Intergenerational Effects of Debt Relief: Evidence from Bankruptcy Protection *

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Using bankruptcy filing information on parents matched with administrative data on their children, along with judicial leniency as an instrumental variable, we examine the effect of parental bankruptcy protection on children's income, intergenerational mobility, and homeownership. We find that children whose parents receive Chapter 13 bankruptcy protection experience a significant increase in lifetime income. For every dollar of debt relief granted, these children gain two dollars in adjusted present value of lifetime earnings. Furthermore, they are more likely to rank in the top tercile of the income distribution, driven by increased intergenerational upward mobility, and are over five percentage points more likely to own a home by age thirty. Our findings suggest that bankruptcy protection and debt relief play an important role in fostering intergenerational mobility for low-income distressed households. Our results are most consistent with three mechanisms: protection of assets (e.g., house), higher investment in children's education and skill-development, and avoiding forced geographic mobility. We do not find support for neighborhood effects driving our estimates.

Keywords: Debt relief, bankruptcy protection, intergenerational effects, income, intergenerational mobility

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1 Introduction

Debt relief remains a commonly used policy tool to assist distressed borrowers. In the aftermath of the Great Recession, programs like the Home Affordable Modification Program (HAMP) were introduced to support mortgagors, while the Biden administration's proposed student loan forgiveness aims to alleviate burdens for student borrowers. Bankruptcy protection is another widely used form of debt relief, providing relief for most types of debt, among several other policies. A key issue in evaluating these policies is understanding both the costs to taxpayers and the effects on beneficiaries, many of which are difficult to observe and quantify.

While much of the extant research focuses on the immediate impact of debt relief on recipients, less is known about its long-run impact and broader implications for their families. This paper examines whether debt relief policies generate spillover effects—positive or negative—that extend beyond immediate recipients to their children. We focus on Chapter 13 bankruptcy protection as our empirical setting, where distressed borrowers reorganize debt and receive substantial relief. Bankruptcy protection remains one of the most widely used debt relief mechanisms, with over a million households filing for Chapter 13 protection from 2018 to 2022.¹ With billions of dollars provided in relief under the program, assessing these spillover effects is crucial for a comprehensive evaluation of the policy.

Our analysis focuses on three main outcomes: income, intergenerational mobility, and homeownership. It is unclear ex-ante whether, and in what direction, debt relief for parents will influence these outcomes for their children. Chapter 13 protection protects recipients' assets, improves liquidity and credit access, and leads to higher labor supply (e.g., Dobbie and Song (2015)). Access to additional resources through these factors may enable households, particularly low-income or constrained ones, to invest more in their children's

^{1.} Based on data from the case filings provided by US courts. See the following link for more details: https://www.uscourts.gov/news/2023/02/06/bankruptcy-filings-drop-63-percent

development, potentially resulting in substantial gains in their labor market outcomes and homeownership rates. Conversely, if the benefits are concentrated in the short-term — such as alleviating liquidity constraints to smooth consumption (Indarte (2023)) or income gains diminish quickly² — the effects of Chapter 13 protection might not translate into significant long-term differences for children.

On the other hand, increased access to credit and lower perceived bankruptcy costs could reduce parents' precautionary savings, negatively impacting children. Braxton et al. (2024) find that greater parental credit access can lower intergenerational mobility, as households facing credit constraints owing to lower savings may be forced to cut long-term investments, including those in their children's development. Additionally, higher labor supply due to bankruptcy protection may lead parents to substitute time away from childrearing in favor of paid employment. This shift could harm children's human capital development (e.g., Becker (1965); Bernal (2008); Bernal and Keane (2010); Løken et al. (2018); Bastian and Lochner (2022); Hu et al. (2024)), resulting in negative effects. Thus, whether greater bankruptcy protection for parents yields better or worse outcomes for children remains an empirical question that we address in this paper.

Examining the potential effects of parental bankruptcy protection on children poses significant challenges. First, it requires detailed data on bankruptcy filings for parents that also allow researchers to track their children's outcomes over several years. Second, identifying the effect of bankruptcy protection is complicated due to potential omitted variables that influence both the likelihood of households filing for bankruptcy and children's future outcomes. For instance, low-income households may be more likely to file for bankruptcy while simultaneously having fewer resources to invest in their children's education, potentially leading to lower income for the children in the future.

^{2.} Dobbie and Song (2015) find that income for Chapter 13 recipients increases for the five years following filing.

We address these challenges by combining administrative data with an instrumental variables (IV) approach. Our analysis relies on three main datasets from two sources. Consumer bankruptcy filings data come from the Public Access to Court Electronic Records (PACER) system, which includes detailed information such as chapter filed, filing date, court, outcome, and judge and trustee assignments. We merge this with anonymized data from Equifax Inc., which allows us to observe consumer credit histories, household members, and children's employment and earnings. While credit histories cover the entire U.S. population that has used credit, income data are available for approximately 100 million employees working at over 5,000 employers between 2010 and 2022.

To identify the effect of parental bankruptcy protection on children's outcomes, we use judge heterogeneity in the propensity to approve Chapter 13 bankruptcy protection within a 2-stage least squares (2SLS) instrumental variables framework. Although the bankruptcy code is uniform at the federal level, its interpretation varies across judges. For instance, judges may favor debtor or creditor rights differently, which can predict bankruptcy outcomes while remaining unrelated to the characteristics of the filers. Our analysis focuses on children whose parents filed for Chapter 13 protection and estimates the local average treatment effect using variations in whether protection was granted based on judge leniency.

For our estimates to be interpreted as causal, the following assumptions must hold: (i) judge leniency is correlated with parents receiving Chapter 13 protection (relevance condition), (ii) judge leniency affects the outcomes for filers' children only through the realized bankruptcy protection (exclusion restriction), and (iii) the impact of judge leniency on receiving Chapter 13 protection is monotonic across filers (monotonicity assumption). We test the first assumption and find that the probability of receiving protection increases nearly one-to-one with judge leniency, yielding a high F-statistic of 741, which confirms a strong instrument.

Although the exclusion restriction is inherently untestable, we argue that it is reasonable

in our setting for two main reasons. First, bankruptcy cases are plausibly randomly assigned to judges, as suggested by previous studies.³ We augment this argument by showing that judge leniency does not correlate with pre-filing characteristics of filers in our sample. Second, bankruptcy judges typically interact with debtors only at the confirmation hearing for Chapter 13 protection, thereby limiting their influence to affect outcomes for children of filers outside of their decision to grant or reject protection (Dobbie and Song (2015)). We also present evidence that supports the monotonicity assumption.

We find that parental bankruptcy protection leads to an increase of \$1,755 in annual income for children fifteen years after filing, equivalent to 5.6% of the mean. This effect grows over time, reaching 7.1% of the mean twenty years after filing, indicating both higher income levels and growth for children of recipients. Over their life cycle, these children earn 3.4% more at age 20, increasing to 8.8% and 35.5% by ages 25 and 40, respectively. Back-of-the-envelope calculations suggest that for one dollar of debt relief granted to parents through Chapter 13 protection, their children earn two dollars more in adjusted present value of lifetime earnings.

Children of parents who receive protection are more likely to move up the income distribution relative to their parents. Specifically, the likelihood of children belonging to the top tercile of the income distribution when their parents were below it at the time of filing increases by 16.7% relative to the mean fifteen years post-filing. This increase is driven by greater intergenerational upward mobility among recipients' children rather than by reduced mobility among non-recipients. Our findings underscore the role of bankruptcy protection and debt relief in fostering intergenerational mobility.

Homeownership for children of recipients increases by 4.2 percentage points (pp) fifteen

^{3.} Extant literature has used judge leniency to evaluate different aspects of both consumer bankruptcy (Dobbie and Song, 2015; Dobbie et al., 2017; Kleiner et al., 2021) and corporate bankruptcy filings (Chang and Schoar, 2013; Bernstein et al., 2019; Bonfim and Nogueira, 2021; Grindaker et al., 2022; Antill, 2021; Bernstein et al., 2019).

years after filing, equivalent to 28% of the mean ownership of 15%. Similar to the income results, this magnitude grows over time, indicating increases in both levels and growth. Over their life cycle, these children are 3.6pp more likely to be homeowners at age 25, rising to 5.7pp and 12.5pp by ages 30 and 40, respectively.

We perform several robustness checks to show that our results are consistent and reliable across different fixed effects, different definitions of the upward mobility measure, different sample cut-off criteria, and alternative sample restrictions to address potential sample selection issues.

Our evidence indicates that at least three mechanisms contribute to our findings. First, Chapter 13 protection allows recipients to protect assets such as houses. This mechanism appears significant, as our estimates are stronger when compared to individuals in the control group who are foreclosed upon or live in non-judicial states, where there are fewer restrictions on foreclosures (Demiroglu et al. (2014); Dobbie et al. (2017)). Second, parents who receive protection likely have more resources to invest in their children's education and development, enabling them to acquire more skills. We evaluate this mechanism by examining the types of jobs children enter and their education levels and find that children of recipients are more likely to attend college and secure higher-paying jobs, with asset protection playing a role here as well. Third, we observe stronger effects in sub-samples where the control group moves following bankruptcy protection denial, suggesting that avoiding potentially forced relocations also contributes to our findings.

We also examine two additional mechanisms: neighborhood effects and experience effects. Neighborhood effects suggest that where children grow up influences their future income and college attendance (Chetty and Hendren (2018)). Bankruptcy protection could enable parents to move to better neighborhoods or avoid forced relocation to worse ones, impacting their children's outcomes. However, we find no evidence supporting this mechanism in our setting. Experience effects posit that formative experiences shape individuals' risk preferences and adult outcomes (e.g., Malmendier and Nagel (2011); Knüpfer et al. (2017); Bernile et al. (2017)). We find limited evidence for this hypothesis, as children whose parents receive bankruptcy protection are somewhat more likely to sort into riskier jobs with higher income volatility.

Our work relates to the literature on debt relief and bankruptcy protection, which evaluates the costs, benefits, and design of interventions. In mortgage markets, Agarwal et al. (2017) show that the Home Affordable Mortgage Program (HAMP) increased renegotiation intensity and prevented substantial number of foreclosures. Eberly and Krishnamurthy (2014) find that payment reduction is more effective than principal reduction for liquidityconstrained households, aligning with evidence from Ganong and Noel (2020). In the context of student loans, Di maggio et al. (2020) report that debt forgiveness leads to lower debt balances, reduced delinquency rates, and higher mobility and income for recipients. Mueller and Yannelis (2019) examine the effects of income-driven repayment (IDR) plans on delinquencies, payments, and consumer spending. Dobbie and Song (2020) focus on credit card borrowers and evaluate the effects of short-term payment reductions and interest write-downs separately. Dobbie and Song (2015) evaluate Chapter 13 bankruptcy protection and find that recipients earn higher income three to five years post-filing, mainly due to avoiding negative consequences experienced by denied filers.

Our study extends this literature by documenting significant long-term effects of bankruptcy protection that spill over to the next generation, something that is not a priori clear. These effects operate through asset protection, improved education and skill development for children, and reduced likelihood of forced geographic moves. Our findings help quantify the benefits of parental bankruptcy protection for children and underscore the role of debt relief in enhancing intergenerational mobility and homeownership rates.

We also contribute to the literature that examines the determinants of intergenerational mobility and the relation between parental financial characteristics and children's outcomes. Black and Devereux (2010) provide an excellent summary of early work on this topic. While Chetty et al. (2014); Chetty and Hendren (2018); Derenoncourt (2019); Chetty et al. (2020) document the degree of intergenerational mobility in the U.S. and the recent developments in the literature, other work has examined the relation between family income and children's college attendance (e.g., Carneiro and Heckman (2002); Cameron and Taber (2004); Caucutt and Lochner (2020)); housing wealth and college attendance (e.g., Lovenheim and Reynolds (2013); Cooper and Luengo-Prado (2015)); liquid and illiquid assets and child test scores, college attendance and earnings (e.g., Dahl and Lochner (2012); Agostinelli and Sorrenti (2021); Bulman et al. (2021)); and credit constraints and children's earnings (e.g., Sun and Yannelis (2016); Abbott et al. (2019); Lee and Seshadri (2019); Caucutt and Lochner (2020); Braxton et al. (2024)). We build a new dataset that allows us to observe parental bankruptcy filings and follow long-run effects on children to empirically add to these studies. Our findings underscore the potential of bankruptcy protection, and debt relief more broadly, to improve children's income and intergenerational mobility among distressed households.

2 Data & Sample

2.1 Data

Our analysis relies on three main datasets: consumer bankruptcy filings from legal dockets; consumer credit histories from credit bureau; and individual earnings data.

Data on consumer bankruptcy filings come from the Public Access to Court Electronic Records (PACER) system and include cases filed in 81 of the 94 bankruptcy courts in the U.S. These data include detailed information on filings and their outcomes including the chapter filed, filing date, court, outcome, the judge and trustee assigned to each filing, whether the filing includes any assets, and whether the filing fee was paid immediately or in installments. The data include over 2.8 million filings from 1992 through 2009, and have been previously used in Gross et al. (2014) and Dobbie and Song (2015).

The consumer credit histories come from a credit bureau and contain credit line-level information at the monthly frequency for all individuals with some form of credit history in the U.S., and include information such as account type (e.g., credit card, student loan), account age, total borrowing, account balance, any missed or late payments, and defaults. They also include historical information on financial distress events like bankruptcy filings, foreclosures, collections, and medical defaults among others going back to 1995. We use the credit line-level data to identify individuals who attend schools vis-a-vis their use of student loans, and information on historical bankruptcy filings to merge data from PACER to the credit bureau data. This data also include anonymized information on names, current and past addresses, and age, which we use to identify members of the same household.

To study the effect of bankruptcy protection on children's employment outcomes, we use information on employment and earnings that also come from the credit bureau. This data contain anonymized information reported by employers who subscribe to the verification services. These employers report information on monthly earnings, job locations, job tenures, type of jobs, and industry of employees among other firm level details. The data contain over 5,000 employers who report information on all their employees on a payroll-to-payroll basis, and include over 100 million employees between 2010 and 2022. They are representative of the U.S. labor force along several dimensions, including median personal incomes and median employee tenures. In addition, the data closely track aggregate U.S. private sector payroll growth, hiring, and separations. While most industries are represented in the correct proportions, the share of employment in the retail trade industry is significantly higher in the data than in the population. The average firm in the data is also significantly larger than the average firm in the U.S. population. Kalda (2020) shows that the credit profiles of employees in the data are similar to those of the U.S. population.

2.2 Sample

We combine the three datasets described above to construct our final sample. We begin with the sample of the bankruptcy filings from PACER. To aid our empirical strategy discussed below, we confine the sample to only Chapter 13 filers and those assigned to judges who over the filing year oversee at least 10 cases. We further remove cases from offices that assign all cases to a single judge for the filing year, since there is no random assignment within these offices. Our initial PACER sample includes bankruptcy filings under Chapter 13 from 81 districts and 217 offices. On average, each district has 2.68 offices, and each office supervises 1,282 cases annually. Additionally, the sample comprises 440 distinct judges. On average, 5.99 judges are associated with each district and 3.42 judges with each office. We then use filing characteristics to merge with historical bankruptcy filings in the credit bureau data. Specifically, we use the filing date, disposition date, and filing ZIP Code to merge the two data. These variables are required to be non-missing in both data and yield unique matches to be in the sample.⁴ The merged sample contains 875.9k unique cases associated with 983.7k unique filers.

In the next step, we identify children for the individuals in the merged sample of bankruptcy filers. Using anonymized last names and address histories, we classify individuals with the same last name who shared at least one mailing address over their address histories as belonging to the same household. This matching tracks up to five last names for those whose last name changes, thereby allowing us to track household members who may have changed last names post marriage, and up to ten historical addresses. Within the same household we classify individuals who are between 17 and 50 years younger than bankruptcy filers as their children.⁵ We drop households with more than 5 children as they are likely to be nontraditional living arrangements (e.g., joint or large family).⁶ Since individuals enter our

^{4.} Approximately 5% of the cases were deleted owing to multiple matches.

^{5.} Our results are robust to choosing alternate cut-offs.

^{6.} Our Results are robust to extending the maximum number of children of a household to 10.

data when they first obtain formal credit, our identification limits us to children who first obtained some form of credit (e.g., credit card, student loan, auto loan etc.) while still residing with their parents or who used parents' address on at least one credit account even if not residing with them.⁷ Finally, following Dobbie and Song (2015), we restrict parents in the sample to be first-time bankruptcy filers to rule out the effects of previous bankruptcy fillings. This gives us a sample of 400.2k children associated with 241.5k unique filers.

To follow employment outcomes for filers' children, we merge their information to the employment data using their anonymized identifiers. Finally, we restrict our sample to those children who were less than 18 years old at the time their parents filed for bankruptcy. This reduces the possibility that children take on direct financial responsibility to pay parental debt at the time of filing, which can also affect their labor supply. This gives us our final sample that includes 306.9k children associated with 263.3k parents who filed 201.2k unique bankruptcy cases. Our data allows us to track income and employment outcomes for these children between 2010 and 2022. Figure 3 plots the frequency of case filings over these years where we observe an increase in the number of cases with time peaking in years 2004-2005.⁸

3 Empirical Framework

The baseline specification we are interested in can be estimated as follows:

 $y_{i,d,o,j,c,p,f+k} = \beta \times Parental Bankruptcy Protection_{i,d,o,j,c,p,f} + \alpha_{o,f} + \delta_c + \gamma_p + \epsilon_{i,d,o,j,c,p,f+k}$ (1)

where y denotes the outcome variable for individual i whose parent received Chapter 13

^{7.} Whereas this limits us to individuals with some credit activity, it is worth noting that a high fraction of young adults live with their parents. For instance, in 2020, more than half (58%) of adults ages 18 to 24 lived in their parental home. (See: https://www.census.gov/newsroom/press-releases/2020/estimates-families-living-arrangements.html)

^{8.} The implementation of the Bankruptcy Abuse Prevention and Consumer Protection Act (BAPCPA) in 2005 that increased bankruptcy filing costs likely explains the decline in filings thereafter.

bankruptcy protection in year f when they were c years of age and the filing parent was p years old.⁹ This case was filed in district d and office o and adjudicated by judge j. The outcome variables are measured k years post-filing. *ParentalBankruptcyProtection* is a dummy variable that takes a value of one for individuals whose parents received Chapter 13 bankruptcy protection as their filing was approved. $\alpha_{o,f}$ denotes filing court office-by-filing year fixed effects and controls for any time varying differences across court-offices.¹⁰ δ_c and γ_p represent fixed effects for age at the time of filing for both the children and parent respectively. These fixed effects account for time invariant differences across households that file for bankruptcy during different times in their life cycle. Robust standard errors are clustered at the office level.

The OLS estimates of β may suffer from omitted variables problem. For example, filers with better credit histories/standings or higher income may be more likely to receive bankruptcy protection as their proposed repayment plans may be more likely to be approved. Such filers may also be able to invest more in their children's education and development, thereby leading to better labor market outcomes for them. To overcome such challenges and identify the causal effect of parental bankruptcy protection on children's labor outcomes, we use judge heterogeneity in the propensity to approve Chapter 13 bankruptcy protection. This instrument does not rely on differences in actual bankruptcy laws, as the bankruptcy code is uniform at the federal level. Rather, the instrument relies on differences in interpretation of the law across bankruptcy judges. For example, judges may lean toward protecting debtor rights or creditor rights, and these views can potentially be both predictive of a given bankruptcy outcome and exogenous to the characteristics of filing individuals and households.

^{9.} When both parents are filers, we take their average age as p.

^{10.} Bankruptcy districts are often further divided into offices that hear all cases originating from a subset of counties in the district's jurisdiction. Our final sample includes cases filed in 81 districts which have 1217 unique local offices in total.

We estimate a standard 2-Stage Least Squares (2SLS) instrumental variables model where the first stage predicts the endogenous regressor, *ParentalBankruptcyProtection*, using judge leniency as the instrument. This first stage is estimated as follows:

$$ParentalBankruptcyProtection_{i,d,o,j,c,p,f} = \gamma \times JudgeLeniency_{d,j,f} + \alpha_{o,f} + \delta_c + \gamma_p + \epsilon_{i,d,o,j,c,p,f+k}$$

$$(2)$$

where $JudgeLeniency_{d,j,f}$ represents the assigned judge j's rate at which they approve Chapter 13 filings in year f relative to district d's approval rate in the same year. To avoid the mechanical effect of the case related to individual i on the relative approval rate, we follow Dobbie and Song (2015) and construct the instrument following the "leave-one-out" method. In particular, for every individual in our sample, we drop the outcome of their parents' case while constructing this instrument from both the judge j's and district d's approval rate calculations for year f. All other variables are same as defined above. The second stage equation estimates the effect of bankruptcy protection on children' outcomes as follows:

$y_{i,d,o,j,c,p,f+k} = \beta \times \overline{ParentalBankruptcyProtection_{i,d,o,j,c,p,f}} + \alpha_{o,f} + \delta_c + \gamma_p + \epsilon_{i,d,o,j,c,p,f+k}$ (3)

where $ParentalBankruptcyProtection_{i,d,o,j,c,p,f}$ represents the predicted values from the first-stage regression. Since Chapter 13 cases are randomly assigned to judges within each office, we include office fixed effects interacted with filing year fixed effects. We also include controls for both children (δ_c) and their parents' age (δ_c) at the time of filing. As all individuals within the same office-year are subject to the same set of bankruptcy judges and are exposed to common local economic factors, we cluster standard errors at the office level.

The coefficient β captures the local average treatment effect of Chapter 13 protection for filers whose bankruptcy outcomes are altered by judge leniency. The assumptions required to interpret this estimate as causal include that: (i) judge leniency is associated with parent filers receiving Chapter 13 protection (i.e., relevance condition), (ii) judges' leniency affects filers' children outcomes several years later only through the realized bankruptcy protection outcome (i.e., exclusion restriction), and (iii) impact of judge leniency on the probability of receiving bankruptcy protection through Chapter 13 is monotonic across filers (i.e., monotonicity assumption).

3.1 Relevance Condition

We estimate Equation 2 to test the relevance condition and report the results in Table 2. Our coefficient shows a strong relation between judge leniency and the likelihood of receiving bankruptcy protection. For 1 percentage point increase in judge leniency, the likelihood of receiving bankruptcy protection increases by 0.957 percentage points. The increase in the probability of receiving protection is close to one-to-one with increase in leniency suggesting a precisely estimated coefficient with minimal measurement error. The high value of the F-statistic of 741 further confirms the validity of the instrument as it is well above the threshold of F=10 for a weak instrument (Stock and Yogo, 2002). In addition, this Fstatistic is well over the critical value highlighted in Olea and Pflueger (2013), which allows for heteroscedastic error terms.

3.2 Exclusion Restriction

Our second identifying assumption is that judge leniency only impacts outcomes for filers' children through the probability of receiving bankruptcy protection. This assumption would be violated if judge leniency is correlated with unobservable determinants of future outcomes. We argue that the plausible random assignment of judges to bankruptcy cases helps support this assumption. Previous work using judge leniency to evaluate different aspects of both consumer bankruptcy (Dobbie and Song, 2015; Dobbie et al., 2017; Kleiner et al., 2021) and corporate bankruptcy filings (Chang and Schoar, 2013; Bernstein et al., 2019; Bonfim

and Nogueira, 2021; Grindaker et al., 2022; Antill, 2021; Bernstein et al., 2019) contends that judges are assigned to cases through a randomized process. Each of these papers also provides evidence that judge leniency does not correlate to filers' ex-ante characteristics.¹¹ In addition to relying on previous work, we also examine whether judge leniency correlates to ex-ante observables that we can measure for filers in our sample. Table A1 reports results for these tests where consistent with randomized assignment we do not find any correlations between our measure of judge leniency and ex-ante characteristics.

Even with random assignment, the exclusion restriction can be violated if judge leniency affects outcomes for filers' children through channels other than conversion. For example, more lenient judges may interact more with the filer and provide guidance on financial planning for the future that may correlate to the labor outcomes of their children. However, as argued in Dobbie and Song (2015), bankruptcy judges typically interact with debtors only at the confirmation hearing, limiting their influence through direct interactions. Alternatively, judges may make rulings on other motions beyond the decision to provide Chapter 13 protection. If these other motions are correlated with judge leniency, then our estimate will reflect the effect of the combined judicial decisions correlated with bankruptcy protection instead of the effect of protection by itself.

We argue against this interpretation in two ways. First, we rely on Chang and Schoar (2013) who find that the motion to grant bankruptcy protection is relatively uncorrelated to other types of judicial rulings. Second, we follow Bernstein et al. (2019) who show that judge leniency in their setting is not correlated with their outcome variables even within the subset of firms that received bankruptcy protection. The authors argue that this result suggests that their estimates are not driven by judicial decisions beyond the bankruptcy protection

^{11.} A notable exception is Kleiner et al. (2022) who document that while hedge funds influence the random judge assignment for large firms, they do not affect randomization for small firms. Similar to small firms, hedge funds are not likely to intervene in the judge assignment process for households given that these cases also tend to be relatively small and less complex.

otherwise one would continue to find that the instrument is correlated with the outcomes even within firms that received protection. We implement this approach in our setting and evaluate whether judge leniency affects outcomes for filers' children even within those who received bankruptcy protection (or, separately, did not receive protection).

3.3 Monotonicity of Judicial Influence

Third assumption for our analysis requires that there is a weakly monotonic impact of judge leniency on the likelihood of receiving bankruptcy protection. This assumption is based on the local average treatment effect framework of Imbens and Angrist (1994), which implies that when monotonicity is violated, the IV estimand may not necessarily correspond to a proper weighted average treatment effect. In the context of our setting, this states that if judge X is more likely to approve Chapter 13 protection for a given case than Judge Y, then all Chapter 13 cases approved by judge Y would have also been approved by judge X. A simple interpretation of this condition is that judges agree on the ranking regarding which Chapter 13 repayment plans are most feasible, but disagree about where to place the cutoff for approval. This implies that leniency is not determined by filer characteristics, i.e., for example it is not the case that some judges are more lenient towards low income households while others towards high income households.

We demonstrate this monotonicity by evaluating judge leniency for each judge across filers of different ages, children's ages, number of children, and levels of income in ZIP Codes that they reside, and report results in Figure 4. Different panels also report the coefficient from an OLS regression relating judges' approval-rates for subset A on the approval-rate for subset B. Here the subsets include above vs below median levels of age, children's age, number of children, and ZIP Code level income of their residence at the time of filing. Consistent with the monotonicity assumption, we find that judges exhibit similar levels of judge leniency across filers with different characteristics. Regressing leniency for young filers on old filers yields a coefficient of 0.95. The coefficients are 0.91 for those with young and old children, 0.99 for those with more or less number of children, and 0.96 with filers residing in high and low income ZIP Codes.

4 Parental Bankruptcy Protection, Income & Intergenerational Social Mobility

4.1 Income

Our analysis begins by evaluating the effect of Chapter 13 bankruptcy protection on filers' children's income several years following bankruptcy filing. The outcome variables reflect income 10, 15, and 20 years post-filing. The choice of these durations is motivated by sample characteristics and data limitations. Since an average child at the time of filing is eleven years old, we capture income ten years later on the lower end so that an average child is 21 years old and has either entered or is close to entering the labor force. We are limited by the data to go beyond 20 years post-filing because the first filing in the sample occurs in 1998 with a peak in the number of filings in 2004 and 2005 and our employment data ends in 2022. Instead of using income precisely during years 10, 15, or 20 post-filing, we take an average of annual income over a five-year period around these years. For example, the outcome variable for income 10 years post-filing captures average income over 8-12 years after filing. Using this average offers two distinct advantages. First, it allows us to capture individuals who temporarily drop out of our data. This can happen, for instance, if an individual is employed at a firm covered in our data either prior to or after the year of interest (e.g., year 10) or even both but not during that year. Second, the average allows us to reduce the effect of any abnormally high or low income during a given year for an employee (e.g., owing to changing jobs and receiving signing bonus).¹²

We first evaluate the relation between parental bankruptcy protection and income using the endogenous OLS specification outlined in Equation 1 and report the estimates from these analyses in Panel A of Table 3. All specifications control for filing year-by-office fixed effects that account for time-varying differences at the office level and filing age fixed effects for both children and parents to account for time-invariant differences in households that file for bankruptcy during different times in their life cycle. Column 1 reports estimates for the specification with income ten years post-filing as the outcome variable. The estimate suggests that parental bankruptcy protection is associated with \$600 higher annual income ten years after filing. This is economically meaningful as it corresponds to 2.8% of the unconditional mean of income ten years post-filing. Columns 2 and 3 report estimates for income 15- and 20 years after filing, where we find stronger associations as parental bankruptcy protection is associated with \$1,533 and \$2,518 higher income, respectively. Even economically our estimates are larger in longer term as these coefficients correspond to increases of 4.9% and 6.3% relative to their respective means.

As discussed in section 3, the OLS estimates may suffer from omitted variables problem. It is plausible, for instance, that filers with higher income are more likely to receive protection and simultaneously invest more in their children's education, leading to better labor market outcomes for them. To overcome these challenges we turn towards our instrument and estimate the effect of parental bankruptcy protection on income using the 2SLS specification stated in Equation 3. We report the estimates from these analyses in Panel B of 3. Column 1 reports the results for income ten years post-filing. The estimate shows that parental bankruptcy protection leads to \$1,215 higher income ten years post-filing. This effect is

^{12.} We show that our results are not driven by this choice of taking the average or the five-year rolling window using two different analyses. First, we re-estimate our baseline coefficients and find similar results if we use the income during the exact year instead of an average albeit with smaller sample. Second, we use alternative windows and impute outcome variables as average over three-year windows and find similar results. Panels A and B of Figure 5 report these findings.

economically meaningful as it corresponds to 5.7% of the sample mean. The 2SLS coefficient captures the local average treatment effect, i.e., it is estimated among filers on the margin comparing those who did and did not receive bankruptcy protection owing to judge leniency. We find larger effects in longer terms as estimates correspond to \$1,755 and \$2,819 higher annual income 15- and 20-year post-filing. Economically, these estimates correspond to 5.6% and 7.1% of their respective means. The 2SLS estimates are larger than the OLS coefficients, suggesting that they are more precisely estimated, but not by an unusually large margin (Jiang, 2017).

The increasing magnitudes with duration following bankruptcy filing suggests that not only is income higher for individuals whose parents received bankruptcy protection but the growth in income is likely to be higher for them as well. If true this implies that the effect of parental bankruptcy protection on income should increase over the life cycle of the individuals. We directly test this by measuring income for individuals in the sample at different points during their lifetime, i.e., when they are 20, 25, 30, 35, and 40 years of age. As before, instead of using income precisely at these ages, we take an average of annual income over a five-year period around these ages. For example, the outcome variable for income at age 20 captures average income over ages 18 through 22. We then use these income variables as outcomes in our 2SLS specification.

Panel C of Table 3 reports coefficients for these estimations. Consistent with bankruptcy protection affecting both income and its growth, we find that our coefficients increase over the life cycle. While bankruptcy protection leads to \$571 higher income at age 20, it leads to \$2,494 and \$4,367 higher income by age 25 and 35 respectively. By age 40, the effect of bankruptcy protection on annual income increases to \$18,831. This increase is also noticeable in economic magnitudes which increase from 2.8% at age 20 to 8.8% by 25 and 35.4% by age 40, all calculated relative to their respective means. Overall, our results show a robust positive effect of parental bankruptcy protection on income which is increasing over

individual's life cycle.

4.2 Intergenerational Social Mobility

The positive impact of parental bankruptcy protection on both income and its growth may help individuals achieve higher relative standings within the income distribution. We first evaluate this plausibility using the income rank of children among the population of employees in our employment dataset. Table A2 indicates that children's percentile income rank increases by 1.44 and 1.95 fifteen and twenty years after parents' bankruptcy filing, indicating they have significantly moved up in the income distribution compared to the children whose parents' bankruptcy was rejected. Economically, these effects are large as the estimates represent 4.9% and 5.5% relative to the mean fifteen and twenty years postfiling.

While these results show that parental bankruptcy protection leads to a higher probability of moving up among the income distribution, it does not shed light on the relative standings of children compared to those of the parents, i.e., intergenerational social mobility. Furthermore, the higher likelihood of being in the top tercile can either occur if bankruptcy protection improves intergenerational upward mobility or it allows those who receive protection to avoid the intergenerational downward mobility that households who do not receive protection experience. Either way, understanding the impact of bankruptcy protection on intergenerational social mobility is of interest to both economists and policymakers.

Motivated by this, our next set of analyses examines intergenerational social mobility as outcome variables. Panel B of Table 4 reports estimates for the 2SLS regressions where the outcome variables capture upward mobility. Specifically, they are dummy variables that take a value of one for individuals who belong to the top tercile of the income distribution ten, fifteen, or twenty years post-filing but their parents were in the bottom two terciles at the time of filing. This measure of mobility is similar to the measures proposed by Chetty et al. (2014). Similar to section 4.1, we use children's five-year average income to calculate social mobility. The 2SLS indicate that upward mobility increases by 0.5% and 1.5% fifteen and twenty years post-filing, representing roughly 16.7% and 25.0% of the sample mean. Furthermore, we also show that bankruptcy protection leads to a 0.5%, 1.3%, and 2.7% increase in upward mobility when the children are twenty-five, thirty, and thirty-five years old. Our results are also robust to measuring upward mobility using different windows to average children's income (i.e., panel a and b in Figure 6).

Column 3 of table A3 reports the result for downward mobility, where the outcomes are dummy variables that take a value of one for individuals who do not belong to the top tercile of income distribution fifteen years post-filing but their parents were in the top tercile at the time of filing. We find a positive but statistically insignificant coefficient, suggesting the children with treated parents are not less likely to move downward compared to the control group.

Overall, our findings show that bankruptcy protection has significant effects on intergenerational social mobility driven by an increase in upward mobility for households that receive protection and not by an increase in downward mobility for households that do not receive protection.

4.3 Homeownership

We examine the effects of parents' bankruptcy protection on children's homeownership because of the imperative role of owning homes in individuals' wealth accumulation and consumption smoothing (Goodman and Mayer, 2018; Sodini et al., 2023). If the benefits of parents' bankruptcy spill over to children's growth, income, and social mobility, children may be more likely to own homes owing to improved liquidity, education, or credit access.

We test the above hypothesis in Table 5. Panel B shows that homeownership increased by 4.2% and 5.0% fifteen and twenty years post-filing under bankruptcy protection. These coefficients are economically meaningful as they represent 28.0% and 26.4% of the sample mean. The results are also consistent when we examine homeownership through children's life cycle. Specifically, homeownership increases by 3.6%, 5.7%, and 7.2% when children are twenty-five, thirty, and thirty-five years old. Similarly to income and upward mobility, the results are robust to using different time windows to capture children's homeownership as indicated by Figure 7.

The findings presented in sections 4.1, 4.2, and 4.3 collectively demonstrate that the benefits of parents' Chapter 13 bankruptcy protection significantly extend to their children's labor outcomes and homeownership. Children whose parents received bankruptcy protection see a notable increase in their income, are more likely to move up the income ladder, and have a greater chance of achieving the 'American Dream' by owning homes.

5 Plausible Mechanisms

5.1 Asset protection

One of the most significant benefits of Chapter 13 bankruptcy protection is that it allows financially stressed individuals to safeguard their assets (Dobbie and Song, 2015; Dobbie et al., 2017). Unlike Chapter 7 bankruptcy, which may require individuals to liquidate their assets to repay creditors, Chapter 13 provides a repayment plan that typically lasts three to five years. The protection of important assets (e.g., house, car) can be especially beneficial, as it can lead to more stable and higher-quality living conditions for children during their teenage years. Additionally, owning a home can enhance parents' creditworthiness, as it can be used as collateral to secure funding for their children's expenses and human capital development.

Previous research has demonstrated that owning essential household assets, like homes, significantly impacts children's outcomes, influencing factors such as cognitive ability, behav-

ioral issues, and the likelihood of homeownership in adulthood (Haurin et al., 2002; Benetton et al., 2022). Therefore, we propose that one potential way in which bankruptcy protection benefits children's future outcomes is by enabling parents to retain important assets.

We test the above hypothesis in table 6. Specifically, in Panel A, we split the whole sample into two subsamples. The first subsample (foreclosed subsample) contains parents who receive protection, and the subsample of parents who do not receive protection and are foreclosed upon within five years post-filing. The second subsample (not foreclosed subsample) contains parents who receive protection and the subsample of parents who do not receive protection and are not foreclosed upon within five years. The construction of these two subsamples enables us to tell apart whether children whose parents lose bankruptcy protection become worse off through losing houses. If asset protection is essential for children's outcomes, we would expect to see a larger gap (i.e., higher coefficient estimates) between the treated parents (parents who receive bankruptcy) and controlled parents (parents who do not receive bankruptcy) in the first subsample than in the second subsample.

In panel A, we demonstrate that the estimates are significantly larger in magnitude and more statistically significant for the first subsample of parents compared to the second subsample. Specifically, the estimates for the first subsample are \$2,199.53 for income, 0.009 for upward mobility, and 0.047 for homeownership (see Columns 1, 3, and 5). In contrast, the estimates for the second subsample are \$1,276.00 for income, 0.002 for upward mobility, and 0.033 for homeownership (see Columns 2, 4, and 6). These results indicate that children from families who experience foreclosure due to the loss of bankruptcy protection fare much worse across all three outcome categories compared to children whose parents receive protection. This highlights the important role of asset protection in enhancing children's outcomes.

Since foreclosure would merely affect homeowner parents, we establish the same analysis in Panel B of table 6 by restricting the sample to be homeowner parents. Again, we find that the magnitudes of coefficient estimates are larger for the first subsample (Columns 1, 3, and 5) than the second subsample (Columns 2, 4, and 6) mentioned above. Also, the magnitude difference of children's income and homeownership is even larger between the two subsamples (see Columns 1-2 and 5-6).

To strengthen the asset protection mechanism, we further performance heterogeneity analysis based on the subsample of parents in states with or without judicial reviews for the foreclosure procedure. As noted by Demiroglu et al. (2014) and Dobbie et al. (2017), states that require judicial reviews for foreclosure essentially increase the costs, duration, and complexity for creditors attempting to foreclose on a consumer. Consequently, in states with judicial reviews, delinquent consumers face lower costs during the foreclosure process, as they are less likely to be foreclosed upon ex-ante and see an extended period to remain in their homes, allowing them to prepare for the next steps. Based on this reasoning, if preventing foreclosure indeed leads to better outcomes for children, we expect that our estimation results will be smaller in states with judicial reviews. This is because the relative cost of not receiving bankruptcy protection tends to be lower in these states.

Panel C supports our findings. We observe that the coefficients for income and upward mobility are significantly smaller and less significant in states that have judicial foreclosure reviews (see Columns 1-2 and 5-6). This suggests that children tend to be better off in families that are better able to protect their homes, highlighting that asset protection is an important channel in explaining our results. We find that the coefficient estimates for homeownership are quite similar (see Columns 3-4), indicating that the mechanism of protecting homes is relatively less important in improving children's homeownership. Furthermore, we perform the same analysis in Panel D by restricting the parents to be homeowners before filing. Similarly, we see smaller and less significant estimates in states with judicial reviews, and the coefficient estimate difference between Columns 1-2 and Columns 5-6 are even larger. Not surprisingly, this result indicates that the asset protection mechanism is more significant for ex-ante homeowner parents. Our findings support the view that protecting household assets is crucial for children's outcomes. Children whose parents receive Chapter 13 protection benefit from having essential assets safeguarded.

5.2 Higher education and skills

One potential mechanism through which parental bankruptcy protection affects children's income and its growth, and has implications for intergenerational social mobility is higher investments in children's education and skills. Parents receiving bankruptcy protection are likely to have more resources and may invest some of these higher resources in their children's development, thereby helping them acquire more specialized skills. We evaluate this plausibility using measures for the type of jobs that children sort into and their education levels. We first examine whether children are more likely to sort into jobs requiring more specialized skills when their parents have been recipients of bankruptcy protection. This should be a direct implication of higher investment in children's development and consequent acquisition of skills. We rely on the mean income of the job to reflect the skills required for it and use this as an outcome variable.

Table 7 reports results for this analysis where we calculate the mean income at two different levels — industry and employer. The outcome variable in panel A is calculated at the industry-level, thereby allowing us to measure sorting across industries. As before, different columns report results for different horizons from bankruptcy filing. We find that parental bankruptcy protection leads to their children sorting into industries with higher paying jobs on average. While our coefficients are not significant for ten years post-filing, they are both statistically and economically meaningful fifteen and twenty years post-filing corresponding to working in industries where average income is higher by \$1,113 and \$3,003 respectively. Panel B reports results for that analysis that examines sorting across employers within the same industry. The outcome variable is calculated as the mean income at the employer-level. In addition to the fixed effects in our baseline specification, we further control for industry-by-filing year fixed effects to ensure that we exploit variation within the same industry. We find that parental bankruptcy protection leads to children being employed at higher paying employers even within the same industry. We further augment these findings by evaluating the likelihood that children belong to the top tercile of income by industry and employer. Table A4 reports these estimates which show that children whose parents received bankruptcy protection are more likely to belong to the top tercile of income by both industry and employer.

Our results so far are consistent with the hypothesis that children whose parents received bankruptcy protection sort into jobs that require greater skills. We now turn our attention to evaluate children's education, a key measure of skill development. Our data allows us to observe all student loans originated either by children or their parents (i.e., parent plus loan).¹³ We use both the presence of student loans and debt balances as proxies for whether or not children went to college. While over half of all undergraduate students rely on student loans to fund their college, substantial portion of them get help from their parents through parent plus loans. This allows us to capture college education for majority of students. However, since these proxies do not cover the entire population of students, using them does induce some measurement error. We require this measurement induced deviation to not be correlated with the error term in the regression for our results on these outcomes to be unbiased.

We report results for this analysis in Table 8 where we find that parental bankruptcy protection leads to a higher likelihood of attending college. Panel A reports the estimates for children's student loan outcomes when they are 23 years of old, the typical age of graduation.¹⁴ The outcome variable in Column 1 is the total student loan balance, and the estimates

^{13.} Direct plus loans/parent plus loans are federal loans that parents of dependent undergraduate students can use to help pay for college.

^{14.} According to Henderson et al. (2022), 62.8% enrolled undergraduate students complete their bachelor's

show that parental bankruptcy protection leads to \$1,723 higher balance. This is economically large as it corresponds to 16.9% of the mean debt balance. We find consistent results when we examine the likelihood of at least one student loan appearing on children's credit profiles. Those whose parents received bankruptcy protection are 5.4 percentage points more likely to have an account on their profile. This is economically meaningful when compared to the sample mean of 51%. Columns 3 and 4 report results for a parallel analysis that examines similar outcomes calculated using parent plus loans. We find that parents who receive bankruptcy protection have \$778 higher loan balance, corresponding to 17.4% of the sample mean. The likelihood of having a loan on their profile also increases by 3.9 percentage points.

Additionally, we apply the same heterogeneity analysis strategy used in Section 5.1 to assess the impact of education on children's outcomes. The premise is that parents who benefit from Chapter 13 by avoiding foreclosure are likely to invest more in their children's education, and the benefit is supposed to be higher for parents who bear a higher cost of foreclosure. Similar to Panel A of Table 6, we divide the control group (parents without protection) into two categories: foreclosed parents and non-foreclosed parents, as shown in Panel A of Table 9. Our findings reveal that the coefficients are generally larger and more statistically significant when the sample contains foreclosed parents within the control group. For example, the increase in student loan balances is \$2,768 in Column 1 and \$1,749 in Column 2.

Furthermore, in Panel B, we conduct a heterogeneity analysis based on whether states employ judicial foreclosure reviews. Our results indicate that the coefficient magnitudes across all educational outcome categories are higher in states without judicial reviews. This suggests that children's educational outcomes decline significantly in states where parents degree at 23 years old or younger. Our results are robust to measuring student loan outcomes when children are 22. face a greater foreclosure burden if they do not receive Chapter 13 protection.

Overall, our results are consistent with parental bankruptcy protection increasing the likelihood of attending college for children, which helps them acquire more skills and sort into jobs that require greater skills.

5.3 Forced relocation

According to the findings in Dobbie and Song (2015), bankruptcy protection benefits stressed individuals by allowing them to stay in their homes, thus avoiding the need to change addresses or relocate due to foreclosure or debt collection efforts. This stability can have positive effects on their children. For instance, parents who do not have to move can maintain a more consistent income, which fosters a stable environment for their children and encourages greater investment in their growth. Conversely, forced relocations can negatively impact children, as research indicates that frequent moves during childhood are associated with higher levels of emotional and behavioral issues (Jelleyman and Spencer, 2008).

We examine the mechanism of forced relocation in Table 10. In Panel A, we analyze the outcomes for children by dividing the sample based on whether parents in the control group (those who do not receive protection) relocated to another ZIP Code within five years of filing. In Columns 1-2 and 5-6, we find that the coefficients are larger in magnitude and more statistically significant for the subsample of parents who moved without bankruptcy protection. For example, the coefficients for children's income are \$2,279 compared to \$1,479, and for upward mobility, they are 0.009 versus 0.003. This suggests that children's outcomes worsen when their parents are forced to relocate due to the lack of bankruptcy protection. In Columns 3-4, we do not observe a significant impact of forced relocation on children's homeownership outcomes through bankruptcy protection, as the coefficient estimates remain similar in magnitude across the two columns. We also conduct the same analysis while restricting our focus to non-homeowners (i.e., renters) in Panel B. We are particularly interested in renters because their forced relocation is more likely to result from debt collection evasion rather than foreclosure. Similarly, we find stronger results for the subsample of parents who moved without protection. Specifically, the coefficient magnitudes in Columns 1 and 5 are higher compared to those in Columns 2 and 6.

Overall, these findings illustrate that forced relocation appears to be a significant disruptive factor in children's development, and children's outcomes improve significantly if their parents can avoid forced relocation through bankruptcy protection.

5.4 Neighborhood effects

Another mechanism that may affect children's income and intergenerational mobility are the neighborhood effects. Chetty and Hendren (2018) document that neighborhoods where children grow up affect their income and college attendance rates, among other outcomes, when they become adults. If receiving bankruptcy protection allows parents to move to better neighborhoods or decline in protection forces parents to move to worse neighborhoods, it may affect children's income and likelihood of college attendance. We evaluate this mechanism by examining the effect of parental bankruptcy protection on the characteristics of the neighborhoods where the household resides and children grow up. Panel A of Table 11 reports estimates for the analysis which uses the mean income of the ZIP Code where the household resides as the outcome variable. This variable is measured at the time of filing (Column 1), when children are 18 years of age (Column 2), and as the change between the two (Column 3). Across the three measures, we do not find any effect of parental bankruptcy protection on ZIP Code level income for where filers reside.

Our second measure captures the quality of the school district using graduation rate of the district as the outcome variable. For this analysis, while information on the mapping between ZIP Codes and school district's geographical boundary comes from the National Center for Education Statistics, graduation rates are obtained from the U.S. Department of Education.¹⁵. As before, the graduation rate is measured at three different times — at filing, when children are 18 years of age, and the change between these time periods. Columns 4-6 of Table 11 report these results. Again, we do not find any statistical effect of parental bankruptcy protection on the graduation rate of school districts where households reside. If anything, there's a negative effect on the change between the time of filing and when children turn 18 years old suggesting that those receiving protection end up moving to worse school districts.

In summary, our estimates are inconsistent with neighborhood effects driving the effects of parental bankruptcy protection on children's outcomes. Further, higher college attainment owing to parental bankruptcy protection, which we document in the previous section, is not driven by differences in middle or high schools that children attend.

5.5 Experience effects

A growing literature documents that individuals' experiences, especially during their formative years, influence their outcomes in their adulthood. While Malmendier and Nagel (2011) show that individuals exposed to the great depression in their early lives take fewer risks, Knüpfer et al. (2017) find that the intensity of this experience through worker displacements further helps explain heterogeneity in risk-taking. Bernile et al. (2017) show that when individuals escape natural disasters relatively unscathed, they tend to take on more risks than those who bear heavier costs in their formative years. Extending this argument to our setting, it is plausible that children whose parents receive bankruptcy protection are relatively less affected by bankruptcy filing than those whose parents did not receive protection.¹⁶ This may lead to differential risk taking tendencies for those whose parents do

^{15.} These data are obtained from U.S. Department of Education and National Center for Education Statistics.

^{16.} One way through which filing may affect children in the short-run is likelihood of geographic mobility. We examine this in Table A7 and find that those who receive protection are less likely to move. While our previous results suggest that children grow up in similar neighborhoods, as we argued in section 5.3, the

and do not receive protection.

We evaluate this plausibility by examining the riskiness of the jobs that children sort into. Our measure of riskiness is the average income volatility at the industry or employer level. Table 12 reports these estimates where we find that children whose parents receive bankruptcy protection sort into jobs with higher income volatility. Columns 1 and 2 use income volatility at the industry level as the outcome variable in our baseline specification. The estimates are positive but are statistically insignificant. The final two columns report results for analysis that use income volatility at the employer level as the outcome variable. We find that parental bankruptcy protection leads children to be employed at firms where the income volatility is higher by 2.5% relative to the mean, as shown in Column 3. However, the results are insignificant as we further compare individuals with similar income levels by adding income fixed effects in Column 4.

Overall, the positive coefficient estimates in Table 12 are consistent with experience effects playing a role in driving our results as those who prefer to take more risk are rewarded for it through higher income. However, we find limited statistical power for this mechanism.

6 Robustness

6.1 Alternative measures of social mobility

We estimate an alternative measure of upward mobility in Table A5, under the similar construction of Panel B of Table 4. In this new measure, we define upward mobility as one if children's income falls into the top quartile of the income distribution while their parents were not at the time of filing. The results show that children's upward mobility fifteen years later increases by 0.004 if parents receive bankruptcy protection, representing 20% of the move itself and displacement may negatively affect children whose parents did not receive protection and are forced to move (e.g., Dobbie and Song (2015)).

mean. The results are also robust to measuring outcomes ten and twenty years post-filing. These results show that our upward mobility measure is not sensitive to the cutoff values we choose to measure children's relative standing among the income distribution.

6.2 Alternative sample constructions

In our baseline estimations, we limit the number of children in a household to five to eliminate the effect of excessively large and joint families. In Table A10, we expand the maximum number of children to ten. The table shows that children's income, upward mobility, and homeownership increase by \$1,746, 0.008, and 0.033 fifteen years post-filing. These estimates are statistically significant and are very similar to the baseline 2SLS estimates in Table 3, 4, and 5.

Another concern with our baseline sample is that households can refile for Chapter 13 multiple times if their initial attempts are rejected. Among these repeat filers, it becomes unclear which filing actually triggers the positive effects on children's outcomes. To address this, we further refine our sample to include only single-time filers by excluding households that have filed multiple times. With this slightly smaller sample in Table A11, we still obtain significant results that are robust and consistent with our baseline findings.

6.3 Alternative fixed effects

We incorporate filing year by office, children's ages, and parents' ages at the time of filing as fixed effects in our baseline analysis. Table A12 presents the estimation results regarding the annual income of children ten and fifteen years after the filing, using alternative fixed effects. In Panel B, Columns 3, 5, and 7, we compare children who filed at the same age and work in the same industry, company, or job title fifteen years after filing. These fixed effects further eliminate unobserved factors that might influence the sorting of children into different industries, companies, and job titles. Our findings from this analysis are robust. For example, we observe that children's annual income increases by \$1,025 if their parents receive bankruptcy protection, even when the treated and control groups have the same job title. These results underscore the vital importance of bankruptcy protection, even after accounting for confounding factors that can affect children's job choices.

In Panel A, we find similar results on children's income ten years post-filing. However, the coefficient is not statistically significant if we control for job title fixed effects in Columns 6-7. This is possibly due to the limited variations in children's income under the very granular job-title fixed effects.

6.4 Possible sample selection issues

Another concern regarding our estimated results is that the sample of children can be different when we measure children's outcomes ten, fifteen, and twenty years post-filing as we have argued in section 4.1. For example, a child who is included in the sample ten years post-filing may be excluded in the sample twenty years post-filing. This can happen because of two reasons. First, the filing year determines whether we can observe children's outcomes in each of the outcome years. For example, if the bankruptcy was filed in a relatively later year, say 2006, we can only observe the children's outcome ten and fifteen years later, but not twenty years later. Second, a child can drop out of current employment data coverage if they change companies or jobs, or simply due to the coverage changes of the employment data across different years. These two reasons can result in possible selection issues if the selection of the sample is correlated with children's outcomes.

We mitigate the concern of the above selection issues in Table A13. In Panel A, we only include children whose income, homeownership, and upward mobility outcomes are non-missing ten, fifteen, and twenty years post-filing. This addresses the concern that the employment data coverage may change from year to year. In Columns 1-6, we show that the income and homeownership results are consistent with our baseline results, and are even stronger. However, the upward mobility results become insignificant. This is possibly owing to the large reduction in the sample size compared to the baseline sample.

In Panel B, we implement a slightly more relaxed criterion. Here, we include children whose income, homeownership, and upward mobility outcomes are available ten and fifteen years after filing. Compared to Panel A, this sample is significantly larger because the number of observations available twenty years after filing is quite small. Our findings remain consistent with the baseline results. For instance, Columns 2, 5, and 8 indicate that, fifteen years after filing, income, upward mobility, and homeownership increase by \$1,777, 0.008, and 0.050, respectively, and these estimates are statistically significant.

Overall, although we cannot completely rule out the sample selection issue, we argue the issue is not substantial at least based on the results of Table A13.

7 Back-of-the-envelope calculations

To further understand the economic magnitude of the parental bankruptcy effects on children, we present back-of-the-envelope calculations that relate the amount of debt relief received by parents to the adjusted present value of life time earnings for children. A major challenge associated with these calculations is that we do not observe the amount of debt relief granted under the Chapter 13 protection. We overcome this limitation by scraping additional data on the amount of debt relief granted in each bankruptcy case.

Upon closure of each bankruptcy case, the trustee is required to prepare the "Final Report and Account" document to record the details of the amount of reported debt allowed by the court, total Chapter 13 plan payments received, and disbursements to creditors. We download these documents to scrape this information and calculate the dollar amount of debt relief as the difference between the total amount of allowed debts and the total payment through the Chapter 13 plan. One limitation of this exercise is that we only collect this information for years 2004 through 2009 as these documents are not available in digitized machine-readable format for cases prior to that. Covering over 344k Chapter 13 cases, we find that the average total debt relief is \$55,574.90, representing 71.38% of the total allowed debts. Specifically, the average debt relief for unsecured, secured, and priority debts are \$33,859.25, \$21,428.11, and \$287.50, reflecting 77.12%, 66.32%, and 17.53% of the total allowed debts in each category. These statistics closely track some earlier work. For example, Eraslan et al. (2007) and Li (2007) document a 73% average debt relief for 948 Chapter 13 cases. Norberg and Velkey (2005) report a 69.9% debt relief average based on 795 Chapter 13 cases.

The second part of our analysis calculates the differential adjusted present value in lifetime earnings for those receiving Chapter 13 bankruptcy protection based on our reduced form estimates. Following Tamborini et al. (2015); Wilkinson (1966); Kim et al. (2015)¹⁷, we assume a 45-year career span for each child, ranging from 20 to 65 years of age. We further assume the discount factor to be 4%, the average U.S. inflation rate in the past 100 years. Finally, since the coefficients grow in our setting over the life cycle of the children, we assume a constant growth rate in income from years 38 through 65 calculated as the average yearly growth rate in estimates between children's age of 20 and 38.¹⁸ We then calculate the increase in the net present value of lifetime earnings as of children's age of 20 as follows:

^{17.} Tamborini et al. (2015) uses 4% discount rate to study the effect of education on lifetime earnings; Wilkinson (1966) uses 5% discount rate to compute the lifetime earnings of different occupations. Kim et al. (2015) argues that the 4% average inflation rate reflects the psychological impact of individuals in evaluating human capital investments and should be used as the discount factor to calculate lifetime earnings NPV.

^{18.} We exclude the coefficients for ages 39 and 40 because they are large and may potentially induce noise owing to small sample size.

$$NPV_1 = \sum_{age=20}^{38} \frac{\beta_{age}}{(1+r)^{age-20}} + \sum_{age=39}^{65} \frac{\beta_{age=38} \times (1+g)^{age-38}}{(1+r)^{age-20}}$$
$$= \$536, 150.04$$

where g is 15%, calculated as the average growth rate of the coefficient β for children between the age of 20 and 38.

Though the growth rate in our setting is increasing over the life cycle, one may argue that we do not observe how it evolves post children's age of 38. While the above calculation assumed that the growth rate between ages 20 through 38 years will sustain through the work life of the children after the age of 38, in the next analysis we assume that the growth rate will drop to zero after the age of 38 years:

$$NPV_2 = \sum_{age=20}^{38} \frac{\beta_{age}}{(1+r)^{age-20}} + \sum_{age=39}^{65} \frac{\beta_{age=38}}{(1+r)^{age-20}} = \$88,956.25$$

While the above NPVs reflect the value at children's age of 20 years, the average age at the time of bankruptcy filing is 11 years in our sample. We discount both values by 9 years to adjust for this difference. This yields values of \$376,691.91 and \$62,499.48. Finally, since an average filer in our sample has 2.18 children, these NPVs correspond to \$821,188 and \$136,248 from the perspective of dollars given in debt relief. Even with a more conservative NPV, these calculations show that for every dollar given in debt relief to average parents, children's lifetime earnings increase by more than two dollars (i.e., 136,248/\$55,574.90 = 2.45).
8 Conclusion

While debt relief remains a commonly used policy tool to help indebted borrowers in distress, evaluating its effectiveness is complicated because several of its costs and benefits are difficult to observe and quantify. In this paper, we evaluate the potential long-run benefits of debt relief that spillover to the labor markets for the next generation of the recipient households affecting their income and intergenerational mobility. We focus on Chapter 13 bankruptcy protection as our laboratory, one of the most widely used debt relief programs in the U.S. to address this question.

Our setting uses a combination of administrative data and instrumental variables (IV) approach to overcome empirical challenges associated with evaluating the effects of parental bankruptcy protection on children's outcomes. The unique data merges bankruptcy filing information for parents to data from credit bureau that allows us to follow labor market outcomes for their children. The empirical setting uses the leniency of the randomly assigned judges as an instrument in a 2SLS setting. While the bankruptcy code is uniform at the federal level, this instrument relies on differences in its interpretation across bankruptcy judges.

We find that children whose parents receive Chapter 13 bankruptcy protection earn \$1,755 (or 5.6%) higher annual income relative to those whose parents file for but are denied protection. Our results are increasing in the duration lapsed from filing and over the life cycle of children. Parental bankruptcy protection leads to higher income by 2.8% at age 20, 8.8% at age 25 and 35.4% at age 40. Back-of-the-envelope calculations suggest that for one dollar of debt relief granted to parents through Chapter 13 protection their children earn two dollars more in adjusted present value of lifetime earnings. Children of parents who receive protection are more likely to be in the top tercile of income distribution, which is driven by an increase in intergenerational upward mobility for children whose parents receive

protection rather than an increase in downward mobility for those whose parents were denied protection. These results highlight the potential role of bankruptcy protection and debt relief more broadly in helping improve intergenerational mobility.

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Figure 1: Judge Leninecy

This figure shows the histogram of judge leniency of the original sample (before matched to the credit bureau data), which contains 2.85 million Chapter 13 bankruptcy cases from 1992 - 2007. Judge leniency is defined as the bankruptcy grant rate of the judge over a year relative to the overall grant rate of the bankruptcy court (district) over the same year.



Judge Leniency

Figure 2:

Case Number and Grant Rate for the Sample Before Credit Bureau Matching

This figure shows the barplot of the number of Chapter 13 bankruptcy cases from 1995 to 2009 before matching to the credit bureau household and employment data. There are 2.49 million unique cases for the PACER sample and 5.93 million unique cases on the credit bureau.

(a) Case Number by Year: PACER Sample

Bankruptcy Filing By Year (PACER Sample)



(b) Grant Rate by Year: Credit Bureau Sample





Figure 3: Case Number and Grant Rate for the Sample After Credit Bureau Matching (Final Sample)

This figure shows the barplot of the number of Chapter 13 bankruptcy cases and grant rate by filing year for the sample matched to credit bureau household and employment data. The cases filed between 1995 and 1998 are dropped in the plot as the observations are relatively small (less than 5,000 cases).

(a) Case Number by Year

Bankruptcy Filing By Year (Matched to Credit Bureau) File Year



Grant Rate By Year (Matched to Credit Bureau) 0.5 0.4 0.3 0.2 0.1 0.0 File Year

Figure 4: Judge Leniency: Monotonicity Tests

This figure shows the monotonicity test of judge leniency by parents' filing age, children's filing, ZIP Code income at filing, and the number of children in the family. The plots are generated by plotting the judge leniency for the four metrics above and below the median. The figure also includes the OLS estimates ($\hat{\beta}$) between the judge leniency values above and below the median.





(c) By ACS ZIP Code Income at filing



0.4

0.2





Figure 5: Income

This figure shows 2SLS regression estimates examining the relationship between parental bankruptcy protection and children's income. Panel (a) displays estimates for 10 to 20 years post-filing, while panel (b) presents estimates for ages 20 to 40. Green color indicates annual outcomes for the specified year, while red and blue represent outcomes averaged over 5-year and 3-year periods, respectively, centered around the indicated year on the horizontal axis. All regressions include fixed effects for filing year x office, children's age at filing, and parents' age at filing. Vertical bars represent 95% confidence intervals.

(a) N Years After filing



Children's Annual Income After Parents' Bankruptcy

Figure 6: Social Mobility

This figure shows 2SLS regression estimates examining the relationship between parental bankruptcy protection and intergenerational upward social mobility. Panel (a) displays estimates for 10 to 20 years post-filing, while panel (b) presents estimates for ages 20 to 40. Green color indicates annual outcomes for the specified year, while red and blue represent outcomes averaged over 5-year and 3-year periods, respectively, centered around the indicated year on the horizontal axis. All regressions include fixed effects for filing year x office, children's age at filing, and parents' age at filing. Vertical bars represent 95% confidence intervals.

(a) N Years After filing



Figure 7: Homeownership

This figure shows 2SLS regression estimates examining the relationship between parental bankruptcy protection and children's homeownership. Panel (a) displays estimates for 10 to 20 years post-filing, while panel (b) presents estimates for ages 20 to 40. Green color indicates annual outcomes for the specified year, while red and blue represent outcomes averaged over 5-year and 3-year periods, respectively, centered around the indicated year on the horizontal axis. All regressions include fixed effects for filing year x office, children's age at filing, and parents' age at filing. Vertical bars represent 95% confidence intervals.

(a) N Years After filing



Children's Homeownership After Parents' Bankruptcy

(b) Over Children's Life Cycle



Children's homeownership After Parents' Bankruptcy

Table 1: Summary Statistics

This table shows the summary statistics for the main sample (the population of Chapter 13 cases matched to credit bureau data from 1998 to 2007).

Variables	Ν	Mean	Median	Min	Max	St. Dev.
Grant Chapter 13 Protection $(0,1)$	306,918	0.33	0	0	1	0.47
Judge Leniency	306,918	-0.001	-0.01	-0.65	0.88	0.12
Parents Age in 2022	306,918	57.92	57	35	92	7.89
Parents Age at Filing	306,918	40.07	40	18	68	7.83
Children Age in 2022	306,918	28.87	29	18	44	4.85
Children Age at Filing	306,918	11.03	11	0	18	4.63
Number of Children	306,918	2.18	2	1	5	1.08
Parents Homeownership (0,1)	306,918	0.46	0	0	1	0.50
Children Income 10 Years Later (\$)	183,032	21,151.86	16,346.86	5,000.00	988,000.00	17,250.02
Children Income 15 Years Later (\$)	242,401	31,302.28	24,960.00	5,000.00	991,925.20	25,661.56
Children Income 20 Years Later (\$)	115,380	39,843.13	32,492.19	5,000.00	974,677.70	33,061.95
Children Income at Age 20 (\$)	183,672	16,961.28	14,239.05	5,000.31	848,409.60	11,268.66
Children Income at Age 25 (\$)	200,779	28,273.66	23,766.29	5,000.74	991,925.20	20,786.58
Children Income at Age 30 (\$)	137,855	39,082.97	32,601.24	5,000.00	969,023.70	29,474.14
Children Income at Age 35 (\$)	52,956	47,651.30	38,728.09	5,000.00	834,185.70	38,252.81
Children Income at Age 40 (\$)	6,105	53,052.53	41,833.17	5,000.00	890,939.10	46,485.19
Children Upward Mobility 10 Years Later (0,1)	180,658	0.01	0	0	1	0.11
Children Upward Mobility 15 Years Later (0,1)	239,282	0.03	0	0	1	0.18
Children Upward Mobility 20 Years Later (0,1)	114,394	0.06	0	0	1	0.24
Children Upward Mobility at Age 20 $(0,1)$	100,687	0.001	0	0	1	0.04
Children Upward Mobility at Age 25 (0,1)	198,324	0.02	0	0	1	0.13
Children Upward Mobility at Age 30 $(0,1)$	136, 196	0.06	0	0	1	0.23
Children Upward Mobility at Age 35 (0,1)	52,420	0.10	0	0	1	0.30
Children Upward Mobility at Age 40 $(0,1)$	6,070	0.13	0	0	1	0.34
Children Homeownership 10 Years Later (0,1)	259,721	0.07	0	0	1	0.26
Children Homeownership 15 Years Later (0,1)	299,641	0.15	0	0	1	0.35
Children Homeownership 20 Years Later $(0,1)$	165,413	0.19	0	0	1	0.40
Children Homeownership at Age 20 $(0,1)$	296,293	0.02	0	0	1	0.15
Children Homeownership at Age 25 $(0,1)$	272,104	0.11	0	0	1	0.31
Children Homeownership at Age 30 $(0,1)$	$186,\!649$	0.21	0	0	1	0.41
Children Homeownership at Age $35(0,1)$	76,232	0.29	0	0	1	0.45
Children Homeownership at Age 40 $(0,1)$	9,229	0.36	0	0	1	0.48
Parents' Move (ZIP Code) within Five Years After Filing $(0,1)$	283,015	0.21	0	0	1	0.40
Parents' Number of Moves (ZIP Code) within Five Years After Filing	286,508	0.39	0.00	0.00	5.00	0.64
Children's Student Loan Balance by Age 23 (\$)	$214,\!554$	10,186.70	525.00	0.00	78,044.10	16,183.95
Children Has Student Loans by Age 23 $(0,1)$	$214,\!554$	0.51	1	0	1	0.50
Parent PLUS Loan Balance by Children's Age 23 (\$)	306,918	4,470.58	0.00	0.00	81,101.70	$13,\!374.55$
Parents Have PLUS Loans by Children's Age 23 $(0,1)$	306,918	0.21	0	0	1	0.41

Table 2: First-Stage

This table shows the 2SLS first-stage regression that examines the effect of judge leniency on granting Chapter 13 bankruptcy filed by parents. Judge leniency is calculated as the difference in the yearly grant rate between the judge assigned to the Chapter 13 case and the average grant rate of all judges in the same district.

	Dependent variable: ParentalBankruptcyProtection
Judge Leniency	0.957^{***} (0.035)
Year x Office FE	Yes
Children File Age FE Parents File Age FE	Yes Yes
S.E. Clusters F Statistic	Office 741
$\begin{array}{c} \text{Observations} \\ \text{R}^2 \end{array}$	$\begin{array}{c} 306,\!918\\ 0.274\end{array}$

Table 3: Income

This table reports estimates examining the effect of parental bankruptcy protection on children's income. Panel A shows results for OLS estimations, while panels C and D present results for IV specifications. In panels A and B, columns (1) to (3) measure outcomes 10, 15, and 20 years after filing, whereas in panel C, columns (1) to (5) measure outcomes at various points between ages 20 and 40. All regressions include fixed effects for year x office, children's age at filing, and parents' age at filing. Robust standard errors, clustered at the office level, are reported in parentheses below the estimates. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Children Annual Income				
	(N Years After Parents' Bankruptcy) 10 Years 15 Years 20 Years				
	(1)	(2)	(3)		
Parental Bankrupt cyProtection	$599.671^{***} \\ (76.353)$	$1,533.205^{***} \\ (128.306)$	$2,518.079^{***} \\ (223.259)$		
Year x Office FE	Yes	Yes	Yes		
Children File Age FE	Yes	Yes	Yes		
Parents File Age FE	Yes	Yes	Yes		
S.E. Clusters	Office	Office	Office		
Observations	183,032	$242,\!401$	$115,\!380$		
R ²	0.173	0.157	0.113		

Panel A: OLS

Panel B: 2SLS

	Children Annual Income (N Years After Parents' Bankruptcy)				
	10 Years 15 Years 20 Years				
	(1)	(2)	(3)		
Parental Bankrupt cyProtection	$\substack{1,215.100^{***}\\(392.928)}$	$\begin{array}{c} 1,755.678^{***} \\ (538.375) \end{array}$	$2,819.513^{***} \\ (775.669)$		
Year x Office FE	Yes	Yes	Yes		
Children File Age FE	Yes	Yes	Yes		
Parents File Age FE	Yes	Yes	Yes		
S.E. Clusters	Office	Office	Office		
Observations	183,032	$242,\!401$	$115,\!380$		
R ²	0.173	0.157	0.113		

		Children Annual Income (at Children's Age)						
	Age 20	Age 25	Age 30	Age 35	Age 40			
	(1)	(2)	(3)	(4)	(5)			
Parental Bankrupt cyProtection	571.200^{**} (269.424)	$2,494.402^{***} \\ (466.294)$	$2,145.535^{**}$ (867.475)	$\begin{array}{c} 4,367.501^{***} \\ (1,438.048) \end{array}$	$\begin{array}{c} 18,831.990^{*} \\ (11,080.520) \end{array}$			
Year x Office FE	Yes	Yes	Yes	Yes	Yes			
Children File Age FE	Yes	Yes	Yes	Yes	Yes			
Parents File Age FE	Yes	Yes	Yes	Yes	Yes			
S.E. Clusters	Office	Office	Office	Office	Office			
Observations	$183,\!672$	200,779	$137,\!855$	52,956	6,105			
<u>R</u> ²	0.052	0.060	0.064	0.076	0.182			

Panel C: 2SLS Over Life Cycle

Table 4: Social Mobility

This table reports estimates examining the effect of parental bankruptcy protection on intergenerational upward social mobility. The outcome is measured as a dummy variable that takes a value of one when children belong to the top tercile of income distribution while their parents did not at the time of filing. Panel A shows results for OLS estimations, while panels C and D present results for IV specifications. In panels A and B, columns (1) to (3) measure outcomes 10, 15, and 20 years after filing, whereas in panel C, columns (1) to (5) measure outcomes at various points between ages 20 and 40. All regressions include fixed effects for year x office, children's age at filing, and parents' age at filing. Robust standard errors, clustered at the office level, are reported in parentheses below the estimates. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Children's Upward Mobility (N Years After Parents' Bankruptcy)				
	10 Years 15 Years 20 Years				
	(1)	(2)	(3)		
Parental Bankrupt cyProtection	0.003^{***} (0.001)	0.007^{***} (0.001)	$\begin{array}{c} 0.011^{***} \\ (0.002) \end{array}$		
Year x Office FE	Yes	Yes	Yes		
Children File Age FE	Yes	Yes	Yes		
Parents File Age FE	Yes	Yes	Yes		
S.E. Clusters	Office	Office	Office		
Observations	$180,\!658$	$239,\!282$	$114,\!394$		
\mathbb{R}^2	0.026	0.036	0.045		

Panel A: OLS

Panel B: 2SLS

	Children's Upward Mobility (N Years After Parents' Bankruptcy)			
	10 Years	15 Years	20 Years	
	(1)	(2)	(3)	
Parental Bankrupt cyProtection	0.007^{***} (0.002)	0.005^{*} (0.003)	0.015^{**} (0.007)	
Vear x Office FE	Ves	Ves	Ves	
Children File Age FE	Yes	Yes	Yes	
Parents File Age FE	Yes	Yes	Yes	
S.E. Clusters	Office	Office	Office	
Observations	$180,\!658$	239,282	$114,\!394$	
\mathbb{R}^2	0.026	0.036	0.045	

	Children's Upward Mobility (at Children's Age)				
	Age 20	Age 25	Age 30	Age 35	Age 40
	(1)	(2)	(3)	(4)	(5)
Parental Bankrupt cyProtection	$\begin{array}{c} 0.0004 \\ (0.001) \end{array}$	0.005^{**} (0.002)	0.013^{**} (0.006)	0.027^{*} (0.014)	$\begin{array}{c} 0.050\\ (0.075) \end{array}$
Year x Office FE	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office
Observations	$100,\!687$	198,324	$136,\!196$	$52,\!420$	6,070
\mathbb{R}^2	0.023	0.017	0.026	0.045	0.137

Panel C: 2SLS Over Life Cycle

Table 5: Homeownership

This table reports estimates examining the effect of parental bankruptcy protection on children's homeownership. Panel A shows results for OLS estimations, while panels C and D present results for IV specifications. In panels A and B, columns (1) to (3) measure outcomes 10, 15, and 20 years after filing, whereas in panel C, columns (1) to (5) measure outcomes at various points between ages 20 and 40. All regressions include fixed effects for year x office, children's age at filing, and parents' age at filing. Robust standard errors, clustered at the office level, are reported in parentheses below the estimates. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Children's Homeownership (N Years After Parents' Bankruptcy)				
	Interference Definition 10 Years 15 Years 20 Years				
	(1)	(2)	(3)		
Parental Bankruptcy Protection	$\begin{array}{c} 0.020^{***} \\ (0.002) \end{array}$	$\begin{array}{c} 0.037^{***} \\ (0.002) \end{array}$	0.039^{***} (0.003)		
Year x Office FE	Yes	Yes	Yes		
Children File Age FE	Yes	Yes	Yes		
Parents File Age FE	Yes	Yes	Yes		
S.E. Clusters	Office	Office	Office		
Observations	259,721	$299,\!641$	165,413		
\mathbb{R}^2	0.070	0.085	0.084		

Panel A: OLS

Panel B: 2SLS

	Children's Homeownership (N Years After Parents' Bankruptcy)			
	10 Years 15 Years 20 Years			
	(1)	(2)	(3)	
Parental Bankrupt cyProtection	$\begin{array}{c} 0.031^{***} \\ (0.007) \end{array}$	$\begin{array}{c} 0.042^{***} \\ (0.008) \end{array}$	0.050^{***} (0.010)	
Year x Office FE	Yes	Yes	Yes	
Children File Age FE	Yes	Yes	Yes	
Parents File Age FE	Yes	Yes	Yes	
S.E. Clusters	Office	Office	Office	
Observations	259,721	$299,\!641$	165,413	
<u>R²</u>	0.070	0.085	0.084	

	Children's Homeownership (at Children's Age)				
	Age 20	Age 25	Age 30	Age 35	Age 40
	(1)	(2)	(3)	(4)	(5)
Parental Bankrupt cyProtection	0.007^{**} (0.003)	0.036^{***} (0.007)	$\begin{array}{c} 0.057^{***} \\ (0.012) \end{array}$	0.072^{***} (0.018)	$0.125 \\ (0.092)$
Year x Office FE	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office
Observations	296,293	$272,\!104$	$186,\!649$	$98,\!383$	9,229
\mathbb{R}^2	0.016	0.027	0.035	0.046	0.113

Panel C: 2SLS Over Life Cycle

Table 6:Heterogeneity by Foreclosure

This table reports 2SLS results examining the heterogeneity in the effect of parental bankruptcy protection on children's outcomes 15 years post-filing, based on foreclosure likelihood or realization for dismissed filers. Panel A presents results based on whether dismissed parents were subject to foreclosure, while Panel B reports results for the same analysis for the subsample of homeowner parents. Panel C reports heterogeneity based on whether the states require judicial review for the foreclosure process. Panel D reports results for the same analysis as Panel C of homeowner parents. In Panels A and B, columns (1), (3), and (5) include parents granted bankruptcy protection and those dismissed and foreclosed upon. Columns (2), (4), and (6) include parents granted bankruptcy protection and those dismissed but not foreclosed upon. The outcome variables include children's income, homeownership, and upward mobility. All regressions include fixed effects for filing year x office, children's age at filing, and parents' age at filing. Robust standard errors, clustered at the office level, are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Pa	anel	A:	Whole	Sample
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		Children's Outcomes (15 Years After Parents' Bankruptcy)								
	Income	Income	Upward Mobility	Upward Mobility	Homeownership	Homeownership				
	(1)	(2)	(3)	(4)	(5)	(6)				
Parental Bankrupt cyProtection	$2,119.531^{***} \\ (697.288)$	$\substack{1,275.966^{**}\\(592.069)}$	0.009^{**} (0.004)	0.002 (0.003)	$\begin{array}{c} 0.047^{***} \\ (0.010) \end{array}$	$\begin{array}{c} 0.033^{***} \\ (0.009) \end{array}$				
Sample	Foreclosed	Not Foreclosed	Foreclosed	Not Foreclosed	Foreclosed	Not Foreclosed				
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes				
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes				
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes				
S.E. Clusters	Office	Office	Office	Office	Office	Office				
Observations	152,360	161,242	150,224	159,665	187,213	$197,\!685$				
R ²	0.156	0.158	0.040	0.041	0.090	0.093				

Panel B: Parents' Homeowner Subsample

		Children's Outcomes (15 Years After Parents' Bankruptcy)							
	Income	Income	Upward Mobility	Upward Mobility	Homeownership	Homeownership			
	(1)	(2)	(3)	(4)	(5)	(6)			
Parental Bankrupt cyProtection	$2,856.140^{**} \\ (1,097.567)$	$\substack{1,053.019\\(1,171.130)}$	0.008 (0.007)	0.006 (0.007)	0.046^{**} (0.018)	0.027 (0.017)			
Sample	Foreclosed	Not Foreclosed	Foreclosed	Not Foreclosed	Foreclosed	Not Foreclosed			
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes			
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes			
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes			
S.E. Clusters	Office	Office	Office	Office	Office	Office			
Observations	83,255	67,122	81,758	66,292	102,458	82,325			
R ²	0.159	0.169	0.051	0.057	0.106	0.113			

Panel C: Judicial/Non-Judicial States, Whole Samp	Panel C: Juc	licial/Non	Judicial	States,	Whole	Samp
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		Chil	dren's (Outcomes 1	5 Years After Pare	nts' Bankruptcy)	
	Income	Income	Homeownership	Homeownership	Upward Mobility	Upward Mobility
	(1)	(2)	(3)	(4)	(5)	(6)
Parental Bankruptcy Protection	$2,576.829^{***}$ (617.897)	$\substack{1,138.307\\(829.722)}$	0.039^{***} (0.008)	0.047^{***} (0.013)	0.009^{**} (0.004)	0.002 (0.004)
Sample	Non-Judicial	Judicial	Non-Judicial	Judicial	Non-Judicial	Judicial
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office
Observations	144,065	98,336	178,133	121,508	141,304	97,978
\mathbb{R}^2	0.161	0.154	0.087	0.085	0.036	0.039

Panel D: Judicial/Non-Judicial States, Parents' Homeowner Subsample

		Child	lren's (Outcomes 15	5 Years After Paren	ts' Bankruptcy)	
	Income	Income	Homeownership	Homeownership	Upward Mobility	Upward Mobility
	(1)	(2)	(3)	(4)	(5)	(6)
Parental Bankrupt cyProtection	$3,700.853^{***}$	961.309 (1.375.223)	0.035^{**}	0.048^{**}	0.020^{**}	-0.01
	(1,0011210)	(1,0101220)		(0.020)		
Sample	Non-Judicial	Judicial	Non-Judicial	Judicial	Non-Judicial	Judicial
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office
Observations	65,105	46,638	80,625	57,397	63,243	46,480
\mathbb{R}^2	0.156	0.163	0.101	0.101	0.046	0.051

Table 7:

Income across Job Characteristics

This table presents 2SLS regression results examining the effect of parental bankruptcy protection on children's job choices and characteristics. The dependent variable in panel A is the average income of the industry in which the children work, defined using the first three digits of NAICS codes. In Panel B, the dependent variable is the average income of the employer where the children are employed. All dependent variables are specified for 10, 15, and 20 years post-parents' bankruptcy filing. Each regression includes fixed effects for year x office, children's age at filing, and parents' age at filing. Columns (4) to (6) additionally control for year x industry fixed effects. Robust standard errors, clustered at the office level, are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Average Income by Industry and Employer (N Year After Parents' Bankruptcy)							
	Industry 10 Years	Industry 15 Years	Industry 20 Years	Employer 10 Years	Employer 15 Years	Employer 20 Years		
	(1)	(2)	(3)	(4)	(5)	(6)		
Parental Bankrupt cyProtection	671.980 (732.861)	$1,113.157^{**}$ (542.767)	$3,003.547^{***}$ (1,048.617)	759.928^{*} (396.962)	$1,853.849^{***} \\ (518.900)$	$\begin{array}{c}4,874.413^{***}\\(1,580.786)\end{array}$		
Dep Var Mean	47,698	53,452	57,290	43,768	49,229	52,649		
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes		
Year x Industry FE	No	No	No	Yes	Yes	Yes		
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes		
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes		
S.E. Clusters	Office	Office	Office	Office	Office	Office		
Observations	166, 144	$191,\!549$	51,163	181,966	216,427	59,072		
\mathbb{R}^2	0.088	0.097	0.080	0.480	0.189	0.125		

Table 8:Student Loan/Parent PLUS Loan

This table reports 2SLS results examining the heterogeneity in the effect of parental bankruptcy protection on children's student loans and parents' PLUS loan outcomes by age 23, based on foreclosure likelihood or realization for dismissed filers. Panel A presents results based on whether dismissed parents were subject to foreclosure. Panel B reports heterogeneity based on whether the states require judicial review for the foreclosure process. The sample for both panels includes parents who are homeowners. The dependent variables are children's student loan balance (columns 1 and 2), whether children have student loans (columns 3 and 4), parents' PLUS loan balance (columns 5 and 6), and whether parents have PLUS loans (columns 7 and 8). All regressions include fixed effects for year x office, children's age at filing, and parents' age at filing. Robust standard errors, clustered at the office level, are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Children Stude	nt Loan / Paren	t PLUS Loan at	Children's Age 23
	Student Loan	Has Student	PLUS loan	Has PLUS
	Balance	Loan	Balance	Loan
	(1)	(2)	(3)	(4)
Parental Bankrupt cyProtection	1,723.261***	0.054***	778.083**	0.039***
	(283.704)	(0.010)	(307.320)	(0.009)
Year x Office FE	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office
Observations	264,710	264,710	264,710	264,710
\mathbb{R}^2	0.045	0.031	0.038	0.065

Table 9:

Parents' Foreclosure & Children's Education

This table shows 2SLS results examining the heterogeneity in the effect of parental bankruptcy protection on children's educational outcomes based on foreclosure status for dismissed filers. Panel A shows results for the homeowner sample, while panel B includes the entire sample. In each panel, columns (1), (3), (5), and (7) represent the subsample of parents granted bankruptcy protection and those dismissed and foreclosed, whereas columns (2), (4), (6), and (8) include parents granted bankruptcy protection and those dismissed but not foreclosed. The dependent variables include children's student loan balance, whether children have student loans, parents' PLUS loan balance, and whether parents have PLUS loans. All regressions control for fixed effects by filing year x office, children's age at filing, and parents' age at filing. Robust standard errors, clustered at the office level, are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Foreclosure, Parents Homeowner Subsample

		Children's Education Outcomes (23 Years Old)							
	Student Loan	Student Loan	Has	Has	PLUS Loan	PLUS Loan	Has	Has	
	Balance	Balance	Student Loan	Student Loan	Balance	Balance	PLUS Loan	PLUS Loan	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Parental Bankruptcy Protection	2,767.701***	1,749.152**	0.081***	0.055^{*}	1,534.575**	1,453.435	0.065***	0.044	
	(817.334)	(727.442)	(0.020)	(0.019)	(707.238)	(1,072.860)	(0.023)	(0.030)	
Sample	Foreclosed	Not Foreclosed	Foreclosed	Not Foreclosed	Foreclosed	Not Foreclosed	Foreclosed	Not Foreclosed	
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office	Office	
Observations	90,472	72,770	90,472	72,770	90,472	72,770	90,472	72,770	
R ²	0.056	0.062	0.046	0.048	0.051	0.061	0.091	0.098	

Panel B: Judicial/Non-Judicial States, Parents Homeowner Subsample

		Children's Education Outcomes (23 Years Old)							
	Student Loan Balance	Student Loan Balance	Has Student Loan	Has Student Loan	PLUS Loan Balance	PLUS Loan Balance	Has PLUS Loan	Has PLUS Loan	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Parental Bankrupt cyProtection	$\substack{2,635.954^{***}\\(679.650)}$	496.711 (895.539)	0.071^{***} (0.021)	0.037^{*} (0.018)	$\substack{1,404.344\\(996.121)}$	$^{1,196.833^{\ast}}_{(647.163)}$	0.087^{***} (0.027)	$\begin{array}{c} 0.011 \\ (0.019) \end{array}$	
Sample	Non-Judicial	Judicial	Non-Judicial	Judicial	Non-Judicial	Judicial	Non-Judicial	Judicial	
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office	Office	
Observations	81,959	40,149	81,959	40,149	81,959	40,149	981,959	40,149	
R ²	0.050	0.047	0.040	0.039	0.045	0.053	0.082	0.092	

Table 10:Heterogeneity by Geographic Mobility

This table reports 2SLS results examining the heterogeneity in the effect of parental bankruptcy protection on children's outcomes 15 years post-filing, based on whether dismissed parents moved. Panel A present results based on whether dismissed parents moved, while Panel B reports results for the same analysis for the subsample of renter parents. In Panels A and B, columns (1), (3), and (5) include parents granted bankruptcy protection and those dismissed and moved. Columns (2), (4), and (6) include parents granted bankruptcy protection and those dismissed but did not move. The outcome variables include children's income, homeownership, and upward mobility. All regressions include fixed effects for filing year x office, children's age at filing, and parents' age at filing. Robust standard errors, clustered at the office level, are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

		Children's Outcomes (15 Years After Parents' Bankruptcy)							
	Income	Income	Homeownership	Homeownership	Upward Mobility	Upward Mobility			
	(1)	(2)	(3)	(4)	(5)	(6)			
Parental Bankruptcy Protection	$2,278.769^{***}$ (818.793)	$1,479.155^{**}$ (579.989)	0.035^{***} (0.012)	$\begin{array}{c} 0.042^{***} \\ (0.009) \end{array}$	0.009^{*} (0.005)	0.003 (0.003)			
Sample	Moved	Not Moved	Moved	Not Moved	Moved	Not Moved			
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes			
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes			
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes			
S.E. Clusters	Office	Office	Office	Office	Office	Office			
Observations	120,208	191,036	147,138	234,878	119,503	190,242			
<u>R²</u>	0.163	0.152	0.099	0.087	0.046	0.038			

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Panel B: Parents' Renter Subsample

		Children's Outcomes (15 Years After Parents' Bankruptcy)							
	Income	Income	Homeownership	Homeownership	Upward Mobility	Upward Mobility			
	(1)	(2)	(3)	(4)	(5)	(6)			
Parental Bankrupt cyProtection	$1,295.720^{*}$ (754.247)	348.674 (587.489)	0.022^{**} (0.011)	0.035^{***} (0.008)	$0.005 \\ (0.006)$	-0.003 (0.005)			
Sample	Moved	Not Moved	Moved	Not Moved	Moved	Not Moved			
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes			
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes			
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes			
S.E. Clusters	Office	Office	Office	Office	Office	Office			
Observations	63,549	98,951	77,581	121,643	63,179	98,531			
R ²	0.172	0.152	0.098	0.086	0.059	0.047			

Table 11: Neighborhood Effects

This table shows 2SLS regression results examining the effect of parental bankruptcy protection on ZIP Code income and school district characteristics from the time of parents' bankruptcy filing to children's age 18. The dependent variables in columns (1) to (3) are parents' average ZIP Code income at the time of filing, at children's age 18, and the change between these two points. Columns (4) to (6) report the average school district graduation rate at filing, at children's age 18, and the change over this period. All regressions include fixed effects for year x office, children's age at filing, and parents' age at filing. Robust standard errors, clustered at the office level, are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Neighborhood Related Variables					
	Zip Code Income At Filling	Zip Code Income At Children's Age 18	Zip Code Income Change between Filling and Age 18	Grad Rate At Filling	Grad Rate At Children's Age 18	Grad Rate Change between Filling and Age 18
	(1)	(2)	(3)	(4)	(5)	(6)
$\overline{ParentalBankruptcyProtection}$	$\substack{1,518.839\\(1,239.659)}$	901.475 $(1,383.136)$	-617.365 (513.571)	$\begin{array}{c} 0.262\\ (0.317) \end{array}$	-0.108 (0.318)	-0.370^{***} (0.109)
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Ves Office	Ves Office	Ves Office	Office	Office	Office
R ²	0.137	0.117	0.015	253,483 0.375	253,483 0.353	255,483 0.025

Table 12:Income Volatility

This table shows 2SLS regression results examining the effect of parental bankruptcy protection on the riskiness of children's job, measured by income volatility at the industry and employer levels 15 years after parents' bankruptcy filing. The outcome variables are the standard deviation of industry income (columns 1 and 2) and employer income (columns 3 and 4). Columns (1) and (3) include fixed effects for year x office, children's age at filing, and parents' age at filing. Columns (2) and (4) add controls for current income decile fixed effects. Robust standard errors, clustered at the office level, are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Income Volatility 15 Years After Parents' Bankruptcy			
	Industry Industry		Employer	Employer
	(1)	(2)	(3)	(4)
Parental Bankrupt cyProtection	251.215 (474.900)	-319.796 (458.524)	$1,049.333^{**} \\ (487.414)$	309.271 (469.520)
Mean	55,413	55,413	42,624	42,624
Year x Office FE	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes
Current Income FE	No	Yes	No	Yes
S.E. Clusters	Office	Office	Office	Office
Observations	$191,\!549$	$191,\!549$	216,427	216,427
<u>R²</u>	0.082	0.182	0.056	0.172

Appendix for Online Publication

Table A1: Randomization Test

This table shows the OLS correlation between judge leniency and a range of bankruptcy filers and filing ZIP Code characteristics. ZIP Code level characteristics are obtained from the American Community Survey and the IRS website. Column(1) includes filing year x office fixed effects, and column (2) includes year x office fixed effects, children's age, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Judge Leniency	
	(1)	(2)
Number of Children	-0.0004 (0.0003)	-0.0002 (0.001)
Zipcode Income at Filling	0.000 (0.00000)	0.000 (0.00000)
Zipcode Fraction of Senior at Filling	-0.0001 (0.0001)	-0.0001 (0.0001)
Zipcode Fraction of Bachelor Degree at Filling	$\begin{array}{c} 0.00001 \\ (0.0001) \end{array}$	$\begin{array}{c} 0.00000\\ (0.0001) \end{array}$
Zipcode Fraction of Black at Filling	-0.00004 (0.00002)	-0.00003 (0.00002)
Zipcode Fraction of Female at Filling	0.0001 (0.0001)	0.0001 (0.0001)
Year x Office FE	Yes	Yes
Children File Age FE	No	Yes
Parents File Age FE	No	Yes
S.E. Clusters	Office	Office
Observations	$197,\!207$	197,207
R ²	0.241	0.244

Table A2:Children Income Ranks (Percentiles)

This table shows the 2SLS regression that examines the effect of parental bankruptcy protection on average annual income ranking (in percentile) for children 10, 15, and 20 years after parents' bankruptcy filing. Children's average income is ranked among all other individuals in the Equifax employment dataset within the same employment year. The average income rank is computed from annual income ranks over a five-year window. Columns (1) - (3) demonstrate the average income ranks due to bankruptcy protection 10, 15, and 20 years after the filing. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. We control year x office x parent's Income Rank, children's age at filing, and parents' age at filing fixed effects. Parents' income ranks are the percentile ranks of the ZIP Code income they reside before the bankruptcy filing. The average income of a ZIP Code is obtained from the IRS website. Robust standard errors, which are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Children Annual Income Ranks (Percentiles)		
	(N Years After Parents' Bankruptcy		
	10 Years 15 Years 20 Years		
	(1)	(2)	(3)
Parental Bankrupt cyProtection	1.952***	1.441^{***}	1.949***
	(0.411)	(0.358)	(0.573)
Dep Var Mean:	21.97	29.23	35.13
Year x Office x Parents Income Rank FE	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office
Observations	$180,\!658$	239,282	114,394
\mathbb{R}^2	0.380	0.349	0.325

Table A3:Additional Tests on Social Mobility

This table shows additional 2SLS results on children's social mobility 15 years after parental bankruptcy. Parents' low economic status is defined as the average income of the filing ZIP Code falling into the bottom two terciles. Parents' high economic status is defined as the average income of the filing ZIP Code falling into the top tercile. Children's low economic status is defined as the children's annual income falling into the bottom two terciles of all individuals in the Equifax employment dataset within the same employment year. Children's high economic status is defined as the children's annual income falling into the top tercile of all individuals in the Equifax employment dataset within the same employment year. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. All regressions include filing year x office, children's age, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Alternative Measures of Children's Social Mobility (15 Years After Parents' Bankruptcy)			
Parents economic status:	Low	High	High	
children economic status:	Low	High	Low	
Social Mobility:	Low-Low	High-High	High-Low	
			(Doward Mobility)	
	(1)	(2)	(3)	
Parental Bankrupt cyProtection	-0.041^{**}	0.005	0.016	
	(0.019)	(0.005)	(0.017)	
Dep Var Mean	0.58	0.03	0.29	
Year x Office FE	Yes	Yes	Yes	
Children File Age FE	Yes	Yes	Yes	
Parents File Age FE	Yes	Yes	Yes	
S.E. Clusters	Office	Office	Office	
Observations	$153,\!314$	164,563	239,282	
\mathbb{R}^2	0.159	0.049	0.122	

Table A4:Top Tercile of Income By Industry and Employer

This table shows the 2SLS regression that examines the effect of parental bankruptcy protection on children's likelihood of being in the top tercile of industry and employer income distribution. The dependent variables in Panel A indicate that children working in industries are among the top tercile of the average industry income distribution. The dependent variables in Panel B indicate children working in industries among the top tercile of average employer income distribution. Industries are the first three digits of NAICS codes. All dependent variables are specified as 10, 15, and 20 years after parents' bankruptcy filing. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. All regressions include filing year x office, children's age, and parents's age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	N Year After Parents' Bankruptcy		
	10 Years 15 Years 20		20 Years
	(1)	(2)	(3)
Parental Bankrupt cyProtection	0.0002	0.008	0.049***
	(0.011)	(0.009)	(0.019)
Mean	0.103	0.148	0.183
Year x Office FE	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office
Observations	166, 144	$191,\!549$	51,163
\mathbb{R}^2	0.047	0.050	0.057

Panel A: Top tercile of Income by Industry

Panel B: Top tercile of Income by Employer

	N Year After Parents' Bankruptcy		
	10 Years 15 Years 20 Ye		20 Years
	(1)	(2)	(3)
Parental Bankrupt cyProtection	0.020**	0.026***	0.086***
	(0.009)	(0.009)	(0.028)
Mean	0.17	0.26	0.32
Year x Office FE	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office
Observations	181,966	216,427	59,072
R ²	0.067	0.079	0.080

Table A5:Alternative Measure of Children's upward Mobility (Quartiles)

This table shows the 2SLS regression that examines the effect of parental bankruptcy protection on alternative measures of children's upward mobility. The dependent variable indicates that children are in the top one quartile of the population income distribution while parents' ZIP Code average income at filing is in the bottom three quartiles of the ZIP Code income distribution. The average income of a ZIP Code is obtained from the IRS website. The dependent variables are specified as 10, 15, and 20 years after parents' bankruptcy filing. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. We control year x office, children's age at filing, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Alternative Measure of Upward Mobility (Quartiles) (N Years After Parents' Bankruptcy)				
	10 Years15 Years20 Years				
	(1)	(2)	(3)		
Parental Bankrupt cyProtection	0.003^{*} (0.002)	0.004^{*} (0.002)	0.014^{**} (0.006)		
Dep Var Mean:	0.006	0.020	0.040		
Year x Office FE	Yes	Yes	Yes		
Children File Age FE	Yes	Yes	Yes		
Parents File Age FE	Yes	Yes	Yes		
S.E. Clusters	Office	Office	Office		
Observations	$180,\!658$	239,282	114,394		
\mathbb{R}^2	0.020	0.028	0.038		
Table A6:

Heterogeneity on ZIP Code Income Quartiles

This table examines the heterogeneity effects of parents' bankruptcy on children's income and homeownership 15 years after filing. The sample is split based on quartile rankings of the average ZIP Code income of parents' filing addresses. Panel A shows the subsample analysis based on the entire sample. Panel B shows the subsample analysis of parents who are homeowners at the time of filing. Panel C shows the subsample analysis of parents who are not homeowners (i.e., renters) at filing. The average income of a ZIP Code is obtained from the IRS website. In each regression, parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. All regressions include filing year x office, children's age, and parents's age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

		Childr	en Outcome	s (15 Years Af	ter Parents	' Bankrupt	cy)	
		Inc	ome			Homeov	vnership	
Filing ZIP Code Income:	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Quartile 1	Quartile 2	Quartile 3	Quartile 4
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parental Bankruptcy Protection	$\substack{1,176.175^{*}\\(643.375)}$	$\substack{1,310.144^{*}\\(776.482)}$	$\substack{1,497.920\\(978.633)}$	$2,117.988^{*}$ (1,133.177)	$\begin{array}{c} 0.012\\ (0.013) \end{array}$	$\begin{array}{c} 0.049^{***} \\ (0.013) \end{array}$	$\begin{array}{c} 0.057^{***} \\ (0.016) \end{array}$	$\begin{array}{c} 0.039^{***} \\ (0.013) \end{array}$
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office	Office
Observations	61,723	60,137	59,090	58,435	75,003	74,923	73,435	72,562
R ²	0.146	0.166	0.187	0.192	0.088	0.096	0.107	0.121

Panel A: Whole Sample	e
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Par	iel B:	Parents	Homeowners	Su	bsamp	le
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		Child	ren Outcomes	(15 Year After	Parents' B	ankruptcy)		
		Inco	ome			Homeov	vnership	
Filing 7ID Code Income	Quartile	Quartile	Quartile	Quartile	Quartile	Quartile	Quartile	Quartile
Filing ZIP Code Income:	1	2	3	4	1	2	3	4
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parental Bankrupt cyProtection	620.903	3,620.494***	1,321.710	2,198.308	-0.002	0.053**	0.031	0.055***
	(1, 362.839)	(1,299.175)	(1,804.600)	(1,973.996)	(0.028)	(0.020)	(0.032)	(0.018)
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office	Office
Observations	24,401	26,802	28,558	29,991	29,625	33,349	35,490	37,119
R ²	0.162	0.180	0.201	0.201	0.115	0.126	0.134	0.141

		Chi	ldren Outcome	es (15 Years Af	fter Parents	'Bankruptc	y)	
		Ir	ncome			Homeov	vnership	
Filing ZIP Code Income:	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Quartile 1	Quartile 2	Quartile 3	Quartile 4
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parental Bankruptcy Protection	$\substack{1,031.884\\(779.433)}$	-682.169 (977.740)	$1,094.194 \\ (1,165.938)$	965.620 $(1,501.232)$	$0.007 \\ (0.014)$	0.038^{**} (0.015)	$\begin{array}{c} 0.063^{***} \\ (0.015) \end{array}$	$\begin{array}{c} 0.019 \\ (0.023) \end{array}$
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office	Office
Observations	37,322	33,335	30,532	28,444	45,378	41,574	37,945	35,443
\mathbb{R}^2	0.153	0.180	0.204	0.209	0.099	0.107	0.121	0.133

Panel C: Parents Renters Subsample

Table A7:

Parents Foreclosure and Geographical Mobility

This table shows the 2SLS regression that examines the effect of granting Chapter 13 bankruptcy protection on parents' geographical mobility and foreclosure five years after filing. The dependent variables in columns (1)-(2) represent indicators of whether the parents moved out of the filing ZIP Code and the first three digits of the filing ZIP Code. The dependent variables in columns (3)-(4) represent the number of parental moves across ZIP Codes and the first three digits of ZIP Codes. The dependent variable in column (5) represents whether parents were foreclosed upon. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. All regressions include filing year x office, children's age, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

		Pa: (Within 5 Y	rents' Move/Fo Tears After Pare	reclosure ents' Bankrupt	ccy)
	Move out of ZIP Code (0,1)	Move out of ZIP3 (0,1)	Number of Moves (ZIP Code)	Number of Moves (ZIP3)	Foreclosure $(0,1)$
	(1)	(2)	(3)	(4)	(5)
Parental Bankrupt cyProtection	-0.235^{***} (0.016)	-0.085^{***} (0.009)	-0.261^{***} (0.022)	-0.088^{***} (0.013)	-0.311^{***} (0.019)
Mean	0.21	0.08	0.39	0.15	0.38
Year x Office FE	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office
Observations	283,015	283,015	$286{,}508$	$286{,}508$	$286{,}516$
<u>R²</u>	0.065	0.035	0.103	0.054	0.167

Table A8:

Heterogeneity by Children Age at filing

This table shows the 2SLS regression that examines heterogeneous effects of parental bankruptcy protection based on children's age at filing. The dependent variables are children's annual income, homeownership, and upward mobility when children are 30. The sample is split based on the median age of children at parental bankruptcy filing. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. All regressions include filing year x office, children's age, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Chil	dren Outcome	s (when Chi	ldren Are 3	0 Years Old)
	Inc	ome	Homeow	mership	Upward I	Mobility
	Younger;	Older;	Younger;	Older;	Younger;	Older
	(1)	(2)	(3)	(4)	(5)	(6)
Parental Bankrupt cyProtection	1,712.607	2,175.687**	0.039**	0.071***	0.007	0.015**
	(1, 143.645)	(1,046.669)	(0.015)	(0.014)	(0.007)	(0.007)
Children Age Cutoff	14	14	14	14	14	14
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office
Observations	56,080	81,775	80,276	106,373	$55,\!530$	80,666
<u>R²</u>	0.070	0.077	0.049	0.041	0.044	0.033

Table A9: Heterogeneity by Family Size

This table shows the 2SLS regression that examines heterogeneous effects of parental bankruptcy protection based on family size. The dependent variables are children's annual income, homeownership, and upward mobility 15 years after filing. The sample is split based on the median number of children in the whole sample. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. All regressions include filing year x office, children's age, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, ***, and * represent significance at 1%, 5% and 10% levels.

	(Children Out	comes $(15 \times$	lears Later	Filling)	
	Inco	me	Homeov	vnership	Upward 1	Mobility
	Smaller;	Lager;	Smaller;	Larger;	Smaller;	Larger
	(1)	(2)	(3)	(4)	(5)	(6)
Parental Bankrupt cyProtection	$2,010.002^{***} \\ (643.239)$	$1,235.377 \\ (895.914)$	$\begin{array}{c} 0.032^{***} \\ (0.011) \end{array}$	$\begin{array}{c} 0.047^{***} \\ (0.009) \end{array}$	$0.005 \\ (0.004)$	$0.007 \\ (0.005)$
Number of Children Cutoff	2	2	2	2	2	2
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office
Observations	161,542	80,859	93,336	206,305	159,441	79,841
\mathbb{R}^2	0.162	0.169	0.093	0.090	0.038	0.056
Adjusted \mathbb{R}^2	0.153	0.148	0.076	0.080	0.027	0.032

Table A10:

2SLS Robustness: Sample Extended to 10 Maximum Children in a Household

This table shows the 2SLS regression that examines the robust effect of parental bankruptcy protection on children's income, homeownership, and upward mobility 15 years after parents' bankruptcy filing. Compared to the baseline 2SLS results, the sample is extended to include all households with 10 maximum children. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. We control year x office, children's age at filing, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Children Out	comes (15 Year After 1	Parents' Bankruptcy)
	Income;	Upward Mobility;	Homeownership
	(1)	(2)	(3)
Parental Bankrupt cyProtection	1,746.080***	0.008^{*}	0.033***
	(531.053)	(0.005)	(0.007)
Year x Office FE	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office
Observations	247,871	244,709	$306,\!490$
R ²	0.157	0.048	0.094

Table A11:2SLS Robustness: Sample Restricted to Single-time Filers

This table shows the 2SLS regression that examines the robust effect of parental bankruptcy protection on children's income, homeownership, and upward mobility 15 years after parents' bankruptcy filing. Compared to the baseline 2SLS results, the sample is restricted to single-time bankruptcy-filing parents. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. We control year x office, children's age at filing, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Children Out	comes (15 Year After	Parents' Bankruptcy)
	Income;	Upward Mobility;	Homeownership
	(1)	(2)	(3)
Parental Bankrupt cyProtection)	1,747.204***	0.006^{*}	0.039***
	(564.705)	(0.003)	(0.009)
Year x Office FE	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office
Observations	209,728	207,082	$259,\!621$
R ²	0.157	0.037	0.087

	$\operatorname{Robustness}$
A12:	Effect
Table	Fixed

This table shows the robustness of the main 2SLS analysis with a range of fixed effects. The dependent variables are children's annual income post parental bankruptcy filing. Panel A and B specify 10 and 15 years after post-filing. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

		hildren Annı	ual Income (10 Years Aft	er Parents' B	ankruptcy)	
	(1)	(2)	(3)	(4)	(5)	(9)	(2)
Parental Bankrupt cyProtection	$1,215.100^{***}$ (392.928)	788.909^{**} (338.082)	779.609^{**} (307.506)	524.516^{*} (300.615)	574.976^{**} (280.651)	143.726 (184.480)	326.776 (221.635)
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	\mathbf{Yes}	Yes	Y_{es}	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$
Children File Age FE	\mathbf{Yes}	Y_{es}	No	$\mathbf{Y}_{\mathbf{es}}$	No	$\mathbf{Y}_{\mathbf{es}}$	No
Industry FE	No	Y_{es}	No	N_{O}	No	No	No
Children File Age x Industry FE	No	No	\mathbf{Yes}	No	No	No	No
Company FE	N_{O}	N_{O}	No	$\mathbf{Y}_{\mathbf{es}}$	No	No	No
Children File Age x Company FE	N_{O}	No	No	No	$\mathbf{Y}_{\mathbf{es}}$	N_{O}	N_{O}
Title FE	N_{O}	N_{O}	N_{O}	N_{O}	N_{O}	$\mathbf{Y}_{\mathbf{es}}$	N_{O}
Children File Age x Title FE	No	No	No	No	No	No	$\mathbf{Y}_{\mathbf{es}}$
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office
Observations	183,032	165,302	165, 302	165, 302	165, 302	165, 302	165,302
$ m R^2$	0.173	0.335	0.355	0.540	0.643	0.766	0.838

Panel A: 10 Years After Parents' Bankruptcy filing

		Children An	nual Income (1:	5 Years After	· Parents' Bar	$\operatorname{nkruptcy})$	
	(1)	(2)	(3)	(4)	(5)	(9)	(2)
Parental Bankrupt cyProtection	$1,740.248^{***} \\ (494.364)$	$1,311.093^{***} \\ (445.634)$	$1,230.571^{***}$ (434.794)	567.695^{*} (330.308)	982.659^{***} (346.632)	798.775^{**} (325.825)	$1,024.678^{**} \\ (465.531)$
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$
Children File Age FE	Yes	\mathbf{Yes}	N_{O}	$\mathbf{Y}_{\mathbf{es}}$	No	$\mathbf{Y}_{\mathbf{es}}$	No
Industry FE	No	Yes	No	No	No	No	No
Children File Age x Industry FE	No	No	\mathbf{Yes}	No	N_{O}	No	No
Company FE	N_{O}	No	No	$\mathbf{Y}_{\mathbf{es}}$	No	No	No
Children File Age x Company FE	No	No	No	No	\mathbf{Yes}	N_{O}	No
Title FE	No	No	No	No	No	$\mathbf{Y}_{\mathbf{es}}$	No
Children File Age x Title FE	No	No	No	No	No	No	$\mathbf{Y}_{\mathbf{es}}$
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office
Observations	191,284	191,284	191,284	191,284	191,284	191,284	191,284
$ m R^2$	0.171	0.297	0.314	0.536	0.673	0.769	0.841

Panel B: 15 Years After Parents' Bankruptcy filing

Table A13:

Robustness: Sample of Non-missing Outcome Variables Across Different Outcome Years

upward mobility 10 and 15 years after bankruptcy. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to the sample is limited to observations with non-missing variables on children's income, homeownership, and upward mobility 10, 15, and 20 years after bankruptcy. In Panel B, the sample is limited to observations with non-missing variables on children's income, homeownership, and this case. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent This table shows the 2SLS regression that examines the robust effect of parental bankruptcy protection on children's outcomes. In Panel A, significance at 1%, 5% and 10% levels.

				Children's (Dutcomes (N Years	: After Parental Bar	nkruptcy)		
	Income 10 Yrs	Income 15 Yrs	Income 20 Yrs	Homeownership 10 Yrs	Homeownership 15 Yrs	Homeownership 20 Yrs	Upward Mobility 10 Yrs	Upward Mobility 15 Yrs	Upward Mobil 20 Yrs
	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)
Parental Bankrupt cyProtection	$1,217.971^{**}$	$2,550.512^{***}$	$3,804.541^{**}$	0.032^{**}	0.057^{***}	0.059^{***}	0.006	0.010	0.018
	(520.244)	(802.484)	(1, 482.307)	(0.014)	(0.016)	(0.018)	(0.005)	(0.008))	(0.013)
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	$\mathbf{Y}_{\mathbf{es}}$	\mathbf{Yes}	γ_{es}	Yes	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	Yes
Parents File Age FE	Yes	Yes	$\mathbf{Y}_{\mathbf{es}}$	\mathbf{Yes}	\mathbf{Yes}	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office	Office	Office
Observations	41,779	41,779	41,779	41,779	41,779	41,779	52,420	41,779	41,779
$ m R^2$	0.201	0.144	0.089	0.105	0.095	0.092	0.047	0.057	0.059

Panel A: Non-missing Variables for 10, 15, and 20 Years After filing

Panel B: Non-missing Variables for 10 and 15 Years After filing

				Children Out	comes (N Year Afte:	r Parents' Bankrupte	cy)		
	Income 10 Yrs	Income 15 Yrs	Income 20 Yrs	Upward Mobility 10 Yrs	Upward Mobility 15 Yrs	Upward Mobility 20 Yrs	Homwoernship 10 Yrs	Homwoernship 15 Yrs	Homwoernship 20 Yrs
	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)
Parental Bankrupt cyProtection	$1,282.394^{***}$	$1,776.908^{**}$	$3,664.577^{**}$	0.007**	0.008^{*}	0.011	0.027^{***}	0.050^{***}	0.057^{***}
	(463.709)	(711.557)	(1, 438.953)	(0.003)	(0.005)	(0.00)	(0.008)	(0.011)	(0.015)
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	\mathbf{Yes}	$\mathbf{Y}_{\mathbf{es}}$	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	\mathbf{Yes}	Yes	Yes	γ_{es}	Yes	Yes	Yes	γ_{es}
S.E. Clusters	Office	Office	Office	Office	Office	Office	Office	Office	Office
Observations	137,736	137,736	43,589	137,736	137,736	74,659	137,736	137,736	62,876
R ²	0.196	0.125	0.091	0.032	0.039	0.074	0.078	0.076	0.078

Table A14:2SLS Heterogeneity Analysis on Parents' Education

This table examines the heterogeneity analysis based on parents' education backgrounds. The analysis is based on the subsample of parents who report their educational backgrounds on their LinkedIn profiles. The dependent variables in each panel represent children's annual income, homeownership, and upward mobility 15 years after parents' bankruptcy filing. Panel A, B, and C show the subsample analysis on whether parents have bachelor's, master's, and doctoral degrees at filing. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. We control year x office, children's age at filing, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Childr	en Outcomes (1	15 Year Aft	er Parents	Bankrupt	cy)
	Inc	ome	Homeov	vnership	Upward	Mobility
	Yes	No	Yes	No	Yes	No
	(1)	(2)	(3)	(4)	(5)	(6)
Parental Bankrupt cyProtection	2,708.997 (2,244.306)	$3,660.448^{**}$ (1,474.776)	$\begin{array}{c} 0.030 \\ (0.018) \end{array}$	0.047^{*} (0.027)	$0.020 \\ (0.012)$	$\begin{array}{c} 0.007 \\ (0.013) \end{array}$
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office
Observations	19,768	16,102	24,271	19,963	$19,\!471$	$15,\!938$
\mathbb{R}^2	0.216	0.227	0.135	0.155	0.102	0.125

Panel A: Parents' Bachelor's Degree

Panel B: Parents' Master's Degree

	Child	ren Outcomes (1	5 Year Aft	er Parents'	Bankrupto	y)
	Inc	come	Homeov	vnership	Upward	Mobility
	Yes	No	Yes	No	Yes	No
	(1)	(2)	(3)	(4)	(5)	(6)
Parental Bankrupt cyProtection	-2,537.009 (4,185.256)	$\begin{array}{c} 4,875.837^{***} \\ (1,534.502) \end{array}$	$\begin{array}{c} 0.003 \\ (0.034) \end{array}$	0.048^{**} (0.022)	$0.003 \\ (0.018)$	0.025^{**} (0.010)
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office
Observations	$8,\!108$	27,762	10,001	34,233	7,988	$27,\!421$
R ²	0.262	0.203	0.197	0.127	0.188	0.084

	Child	ren Outcomes (1	5 Year Aft	er Parents'	Bankrupto	y)
	Inc	come	Homeov	wnership	Upward	Mobility
	Yes	No	Yes	No	Yes	No
	(1)	(2)	(3)	(4)	(5)	(6)
Parental Bankrupt cyProtection	-271.332 (6,064.641)	$3,930.002^{***}$ (1,438.614)	$\begin{array}{c} 0.061 \\ (0.098) \end{array}$	0.046^{**} (0.019)	$\begin{array}{c} 0.030 \\ (0.038) \end{array}$	0.018^{*} (0.009)
Year x Office FE	Yes	Yes	Yes	Yes	Yes	Yes
Children File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Parents File Age FE	Yes	Yes	Yes	Yes	Yes	Yes
S.E. Clusters	Office	Office	Office	Office	Office	Office
Observations	$1,\!460$	$34,\!410$	1,816	42,418	$1,\!438$	$33,\!971$
\mathbb{R}^2	0.624	0.193	0.442	0.116	0.509	0.078

Panel C: Parents' Doctoral Degree

Table A15:Educational Upward Mobility

This table examines the effect of parents' bankruptcy protection on children's educational upward and downward mobility. Educational upward mobility occurs when parents do not have a bachelor's degree, but their children do. In contrast, educational downward mobility happens when parents hold a bachelor's degree, yet their children do not. The analysis is based on the subsample of parents who report their educational backgrounds on their LinkedIn profiles. Children's educational outcomes are approximated by their student loan balances by age 23. Parents' bankruptcy protection is instrumented by the leniency of the judge assigned to this case. We control year x office, children's age at filing, and parents' age at filing fixed effects. Robust standard errors are clustered at the office level and are reported in parentheses below the estimates. ***, **, and * represent significance at 1%, 5% and 10% levels.

	Educatio	nal Mobility
	Upwards Educational Mobility	Downwards Educational Mobility
Parents' Bachelor's Degree:	No	Yes
Children's Bachelor's Degree:	Yes	No
	(1)	(2)
Grant (fitted)	0.063^{**}	-0.031
	(0.030)	(0.026)
Dep.Var.Mean:	0.236	0.263
Year x Office FE	Yes	Yes
Children File Age FE	Yes	Yes
Parents File Age FE	Yes	Yes
S.E. Clusters	Office	Office
Observations	30,851	30,851
\mathbb{R}^2	0.080	0.077