.2	53.4
6.			✓							599	3.3	319	3.4	53.3
7.	✓	✓	✓							517	2.9	243	2.6	47.0
8.	✓					✓				412	2.3	218	2.3	52.9
9.	✓		✓	✓						380	2.1	185	2.0	48.7
10.	✓			✓						346	1.9	165	1.8	47.7
11.					✓					316	1.8	167	1.8	52.8
12.	✓	✓			✓					308	1.7	157	1.7	51.0
13.							✓			276	1.5	159	1.7	57.6
14.	✓				✓					271	1.5	144	1.5	53.1
15.	✓		✓			✓				263	1.5	129	1.4	49.0
16.		✓	✓							237	1.3	142	1.5	59.9
17.	✓						✓			236	1.3	111	1.2	47.0
18.	✓	✓				✓				232	1.3	120	1.3	51.7
19.						✓				218	1.2	124	1.3	56.9
20.	✓	✓		✓						214	1.2	115	1.2	53.7

Notes: Table lists the top 20 most common combinations of reasons for considering bankruptcy among Upsolve users. For users that list at least one reason from columns (1) to (8), we group users that do or do not select "other" as a reason. Columns (10) and (11) show the number of users with each combination of reasons and the share of total observations. Columns (12) and (13) show the number of users who filed with each combination of reasons and the share of total users who filed. Column (14) reports the share of users with a given combination of reasons who filed for bankruptcy.

Table 11: Composition of Debt by Reason for Considering Bankruptcy

	Full sample (1)	Behind on bills (2)	Lost job (3)	Spent irresponsibly (4)	Medical debt (5)	Sick or disabled (6)	Hours or pay cut (7)	Wages garnished (8)	Divorce (9)	Other (10)
Total debt ($)										
Total debt	80,366	81,285	84,166	76,658	84,504	81,829	80,929	79,585	90,974	81,478
Dischargeable debt	48,218	47,368	51,171	45,894	48,974	49,414	47,803	45,612	54,056	48,622
Non-dischargeable debt	31,046	32,899	31,752	30,044	34,195	31,181	32,310	33,158	35,374	31,504
Composition of debt (%)										
Alternative debt	0.6	0.7	0.5	0.7	0.6	0.6	0.7	0.5	0.4	0.6
Auto debt	17.3	19.0	16.1	17.8	17.3	15.3	18.3	20.2	17.7	21.1
Credit card debt	22.8	19.9	24.0	23.7	15.8	22.9	22.0	11.3	9.9	25.0
Debt in collections	7.3	7.6	7.6	6.7	8.5	7.6	6.9	9.1	8.0	7.8
Medical debt	2.3	2.2	2.1	1.9	7.0	4.1	1.8	3.4	3.0	1.9
Personal loans	2.7	2.7	2.4	3.4	2.3	2.2	2.8	1.5	1.3	3.2
Priority claims	4.7	4.6	5.4	3.5	4.7	5.4	4.2	7.9	6.9	5.4
Student debt	29.9	31.7	29.3	31.8	32.6	29.6	31.4	30.3	26.5	32.7
Other debt	12.3	11.6	12.6	10.5	11.2	12.4	12.0	15.8	13.8	14.1
Observations										
N	18,055	10,148	5,904	5,818	3,850	3,532	3,171	1,993	1,761	8,074

Notes: Table presents total debt, dischargeable and nondischargeable debt, and the composition of debt by category for the full sample (column 1) and for users who select each reason for considering bankruptcy (columns 2-10). Debt categories are winsorized at the 99^{th} percentile conditional on being non-zero. Users may select multiple reasons for considering bankruptcy.

Table 12: Robustness of RD Estimation to Kernel Weights and Selected Bandwidths

	Bandwidth selection				
	149pp	100pp	75pp	50pp	MSE Optimal
	(1)	(2)	(3)	(4)	(5)
Panel A: Uniform kernel					
Coefficient on Below 150% FPL (E_i)	89.9	89.1	88.2	86.8	85.6
(Outcome = Waiver)	(0.6)	(0.7)	(0.8)	(1.1)	(1.3)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Coefficient on Waiver ($\hat{W}_i$)	6.6	7.8	7.1	9.3	6.7
(Outcome = Filed)	(1.7)	(2.0)	(2.2)	(2.8)	(3.1)
	[0.000]	[0.000]	[0.001]	[0.001]	[0.034]
R^2	0.070	0.070	0.072	0.082	0.091
N	13,949	11,388	9,325	6,458	5,171
Panel B: Triangular kernel					
Coefficient on Below 150% FPL (E_i)	88.9	87.9	87.0	85.3	84.2
(Outcome = Waiver)	(0.7)	(0.8)	(1.0)	(1.3)	(1.4)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Coefficient on Waiver ($\hat{W}_i$)	7.2	7.7	7.9	7.5	6.3
(Outcome = Filed)	(1.8)	(2.2)	(2.5)	(3.1)	(3.4)
	[0.000]	[0.000]	[0.001]	[0.014]	[0.066]
R^2	0.071	0.074	0.079	0.089	0.094
N	13,949	11,387	9,325	6,453	5,171

Notes: Table presents RD estimates from the Upsolve fuzzy RD model outlined in equations (1) and (2), using different bandwidths around the 150% FPL threshold and different kernel weights. The bandwidth is indicated in the column header. Panel A uses uniform weights and Panel B uses triangular weights. Both panels control for questionnaire completion time, state and year-month fixed effects, debt, assets, demographics, and reasons for considering bankruptcy (outlined in Section 4.2). The coefficients on "Below 150% FPL" are first-stage estimates, and the coefficients on "Waived" are second-stage estimates. Robust standard errors and p-values are reported in parentheses and square brackets, respectively, below the point estimates. The R^2 for the second-stage model and sample size are shown at the bottom of each column.

Table 13: Bankruptcy Exemptions

Exemption	**Coverage**	**Federal Limit (effective as of) April 1, 2022**
Homestead	Equity in one's primary residence	$27,900
Vehicle	One motor vehicle	$4,450
Personal Assets	Personal items (e.g. furniture, appliances, clothing)	$14,875
Jewelry	Jewelry	$1,875
Tools of the Trade	Tools used for work (e.g., books, instruments, tools)	$2,800
Life Insurance	Life insurance policy with cash value	$14,875
Wildcard	Any assets not covered by other exemptions	$1,475
Unused Homestead	Any assets not covered by other exemptions (only available if homestead exemption was not fully used)	Up to $13,950

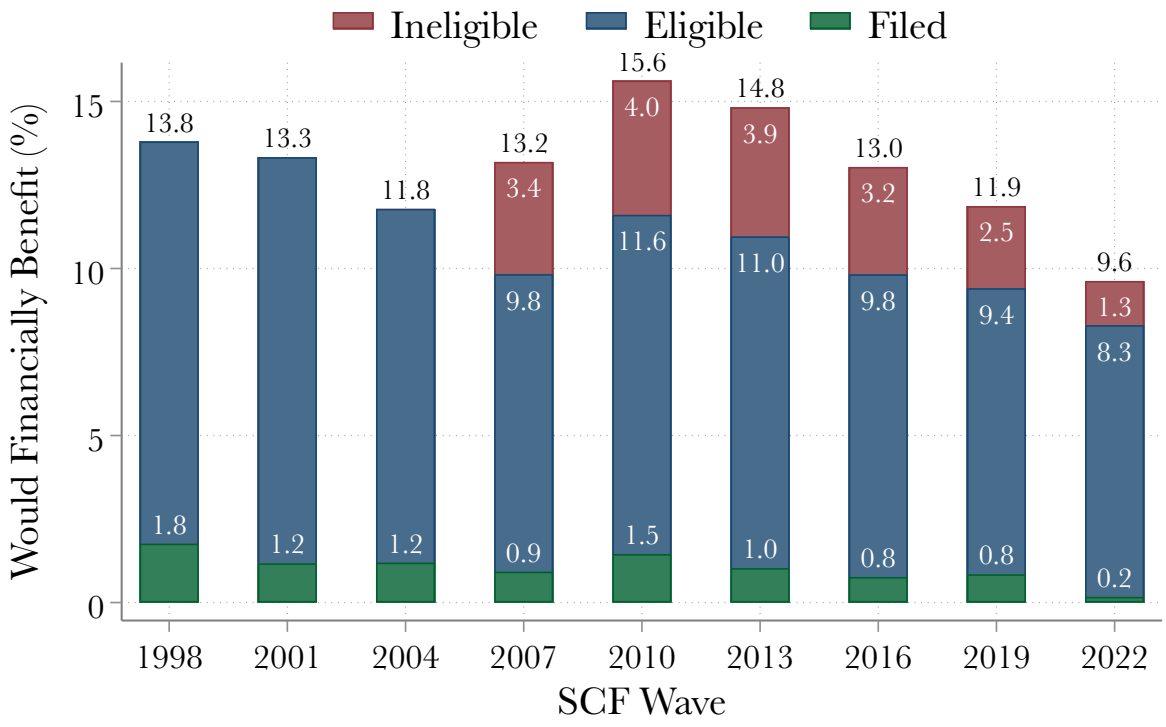
Notes: Table presents the asset exemptions provided by the federal bankruptcy code and the current dollar limits, effective as of April 1, 2022.

Table 14: Financial Benefit Calculation Example

	Category (1)	**Equity in Assets** (2)	**Remaining Exemptions** (3)	**Explanation** (4)
1.	Homestead	Home: $10,000	Homestead: $17,900 Wildcard: $1,475 Unused Homestead: $13,950	Homestead is exempt and mortgage debt is not discharged.
2.	Motor Vehicles	Vehicle #1: $3,500 Vehicle #2: $1,200	Vehicle: $950 Wildcard: $275 Unused Homestead: $13,950	Vehicle exemption protects vehicle #1, and wildcard covers vehicle #2. Associated auto loans are not discharged.
3.	Investment Properties	None	Wildcard: $950 Unused Homestead: $13,950	
4.	Other Vehicles	Motorcycle: $2,500	Wildcard: $0 Unused Homestead: $12,400	Remaining wildcard and unused homestead exemptions protect motorcycle. Associated secured debt is not discharged.
5.	Businesses	None	Wildcard: $0 Unused Homestead: $12,400	
6.	Jewelry	Wedding Ring: $1,250 Watch: $800	Jewelry: $0 Wildcard: $0 Unused Homestead: $12,225	Ring covered by jewelry exemption, watch covered by remaining jewelry exemption and unused homestead exemption.
7.	Misc. Assets	Painting: $2,000	Wildcard: $0 Unused Homestead: $10,225	Unused homestead exemption covered painting.
8.	Life Insurance	Cash Value: $16,000	Life Insurance: $0 Wildcard: $0 Unused Homestead: $9,100	Life insurance covered by life insurance and unused homestead exemptions.
9.	Financial Assets	Checking Accounts: $8,000 Stocks $5,000	Wildcard: $0 Unused Homestead: $0	Unused homestead exemption covered all of checking accounts and $1,100 of stocks. Remaining $3,900 of stocks are non-exempt.

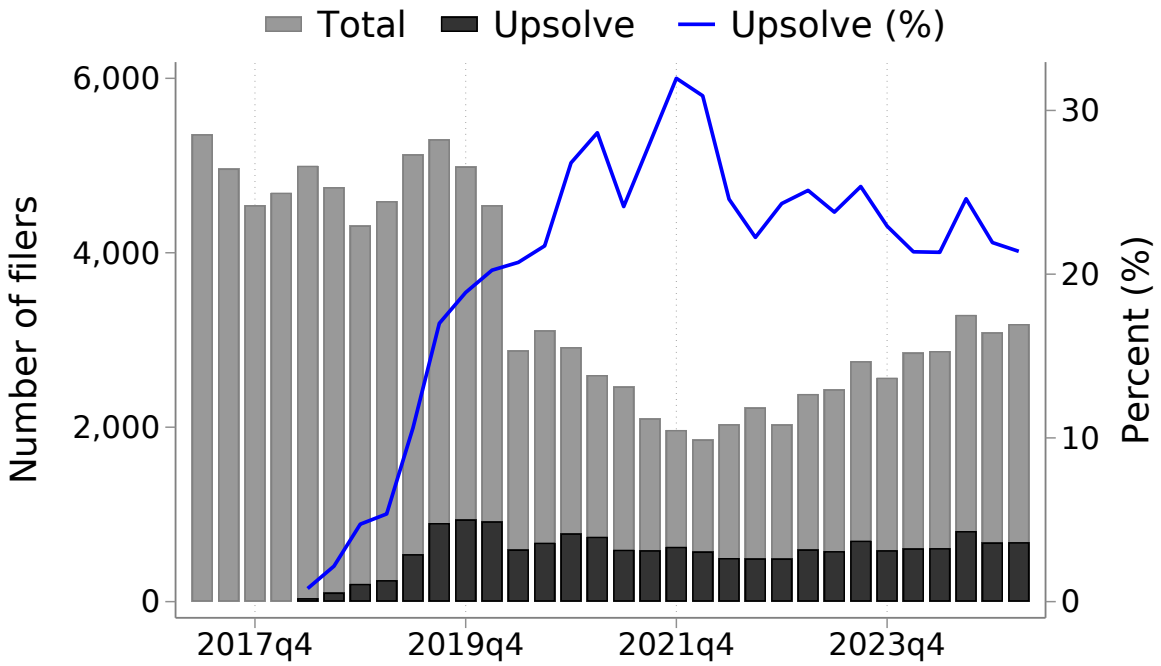
Notes: This table demonstrates a hypothetical example of how we apply bankruptcy exemptions in the SCF financial benefit calculation. We use the 2022 federal exemptions outlined in Appendix Table 13. The rows indicate the order in which we apply exemptions. Column (1) indicates the asset category, and column (2) lists the hypothetical individual's assets in each category and their equity in each asset. Columns (3) indicates the remaining applicable exemptions after each step, and column (4) provides an explanation. With each asset category, we first exempt the highest-value asset that fits within the combined value of the applicable exemption and the remaining wildcard and unused homestead exemptions. We repeat this process with remaining assets in the category, then move to the next category.

Figure 6: SCF Financial Benefit Calculation



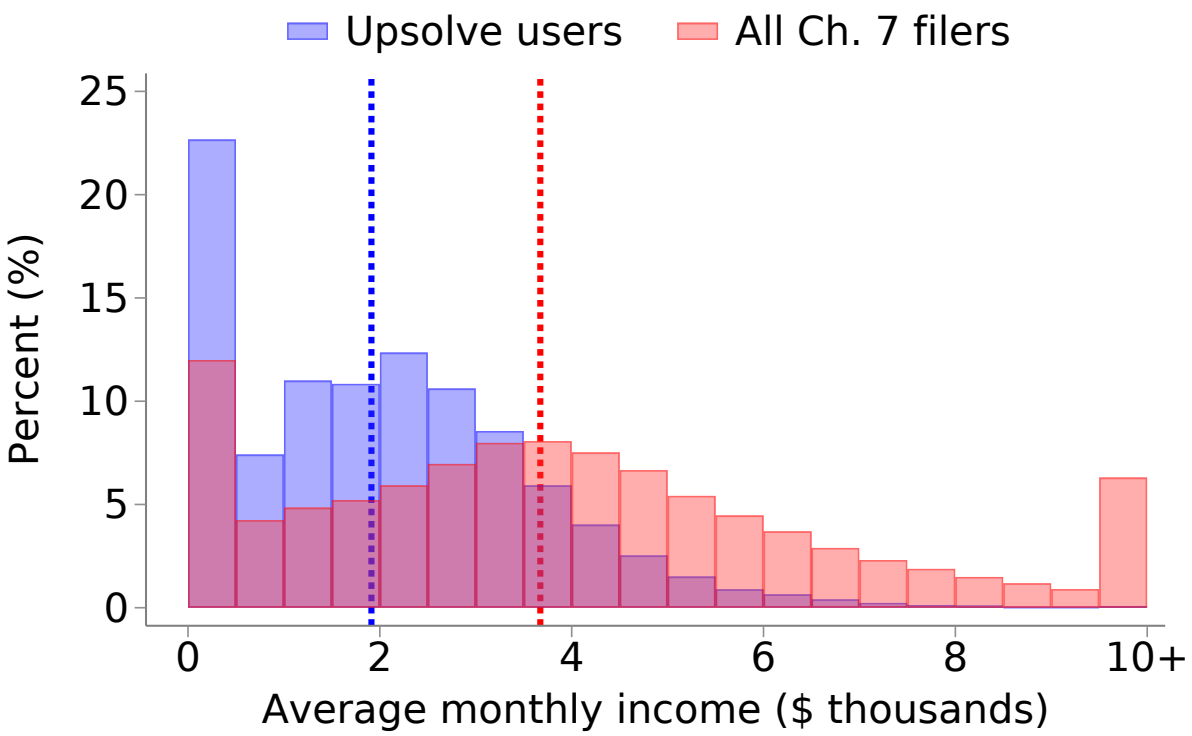
Notes: Figure shows the percentage of individuals who would benefit from filing for Chapter 7 bankruptcy across the 1998 through 2022 waves of the Survey of Consumer Finances (SCF) (Board of Governors of the Federal Reserve Board, 2023) The methodology for this calculation is outlined in Appendix **??**. Blue bars indicate households who would financially benefit and are eligible to file for Chapter 7 bankruptcy; red bars indicate households who would financially benefit but are ineligible. Green bars indicate households who filed within the past year.

Figure 7: Upsolve-Eligible Chapter 7 Filings Over Time



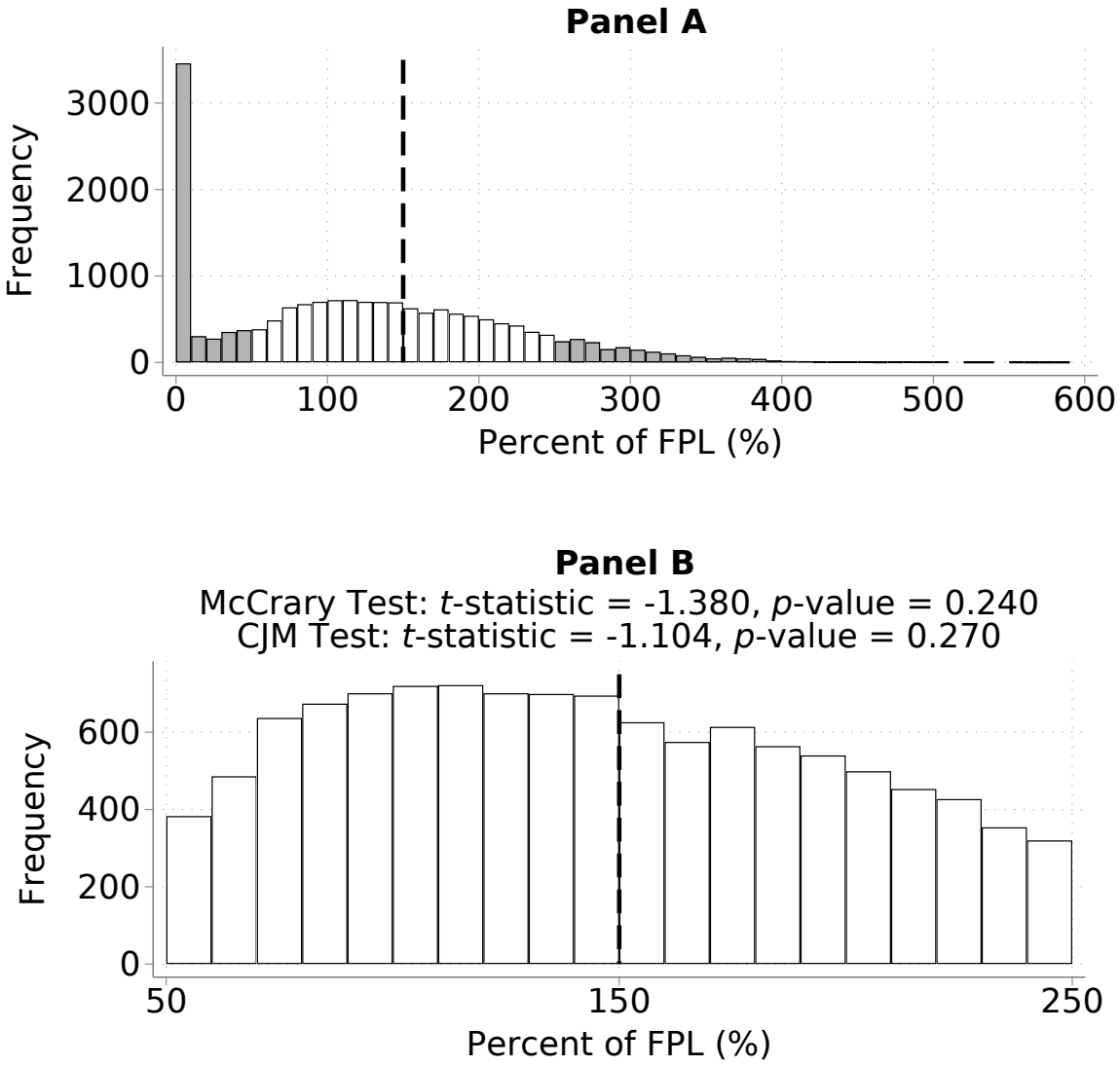
Notes: Figure shows the number of Upsolve bankruptcy filings and Upsolve-eligible filings in the Federal Judicial Center (FJC) database between 2017 Q2 and 2025 Q1 (Federal Judicial Center, 2024). The first recorded Upsolve filing is in 2018 Q2. We define Upsolve-eligible filings as non-joint Chapter 7 cases filed pro se by non-homeowners. The blue line presents the share of Upsolve-eligible filings attributed to Upsolve users, calculated by dividing the number of Upsolve filings by the number of Upsolve-eligible FJC filings.

Figure 8: Distribution of Income for Upsolve Users vs. All Chapter 7 Filers



Notes: Figure shows the distribution of average monthly income for Upsolve users (filers and non-filers) and all Chapter 7 filers in the Federal Judicial Center (FJC) database between September 2021 and March 2025. Income is deflated to August 2024 prices and is winsorized at $0 and $10,000. The bars of the histogram are $500 in width, and the blue and red dashed lines represent the median income for the Upsolve and FJC samples, respectively.

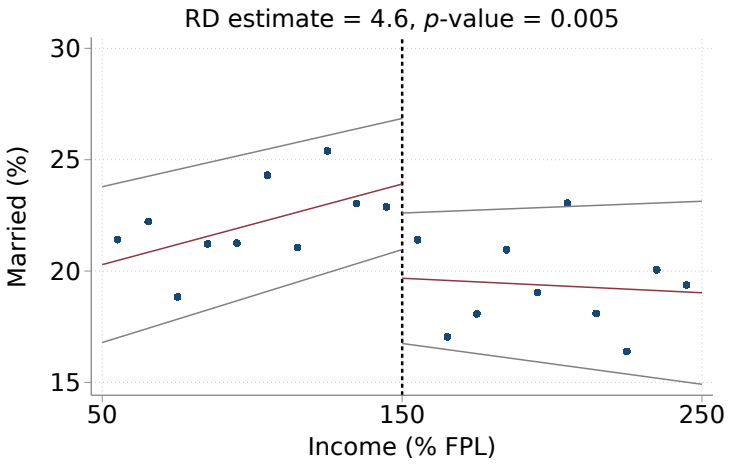
Figure 9: McCrary and CJM Tests



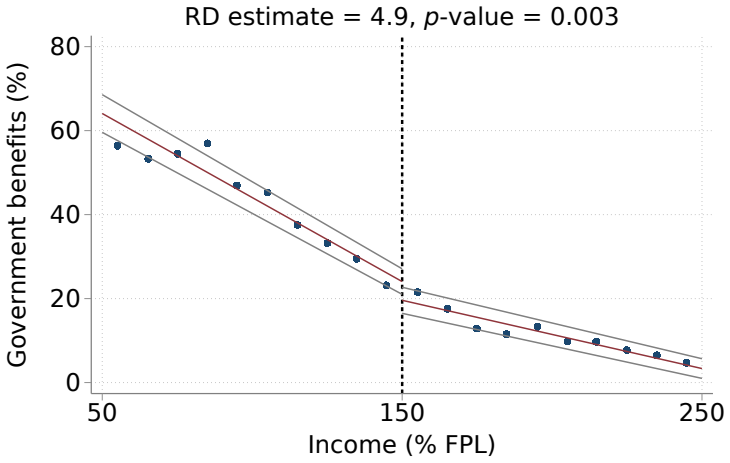
Notes: Panel A shows the distribution of applicant income, with the gray bars representing applicants outside of the 100 percentage-point bandwidth. Panel B shows the distribution of applicant income within this bandwidth and reports the t-statistics and p-values from the manipulation tests proposed by McCrary (2008) and Cattaneo et al. (2020).

Figure 10: RD Plots for Discontinuous Covariates

Panel A. Marital status

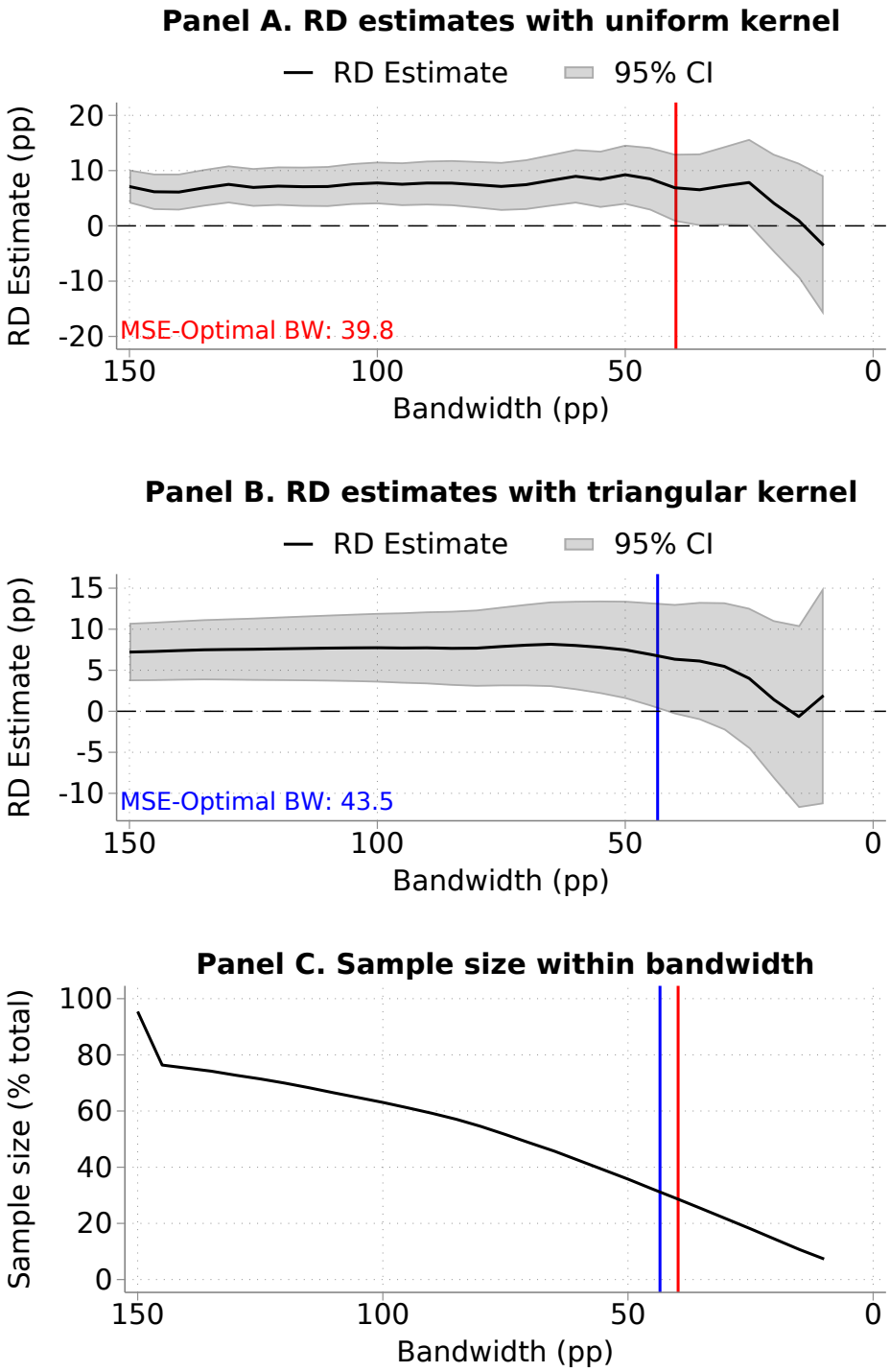


Panel B. Receives government benefits



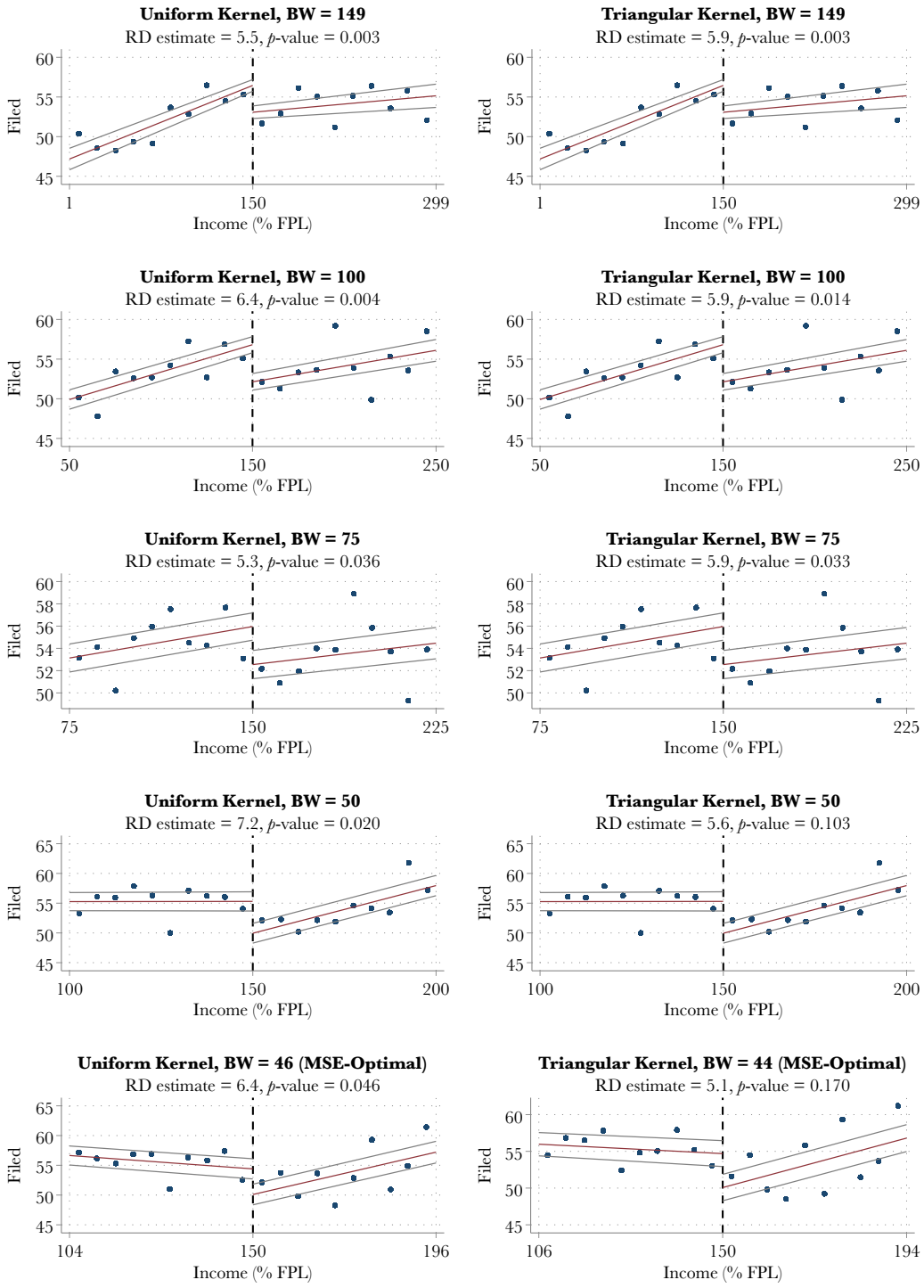
Notes: Figure presents RD plots for two covariates with significant discontinuities at the threshold: (1) whether the user is married and (2) whether the user receives income from government benefits. Each sub-figure presents the mean of each covariate for 20 quantile income bins. The RD estimates and p-values are estimated using the linear RD model from equations (1) and (2), using a 100-percentage point bandwidth and no controls.

Figure 11: Robustness of RD Estimation to Bandwidth Selection and Kernel Weighting



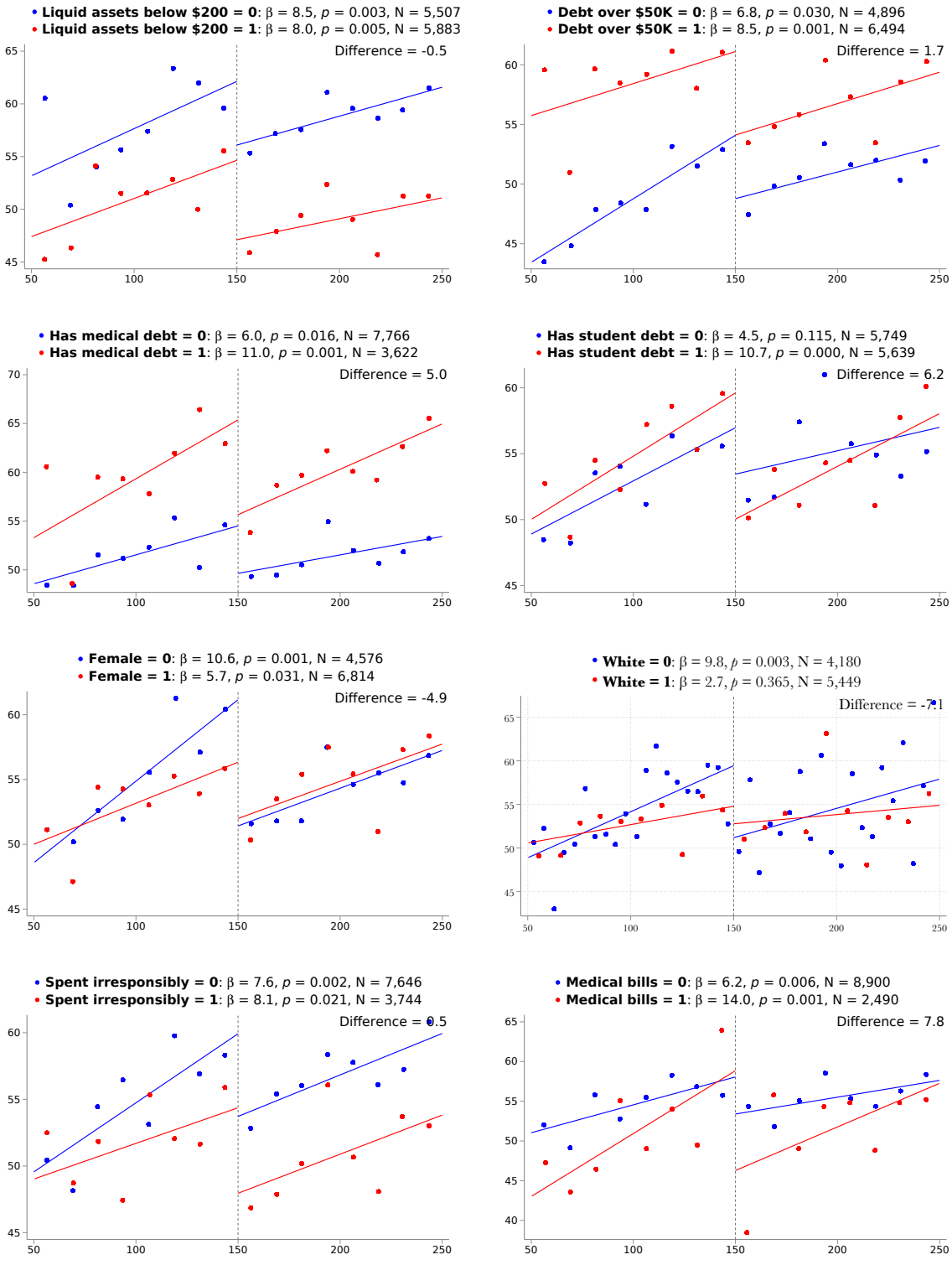
Notes: Figure shows the estimated effect of the fee waiver on filing, as estimated in the fuzzy RD model from equations (1) and (2), under different bandwidths and kernel weights. We vary the bandwidth from 10 to 150 percentage points. Panel A uses uniform kernel weights and Panel B uses triangular kernel weights. In these panels, the black line represents the RD estimate, the grey bands represent a 95% confidence interval, and the red and blue lines represent the MSE-optimal bandwidth based on the algorithm from Calonico et al. (2020). Panel C shows the share of the full sample within each bandwidth.

Figure 12: Robustness of RD Estimation to Bandwidth Selection and Kernel Weighting



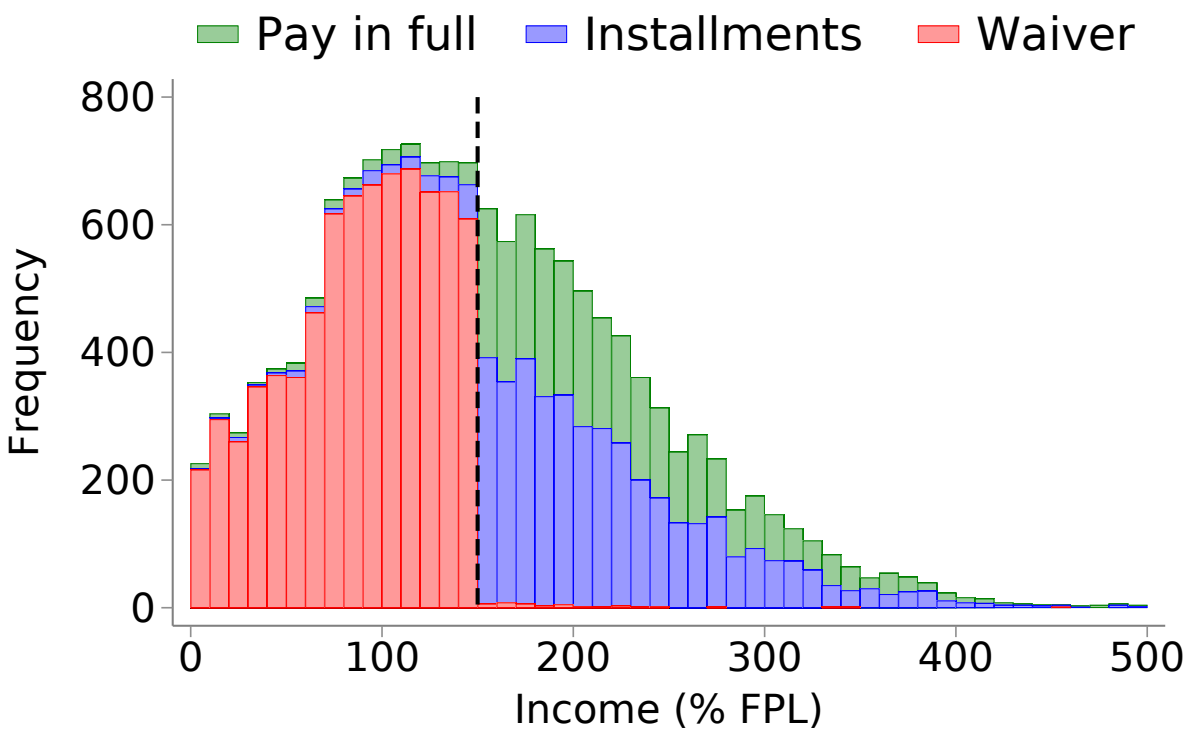
Notes: Figure shows the second-stage effect on filing for bankruptcy under different bandwidths and kernel weights. The bandwidth and kernel weighting approach is specified in the top of each plot. The bottom two plots show the MSE-optimal bandwidths (46.2 and 44.4 percentage points for the uniform and triangular specifications, respectively). Each RD plot controls for state and year-month fixed effects, questionnaire completion time, demographics, debt, assets, and reasons for considering bankruptcy (outlined in Section 4.2). The RD estimate and corresponding p-value is included in the top right of each plot. Dots show the mean application and filing rates for 20 quantile income bins. Solid lines are fitted values from first-order polynomials, and gray lines represent 95% confidence intervals.

Figure 13: Heterogeneous Treatment Effects



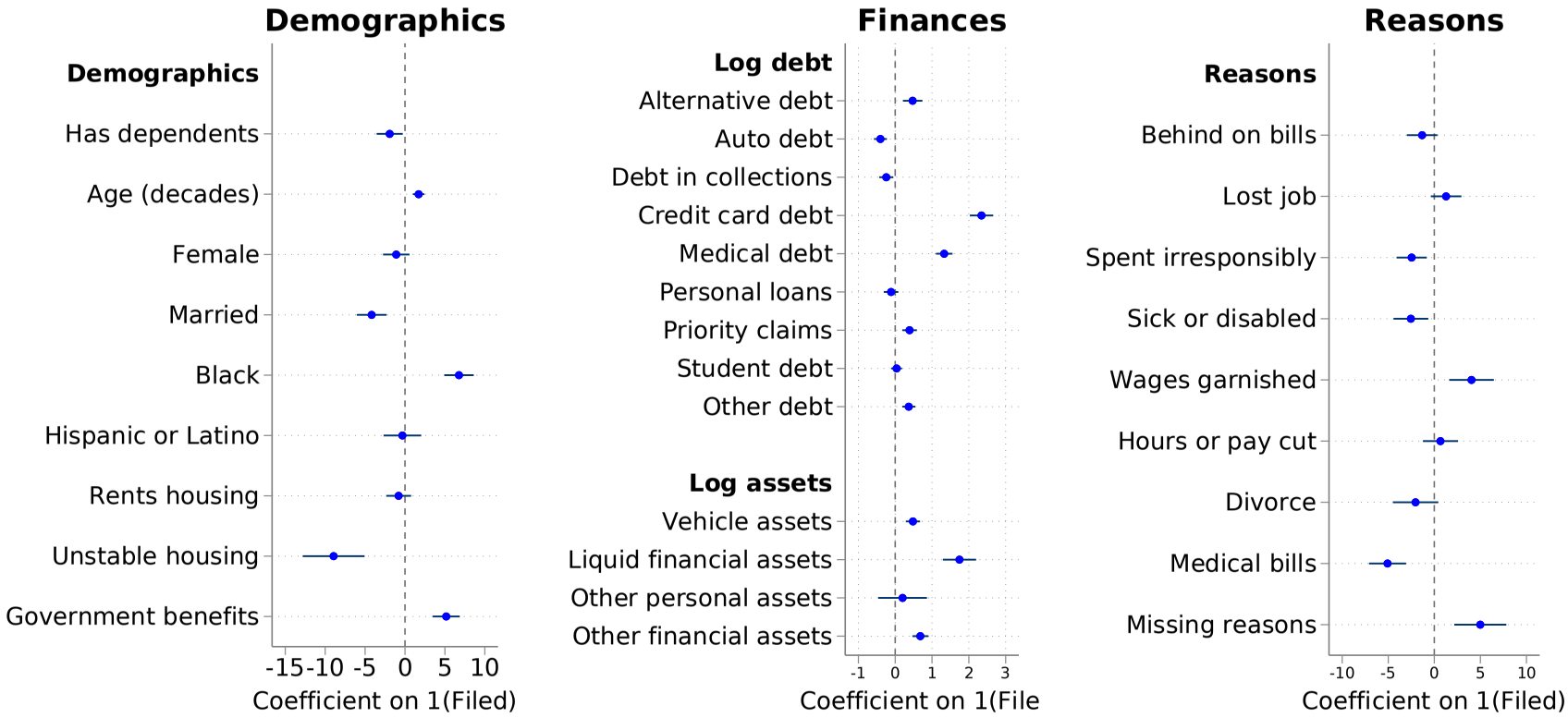
Notes: Figure plots the fuzzy RD model outlined in equations (1) and (2) for sub-groups based on binary characteristics defined prior to treatment. Uses a 100 percentage-point bandwidth, includes state and year-month fixed effects, and controls for questionnaire completion time. The RD estimates and corresponding p-values are presented in the legend next to each group label, and the difference in RD estimates is shown in the top right of the plot. Dots show the mean filing rate for 20 quantile income bins. Solid lines are fitted values from the first-order polynomials with a uniform kernel.

Figure 14: Distribution of Applicant Income



Notes: Figure presents the distribution of income as a percent of the FPL, highlighting users who applied for a fee waiver, applied to pay the fee in installments, or opted to paid the fee in full. Excludes 21 users with income above 500% of the FPL.

Figure 15: Multivariate Regression of Filing Status on Controls



Notes: Figure plots estimated coefficients from a multivariate regression of Upsolve users' filing decision on demographics, the log of each debt and asset category, indicators for users' primary reasons for considering bankruptcy, income (percent of FPL), questionnaire completion time, and state and year-month fixed effects. We exclude the coefficients on income, questionnaire completion time, and fixed effects from the coefficient plots. "Alternative loans" includes payday loans, cash advances, lease-to-own debt, and buy-now-pay-later (BNPL) debt. The bands around each coefficient represent 95% confidence intervals.