Views from the other side of the Rail

Guest Speakers: Nancy J. Stone and Edward “Trey” Basha, III

May 7, 2015 – Pupilage 2

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[1]Pupilage 2 is grateful for the authors and publication editors who gave their permission to reproduce these articles.

INTRODUCTION

With the assistance of guest speakers Nancy J. Stone and Edward N. Basha III, Pupilage 2 presents a unique perspective of the Chapter 11 process through the viewpoint of individuals whose companies have filed for bankruptcy protection. The speakers will address several issues associated with bankruptcy, including the decision-making process in deciding to file, interactions with creditors and creditor committees, perception of judges and counsel interactions with the court, negative perceptions of filing, employee concerns, and biggest surprises faced during the process.

The goal of Pupilage 2 is to encourage practitioners to consider and understand the viewpoint of those faced with bankruptcy to better communicate and counsel those going through the process. Although the guest speakers will be discussing the Chapter 11 experience exclusively, their thoughts will provide a reminder for all practitioners that any bankruptcy can be stressful, complicated, and full of surprises. It is the role of debtorsô counsel to anticipate, communicate, and guide debtors through the process with a sympathetic understanding of the stressful complexities bankruptcy can bring.

Three articles are enclosed in these materials. The first, *Counseling Clients in Financial Distress*, asks business attorneys to identify and address the ñpsychological, ethical, and spiritual aspectsò of financial failure as a means to better facilitate business restructuring. The second, *Bankruptcy Phobia*, reminds attorneys that despite the continuing negative impressions of bankruptcy, it remains an effective and frequently successful means for individual and business financial recovery, and economic recovery as a whole. The third article, *Debt Relief and Debtor Outcomes*, focused particularly on Chapter 13 bankruptcy, provides an uplifting perspective on the positive statistics associated with successful Chapter 13 filers. The overall message of these articles is that, despite negative stereotypes, complexities, and challenges, bankruptcy protection remains a useful and effective tool for solving financial crises for individuals and businesses.

Biography of Nancy J. Stone
Stone Strategic Management, LLC

Nancy Stone, founder of Stone Strategic Management, LLC, works with business owners and leaders to improve operational and financial performance, execute new projects and move the business forward to achieve its most important goals. She serves as an advisor and confidant to CEO's and business owners; supports time constrained CEO's by addressing issues and opportunities as needed; and heads Business Leadership Forums for CEO's, business owners and executives to exchange issues and ideas in a confidential setting with peers outside their own industry.

For 25 years, Ms. Stone has navigated companies from concept, through growth, repositioning and disposition. She was the President and Vice Chairman of publicly held ILX Resorts Incorporated, a premier provider of vacation ownership in the western United States. ILX acquired and developed resort properties, marketed vacation ownership interests, provided consumer financing and operated resort hotels.

In her role as President of ILX, she led the company's growth and more than a decade of consecutive years of profitability. Prior to her tenure as President she served as Chief Financial Officer, presiding over the company's initial public offering and transition from start up to an operating company.

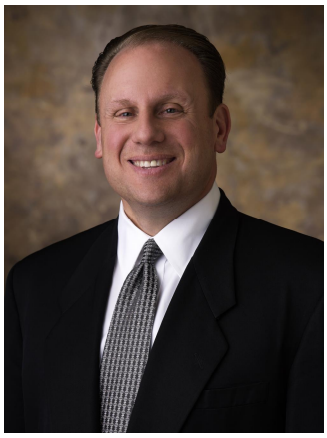
Ms. Stone has held management positions in entrepreneurially driven companies, private and public, in various industries. As Treasurer of a private holding company which acquired, added value, and remarketed operating businesses, she analyzed the potential of target opportunities, reduced costs and improved operations of acquired companies, and created offering documents to showcase the attributes of the enhanced business.

She worked with one of the foremost real estate developers in the Southwest to reposition the organization to capitalize on current market opportunities; headed the business and financial affairs for a top performing region of a national for-profit college; and worked for a professional services and consulting firm to develop a practice in a specialized new niche. She built a solid foundation for her career with the international firm of Arthur Andersen & Co, where she analyzed internal control systems, audited financial statements, and performed operational evaluations.

Ms. Stone serves in a leadership capacity for civic, business and charitable organizations both locally and nationally.

Ms. Stone has a master's degree in business administration from Arizona State University and a bachelor's degree in finance from Michigan State University. She is a CPA in the state of Arizona.

www.stonestrategicmanagement.com
480-521-4912



Edward N. Basha III
Chairman of the Board
President and CEO
Bashas' Inc.

Edward N. Basha III is Chairman of the Board of Directors, President and CEO for Bashasô Inc.ï the family-owned grocer that operates Bashasô Food City, AJôs Fine Foods, Eddieôs Country Store, and BashasôDiné supermarkets.

Edwardôs grandfather and great uncle founded the Arizona-based company in 1932. At the time, every family member worked for just one Bashasô market, helping to fulfill the needs of the surrounding community. Nearly eight decades later, Bashasôis still a family affair. Edwardôs first job, in fact, was serving as a carryout for Bashasôwhen he was 12 years old. Heôs been with the company ever since. Prior to taking over his current responsibilities, he was responsible for retail operations. His roles within Bashasô management have been in Real Estate, Finance, and Legal.

A lifelong resident of Chandler, he earned his bachelorôs degree and MBA from Arizona State University.

Edward is extremely involved in the community. He has served on the Board of Directors of the East Valley Child Crisis Center, as a member of and president of the Board of Directors of the Childrenôs Cancer Center, as a member of and president of the Phoenix Childrenôs Hospital Foundation Board of Directors and as a member of the Arizona Chapter of the American Academy of Pediatrics. He has also served on numerous committees for the Chandler Unified School District and the City of Chandler

He and his wife LeAnn are actively involved in serving in the community and in their faith.

Edward and LeAnn are the proud parents of five children and six grandchildren, and they enjoy spending their free time with all of them.

# # #

In re: ILX RESORTS INCORPORATED, et al.

3:09-bk-03594-GBN (2:09-bk-03594-RTB)

Nancy J. Stone, President: ILX Resorts incorporated

International Leisure Enterprises Incorporated was founded and incorporated in 1986. It changed its name to ILX Incorporated in 1993 and finally to ILX Resorts Incorporated (ñILXò) in 1998. ILX began modestly with two resort properties in 1991, and by 2008, it had grown to ten total properties; seven in Arizona, one each in Indiana and Colorado; and one in Sonora Mexico. In addition to these properties, ILX also held ownership interests in four additional resort properties; as well as undeveloped land in Bullhead City and Sedona, Arizona and Rocky Point, Mexico. ILX originally marketed vacation ownership interests in its individual resorts; but by 1998 had created its Premiere Vacation Ownership Club (ñPCVò). The PCV offered one week membership interests to be used anytime at any of its destinations or at individual resorts. Further, PCV also offered ownership interests that could be exchanged for other stays at other resorts through networks such as Interval International (ñIIò) and Resort Condominium International (ñRCIò).

The economic downturn beginning in 2007 led to ILXôs primary lender beginning the process of exiting the lending business. As a consequence, ILX was unable to negotiate the restructuring of a note encumbering its raw land located in Sedona, thereby leading to a default under that particular note and defaults under the cross default provisions of the various other notes held by ILXôs primary lender. The lender could cease funding on the revolving timeshare loan in the event of cross-default and thereby cripple ILXôs ability to operate its primary business of selling timeshare interests. Counsel indicated that the bankruptcy court would likely make available to ILX during the pendency of the bankruptcy proceeding the cash flows from the payments by timeshare owners on their receivables, which normally would have been paid to the lender. In order to prevent the lender ceasing funding under the revolving timeshare loan without a replacement of cash flow, ILX and 15 of its subsidiaries filed for bankruptcy protection in March 2009.

ILX was initially very hopeful of successfully emerging from the chapter 11 bankruptcy in 2014 and had begun measures to achieve this; namely: 1) companywide reductions and freezes in pay, 2) rejection of costly leases, 3) personnel reductions and 4) revised marketing and sales strategies. Moreover, ILX hoped to establish and renew relationships with equity investors and debt financing sources that would allow it to replace the primary lender as its financing partner and maximize and create sustainable profitability.

However, ILXôs primary secured creditor filed a motion for relief from stay and objected to ILXôs original plan of reorganization. If stay relief were granted, it would have been impossible for ILX to reorganize and successfully emerge from the bankruptcy. After a plan confirmation fight with its primary lender, ILX and the lender entered into an agreement whereby they submitted a joint liquidating plan that provided the following:

1) The sale of substantially all of the assets of ILX to a third party;
2) Payment from the sale proceeds and cash on hand of all allowed administrative and priority claims; and pre and post petition confirmation operating expenses;
3) Payment of allowed secured claims from the sale proceeds of the assets subject to their lien;
4) Return of collateral to holders of certain secured claims;
5) Creation of an ILX Liquidating Trust for the benefit of the Allowed Unsecured Claims;
6) Transfer of certain real property, residual rights to proceeds and other assets not sold to the ILX liquidating Trust;
7) Creating of stock pool for the benefit of the holders of ILX stock;
8) Transfer to the ILX stock pool of $2.1 million;
9) Retention of the corporate shell, the related income tax benefits and certain merchant deposits for the ILX stock pool;
10) The settlement and release of causes of action against Textron Financial and the allowance of its claim and the validity and priority of its security interests.

ILX received a stalking-horse sale offer for $29,672,251.00 from an entity created by ILXôs primary competitor. The sale was successfully completed and the plan was confirmed.

In re Bashas' Inc., Bashas' Leaseco Inc., Sportsman's, LLC

2:09-bk-16050-JMM, 2:09-bk-16051-JMM, 2:09-bk-16052-JMM

Edward N. Basha III, Current Chairman of the Board, President, and CEO: Bashas' Inc.

At the time of filing, Bashasô was the 12th largest employer in the State of Arizona and the 15th largest privately held grocery chain in the United States, operating approximately 158 stores and employing 8,500 people. Bashasô had been in existence for 78 years and this was its first bankruptcy filing. Its assets consisted of 34 parcels of real property, many of which were improved, and personal property

Before 2009, Bashasô and the related entities had borrowed money on an unsecured basis, repaying obligations as they became do. However, with the downturn in the economy, Bashasô faced higher demands on cash flow than it could sustain, resulting in demands from lenders to secure the outstanding debt and to repay amounts owed in shorter terms. Bashasô and its related entities filed for Chapter 11 Bankruptcy Protection on July 12, 2009. The Plan was confirmed approximately one-year later in August 2010.

Prior to the filing, the Debtors secured a prepetition loan and a commitment for DIP financing, secured against the real property. A portion of the committed funds were borrowed during the course of the bankruptcy with Court approval. During the bankruptcy, the Debtorsô relied on several professionals, including bankruptcy counsel, special counsel, financial restructuring advisors, real estate experts, financial advisors/investment bankers, and a Chief Restructuring Officer. While under bankruptcy court protection, Bashasô stayed within its budgets and became profitable, amassing over $100 million in cash.

At the time of filing, Bashasô was the tenant of approximately 130 grocery leases. Because of the decline in the economy, many of the leases were over-market. Many of the leases were rejected and many were re-negotiated in the bankruptcy. During the course of the bankruptcy, Bashasô received an unsolicited offer from Albertsons, LLC to purchase the assets of the company for $260 to $290 million. Such offer was rejected in favor of the Plan of Reorganization because the sale would not have fully repaid creditors.

The DebtorsôPlan was proposed jointly by the Debtors and the Official Committee of Unsecured Creditors and provided for the following:

1) The Plan used the cash on hand to bring its lendersô interest current, pay most of the priority claims, and pay professionals.
2) The Plan further provided for continued regular payments to creditors on a three-year schedule with projections providing for the opportunity to re-finance remaining obligations after three years on longer, more favorable terms.

3) The Plan provided for 18 creditor classes and one equity class. Fourteen of the voting classes voted in favor of the Plan. The lender classes objected, raising several issues, including feasibility, the propriety of modifications to the Plan and corresponding disclosure, and whether treatment of the creditor claims was fair and equitable.
4) The Plan was a full repayment Plan.

The Plan was confirmed and the Debtors have since fully consummated the Plan.

COUNSELING CLIENTS IN FINANCIAL DISTRESS

Steven H. Silton

66 Aug. Bench & B. Minn. 29 (2009)

Summary

Unlike personal injury or family law attorneys, commercial lawyers tend to focus solely on the financial needs of their clients. But counsel who can identify and address the psychological, ethical, and spiritual aspects of personal financial failure or the failure of their clientsô businesses can better facilitate the restructuring of the clientôs financial affairs.

Important Points

- Business clients operate by moving from deal to deal. Clients accustomed to operating on a transaction basis will view the passage of time as a negative. This can be antithetical to a workout where the passage of time is positive. Encouraging patience is imperative, as is ensuring clients do not push for a hasty and unnecessary solution.
- Failure is devastating, but counsel should encourage clients to use depression as a motivator, focusing on the positive aspects of their business and emphasizing those aspects to the public.
- Get clients to focus on two things: (1) what is necessary to overcome the financial crisis, and (2) the future and their next success.
- Manage expectations, including the downside expectations. Describe worst-case scenarios so that clients do not have irrational fears and know both the issues they are likely to face as well as those they likely will not face.
- Shift the focus from wealth to work.
- Recognize your own limits and refer to other professionals if necessary.

BANKRUPTCY PHOBIA

David A. Skeel, Jr.

82 Temp. L. Rev. 333 (2009)

Summary

During the recent financial crisis, regulators and lawmakers were reluctant to use bankruptcy as a solution. Such reluctance likely was the result of a least four contributing factors: (1) belief that bankruptcy is a poor solution to the mortgage crisis or for resolving the distress of financial institutions because it would result in even tighter lending standards, i.e., the costs would be borne by future borrowers; (2) lobbying by banks and financial institutions; (3) pressure from executives to avoid bankruptcy; and (4) widespread misconceptions about bankruptcy.

Important Points

- ñPerhaps the biggest wild card for the perception of bankruptcy is the Chapter 11 filings by Chrysler and General Motors. Chapter 11ôs role in restructuring the carmakers could help dispel the myth that bankruptcy is the end of the road for a troubled corporation. On the other hand, the administrationôs commandeering of the bankruptcy process in these cases, and the efforts it took to circumvent the ordinary Chapter 11 process, could reinforce the suspicion that bankruptcy means liquidation absent an extraordinary intervention. Overall, the administrationôs response is unlikely to significantly alter most Americansô impression of bankruptcy.ò
- According to a recent study, more than 70% of companies that enter bankruptcy with a plausible prospect of reorganizing do in fact successfully reorganize.
- The 2005 amendments magnified misconceptions about bankruptcy, painting consumer bankruptcy in a bad light, adding new substantial obligations, and curbing the discretion of judges, leading many Americans to believe that bankruptcy no longer was a reasonable option.
- During the financial crisis, bailout decisions were made by the Treasury and the Federal Reserve, the leaders of which had a sophisticated understanding of banking regulations, but little familiarity with bankruptcy. This gap in expertise likely reinforced the dismissal of bankruptcy as a solution to resolving the financial crisis.
- American bankruptcy laws, more than the insolvency laws of other countries, have contributed to the recovery of individuals and the economy in general.

DEBT RELIEF AND DEBTOR OUTCOMES:
MEASURING THE EFFECTS OF CONSUMER BANKRUPTCY PROTECTION
Will Dobbie and Jae Song
National Bureau of Economic Research Working Paper 20520 (2014)

Summary

Characterizing consumer bankruptcy as a significant social insurance program, the authors evaluated 500,000 Chapter 13 bankruptcy filings and found that bankruptcy protection increased annual earnings by $5,562.00, decreased five-year mortality by 1.2%, and decreased five-year foreclosure rates 19.1%. These figures primarily derive from the negative outcomes of dismissed filers.

Important Points

- Bankruptcy protection helps workers earn more by removing the disincentive to work, which results from creditor garnishment of paychecks.
- Bankruptcy protection can help people live longer, most likely because of the reduction in the stress that results from dealing with debt problems.
- Chapter 13 may also decrease the receipt of Supplemental Security Income.
- Chapter 13 filers granted bankruptcy protection have similar earnings pre and post filing. However, dismissed filers experience substantial declines in earnings after filing.
- The impact of Chapter 13 protection is greater when creditors were allowed to garnish earnings, suggesting bankruptcy protection help maintains the incentive to work.
- Chapter 13 protection helps maintain economic stability by reducing foreclosure rates and reducing consumer evasion of creditors.
- A recipient of Chapter 13 protection is 24.6% more likely to continue to work in his or her pre-filing job, 23.8% more likely to continue working in the same field, and 15.3% more likely to continue working in the same state.
- The effect of Chapter 7 is much more modest than Chapter 13 in terms of earnings, employment, and foreclosure rates.
- The results of the study indicate that debt relief and mortgage modification may be important tools to stimulate the economy.
- The restrictions put in place by the 2005 amendments likely had significant adverse consequences for debtors.

66-AUG Bench & B. Minn. 29

Bench and Bar of Minnesota
August, 2009

COUNSELING CLIENTS IN FINANCIAL DISTRESS

Steven H. Silton [a1]

Individuals suffering personal financial failure or the failure of their business often need more than legal advice from their lawyer. Counsel who can identify and address the psychological, ethical, and spiritual aspects of the situation will not only facilitate the restructuring of the client's financial affairs and have a positive effect on the individual's personal well-being, but may recycle the occasional soul.

The global financial crisis has introduced the bitter taste of financial failure to some who considered themselves immune. Cyclical market forces and a number of acute events, such as the proliferation of *Ponzi* schemes, have afflicted naïve and "conservative" investors alike, wiping out fortunes without notice. Even Warren Buffet has seen his portfolio decrease over 55 percent. While Mr. Buffet can afford this type of hit, most cannot maintain equanimity--and many may risk insolvency--when the value of their business or net worth drops by 50 percent.

In these circumstances, while much emphasis is placed on the legal aspects of restructuring a business or a personal bankruptcy, the personal issues for the individuals involved are often neglected. This is particularly true of commercial lawyers who generally represent sophisticated clients they believe do not need psychological or business assistance. While personal injury and family law attorneys have institutional mechanisms to address their client's personal needs, commercial lawyers, by definition, assume their clients' needs are merely financial.

My mentor, an attorney named Bill Kampf, would often describe his job as a bankruptcy attorney as "recycling souls." While this may have been hyperbolical, it was to a great extent how he practiced his craft. His concern for the psychological impact that chronic and ***30** acute financial hardship had on the individuals involved made him an extremely effective attorney.

Understanding the psychology of failure, particularly when the failure of a business involves individuals who have a history of spectacular success, is equally or more important than addressing their financial circumstances. Counseling your clients through the psychological, ethical and spiritual implications of failure is imperative to a successful restructuring. Understanding your limits as a lawyer and when a referral is appropriate is also important. In sum, a holistic approach to representation will not only serve your client's legal needs but will lead to a feeling of accomplishment and value-added service.

Psychology of Financial Failure

The psychological aspects of a financial failure are important to identify as they affect your ability to work through the ethical and spiritual aspects as explained below. Donald Trump, who used bankruptcy as a financial tool like some people use credit cards, ironically opined that "'success breeds success' has something to it. It's that feeling of confidence that can banish negativity and procrastination and get you going the right way." However, it is equally important to emphasize that the only predicate to success is failure, and as Sumner Redstone observed, "success is not built on success. It's built on failure. It's built on frustration. Sometimes it's built on catastrophe." In other words, it's imperative to address that failure is the flip side of success--with a very different emotional impact.

A financial failure will damage a client's reputation and their perception of their self-worth. As Karl Speak writes in his best-selling book, *Be Your Own Brand*, a personal brand--a fancy way of defining reputation--is an accumulation of impressions from relationships. [1] When the sum total of those relationships are based on success, a strong brand ensues. While going through a financial crisis, a person's brand will no doubt be damaged.

An important psychological aspect which the commercial bankruptcy attorney must also identify and address is the “deal mentality” of your client. For the most part, business clients charge from deal to deal and are constantly moving toward a closing. Clients accustomed to making money on a transactional basis view time as the enemy, and every day that elapses without a deal is a concern. This transaction-based “deal mentality” is antithetical to a successful workout where the elapse of time is a positive. I cannot tell you how many times I have heard such clients ask, “What is the plan?” and “When is this deal going to be done?” Since patience is often the key to resolving these financial problems, it is imperative not to allow your clients to push an unnecessary and poor solution.

Treating Psychological Aspects

Once the psychological aspects of failure are identified, you must counsel your clients in a way that “treats” the psychological effects of their financial failure. I use the term “treat” generally, as my psychological training consists of an undergraduate degree, which in no way qualifies me to diagnose or treat serious emotional or mental issues. That being said, lawyers have intimate and ongoing contact with clients in various stages of distress, and should be cognizant of how their counseling relates to their clients' emotional health. Likewise, it is important to understand your educational limitations and engage experts in the process if necessary.

“Anyone who says that winning isn't everything, hasn't won anything,” and anyone who has built a business or personal fortune will attest to this. It follows that failure is, and to an extent should be, devastating. While your client will be depressed at the change in their circumstances, that depression should be motivating, and not debilitating. It is acceptable to allow your client to grieve for their loss, but do not allow them to dwell on their misfortune at the expense of their future. To mitigate damage to your client's brand, counsel your client to continue to present to the public the positive traits which make up their brand. Accepting responsibility is one thing, but there is no room for despair in a sinking ship. The excellent book by the Chinese American, Chin Ning-Chu, *Think Face, Black Heart*, discusses the importance of a rigid outer facade when facing difficult times. This strategy is essential for your clients to embrace in facing partners, investors, and other interested parties.

***31** Implore your client to focus on two things: first, what is necessary to get them through the financial crisis; second, their future, and their next “success.” The first of these is a short-term issue, and it helps to frame it with timelines. Your client can't simply ignore the situation and hope it will go away. Their knowledge and skill set are essential to salvage whatever is left, and their employees, families, and others require their focus. Looking over the longer term to the future, they must realize that the same skill set they utilized to build their prior fortune is the one that will bring them future success.

While managing expectations on the upside is often the goal in deal work, managing the downside expectations is equally important when dealing with financial failure. Talk specifically about the challenges your client will face as well as the issues they will *not* face. Describing the worst-case scenario eliminates irrational tears. The misconceptions that people have regarding a financial collapse are truly amazing. Once your client understands their exemptions and the assets they are most likely to keep, they often feel much better about their condition.

Moreover, shifting the focus from wealth to work will provide a psychological lift for your client. Wealth may have defined their lives for the immediate past; however, at some point, in order to amass their wealth, they were driven by work. Recapturing that spirt is an important aspect of rehabilitating your client's financial fortunes. It is also important to understand and explain that the lack of stressful circumstances does not diminish anxiety, overcoming stressful circumstances does--a theory proven by the University of California Berkeley [2]

Diet and exercise are also essential factors to address in counseling an individual in financial distress. Ironically, during times of stress, people often neglect these aspects of their lives. Further exacerbating the situation, individuals tend to rely on less-productive coping mechanisms, such as alcohol. Encourage your client to seek out new forms of exercise. This has real practical benefits, as Duke University scientists who researched the subject determined that exercising four days a week has more benefits than being on antidepressants.[3] Recommending a change in diet and exercise and going so far as to accompany a client to a gym can have more positive benefits than anything you do for them legally. Personally, I am a fan of Yoga, which not only assists in physical conditioning, but also deals with spiritual issues discuss below.

Whatever approaches you employ to address your client's psychological state, be sure you recognize the limits of your knowledge and expertise. Giving your client a "pep talk," creating realistic expectations, and refocusing your client is one thing--as is recommending physical exercise to your clients. However, if your client exhibits symptoms of withdrawal or hints that they may be contemplating suicide, you should refer them to a professional immediately.

Ethical Aspects of Business Failure

It is a truism that financial distress leads to distressed decisions. As a drowning individual will unconsciously grasp onto someone trying to save them, an individual drowning in financial debt will grab onto anything and anyone that may assist them. While the grasping of the drowning person risks death for both the victim and the lifesaver, that of the financially distressed person can lead to civil and criminal exposure for client and counsel alike.

Working with entrepreneurial clients poses special risks since entrepreneurs tend to be risk takers, and their natural instinct when faced with financial difficulty will be to "double down," taking greater risks. Further, such clients likely have been accustomed, during good times, to having the last word, and may have embraced decisions where the "ends justified the means." While excess profits in good times will cover up numerous missteps, an empty bank account exposes even the most minor malfeasance. This is particularly true if your client seeks bankruptcy court protection, a process which is entirely transparent. Thus it is essential to draw strict ethical boundaries and explain that while you will do anything legal to get the client through this process, you will not do anything that crosses legal or ethical boundaries.

***32** There is a growing line of cases on the concept of "deepening insolvency."[4] Deepening insolvency is a developing theory of law that addresses the wrongful prolongation of a corporation's life beyond insolvency, whereby increased debt, dissipation of assets, and/or decreased reputation result in damage to the corporation.[5] As a company moves toward insolvency and the operators have legal duties to creditors, there may well be pressure from principals to restructure or operate in ways that salvage company assets for them, rather than the creditors. Minnesota law has been particularly forceful in identifying the entity, rather than the principals, as the client in such matters. Where the lawyer's personal loyalties run to the principals, there can be a mismatch and tension.

The Bankruptcy Reform Act of 2005 now imposes additional certification requirements on bankruptcy attorneys. Section 704(b)(4) of the Bankruptcy Code requires attorneys to certify after "reasonable inquiry" the accuracy of the bankruptcy schedules.[6] As such, absolute candor is essential in representing individuals going through difficult financial issues. If a client intends to seek the benefits of bankruptcy, it is imperative that they understand the implications of attempting to hide assets or perpetuating any fallacy by omission.

If a bankruptcy trustee is appointed, there is a transfer of attorney-client privilege and client file rights, and the trustee may well look on the lawyer as a potential defendant. The Lawyers Board recently published for comment a proposed new Board Opinion 21, which would impose on lawyers heavy obligations to disclose their own possible malpractice. A bankruptcy trustee might well allege that failure to make disclosure was a breach of fiduciary duty warranting disgorgement of all fees. This type

of claim was ultimately rejected in *Leonard v. Dorsey & Whitney*, 553 F.3d 609 (8th Cir. 2009), but the Board Opinion, if issued, could have the effect of reviving this kind of claim.

Finally, these ethical issues have significant practical impact on a lawyer's representation in a bankruptcy matter. A lawyer cannot withdraw from representation in a bankruptcy proceeding without court approval. [7] The Minnesota Bankruptcy Court has specifically held that a retainer agreement to represent a debtor was improper because it provided for a right to withdraw if fees were not paid, without conditioning withdrawal on court approval. [8] The court rejected as "disingenuous" the attorney's argument that court approval was an implicit term of the agreement and ordered the disgorgement of all fees.

Spirituality & Rehabilitation

It's said there are "no atheists in foxholes." A final issue in counseling an individual in financial distress is addressing their spiritual needs. All individuals have faith. Some express their faith in terms of formal religion, some in the form of a narcissistic belief in themselves. The evangelical community often preaches that the most devout will receive the greatest material gain. When material abundance is taken from someone, it is not unusual for them to blame the failure on the "god" that allowed it to happen. That being said, it is imperative not to allow your client to abandon their spiritual base at a time they need it the most. Moreover, encourage them to seek out additional spiritual and/or religious counseling to assist them through the financial challenges that exist.

In sum, the actual legal work of a financial restructuring or bankruptcy is often the easiest part of the process. When dealing with individuals in distress, it is essential to deal with the psychological, ethical and spiritual issues that permeate the process. In doing so, you will not only facilitate the legal restructuring and have a positive affect on your client's personal well-being, but will also recycle the occasional soul.

Footnotes

a1 ***Steve Silton is a partner with the law firm of Hinshaw & Culbertson LLP, practicing with the Minneapolis office. He represents small to mid-sized corporations, banks, credit unions and financial groups in commercial and complex bankruptcy matters and has been instrumental in the reorganization of a number of businesses. He often consults and/or associates with lawyers regarding their financially distressed business clients.***

1 McNally, David and Karl Speak. *Be Your Own Brand: A Breakthrough Formula For Standing Out From The Crowd*. San Francisco: Berrett-Koehler Publishers, Inc., 2002.

2 Editors of The Wellness Letter. *The New Wellness Encyclopedia*. New York: Mariner Books, 1995.

3 Babyak Michael, Blumenthal, James, Doraiswamy, Murali, et al., "Exercise and Pharmacotherapy in the Treatment of Major Depressive Disorder," *Psychosomatic Medicine* 69:587-596 (2007).

4 Rohrbacher, Blake, "Deepening Insolvency: Developments for Directors," *Corporate Governance Advisor* (2007).

5 "What is Deepening Insolvency?" 15 *Journal of Bankruptcy Law and Practice* No. 6 (December 2006).

6 *In re Bailey* (Bankr. E.D. Pa. 2005) citing *In re Weaver*, 307 B.R. 834 (Bankr. S.D. Miss 2002).

7 *In re Bulen*, 375 B.R. 858 (Bankr. D.Minn. 2007).

8 *Id*. At 865.

82 Temp. L. Rev. 333

Temple Law Review
Summer 2009

Articles

BANKRUPTCY PHOBIA

David A. Skeel, Jr. [a1]

I. Introduction

My title might seem to herald an extended discussion about the reluctance of Americans who are deeply in debt to file for bankruptcy. The question of whether the stigma of bankruptcy curbs the number of bankruptcy filings has indeed been the subject of a long, hotly contested debate. On the one hand, interviews with debtors suggest that most file for bankruptcy only reluctantly and as a last resort. [1] A surprising number of Americans believe that the 2005 amendments to the bankruptcy laws abolished bankruptcy, and thus that they could not file for bankruptcy even if they wanted to. [2] On the other hand, enormous numbers of Americans have made use of bankruptcy, both in the past generation and in the past year. After averaging over 1,000,000 a year starting in the mid-1990s, bankruptcy filings dropped precipitously ***334** after the 2005 amendments, to 618,000 in 2006. [3] But they have been climbing ever since, to 851,000 in 2007, and back to over 1,000,000 once again last year. [4]

I do think there are links between the stigma debate and the bankruptcy phobia I have in mind. As with stigma, perceptions of bankruptcy and their effect on the use or avoidance of bankruptcy will figure prominently in the discussion that follows. But the focus of this Essay will be a little different. Rather than asking whether ordinary Americans have an aversion to filing for bankruptcy, the discussion that follows will consider the puzzling--and, I will argue, costly--aversion of regulators and lawmakers to bankruptcy: the bankruptcy phobia as it played out in Washington and as regulators descended on troubled investment banks in New York and struggling automakers in Detroit.

As the recent economic crisis has unfolded, bankruptcy has offered possible solutions at several key junctures. The first of these solutions was geared toward homeowners who faced the loss of their homes in the months--now several years--since the start of the subprime crisis. [5] As several million consumers have defaulted or faced default on their mortgages over the last year or so, lawmakers have debated a reform that would allow homeowners to restructure their mortgages in bankruptcy. Under current law, a bankruptcy debtor cannot reduce the principal balance of a mortgage on her primary residence. [6] If she owes $1,000 on her mortgage, for instance, but the value of the house has dropped to $700, she must pay the full $1,000 in order to keep her house. First offered in similar versions by Senator Durbin and Representative Conyers, and variously referred to as “cramdown,” “stripdown,” or “mortgage modification,” the proposed reform would allow the homeowner to restructure the mortgage, reducing it to $700, thus giving it the same treatment as most other assets in bankruptcy. [7] At least in theory, this might both help many homeowners keep their homes and contribute to price discovery in the real estate markets. [8] While lawmakers ***335** and the Obama administration have adopted a variety of other proposals that are designed to help homeowners, Congress has repeatedly stymied the mortgage modification solution. [9]

On the corporate side, Chapter 11 was an obvious alternative when large nonbank financial institutions like Bear Stearns and AIG stumbled in 2008, and with General Motors and Chrysler as well. But regulators consistently shied away from bankruptcy.

The first exception, Lehman Brothers, was an anomaly. By bailing out Bear Stearns in early 2008, the government had strongly signaled its intent to rescue large, troubled financial institutions. Against this backdrop, the decision by then Treasury Secretary Henry Paulson and others to withhold financing from Lehman took Lehman, its buyer, and the markets by surprise. [10] Similarly, the Treasury put the car companies in bankruptcy only after they received roughly $13.4 billion in bailout money and other options had proven fruitless. [11] "[A] GM or Chrysler bankruptcy 'would be the start of a cascade of failures,"' a typical article concluded during the months when the car companies refused to even consider the possibility of a bankruptcy filing. [12]

Bankruptcy has been resisted for often inconsistent reasons. The principal opponents of the mortgage modification proposal are conservatives, who decry it as an unconscionable interference with markets and the sanctity of contract. "We look at this bill as a bailout. But worse than that, it is interfering with contracts," a spokesman for the Bush administration stated when the mortgage modification proposal was announced. [13] Critics of using bankruptcy to resolve the financial distress of nonbank financial institutions and the carmakers, on the other hand, often have included liberals who complain that bankruptcy means leaving too much to the markets, and that it is a dangerously market-oriented response. [14]

***336** This shared aversion to bankruptcy, which seems to pervade all sides of the political spectrum, is the bankruptcy phobia that I would like to explore in this Essay. I will begin by speculating in more detail about the reasons for resisting bankruptcy-based solutions. Although this initial analysis will be descriptive, my own view that the aversion to bankruptcy was quite costly, and that it steered regulators and lawmakers away from promising responses to the economic crisis, will seep through. The third and fourth parts of the Essay will then put the recent crisis in historical perspective. While the absence of bankruptcy solutions and new bankruptcy reforms at the outset of the crisis was puzzling, the historical analysis suggests that it is consistent with the pattern of previous crises. Using the late nineteenth century and the Great Depression as my principal examples, I will argue that significant bankruptcy reform, in striking contrast to major corporate reform, has often come well after a financial crisis was underway, and that the proliferation of dramatically different proposed bankruptcy and nonbankruptcy solutions that we see today is also consistent with historical patterns. I will conclude by speculating about some of the implications for bankruptcy reform. Although the government's use of bankruptcy for Chrysler and GM could mitigate the bankruptcy phobia, its circumvention of ordinary bankruptcy processes makes this unlikely. The prospects for legislative reform--particularly the undoing of several costly 2005 changes--are more promising.

II. Why the Aversion to Bankruptcy?

Start with the question that lies at the heart of this Essay: why were regulators and lawmakers so reluctant to use bankruptcy during the current crisis? One can point to at least four contributing factors.

First, we cannot rule out the possibility--call it the public-spirited explanation--that bankruptcy is flawed or simply a bad idea as a response to the mortgage crisis, or for resolving financial institutions' distress. This first explanation is sufficiently plausible that we will want to consider it in some detail. Critics of the mortgage modification proposal argue that the proposal would exacerbate the credit crunch. In response to the reduction in homeowners' payment obligations, the reasoning goes, and the prospect that future mortgages could also be modified in bankruptcy, lenders would tighten their already tight lending standards. Would-be home buyers would face higher interest rates or would simply be denied access to credit. The cost of mortgage modification would be "borne by aspiring future homeowners," according to one commentator, and "[t]he ripple effects could further roil America's consumer credit markets." [15] Given the large number of homeowners whose mortgages are under water, critics also speculate that the bankruptcy system would be overwhelmed by a flood of new bankruptcy filings if Congress enacted the proposal. [16]

***337** Proponents of mortgage modification responded to the concerns about deleterious effects on access to credit by limiting the scope of the proposal. [17] The revised proposal would apply only to existing mortgages and would require homeowners to negotiate for a voluntary restructuring before using bankruptcy to modify a mortgage. [18] The proposal would help write off the

current crisis, but the rules would then revert to normal, with mortgages once again being treated as sacrosanct in bankruptcy. Although this adjustment assuaged a few critics, most predicted dire consequences even under the revised proposal. [19]

As to financial institutions and auto companies--the objects of corporate bankruptcy phobia--critics have argued that a bankruptcy filing would have catastrophic spillover effects. Regulators justified each of the major financial institution bailouts at the time, as did commentators after the fact, as necessary to prevent a market meltdown. If Bear Stearns had not been bailed out, the reasoning went, repo lending--a major form of very short-term lending for investment banks--or the credit default swap market might have been paralyzed. [20] Because AIG had sold large amounts of credit protection, its failure would have crippled the market for credit default swaps, and its inability to make good on its contractual promises would have precipitated a wave of bankruptcies among its counterparties--that is, the institutions with which AIG entered into derivatives contracts. [21] The one exception to the string of financial institution bailouts was Lehman, whose bankruptcy sent shock waves through the commercial paper market and caused a money market fund to "break the buck" for the first time ever. [22] Lehman's bankruptcy is regularly--and in my view mistakenly--described as having triggered the worst effects of the recent crisis. [23]

Far more than financial institutions, troubled car companies would seem to be ideal candidates for Chapter 11. Like the nineteenth-century railroads whose turmoil was the crucible in which American reorganization was created, car companies have ***338** large amounts of fixed assets and complicated capital structures. [24] Yet here too, regulators and commentators treated bankruptcy as radioactive while GM's and Chrysler's troubles mounted. Critics worried that no one would buy a company's cars if it filed for bankruptcy, in part due to a fear that the company would disappear and fail to honor its warranty obligations. They also predicted that a bankruptcy filing could have devastating spillover effects, prompting bankruptcies of the company's major suppliers. Former GM CEO Rick Wagoner pointed to each of these concerns, especially the claim that the "stigma" of bankruptcy would discourage customers from buying GM cars, as reasons for refusing to consider bankruptcy as an option. [25]

The objections to bankruptcy for GM and Chrysler were never plausible. The track record of other industries, from the railroads of the nineteenth century to the airlines more recently, suggests that customers will not abandon a viable business simply because Chapter 11 is attached to its name. [26] But the public-spirited critiques of bankruptcy responses to the mortgage crisis and the distress of nonbank financial institutions were more realistic. For instance, a group of coauthors from Columbia's law and business schools proposed an interesting alternative to the mortgage modification proposal, which would remove the impediments to restructuring mortgages that have been securitized and would give servicers a financial incentive to restructure mortgages where this would enable homeowners to continue making payments. [27] While the existing empirical evidence is mixed, it does not rule out the possibility that mortgage modification would make mortgages more costly. [28] The concerns about the effect of allowing a large financial institution to file for bankruptcy also are plausible; it is at least possible that a bankruptcy filing by a large financial institution would unleash systemic risk, with destructive market-wide consequences, as regulators feared when they intervened to rescue Bear Stearns and AIG. [29]

***339** But each of these public-spirited arguments also is subject to significant question. Even if mortgage modification did increase the cost of mortgages, the cost might well be small and worth bearing. [30] Mortgage modification could help establish credible values for the mortgages--and more importantly, for the mortgage-related financial assets associated with them-- thus addressing the valuation uncertainty that has significantly complicated efforts to move beyond the credit crisis. [31] Although the reform would spur a surge of new bankruptcy filings, there is little reason to believe that this would overwhelm the bankruptcy courts. Bankruptcy judges have stepped up to handle surges of new cases in the past--most recently, when a wave of debtors filed for bankruptcy before the most recent bankruptcy amendments went into effect in October 2005--and it seems likely they would do so again. [32] While it is difficult to prove or disprove the systemic risk concerns that are used to justify the preference for bailouts rather than bankruptcies with financial institutions, these concerns seem overstated. Even in the case of AIG, which had a huge, imbalanced derivatives portfolio, counterparties may well have been able to adjust if the insurance conglomerate had filed for bankruptcy. [33] Moreover, if regulators are convinced that default could have dangerous ripple effects in the market,

nothing prevents them from stepping in and providing financing or guarantees for a company that has filed for bankruptcy. Regulators can make loans to a debtor in bankruptcy, or promise to backstop counterparties that could be hobbled by the debtor's default. This, of course, is precisely what the Obama administration did when Chrysler and GM finally filed for bankruptcy. [34]

The public-spirited explanations are thus credible but quite debatable. They do not fully explain the aversion to bankruptcy as the crisis developed. Several other factors also seem to have played a role.

Shifting from platonic to more political realms, the most obvious impediment to bankruptcy-based solutions was lobbying by banks and other financial institutions. Given that banks had become dependent on government handouts for survival, one would expect their political influence to have been at low ebb. In some respects it was. The government successfully pressured Bank of America to follow through on its acquisition of Merrill Lynch even after major losses at Merrill gave Bank of America ***340** second thoughts about the transaction. [35] Bank lenders that had received federal bailout money quickly succumbed to administration pressure prior to the Chrysler bankruptcy, for instance, and agreed to accept significant losses, even though the banks' priority status seemed to entitle them to a greater recovery. [36]

But lenders clearly remained a potent lobbying force. Until Citigroup broke ranks in the wake of a promise of additional bailout money from the government, the banking industry had presented a united front opposing the mortgage modification reform. [37] Arguing that the reform would cripple future lending, financial institutions persuaded Congress to dilute the proposal and played a central role in defeating even the more limited proposal. [38]

To resolve their own financial distress, banks and nonbank financial institutions pushed for bailouts, the principal alternative to resolving their failures in Chapter 11. AIG's principal accomplishment as it neared collapse in the fall of 2008, for instance, was producing a memo documenting for regulators the chaos that allegedly would ensue if the government allowed AIG to file for bankruptcy. [39] When the government proposed to give banking regulators the authority to take control of systemically important bank financial institutions--a reform that would essentially expand the government's bailout policy--financial institutions signaled their approval. [40]

Intertwined with the political influence of financial institutions as institutions is a third factor: their executives and the executives of other companies affected by the economic crisis. One would expect executives to have had less clout than anyone during the economic crisis. They, after all, are widely viewed as the chief villains in the crisis, a status cemented by a bonus scandal at AIG. [41] While their influence in the halls of Congress seems to have waned temporarily, the executives of each of the faltering firms were able to persuade regulators and the public that bankruptcy should not be taken seriously as a response to financial distress. Former GM CEO Rick Wagoner ***341** repeatedly insisted that bankruptcy was unthinkable--it would be "a highly risky and highly costly process," he claimed --as the company burned through $2 billion in cash per month in the final quarter of 2008, and lost $20 billion for the year. [42] As already noted, AIG's executives produced a worst-case-scenario memo that struck a responsive chord with regulators. [43]

Executives' influence in these cases was essentially negative, but it nevertheless shaped the regulatory response. By refusing to take any steps to prepare for a bankruptcy, the managers of Bear Stearns, Lehman, AIG, and General Motors maximized the disruption that would occur if bankruptcy became necessary and used this as leverage in their negotiations for a bailout. [44]

The final factor is widespread misconceptions about bankruptcy. Many people still seem to think that bankruptcy means corporate death--the inevitable end of an enterprise--as it does in much of the world. Even I had to chuckle when I realized that a bankruptcy conference I attended during the height of the crisis was being held at the same time, and in the same hotel, as the national undertakers' convention. But the reality is that for well over a century, bankruptcy has meant a fresh start for individual debtors, and corporate reorganization has often meant a second chance for large companies. [45] According to a recent

study, more than seventy percent of the companies that enter bankruptcy with a plausible prospect of reorganizing do in fact successfully restructure. [46] Even when companies are sold rather than reorganized, bankruptcy is a very effective mechanism for dealing with their financial distress.

The misconceptions about bankruptcy may have been magnified by the major amendments to the bankruptcy laws that Congress passed in 2005. [47] The debate over the amendments and the amendments themselves cast bankruptcy-- especially consumer bankruptcy--in a bad light. Proponents of the changes argued that bankruptcy filings impose a cost amounting to $400 for each American. [48] As enacted, the reforms added substantial new obligations and potential liability for bankruptcy lawyers and curbed the discretion of bankruptcy judges, each of which suggested that ***342** something was amok with the bankruptcy system. [49] As noted earlier, many Americans thought that the changes tolled the death knell for bankruptcy. [50]

Ordinary Americans are not the only ones who seem to have had a limited or even mistaken understanding of bankruptcy. As the financial crisis unfolded, the principal decision makers were regulators whose experience was far removed from bankruptcy. The decisions to bail out Bear Stearns and AIG were made by then Treasury Secretary Hank Paulson, then New York Federal Reserve Bank President Timothy Geithner, and Federal Reserve Chairman Ben Bernanke. None of the three has any evident bankruptcy expertise. [51] Similarly, the Federal Reserve banks, which produced much of the research that informed regulators' decision making, had numerous economists with a sophisticated understanding of the banking system but few with any familiarity with bankruptcy. [52] This gap in expertise seems to have reinforced the inclination to dismiss bankruptcy as unthinkable. [53]

The importance of this last factor should not be understated. If lawmakers and regulators had been more familiar and more comfortable with bankruptcy, the interest group obstacles might well have been overcome. Although financial institutions wield enormous clout, lawmakers could have coupled the billions of dollars of bailout money with an insistence that banks accept the mortgage modification proposal as part of a package deal. If Bear Stearns and AIG had been allowed to file for bankruptcy, perhaps with some government support for their trades, the crisis might have unfolded differently--and been dealt with more effectively. [54] If regulators had prodded Chrysler and General Motors toward bankruptcy earlier, these carmakers might have saved billions of dollars and been in much better shape when they began their restructuring.

III. History Lesson #1: Reform Often Comes Late

As frustrating as the absence of bankruptcy-related reforms has been for advocates of bankruptcy-based solutions, it is not surprising from a historical perspective. Although economic crises have often prompted bankruptcy reforms in the past, major legislative change often seems to come well after the onset of the crisis. To ***343** see this, it is useful to contrast bankruptcy reform with its near cousin, corporate and financial regulation.

In the wake of major corporate or financial crises--particularly those that involve corporate scandals, as most do--Congress often springs into action immediately. [55] The most familiar example is the Great Depression. By the time Franklin Roosevelt took office, the Depression had fully taken hold, and the election campaign itself had been punctuated by spectacular collapses such as the failure of Samuel Insull's utilities empire. [56] The Roosevelt administration responded immediately, passing major banking reforms and the first of two securities laws in its first hundred days. [57] More recently, Congress's response to the Enron and WorldCom scandals followed a similar pattern. Within weeks of the revelation that WorldCom had committed a multibillion-dollar fraud, Congress enacted the Sarbanes-Oxley Act reforms. [58]

Unlike new corporate or financial regulation, the most important bankruptcy reforms seem to come well after the onset of a crisis. Lawmakers have often responded with immediate, temporary fixes, which are then followed by more thoroughgoing reforms later in the cycle. Two historical examples will illustrate the pattern.

The first is the federal bankruptcy laws of the nineteenth century. When an economic crisis--or "panic," as they were called--hit, state lawmakers quickly passed stay laws that prevented or delayed efforts of creditors to foreclose on the property of farmers and small businessmen. As Charles Warren pointed out in his 1935 history of bankruptcy:

> While these [stay] laws were in most instances held invalid by the State Courts (and eventually by the United States Supreme Court), they largely achieved their purpose of giving temporary protection to the debtor and conservation of his property from forced sales, during the interval between enactment of the law and its invalidation by the Court. [59]

Thus, the first move during a crisis was usually to pass laws that provided for temporary relief. Later in the crisis, sometimes much later, Congress would finally pass bankruptcy legislation that effectively wrote off the effects of the crisis. This was the case with the short-lived bankruptcy laws passed in 1800, 1841, and 1867, and with the permanent federal legislation finally passed in 1898. [60]

The second illustration is once again the New Deal. Both Congress and the states passed legislation designed to facilitate restructuring early in the New Deal, but the early legislation was much more like the nineteenth-century stay laws than true bankruptcy reform. As they had in the nineteenth century, the states responded to the crisis by enacting stay laws, which the Supreme Court initially struck down but ***344** subsequently upheld. [61] The federal response had three components. First, Congress enacted several measures that were designed to address farm mortgage distress. [62] These measures, which were largely ineffectual, amounted to federal stay laws. [63] Second, in 1933 and 1934 Congress codified corporate reorganization for the first time. [64] The main purpose of the legislation was to make corporate reorganization--or equity receivership, as it was called then--a little less costly by establishing voting rules that would enable a majority of bondholders or other creditors to bind the class as a whole, thus removing the holdup power dissenters enjoyed in the absence of a binding vote. [65] In most other respects, the legislation simply put a congressional seal of approval on the procedures that the parties had been using for decades. [66]

A third stopgap measure implemented by Congress was 1933 legislation abrogating the so-called "gold clause" in corporate bonds. This clause gave bondholders the right to be paid in gold, or to a higher payout in dollars if the price of gold rose. [67] By abrogating the clause, the Roosevelt administration made it much easier for corporate debtors to repay their bond debt, effectively reducing the repayment obligation by a whopping sixty-nine percent. [68] Each of these measures was important, but they were tourniquets--immediate measures to stop the bleeding rather than substantial and permanent reforms. The major reforms did not come until 1938, when Congress completely overhauled the bankruptcy laws under the Chandler Act, which we will consider in the next section. [69]

Why do we often see such a significant time lag between the onset of a financial crisis and the enactment of bankruptcy reform? One reason for the difference may be that, while corporate and financial crises are usually evidence of a breakdown of the existing corporate regulation, they do not necessarily reflect problems with the bankruptcy laws. [70] It is important not to overstate this point. As we have seen, ***345** lawmakers do often respond to a crisis with insolvency-related legislation. But the more lasting reforms seem to come later in the cycle of crisis and recovery.

IV. History Lesson #2: The Nature of Reform Is Not Preordained

If one lesson from history is that lasting bankruptcy reform often lags the crisis that spawned it, the second is that the direction of reform is not preordained. [71] Looking back at the response to a crisis with the benefit of twenty-twenty hindsight, we sometimes assume that whatever regulatory response eventuates was inevitable. But this, of course, is not the case at all. There often are a variety of possible responses, ranging from doing nothing at all to completely transforming American bankruptcy law. Which

option is selected depends on numerous factors, not least of which are the strategic decisions and political savvy of the particular men and women who are promoting them. The two illustrations we considered earlier--the nineteenth-century bankruptcy laws and the enactment of the Chandler Act in 1938--are once again instructive.

The legislation that became the Bankruptcy Act of 1898 was hardly the only option on the table at the end of the nineteenth century. The debates that finally led to the 1898 Act began in 1881 and lasted almost twenty years. [72] In the 1880s, there was significant support for a so-called Equity Bill, which was really a glorified stay law. [73] Under the Equity Bill, existing state laws that provided for the marshalling of a debtor's assets on behalf of its creditors would be implemented in federal court. [74] During this same period, creditors rallied around the Lowell Bill, which Massachusetts District Court Judge John Lowell had drafted at the instigation of chambers of commerce and other creditors' groups. [75] The Lowell Bill, which provided for both voluntary and involuntary bankruptcy and for the avoidance of preferential prebankruptcy transfers, was subsequently replaced by the Torrey Bill, which would serve as the template for the law that was finally enacted in 1898. [76]

The Torrey Bill might never have prevailed had it not been for Jay Torrey himself. Torrey--a colorful figure whose resume included participation in the Rough Riders campaign in Cuba--was a passionate lobbyist for the bill, [77] but he also was willing to compromise. Even William Jennings Bryan, who thought federal bankruptcy legislation a terrible idea, commented at one point, “I have never known of any person interested in the passage of a bill through this House who seems to be so fair in the presentation of a case.” [78] The compromises Torrey and his allies made were ***346** responsible both for the success of his bill and for what I think of as the genius of the 1898 Act. [79]

Although the formula for success was somewhat different in the 1930s, [80] the overall pattern was quite similar. The key figure in the 1930s was William O. Douglas. Douglas was a law professor at Columbia and then Yale; later, chair of the Securities and Exchange Commission; and then a Supreme Court justice for over thirty years. [81]

Douglas was extremely hostile to Wall Street investment banks and lawyers--as personified by the Cravath law firm and leading banks J.P. Morgan and Kuhn, Loeb--and he wanted to radically reform large-scale corporate reorganization to reduce their role. [82] As the overseer of a major corporate reorganization study authorized by the Securities and Exchange Act of 1934, [83] and then as SEC chair and a regular participant in Franklin Roosevelt's weekly poker games, Douglas was in a great position to effectuate his vision. [84] But success was hardly guaranteed. There was substantial resistance to Douglas's vision--which called for managers to be kicked out when a large corporation filed for bankruptcy and would disqualify the debtor's prebankruptcy bankers and lawyers (read: J.P. Morgan and the Cravath firm) from participating in the reorganization. [85] Congressman Adolph Sabath had proposed an alternative bill that would provide for conservatorships of large insolvent corporations, and there were at least two other bills as well. [86] Douglas's correspondence with Abe Fortas--his protégé and also an eventual Supreme Court justice--shows just how worried they were about being preempted by the Sabath Bill. “I believe the situation is so serious,” Fortas wrote ***347** to Douglas, “that these contingencies [the possibility that the Sabath committee proposal would preempt Douglas's proposal] are actually and extremely possible.” [87]

Despite his ties to the administration and overwhelming Democratic control in the late 1930s, Douglas's legislative track record was mixed. His efforts to promote a federal incorporation statute ran into a solid wall of bipartisan resistance. [88] But Douglas and his allies cleverly, and in the end successfully, navigated the bankruptcy debates. In addition to stymieing the Sabath Bill internally, Douglas had his large-scale reorganization reforms attached as a separate chapter to a more technical bill that had been proposed by Congressman Chandler and which focused mostly on small-business bankruptcy. [89] With the support of much of the bankruptcy bar, and with a Democratic Congress happy to curtail Wall Street influence, the proposed legislation sailed through in 1938. [90] Just as Douglas intended, the Chandler Act radically altered large-scale corporate reorganization, removing Wall Street from a practice it had dominated for decades. [91]

V. Implications

Each of the history lessons of the two previous parts has been very much in evidence in the recent crisis. The first two years of the credit crisis brought a variety of efforts to minimize foreclosures, ranging from a quite successful foreclosure relief plan here in Philadelphia to the much larger efforts of the Bush and Obama administrations. [92] But Congress did not enact any significant bankruptcy reforms. Moreover, the first legislative proposal that did have bankruptcy implications was part of a package of proposed corporate and financial reforms. [93] Its principal effect on bankruptcy was to take regulatory authority over large, systemic financial institutions away from the bankruptcy courts, and give it to banking regulators. [94]

One could argue that the recent credit crisis was simply the final stage of a longer crisis that began with the Enron and WorldCom scandals or even the bursting of the ***348** dotcom bubble at the beginning of the decade. If we take this longer perspective, the story is essentially the same. Unlike with corporate reform, which came immediately, there were no bankruptcy changes until 2005, and the vast majority of the changes in 2005 had nothing to do with the economic crisis. [95] They were a project the credit card companies had already been working on for a decade, and which was designed to force more consumer debtors to enter into three- to five-year repayment plans, rather than receiving an immediate discharge. [96]

As of this writing, the verdict is still out on potential bankruptcy reforms, with a variety of proposals swirling around. As already noted, the administration has proposed that bank regulators be given the authority to take over systemically important investment banks and hedge funds, and that the resolution of their financial distress be taken away from the bankruptcy courts. [97] Other proposals would add a special set of new provisions for large nonbank financial institutions to the bankruptcy laws, or provide for an interim period during which a large nonbank's obligations would remain while it sought to raise cash or arrange a sale. [98]

On the consumer side, the mortgage writedown proposal has been hotly debated in Washington and seemed on the verge of passing in March 2009, and then again in late April 2009. [99] This approach is competing with alternative approaches, including the three Columbia professors' proposal calling for legislation that might facilitate the restructuring outside of bankruptcy of securitized mortgages, and a foreclosure relief package that the Obama administration put in place in February. [100]

The obvious implications of the recent tumult are that bankruptcy reform may still be forthcoming and that the direction of reform is not yet clear. As already suggested, my own wish list would include the mortgage writedown provision and a commitment to using bankruptcy as the location of choice for resolving the financial distress of investment banks and hedge funds. [101] This also would be a good time to commission a ***349** careful study of the role--particularly from a disclosure perspective--of hedge funds and equity funds in bankruptcy, much as Congress commissioned the vast study overseen by William O. Douglas in the 1930s. [102] Such a study would fit naturally into recent debates about hedge fund regulation and oversight of the derivatives markets.

Perhaps the biggest wild card for the perception of bankruptcy is the Chapter 11 filings by Chrysler and General Motors. [103] Chapter 11's role in restructuring the carmakers could help dispel the myth that bankruptcy is the end of the road for a troubled corporation. On the other hand, the administration's commandeering of the bankruptcy process in these cases, and the efforts it took to circumvent the ordinary Chapter 11 process, [104] could reinforce the suspicion that bankruptcy means liquidation absent an extraordinary intervention. Overall, the administration's response is unlikely to significantly alter most Americans' impression of bankruptcy. Moreover, if other firms replicate the government's strategy in future cases, concerns about manipulation in bankruptcy could increase. [105]

This is a terrible time for millions of Americans. But history suggests that it is also a time of great opportunity to make a difference, hopefully for the better, for those of us who are involved in the bankruptcy system--whether it be as scholars, as lawmakers, as judges, or as lawyers. Perhaps one of us will even prove to be a Jay Torrey or a William O. Douglas. We cannot be certain that history will conclude that we have contributed to recovery, either in individual lives or in the economy more generally. But from a historical perspective, I believe that the American bankruptcy laws, more than the insolvency laws of any other country, have made it possible to do just that.

Footnotes

a1 S. Samuel Arsht Professor of Corporate Law, University of Pennsylvania Law School and Research Associate, European Corporate Governance Institute. This Essay is a revised version of the keynote address for the Temple Law Review's symposium on “Bankruptcy in 2009: Practical Challenges, Scholarly Responses.” I have sought to preserve the tone and content of the talk.

1 See, e.g., Teresa A. Sullivan et al., The Fragile Middle Class: Americans in Debt 32-33 (2000) (surveying debtors and finding nearly fifty who reported that bankruptcy filing was last resort only after alternatives failed).

2 See Cathy Moran, Bankruptcy Survives, On the Bankruptcy Soapbox, http://www.moranlaw.net/blog/bankruptcy-survives (last visited Nov. 7, 2009) (noting that “some large portion of the public” thinks that bankruptcy relief is no longer available). See infra notes 47-50 and accompanying text for a discussion of the 2005 amendments to the bankruptcy laws.

3 Am. Bankr. Inst., Annual Business and Non-business Filings by Year (1980-2008), http://www.abiworld.org/AM/AMTemplate.cfm?Section=Home&TEMPLATE=/ CM/ContentDisplay.cfm&CONTENTID=56822 (last visited Nov. 7, 2009).

4 The exact numbers are 617,660 in 2006, 850,912 in 2007, and 1,117,771 in 2008. Id. Bankruptcy filings exceeded 1,000,000 for the first time in 1996, continued climbing, and then leveled off at roughly 1,500,000 a year before the 2005 amendments. Id.

5 The subprime crisis does not have an agreed-upon starting date, but one candidate is the failure of two Bear Stearns hedge funds in the summer of 2007. See, e.g., David A. Skeel, Jr., Governance in the Ruins, 122 Harv. L. Rev. 696, 734 (2008) (book review) (suggesting that failure of two hedge funds will be identified as beginning of recent subprime crisis).

6 11 U.S.C. § 1322(b)(2) currently precludes debtors who propose a payment plan under Chapter 13 from altering the terms of a mortgage on their principal residence. 11 U.S.C. § 1322(b)(2) (2006).

7 See Helping Families Save Their Homes in Bankruptcy Act of 2009, H.R. 200, 111th Cong. (2009) (delineating bill sponsored by Representative Conyers that Congress is currently considering); Press Release, Sen. Dick Durbin, Durbin Introduces Bill to Stem Record Foreclosures (Jan. 6, 2009), http:// durbin.senate.gov/showRelease.cfm?releaseId=306368 (providing brief overview of Durbin's efforts).

8 By “price discovery,” I mean determination of the value of mortgaged properties and of the complex financial instruments based upon them. Many commentators believe that uncertainty about the value of mortgage-backed securities was one of the major contributing factors in the credit crunch. See, e.g., Michael Steinberg, Mortgage “Cram Downs” Quickest Route to CDO, MBS Price Discovery, Seeking Alpha, Feb. 1, 2009, http://seekingalpha.com/article/117805-mortgage-cram-downs-quickest-route-to-cdo-mbs-price-discovery (emphasizing need for price discovery in order to unclog movement of toxic assets).

9 The Bush and Obama administrations' mortgage relief efforts as of March 2009 are summarized in Cong. Oversight Panel, 111th Cong., Foreclosure Crisis: Working Toward a Solution 30-37 (2009), available at http:// cop.senate.gov/documents/cop-030609-report.pdf. The early results of the programs were disappointing. See Ruth Simon, Mortgage Servicers Are Under Pressure to Modify More Loans, Wall St. J., July 29, 2009, at A6 (stating that administration officials are “[f]rustrated with the slow progress”). As of this writing, more loans are being modified, but the efficacy of the modifications is still in doubt. See, e.g., Cong. Oversight Panel, 111th Cong., October Oversight Report: An Assessment of Foreclosure Mitigation Efforts After Six Months 3-5 (2009), available at http://cop.senate.gov/documents/cop-100909-report.pdf (discussing Panel's concerns with current modification programs and offering suggestions for improvement).

10 This argument is made in detail in Kenneth Ayotte & David A. Skeel, Jr., Bankruptcy or Bailouts?, 35 J. Corp. L. (forthcoming 2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1362639.

11 See, e.g., Chris Isidore, Bush Announces Auto Rescue, CNNMoney.com, Dec. 19, 2008, http://money.cnn.com/2008/12/19/news/companies/auto_ crisis/index.htm (outlining details and purpose of auto rescue plan).

12 Michael McKee, GM, Chrysler Failure Would Push Economy into Abyss, Bloomberg.com, Dec. 15, 2008, http://www.bloomberg.com/apps/news? pid=20601087&sid=aW2D17IBa2Kk&refer=home (quoting Dennis Virag, president of Automotive Consulting Group in Ann Arbor, Michigan).

13 David Cho & Lyndsey Layton, Housing Woes Put Bush, Hill at Odds: White House Opposes Use of Tax Dollars, Wash. Post, Feb. 27, 2008, at A1 (internal quotation marks omitted).

14 See generally Paul Krugman, Op-Ed., The B Word, N.Y. Times, Mar. 17, 2008, at A19 (defending Bear Stearns bailout, despite Bear's unsavory reputation, as necessary to prevent potentially catastrophic market effects). The Obama administration's proposed resolution authority for systemically important institutions is based on a similar distrust of bankruptcy. See infra notes 92-96 and accompanying text for a discussion of the administration's reform plan.

15 Todd J. Zywicki, Don't Let Judges Tear Up Mortgage Contracts, Wall St. J., Feb. 13, 2009, at A13.

16 See, e.g., Alan Schwartz, Op-Ed., Don't Let Judges Fix Loans, N.Y. Times, Feb. 27, 2009, at A27 (detailing problems that could arise in bankruptcy courts if Congress passed mortgage modification proposal); Zywicki, supra note 15 (predicting likely increase in bankruptcy filings as result of mortgage modification proposal).

17 See, e.g., U.S. Senate Rejects Mortgage Modification in Chapter 13 Cases, Am. Bankr. Inst. J., June 2009, at 10, 10 [hereinafter U.S. Senate Rejects] (excerpting statements of Senators Durbin and Kyl, including Durbin's emphasis that modification, while broad enough to help debtors, also contains limitations that protect mortgage servicers).

18 See, e.g., id. (emphasizing plan for amendment to assist troubled homeowners whose last resort is bankruptcy); Robert M. Zinman & Novica Petrovski, The Home Mortgage and Chapter 13: An Essay on Unintended Consequences, 17 Am. Bankr. Inst. L. Rev. 133, 142-43 (2009) (noting that House bill introduced by Congressman Conyers includes each of these restrictions); John Conyers Jr., Loan Modification Can Stop the Foreclosure Crisis, Wall St. J., Jan. 30, 2009, at A11 (explaining narrow application of proposal only to existing mortgages).

19 See, e.g., U.S. Senate Rejects, supra note 17, at 69 (presenting Senator Kyl's statement that cramdown will prolong malaise of housing market by increasing interest rates).

20 See Gretchen Morgenson, Fair Game: A Window in a Smoky Market, N.Y. Times, July 6, 2008, at BU1 (suggesting that concerns about credit default swaps were key factor in bailout).

21 See William K. Sjostrom, Jr., The AIG Bailout, 66 Wash. & Lee L. Rev. 943, 977-83 (2009).

22 A mutual fund “breaks the buck” when a customer who withdraws her money will receive less than a dollar for each dollar she invested. See, e.g., Ayotte & Skeel, supra note 10 (manuscript at 24-25) (detailing Lehman bankruptcy and subsequent effects).

23 See id. (manuscript at 21-25) (arguing that information that major bank was tottering, not bankruptcy filing, best explains market reaction).

24 The complex capital structures of the nineteenth-century railroads, and their role in the advent of corporate reorganization, are discussed in David A. Skeel, Jr., Debt's Dominion: A History of Bankruptcy Law in America 60-63 (2001).

25 See Justin Fox, Don't Call It Bankruptcy, Time, Dec. 1, 2008, at 32, 32 (describing Wagoner's objections to bankruptcy).

26 See, e.g., Michael E. Levine, Why Bankruptcy Is the Best Option for GM, Wall St. J., Nov. 17, 2008, at A19 (noting that “consumers buy tickets from bankrupt airlines” and rejecting argument that carmakers are different in this regard).

27 See Christopher Mayer, Edward Morrison & Tomasz Piskorski, A New Proposal for Loan Modifications, 26 Yale J. on Reg. 417, 419-20 (2009) (proposing three-part plan of servicer incentives, second-lien lender incentives, and litigation protection). The Obama

administration adopted somewhat analogous strategies in the Homeowner Affordability and Stability Plan. Announced on February 18, 2009, the plan provides financial incentives for mortgage servicers to modify troubled mortgages. Cong. Oversight Panel, supra note 9, at 3-4 (providing overview of plan).

28 Compare Adam J. Levitin & Joshua Goodman, The Effect of Bankruptcy Strip-Down on Mortgage Markets 41 (Geo. L. & Econ. Research Paper No. 1087816, 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_ id=1087816 (concluding that mortgage modification would have only modest effects on lending), and Adam J. Levitin, Resolving the Foreclosure Crisis: Modification of Mortgages in Bankruptcy, 2009 Wis. L. Rev. 565, 647 (same), with Mayer et al., supra note 27, at 427 (surveying existing studies, including study by Levitin and Goodman, and concluding that effect is substantial).

29 See supra notes 20-21 and accompanying text for a discussion of the fears that prompted the Bear Stearns and AIG bailouts.

30 See, e.g., Levitin & Goodman, supra note 28, at 41 (concluding that markets are generally indifferent to mortgage modification risk).

31 See supra note 8 and accompanying text for a discussion of the uncertainty surrounding price discovery.

32 Bankruptcy filings exceeded two million in 2005, due to debtors' rush to file before the 2005 changes went into effect. In 2006, the first full year under the amendments, there were only 617,660 bankruptcy filings. See Am. Bankr. Inst., supra note 3 (compiling data for annual business and nonbusiness bankruptcy filings by year from 1980 to 2008).

33 See, e.g., Peter J. Wallison, On Regulating and Resolving Institutions Considered “Too Big to Fail,” Testimony Before the Senate Banking Committee (May 6, 2009) (transcript), available at http:// www.aei.org/speech/100044 (criticizing claim that AIG bankruptcy would have crippled derivatives markets).

34 See Jeff Plungis, Chrysler Bankruptcy Won't Interrupt Warranties, Treasury Says, Bloomberg.com, May 2, 2009, http:// www.bloomberg.com/apps/news? pid=20601103&sid=ai1YZ10u7BcE (explaining application of government warranty program to GM and Chrysler).

35 See Liz Rappaport, Lewis Testifies U.S. Urged Silence on Deal: Bank of America Chief Says Bernanke, Paulson Barred Disclosure of Merrill Woes Because of Fears for Financial System, Wall St. J., Apr. 23, 2009, at A1 (describing pressure to complete deal because “otherwise it would ‘impose a big risk to the financial system”’).

36 See Neil King Jr. & Jeffrey McCracken, Chrysler Pushed into Fiat's Arms, Wall St. J., May 1, 2009, at A1 (“The most compliant of Chrysler's big creditors ... have received hundreds of billions of dollars in TARP aid.”).

37 See Theo Francis, Does Citigroup Stand Alone? Industry Balks at Bankruptcy Bill, BusinessWeek.com, Jan. 8, 2009, http:// www.businessweek.com/election/2008/blog/archives/2009/01/does_citigroup.html? chan=top+news_top+news+index +-+temp_news+%2B+analysis (detailing industry's opposition to mortgage modification legislation).

38 See U.S. Senate Rejects, supra note 17, at 10 (“The mortgage industry has twice succeeded in helping to kill the bankruptcy proposal ....”).

39 See Andrew Ross Sorkin, The Case for Saving A.I.G., by A.I.G., N.Y. Times, Mar. 3, 2009, at B1 (outlining confidential memo's concern that failure of AIG could spur catastrophic failure of insurance industry).

40 See, e.g., Wallison, supra note 33 (noting this support and expressing surprise that smaller institutions did not initially oppose proposed legislation, which would likely benefit the largest institutions by identifying them as too big to fail).

41 See, e.g., Andrew Clark, Congress Grills Geithner and Bernanke over AIG Bonus Scandal, guardian.co.uk, Mar. 24, 2009, http:// www.guardian.co.uk/business/2009/mar/24/bernanke-geithner-aig-bonuses-testimony (discussing backlash resulting from distribution of bonuses).

42 Philip Nussel, Wagoner's Words Underscore Industry Crisis, Automotive News, Mar. 30, 2009 (internal quotation marks omitted), http:// www.autonews.com/article/20090330/ANA02/903299981/1178/ANA03.

43 See supra note 39 and accompanying text for additional information on the AIG executives' memo.

44 Lehman, of course, did not succeed, and the government ultimately steered the carmakers into bankruptcy as well. Cf. Jeffrey McCracken, Lehman's Chaotic Bankruptcy Filing Destroyed Billions in Value, Wall St. J., Dec. 29, 2008, at A10 (discussing some costs of Lehman's failure to plan for possible bankruptcy filing).

45 See, e.g., Skeel, supra note 24, at 1-2 (emphasizing uniqueness of American bankruptcy law).

46 Elizabeth Warren & Jay Lawrence Westbrook, The Success of Chapter 11: A Challenge to the Critics, 107 Mich. L. Rev. 603, 618 (2009).

47 Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, 119 Stat. 23 (codified as amended in scattered sections of 11 U.S.C.).

48 E.g., Skeel, supra note 24, at 203.

49 See, e.g., Jean Braucher, The Challenge to the Bench and Bar Presented by the 2005 Bankruptcy Act: Resistance Need Not Be Futile, 2007 U. Ill. L. Rev. 93, 94 (describing hostility to bankruptcy lawyers and judges reflected in 2005 reforms).

50 See Moran, supra note 2 (discussing public fears after 2005 amendments).

51 Paulson came from Goldman Sachs, where he had risen to the chairmanship from Goldman's investment banking group; Geithner cut his teeth in the international affairs division of the Treasury during the Clinton administration; and Bernanke, a scholar with expertise in monetary policy, was best known for studies concluding that monetary policy exacerbated the Great Depression. See, e.g., David Wessel, In Fed We Trust: Ben Bernanke's War on the Great Panic 10-12, 40-41, 73-75, 111-13 (2009) (detailing backgrounds of leaders confronting crisis).

52 This comment is based on conversations with current and former Federal Reserve economists.

53 The carmaker bankruptcies were a notable exception to this pattern. The auto task force made extensive use of top bankruptcy professionals. See Emily Chasan, U.S. Autos Task Force Hires Bankruptcy Lawyer, Reuters, Mar. 13, 2009, http://www.reuters.com/article/newsOne/idUSTRE52C5V520090314 (discussing U.S. government's consultation with bankruptcy lawyers at several large law firms in conjunction with GM and Chrysler restructuring).

54 See David Skeel, Give Bankruptcy a Chance, Wkly. Standard, June 29, 2009, at 25-27 (discussing these points in greater detail).

55 The relationship between corporate scandals and regulatory reform is a major theme of David Skeel, Icarus in the Boardroom: The Fundamental Flaws in Corporate America and Where They Came From (2005), and David A. Skeel, Jr., Icarus and American Corporate Regulation, 61 Bus. Law. 155 (2005).

56 See, e.g., Skeel, supra note 55, at 80-89 (analyzing Insull failure).

57 See id. at 94-103 (detailing government's regulatory response).

58 Id. at 175-77.

59 Charles Warren, Bankruptcy in United States History 150 (1935).

60 See Skeel, supra note 24, at 24-28 (discussing pattern of enactment and prompt repeal of various pieces of legislation).

61 The Supreme Court struck down the stay laws in 1933 and then finally upheld them a year later. (The Supreme Court voted against them before it voted for them, one might say). See Home Bldg. & Loan Ass'n v. Blaisdell, 290 U.S. 398, 447-48 (1934) (upholding Minnesota stay law that extended temporary relief to homeowners in certain mortgage foreclosures).

62 See, e.g., Anna Gelpern & Adam J. Levitin, Rewriting Frankenstein Contracts: Workout Prohibitions in Residential Mortgage-Backed Securities, 82 S. Cal. L. Rev. 1075, 1141-48 (2009) (describing Frazier-Lemke Act and enactment of section 75 of Bankruptcy Act).

63 Id.

64 See Skeel, supra note 24, at 101-09 (discussing these reforms, which added section 77 to Bankruptcy Act for railroad reorganization in 1933 and section 77B for other corporations the following year).

65 Id. at 106-07.

66 Id.

67 The gold clause is described in Randall S. Kroszner, Is It Better to Forgive than to Receive? Repudiation of the Gold Indexation Clause in Long-Term Debt During the Great Depression 4 (Oct. 1998) (unpublished manuscript), available at http://faculty.chicagobooth.edu/finance/papers/repudiation11.pdf.

68 This is because the value of gold climbed from $20.47 at the time of the abrogation during Roosevelt's first one hundred days to $35 the following year. Id. at 1.

69 See infra notes 88-91 and accompanying text for a discussion of the passage of the Chandler Act.

70 Cf. David A. Skeel, Jr., Creditors' Ball: The "New" New Corporate Governance in Chapter 11, 152 U. Pa. L. Rev. 917, 917-18 (2003) (noting absence of pressure for bankruptcy reform after Enron and WorldCom scandals of early 2000s).

71 In this second respect, bankruptcy reform is much more similar to corporate reform.

72 See, e.g., Skeel, supra note 24, at 33.

73 For a brief description, see Warren, supra note 59, at 128.

74 Id.

75 See, e.g., Skeel, supra note 24, at 36-37.

76 For a discussion of the Lowell and Torrey Bills, see, for example, Skeel, supra note 24, at 40-43, and Charles Jordan Tabb, A Century of Regress or Progress? A Political History of Bankruptcy Legislation in 1898 and 1998, 15 Bankr. Dev. J. 343, 354-61 (1999).

77 Skeel, supra note 24, at 37.

78 25 Cong. Rec. 2815 (1894) (statement of William Jennings Bryan).

79 See generally David A. Skeel, Jr., The Genius of the 1898 Bankruptcy Act, 15 Bankr. Dev. J. 321 (1999) (describing compromises such as incorporation of state exemption laws, minimal administrative structure, and limits on creditors' ability to file involuntary petitions).

80 Compromise across party lines was much less essential in the late 1930s because the Democrats had a huge numerical majority. In 1938, they held seventy-six Senate seats, as opposed to sixteen Republicans (as well as one Progressive, two Farmer-Labor, and one Independent). U.S. Senate, Party Division in the Senate, 1789-Present, http:// www.senate.gov/pagelayout/history/one_item_and_teasers/partydiv.htm (last visited Nov. 7, 2009).

81 See Skeel, supra note 24, at 101-04, 109-27 (discussing Douglas's background and his role in New Deal bankruptcy reforms).

82 Id. at 110-13.

83 The report was published in multiple volumes as Sec. & Exch. Comm'n, Report on the Study and Investigation of the Work, Activities, Personnel and Functions of Protective and Reorganization Committees (1937-1940).

84 Douglas recounted his relationship with Roosevelt in his autobiography. See generally William O. Douglas, Go East, Young Man passim (1st ed. 1974); cf. Jeffrey Rosen, The Justice Who Came to Dinner, N.Y. Times., Feb. 1, 2004, § 4, at 1, 3 (describing social relationship between Douglas and Roosevelt).

85 See Skeel, supra note 24, at 118 (describing resistance and Douglas's refusal to soften mandatory trustee provision).

86 In addition to the Chandler Bill, the principal proposals were the Sabath Bill and the Lea Bill. See, e.g., John Gerdes, Section 77B, The Chandler Bill and Other Proposed Revisions, 35 Mich. L. Rev. 361, 368-409 (1937) (describing Sabath and Chandler Bills, and noting that other bills were expected); Cloyd Laporte, Note, Changes in Corporate Reorganization Procedure Proposed by the Chandler and Lea Bills, 51 Harv. L. Rev. 672, 673-89 (1938) (describing proposals of Chandler and Lea Bills).

87 Memorandum from Abe Fortas to William O. Douglas 3 (Oct. 7, 1935) (from William O. Douglas Papers, Library of Congress, copy on file with author).

88 The story is recounted in Joel Seligman, The Transformation of Wall Street: A History of the Securities and Exchange Commission and Modern Corporate Finance 205-11 (rev. ed. 1995).

89 Cf. Benjamin Wham, Chapter X of the Chandler Act: A Study in Reconciliation of Conflicting Views, 25 Va. L. Rev. 389, 392 (1939) (recognizing SEC's ability to persuade Drafting Committee of National Bankruptcy Conference to add certain SEC recommendations to Chandler Bill).

90 See Skeel, supra note 24, at 119 (describing enactment of Chandler Act).

91 Id. at 125-27.

92 See, e.g., Alan J. Heavens, What a Relief for 1,400 Phila. Foreclosures, Phila. Inquirer, July 1, 2009, at C1 (describing success of Philadelphia plan).

93 The original proposal is summarized in Davis Polk & Wardwell Client Memo, Treasury's Proposed Resolution Authority for Systemically Significant Financial Companies (Mar. 30, 2009), available at http:// www.davispolk.com/1485409/ clientmemos/2009/03.30.09.resolution.authority.pdf. The administration subsequently introduced a revised and expanded set of reforms in June 2009. The subsequent proposals are described in Dep't of the Treasury, Financial Regulatory Reform: A New Foundation (2009), available at http://www.financialstability.gov/docs/regs/FinalReport_web.pdf.

94 See Dep't of the Treasury, supra note 93, at 76-77 (proposing new resolution authority). But see Ayotte & Skeel, supra note 10 (manuscript at 27-29) (critiquing proposals that would shift significant regulatory authority from bankruptcy courts to bankruptcy regulators).

95 Two exceptions are a provision that requires the U.S. trustee to request the appointment of a trustee if there are reasonable grounds for believing the debtor's management has committed fraud, 11 U.S.C. § 1104(e) (2006), and a provision that attempts to limit "pay to stay" bonuses for executives, id. § 503(c). These provisions are discussed in David A. Skeel, Jr., Déjà Vu All Over Again in Corporate Bankruptcy (2005) (unpublished manuscript, on file with author).

96 Cf. Henry J. Sommer, Trying to Make Sense Out of Nonsense: Representing Consumers Under the "Bankruptcy Abuse Prevention and Consumer Protection Act of 2005," 79 Am. Bankr. L.J. 191, 221 (2005) (asserting that "[t]he real goal of the creditor lobby was to make bankruptcy of all types more difficult for debtors who need it").

97 See supra notes 93-94 and accompanying text for a description of the legislative proposal to shift regulatory authority from bankruptcy courts to bankruptcy regulators.

98 I have developed and promoted these bankruptcy-oriented proposals elsewhere. David A. Skeel, Jr., Bankruptcy Boundary Games, 4 Brook. J. Corp. Fin. & Com. L. (forthcoming 2010) (manuscript at 22-26, on file with author) (advocating special provisions, including stay on derivatives, for large nonbank financial institutions); Lee C. Buchheit & David A. Skeel, Jr., Op-Ed., Some Bankruptcies Are Worth It, N.Y. Times, May 19, 2009, at A25 (proposing interim period for financial institutions in distress).

99 See, e.g., U.S. Senate Rejects, supra note 17, at 10 (noting, after April 30, 2009 vote, that "mortgage industry has twice succeeded in helping to kill the bankruptcy proposal").

100 See supra notes 9, 27 and accompanying text for a discussion of the Columbia and Obama mortgage modification proposals.

101 The latter argument is developed in detail in Ayotte & Skeel, supra note 10.

102 See Jonathan C. Lipson, The Shadow Bankruptcy System, 89 B.U. L. Rev. 1609, 1632-38 (2009) (suggesting that Douglas's study provides template for how to approach study of shadow bankruptcy system).

103 The carmaker bankruptcies are described in detail in Mark J. Roe & David A. Skeel, Jr., Assessing the Chrysler Bankruptcy 5-8 (Univ. of Pa. Law Sch., Pub. Law Research Paper No. 09-17; Univ. of Pa., Inst. for Law & Econ. Research Paper No. 09-22; Harvard Law & Econ. Discussion Paper No. 645; Harvard Pub. Law Working Paper No. 09-42, 2009), available at http:// www.ssrn.com/ abstract=1426530.

104 See id. at 12-20 (critiquing terms of Chrysler transaction).

105 Id. at 27-29.

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Debt Relief and Debtor Outcomes: Measuring the Effects of Consumer Bankruptcy Protection
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ABSTRACT

Consumer bankruptcy is one of the largest social insurance programs in the United States, but little is known about its impact on debtors. We use 500,000 bankruptcy filings matched to administrative tax and foreclosure data to estimate the impact of Chapter 13 bankruptcy protection on subsequent outcomes. Exploiting the random assignment of bankruptcy filings to judges, we find that Chapter 13 protection increases annual earnings by $5,562, decreases five-year mortality by 1.2 percentage points, and decreases five-year foreclosure rates by 19.1 percentage points. These results come primarily from the deterioration of outcomes among dismissed filers, not gains by granted filers.

Will Dobbie
Industrial Relations Section
Princeton University
Firestone Library
Princeton, NJ 08544-2098
and NBER
wdobbie@princeton.edu

Jae Song
Social Security Administration
Office of Disability Adjudication
and Review
5107 Leesburg Pike, Suite 1400
Falls Church, VA 22041
jae.song@ssa.gov

"The Bankruptcy Act is...of public as well as private interest, in that it gives to the honest but unfortunate debtor...a new opportunity in life and a clear field for future effort, unhampered by the pressure and discouragement of pre-existing debt."

- U.S. Supreme Court, *Local Loan Co.* v. *Hunt*, 292 U.S. 234 (1934)

In 2010, 1.5 million Americans filed for over $450 billion in debt relief through the consumer bankruptcy system.[1] American households receive more resources through the bankruptcy system than through all state unemployment insurance programs combined (Lefgren, McIntyre, and Miller 2010), with nearly one in ten American households having filed for bankruptcy at some point (Stavins 2000). The U.S. bankruptcy system is also among the most generous in the world, allowing debtors to choose between Chapter 7 bankruptcy that provides debt relief and protection from wage garnishment in exchange for a debtor's non-exempt assets, and Chapter 13 bankruptcy that adds the protection of most assets in exchange for a partial repayment of debt.

Despite providing billions of dollars in debt relief each year, it is not clear how bankruptcy protection impacts debtors. In theory, bankruptcy protection increases an individual's incentive to work and prevents any sharp drops in consumption that may have important long-term consequences, such as becoming sick due to the lack of medical care or losing one's home through foreclosure. Yet, in practice, households work about the same number of hours (Han and Li 2007), accumulate less wealth (Han and Li 2011), and have less access to credit (Cohen-Cole, Duygan-Bump and Montoriol-Garriga 2009) after receiving bankruptcy protection, leading some to conclude that the benefits of debt relief have been overstated (Porter and Thorne 2006). The lack of demonstrable benefits, combined with a rapid increase in the number of bankruptcy filings, led Congress to enact new barriers to filing in the 2005 Bankruptcy Abuse Prevention and Consumer Protection Act.

Empirically estimating the impact of bankruptcy protection has been complicated by two important issues. First, there is little information on the long-term outcomes of most bankruptcy filers. Bankruptcy filers are not tracked in a systematic way after filing and datasets such as the PSID and NLSY include only a few hundred bankrupt households. Second, most comparisons are biased due to selection and endogeneity problems. Bankruptcy filers are likely to have had worse outcomes even before filing, biasing cross-sectional comparisons (e.g. Han and Li 2007, 2011), and most proximate causes of bankruptcy such as job loss and health shocks also impact later outcomes, biasing within-individual comparisons (e.g. Cohen-Cole, Duygan-Bump and Montoriol-Garriga 2009). The lack of an unbiased counterfactual control group may help explain why the previous literature has found little evidence that bankruptcy protection benefits debtors.

In this paper, we use a new dataset linking 500,000 bankruptcy filings to administrative tax records from the Social Security Administration (SSA) and administrative foreclosure records to estimate the causal effect of Chapter 13 bankruptcy protection on subsequent earnings, mortality, and home foreclosure. Our empirical strategy exploits the fact that most U.S. bankruptcy courts use

[1] Non-business Chapter 7 and Chapter 13 filing statistics are available at
http://www.uscourts.gov/uscourts/Statistics/BankruptcyStatistics/BAPCPA/2010/Table1A.pdf
http://www.uscourts.gov/uscourts/Statistics/BankruptcyStatistics/BAPCPA/2010/Table1D.pdf

a blind rotation system to assign cases to judges, effectively randomizing filers to judges within each office. Moreover, while there are uniform criteria by which a judge may dismiss a bankruptcy filing, there is significant variation in the interpretation of these criteria across judges (Sullivan, Warren, and Westbrook 1994, Norberg and Compo 2007, Chang and Schoar 2008). As a result, otherwise identical filers are assigned to judges with substantially different rates of granting bankruptcy protection.

Using these differences in judge leniency as an instrumental variable for bankruptcy protection, we are able to identify the ex-post impact of Chapter 13 on the marginal recipient of protection – filers whose bankruptcy decision is altered by the judge assignment due to disagreement on whether or not they should receive bankruptcy protection. The identified parameter holds fixed any ex-ante impacts of bankruptcy, such as over-borrowing, moral hazard in the workplace (White 2011), entrepreneurial risk-taking (Fan and White 2003, Armour and Cumming 2008), or the crowding out of formal insurance (Mahoney 2012). Our empirical strategy is similar to Kling (2006), which uses the random assignment of judges to estimate the ex-post impact of sentence length on earnings, and subsequent research that estimates the ex-post effects of foster care (Doyle 2007, 2008), juvenile incarceration (Aizer and Doyle 2013), corporate bankruptcy (Chang and Schoar 2008), temporary-help employment (Autor and Houseman 2010), and Disability Insurance (French and Song 2011, Maestas, Mullen, and Strand 2013).

In our empirical analysis, we find compelling evidence that Chapter 13 bankruptcy protection benefits debtors. Over the first five post-filing years, Chapter 13 protection increases the marginal recipient's annual earnings by $5,562, a 25.1 percent increase from the pre-filing mean. Employment increases by 6.8 percentage points over the same time period, an 8.3 percent increase. Five-year mortality decreases by 1.2 percentage points, a 30.0 percent decrease from the dismissed filer mortality rate, and five-year home foreclosure rates decrease by 19.1 percentage points, a more than 100 percent decrease from the dismissed filer foreclosure rate. There is also evidence that Chapter 13 protection deceases the receipt of Supplemental Security Income (SSI), although there is little to no impact on 401k contributions and the receipt of Disability Insurance (DI). Descriptive results suggest that the estimated impacts come from the deterioration of outcomes among dismissed filers, not gains by granted filers. Filers granted bankruptcy protection have similar pre- and post-filing earnings. In contrast, dismissed filers experience large and persistent drops in earnings after filing for bankruptcy.

We find evidence of two mechanisms through which bankruptcy protection benefits filers. First, we find that the impact of Chapter 13 protection is larger when creditors are allowed to garnish a debtor's earnings. Exploiting within- and across-state variation in the marginal garnishment rate, we find that the implied earnings elasticity with respect to potential garnishment is 0.94. These results are consistent with the idea that bankruptcy protection maintains the incentive to work by preventing an increase in the effective marginal tax rate on earnings. Second, we find results suggesting that Chapter 13 protection helps to maintain economic stability by reducing foreclosures and by reducing strategic moves to evade creditors. The marginal recipient of Chapter 13 protection

is 24.6 percentage points more likely to work in his or her pre-filing job, 23.8 percentage points more likely to work in the same industry, and 15.3 percentage points more likely to work in the same state.

There are three important caveats to our analysis. First, our identification strategy measures the effect of Chapter 13 bankruptcy protection for the marginal recipient. It is possible that the impact of Chapter 13 protection is different for filers who are not on the margin of receipt. To partially address this issue, we estimate marginal treatment effects (MTEs) that measure the change in outcomes for the marginal recipient of bankruptcy protection as we move from more strict judges to more lenient judges. The MTE results suggest that the effects of Chapter 13 protection are slightly larger for less deserving filers. Second, we are only able to use our instrumental variables strategy in bankruptcy offices that randomly assign filings to judges. While our instrumental variables sample is broadly similar to the full sample of Chapter 13 filers, it is possible that the effect of bankruptcy may differ in the two samples. To provide some evidence on this issue, we estimate the impact of Chapter 13 in both samples using an event study methodology that does not rely on random assignment. We find that the impact of Chapter 13 protection is similar in our instrumental variables and full samples, though the point estimates are somewhat smaller in our full sample. Third, we are unable to use our instrumental variables strategy to estimate the impact of Chapter 7 bankruptcy protection, which make up approximately 75 percent of all bankruptcy filings. Using our event study design, we find that the effect of Chapter 7 protection is more modest than that of Chapter 13 protection. Filers granted Chapter 7 bankruptcy protection earn $1,639 to $1,936 more than dismissed filers over the first five post-filing years and are 2.7 percentage points more likely to be employed over the same time period. Filers granted Chapter 7 also have five-year foreclosure rates that are 1.7 percentage points lower than dismissed filers, but are neither more nor less likely to be deceased after five years compared to dismissed filers.

The remainder of the paper is structured as follows. Section I provides a brief overview of the consumer bankruptcy system in the United States. Section II describes our data and provides summary statistics. Section III presents a stylized model that motivates our empirical exercise. Section IV describes our empirical strategy. Section V estimates the impact of Chapter 13 bankruptcy protection on labor supply, mortality, and home foreclosure, and Section VI concludes.

I. Consumer Bankruptcy in the U.S.

A. Overview

Bankruptcy is the legal process to resolve unpaid debts. In the United States, individual debtors are allowed to choose between Chapter 7 and Chapter 13 bankruptcy protection.[2]

[2]The most commonly reported cause of bankruptcy is an unexpected income or expense shock. In a hand-collected sample of bankruptcy filers, 67.5 percent of filers report job loss as a precipitating factor, 22.1 percent report family issues such as divorce, and 19.3 report medical expenses (Sullivan, Warren, and Westbrook 2000), with other work suggesting a somewhat larger role for medical expenses (Domowitz and Sartain 1999, Warren, Sullivan, and Jacoby 2000, Himmelstein et al. 2009). Using similar data from PSID, Fay, Hurst, and White (2002) find that households are more likely to file for bankruptcy protection when there are larger financial benefits to doing so, and that there

Under Chapter 7, debtors forfeit all non-exempt assets in exchange for a discharge of eligible debts and protection from future wage garnishment. Nearly all unsecured debts are eligible for discharge under Chapter 7, including credit card debt, installment loans, medical debt, unpaid rent and utility bills, tort judgments, and business debt. Student loans, child support obligations, and debts incurred by fraud cannot be discharged under Chapter 7, and secured debts such as mortgages, home equity loans, and automobile loans can only be discharged if debtors give up the collateral. As most debtors have little non-exempt wealth or can move all non-exempt wealth into exempt assets before filing, the average repayment rate under Chapter 7 is only about one percent (Sullivan et al. 1989). Chapter 7 is chosen by the majority of filers in the United States, with 79.8 percent of debtors in our data filing under Chapter 7.

Chapter 7 cases begin with the debtor filing a bankruptcy petition, a statement of financial affairs, a copy of his or her most recent tax return, executory contracts and unexpired leases, and schedules of current income, expenditures, and assets and liabilities. The assigned bankruptcy trustee then holds a meeting with the debtor to ensure that the debtor is aware of the potential adverse consequences of bankruptcy and to flag any potential issues for the bankruptcy judge. The bankruptcy judge will confirm or dismiss the application using the information from the filing and the trustee's report. If the filing is confirmed, the trustee liquidates the debtor's property and splits it among the creditors. If the filing is dismissed, the debtor must exit the bankruptcy system and may not refile under either chapter for at least six years. In our data, 98.4 percent of Chapter 7 filings ending with a discharge of debt.

Under Chapter 13, filers propose a three- to five-year plan to repay part of their unsecured debt in exchange for a discharge of the remaining unsecured debt, protection from future wage garnishment, and protection of most assets. For example, Chapter 13 allows debtors to retain assets pledged as collateral by including the collateral amount in the repayment plan. Chapter 13 also allows debtors to avoid home foreclosure by including any mortgage arrears in the repayment plan, with the original mortgage reinstated after completion of the plan. Seventy percent of dismissed Chapter 13 filers report that avoiding foreclosure is their principal reason for choosing to file under Chapter 13 (Porter 2011), with 71 percent of filers from a sample of Delaware cases including mortgage arrears in their repayment plans, 41 percent including car loans, and 38 percent including priority debt (White and Zhu 2010).

Chapter 13 cases begin with the debtor filing a repayment plan and the paperwork described above. After a meeting between the debtor and bankruptcy trustee, the bankruptcy judge decides whether the repayment plan is feasible and meets the standards for confirmation set forth in the Bankruptcy Code.[3] If the judge confirms the repayment plan, the debtor makes regular payments to the trustee until the plan is complete. The judge may dismiss or convert the case to Chapter 7 if

is little impact of adverse shocks such as unemployment or divorce of the filing after conditioning on the financial benefits.

[3]There is typically one Chapter 13 bankruptcy trustee that works with all judges in an office. If an office has a particularly high Chapter 13 caseload, judges may have their own Chapter 13 trustee. Chapter 7 trustees are randomly assigned in a process that is independent from the judge assignment.

the debtor fails to make any payments, fails to pay any post-filing domestic support obligations, or fails to make required tax filings during the case. In our data, 48.8 percent of Chapter 13 filings end with a discharge of debt. If a Chapter 13 filing is dismissed, debtors may refile for either Chapter 7 or Chapter 13 after only 180 days. While almost no dismissed Chapter 13 filers in our sample refile under Chapter 13, approximately 20 percent choose to refile under Chapter 7. Thus, we estimate the impact of receiving Chapter 13 protection relative to both no bankruptcy protection and protection via Chapter 7. All of our estimates should be interpreted with this counterfactual in mind.

B. U.S. Bankruptcy Courts

There are 94 Federal bankruptcy courts in the United States, with at least one court in each state, the District of Columbia, and Puerto Rico. Each bankruptcy court hears all cases originating from counties in its jurisdiction. Bankruptcy courts are often further divided into offices that hear all cases originating from a subset of counties in the court's jurisdiction. Appendix Figure 1 displays the 72 courts and 205 offices that we have data for. The median court in our sample is divided into three offices, with little systematic pattern to the number of offices in each office.

Bankruptcy judges are appointed to fourteen-year terms by the court of appeals in their judicial district. Bankruptcy judges only hear cases filed in their court, but often hear cases across multiple offices within their court. Within each bankruptcy office, cases are typically assigned to judges using a random number generator or a blind rotation system.

The assigned bankruptcy judge decides any and all matters connected to a case, including whether or not to dismiss the filing. The most common reason a filing is dismissed is that it constitutes a "substantial abuse" of the bankruptcy process, typically meaning that a debtor should be able to repay his or her debts without bankruptcy protection. Other common reasons for dismissal include a filing missing important information, a Chapter 13 repayment plan being infeasible, or a Chapter 13 repayment plan being too small (Hynes 2004). In Section IV, we discuss how we use systematic differences in the probability that a judge dismisses a filing to estimate the causal impact of bankruptcy protection. These measured differences in judge behavior are likely to be the result of differences in how judges interpret the criteria listed above, implying that more lenient judges may confirm repayment plans that are more generous to debtors or that are less feasible.

Despite the pivotal role of bankruptcy judges, debtors typically have only limited involvement with the assigned judge. Chapter 7 filers do not appear before a judge unless a creditor or trustee raises an objection. Chapter 13 filers appear before the bankruptcy judge at the plan confirmation hearing, but all other administrative aspects of the bankruptcy process are conducted by the bankruptcy trustee, not the bankruptcy judge.

There is considerable variation in the number of bankruptcy judges in each bankruptcy court and office, with courts serving more populous regions tending to have more judges. Appendix Figure 1 displays the number of Chapter 13 bankruptcy judges in each office that we have data for. Of the 205 offices in our sample, 110 have only one Chapter 13 judge, 52 have two Chapter 13 judges, 25 have three Chapter 13 judges, and 18 have four or more Chapter 13 judges.

C. Potential Benefits of Bankruptcy Protection

There are at least two reasons debtors may benefit from bankruptcy protection. First, bankruptcy protection may maintain the incentive to work by protecting future wages from garnishment. Wage garnishments occur when an employer is compelled by a court order to withhold a portion of an employee's earnings to repay a particular debt. Federal law limits the amount that may be garnished in any one week to the lesser of 25 percent of weekly disposable earnings, or the amount by which weekly disposable earnings exceed 30 times the federal minimum wage. Creditors are therefore able to garnish 25 percent of each additional dollar of earnings above 40 times the federal minimum wage, 100 percent of earnings between 30 and 40 times the federal minimum wage, and nothing on earnings below 30 times the federal minimum wage.[4] Bankruptcy protection stops all current garnishment orders and prevents any future garnishment orders on discharged debt, increasing the marginal return to work. Consistent with this mechanism, the U.S. Supreme Court argued in *Local Loan Co.* v. *Hunt* (1934) that eliminating these wage garnishments is "[o]ne of the primary purposes of the Bankruptcy Act," as "[f]rom the viewpoint of the wage earner, there is little difference between not earning at all and earning wholly for a creditor."

Second, bankruptcy protection may prevent economic instability. Creditors have a number of options to collect unpaid debts if a debtor has not filed for bankruptcy protection or after a case is dismissed, including the wage garnishment orders discussed above, collection letters or phone calls, in-person visits at home or work, and the seizing of assets through a court order (Hynes, Dawsey, and Ausubel 2009). Debtors can make these collection efforts more difficult by ignoring collection letters and calls, changing their telephone number, or moving without leaving a forwarding address. Debtors can also leave the formal banking system to hide their assets from seizure, change jobs to force creditors to reinstate a garnishment order, or work less so that their earnings are not subject to garnishment. Thus, bankruptcy protection may prevent economic instability by helping debtors avoid the kinds of sharp drops in consumption that have important long-term consequences, such as losing one's home through foreclosure or becoming sick due to the lack of medical care. Bankruptcy protection may also reduce the incentive to strategically move across state lines or change jobs to avoid creditors.

There are also many reasons to believe that bankruptcy protection will have little impact on debtors. It is possible that financially distressed households have highly inelastic labor supply, or that debt relief will reduce the incentive to work through the income effect. It is also possible that debtors are able to avoid most debt collection efforts at a relatively low cost, or that garnishment amounts are too low to impact labor supply decisions. Finally, it is possible that many bankruptcy filers are in financial distress due to low human capital or poor health that the bankruptcy system is unable to remedy.

[4] Federal law allows garnishments of up to 50 percent of a debtor's disposable earnings for payment related to child support or alimony if the worker is supporting another spouse or child, and up to 60 percent if the worker is not. An additional five percent may be garnished for court order payments more than 12 weeks in arrears.

II. Data

To estimate the impact of bankruptcy protection on debtors, we merge information from individual bankruptcy filings, administrative tax records from the Social Security Administration (SSA), and proprietary real estate records from the data aggregator DataQuick.

Bankruptcy records are available from 1992 to 2009 for the 72 federal bankruptcy courts that allow full electronic access to their dockets. These data represent approximately three quarters of all bankruptcy filings during this period. Each record in our bankruptcy data contains information on the Chapter filed, filing date, court, office, 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 also contain information on each debtor's name, address, and last four digits of each debtor's social security number.

We make five restrictions to our estimation sample. First, we drop 110 offices that only have a single Chapter 13 bankruptcy judge, as there is no variation in judge leniency that allows us to estimate the impact of Chapter 13 protection. Second, we drop all filings originating from counties that assign all cases to a single judge, as these filings are not randomly assigned. Third, we drop office by year bins where a retiring judge's cases were reassigned with no documentation as to the original judge. Fourth, we drop office by year by judge bins with fewer than ten cases. Finally, we restrict the sample to first-time filers between 1992 and 2005 to ensure that we have five or more years of post-filing outcomes for all debtors and that all filings occurred before the 2005 Bankruptcy Reform Act came into effect.

These sample restrictions leave us with 534,980 Chapter 13 filings in 42 offices and 31 bankruptcy courts. These data represent just over 26 percent of the available Chapter 13 filings in the analysis period. The final sample includes 314 office by year observations, 112 office by judge observations, and 758 office-year-judge observations. The number of cases in each office-year-judge bin ranges from 13 to 3,423. The median number of cases in each office-year-judge bin is 1,048. Appendix Table 1 provides additional details on each of the offices in our estimation sample. Appendix Figures 3 and 4 display the distribution of office-year-judge bins and office-year-judge leniency.

To explore the impact of bankruptcy protection on subsequent labor supply and mortality, we matched the bankruptcy records to administrative tax records from the SSA. The SSA data are remarkably complete and include every individual who has ever acquired a SSN, including those who are institutionalized. Illegal immigrants without a valid SSN are not included in these data. Information on earnings and employment comes from annual W-2s. Individuals with no W-2 in any particular year are assumed to have had no earnings in that year. Individuals with zero earnings are included in all regressions throughout the paper. All dollar amounts are in terms of year 2000 dollars.

We measure non-earnings outcomes using data from three sources. Information on annual 401k contributions, job location, and firm characteristics comes from annual W-2s. Information on DI and SSI receipt comes from the Master Beneficiary Record. Information on mortality comes from the Death Master File that is compiled by the SSA, and covers deaths occurring anywhere in the

United States.

We match the bankruptcy data to the SSA records using last name and the last four digits of the filer's social security number. We were able to successfully match 91.6 percent of the bankruptcy records, with nearly all of the unmatched records resulting from a shared name and last four digits of the social security number in the SSA data. The probability of being matched to the SSA data is not significantly related to judge leniency. Our estimation sample consists of the 490,216 filers in the matched dataset.

To explore the impact of bankruptcy protection on home foreclosures, we also matched the bankruptcy records to proprietary real estate data purchased from DataQuick. The DataQuick files include information on the most recent county assessment, pre-foreclosure notices, and all home transactions. The DataQuick files are compiled by county and year, with more complete coverage for more urban areas and more recent years. There are 280,202 Chapter 13 bankruptcy filers matched to the SSA data living in county by year bins covered by the DataQuick records. We matched these filers to the DataQuick records using last name and filing address. We were able to successfully match 48.5 percent of filers to either a past home transaction or a current home assessment. In a random sample of approximately 3,000 Chapter 13 filings between 1999 and 2005, Agarwal et al. (2010) find that 51 percent of Chapter 13 filers are homeowners, suggesting that we are finding most homeowners in our data.[5] Importantly, the probability of being matched to the DataQuick data is not related to judge leniency.

Table 1 presents summary statistics for all first-time filers between 1992 and 2005 and our estimation sample of first-time filers randomly assigned to judges between 1992 and 2005. Consistent with previous research on bankruptcy filers, 98.4 percent of Chapter 7 filers in our data are granted bankruptcy protection, compared to 48.8 percent of Chapter 13 filers. Sixty percent of Chapter 7 filers are male, 74.2 percent are white, and 13.3 percent are black. For Chapter 13, 63.4 percent of filers are male, 55.8 percent are white, and 33.9 percent are black.

The typical bankruptcy filer earns far less than the average American worker. In the five years before filing, 80.6 percent of Chapter 7 filers are employed on average, with average annual earnings of just $21,090. Eighty percent of Chapter 13 filers are employed, earning $22,333 annually in the five years before filing. Over the same five year time period, 4.7 percent of Chapter 7 filers receive DI, and 9.7 percent receive SSI. Just over four percent of Chapter 13 filers receive DI, and 8.4 percent receive SSI.

Column 3 of Table 1 presents summary statistics for filers in our estimation sample. The estimation sample is very similar to the full sample of filers. Forty-four point eight percent of Chapter 13 filers in our sample are granted bankruptcy protection, 4.0 percentage points less than the full sample. Sixty point nine percent of filers in our sample are male, 2.5 percentage points less

[5]Filers are classified as homeowners if they list real property on Schedule A of the bankruptcy form. The Chapter 13 homeownership rate was provided directly by the authors. There is also evidence that the fraction of Chapter 13 filers who are homeowners has increased in recent years. Lawless et al. (2008) find that 69.6 percent of Chapter 13 filers are homeowners in a random sample of filers in 2007, with other, more selected survey samples suggesting homeownership rates of between 70 and 96 percent in the post-2005 period (White and Zhu 2010, Porter 2011).

than the full sample. 401k contributions are also $33 per year higher in the estimation sample, while average firm wages are $3,874 higher. Conversely, filers in our estimation sample are statistically indistinguishable from the full sample with regard to age, ethnic background, employment, earnings, job tenure, the probability of being matched to a home in the DataQuick files, and the probability of receiving DI or SSI.

III. Model

In this section, we motivate our empirical analysis by describing a simple model of how consumer bankruptcy functions as a social insurance mechanism. The model illustrates the trade-off between the consumption smoothing benefits provided by bankruptcy protection with the increased borrowing costs that result from the higher risk of default. We then consider how the estimates of the effect of bankruptcy protection on labor supply can shed light on those benefits and costs.

A. Bankruptcy as Social Insurance

Consider a continuum of risk averse agents who experience an expense shock π distributed $\pi \sim [\underline{\pi}, \overline{\pi}]$. Each agent pays for the expense shock through an existing credit line at interest rate r. We assume that agents borrow exactly π and that there is a single interest rate for all all agents.[6]

Agents who are not eligible for bankruptcy protection repay $(1+r)\pi$ to lenders. Agents who are eligible for bankruptcy protection repay $(1+r)\alpha_b wl$, where $\alpha_b wl < \pi$ for all agents. We assume that there are no other direct or indirect costs of bankruptcy, and that all agents eligible for bankruptcy protection will file for bankruptcy.

Each agent's utility is defined as $U(c) - \psi(l)$, where consumption c equals wage earnings wl minus debt repayment $(1+r)\pi$ or $(1+r)\alpha_b wl$. We assume that U is concave and ψ is convex. We begin with the assumption that l is fixed for all agents to highlight the insurance aspects of bankruptcy protection. In the next section, we allow agents to choose labor supply to show how bankruptcy protection may impact earnings. We assume wages w are fixed throughout.

The lending market is perfectly competitive, leading to no profits in equilibrium. We normalize the shadow cost of bank funds to zero so that the expected cost of lending equals the expected repayment amount:

$$\int_{\underline{\pi}}^{\overline{\pi}} \pi \, d\pi = \int_{\underline{\pi}}^{\pi^*} (1+r)\pi \, d\pi + \int_{\pi^*}^{\overline{\pi}} (1+r)\alpha_b wl \, d\pi \tag{1}$$

where π^* is the cutoff for bankruptcy eligibility chosen by the social planner. Equation (1) yields the familiar result that a more restrictive bankruptcy system decreases borrowing costs as more

[6]The assumption that agents borrow exactly π simplifies the model without affecting the key results. We further simplify the model by assuming that agents only face expense risk that is unlikely to be covered by existing social insurance mechanisms, such as Unemployment Insurance. Our model is therefore unable to shed light on the interaction of bankruptcy protection and these other forms of social insurance. The derivation of an optimal social insurance system with conceptually distinct types of risk remains an important area for future work. See Jackson (1986) and Posner (1995) for discussion of the relationship between bankruptcy and government safety net programs, and Rea (1984) for discussion of why private consumption insurance does not exist in the United States.

individuals fully repay their debts:

$$\frac{\partial r}{\partial \pi^*} = -\frac{(1+r)(\pi^* - \alpha_b wl)}{\int_{\underline{\pi}}^{\pi^*} \pi \, d\pi + \int_{\pi^*}^{\overline{\pi}} \alpha_b wl \, d\pi} < 0 \tag{2}$$

The sensitivity of borrowing costs to the bankruptcy eligibility cutoff is increasing in the difference between what creditors are repaid by the marginal non-filer and marginal filer ($\pi^* - \alpha_b wl$). This is because a larger change in r is needed to compensate creditors for the lost revenue associated with a more lenient bankruptcy cutoff when the difference in the amount repaid is large. Conversely, the sensitivity of borrowing costs to the bankruptcy eligibility cutoff is decreasing in the expected repayment amount $\left(\int_{\underline{\pi}}^{\pi^*} \pi \, d\pi + \int_{\pi^*}^{\overline{\pi}} \alpha_b wl \, d\pi \right)$, as a smaller change in r is needed to compensate creditors for the lost revenue associated with a more lenient bankruptcy cutoff when the total repayment amount is large.

The social planner chooses the bankruptcy eligibility cutoff π^*, where agents are eligible for bankruptcy protection iff $\pi > \pi^*$. Since all agents are identical ex-ante, the social welfare function is the same as the representative consumer's expected utility function:

$$\int_{\underline{\pi}}^{\pi^*} U(wl - (1 + r(\pi^*))\pi) - \psi(l) \, d\pi + \int_{\pi^*}^{\overline{\pi}} U(wl - (1 + r(\pi^*))\alpha_b wl) - \psi(l) \, d\pi \tag{3}$$

The first order condition for equation (3) equates the benefit of bankruptcy protection for the marginal recipient with the marginal cost of providing bankruptcy:

$$\begin{aligned} \Big(U(wl - (1+r)\alpha_b wl) - \psi(l)\Big) - \Big(U(wl - (1+r)\pi^*) - \psi(l)\Big) = \\ - \frac{\partial r}{\partial \pi^*} \left(\int_{\underline{\pi}}^{\pi^*} \pi U_c(wl - (1+r)\pi) \, d\pi + \int_{\pi^*}^{\overline{\pi}} \alpha_b wl U_c(wl - (1+r)\alpha_b wl) \, d\pi \right) \end{aligned} \tag{4}$$

where U_c indicates the first derivatives with respect to consumption.

Equation (4) highlights the trade-off between the consumption smoothing benefits provided by bankruptcy protection when shocks are large ($\pi > \pi^*$) and the increased costs of self-insurance when shocks are small ($\pi < \pi^*$). This trade-off is at the heart of an important literature measuring the effect of consumer bankruptcy on welfare using quantitative models of the credit market (e.g. Athreya 2002, Li and Sarte 2006, Livshits, MacGee, and Tertilt 2007, Chatterjee and Gordon 2012). An important limitation of this literature has been the lack of empirical evidence on the magnitude of both the benefits provided by bankruptcy protection for the marginal recipient and the costs associated with more expensive borrowing. There is also relatively little information on the mechanisms through which bankruptcy protection benefits debtors, forcing the previous literature to make strong assumptions, such as abstracting away from the production side of the economy (e.g. Athreya 2002, Livshits, MacGee, and Tertilt 2007), assuming that labor supply is only influenced by the aggregate capital stock (e.g. Li and Sarte 2006), or assuming that labor supply is extremely inelastic (e.g. Chatterjee and Gordon 2012).

B. Bankruptcy and Labor Supply

Next, we consider how estimates of the impact of bankruptcy protection on labor supply shed light on the benefits and costs of the consumer bankruptcy system as described by equation (4). In the simple setup described above, bankruptcy protection unambiguously decreases labor supply through both substitution and wealth effects. However, the assumption that agents fully repay their debts outside of the bankruptcy system is unlikely to hold in practice given that the majority of debt write-offs occur outside of the bankruptcy system (Hynes, Dawsey, and Ausubel 2009). We therefore make the more realistic assumption that agents who do not receive bankruptcy protection default on their debt and are subject to wage garnishment at rate α_g. The wage garnishment rate is assumed to be larger than the bankruptcy repayment rate $\alpha_g > \alpha_b$, implying that bankruptcy protection reduces the implicit tax on earnings associated with default. We also assume that the amount repaid through garnishment $(1+r)\alpha_g wl$ is less than the amount borrowed π for all agents.

Each agent's labor supply is described by the following first order condition:

$$w(1-(1+r)\alpha)\cdot U_l(wl(1-(1+r)\alpha)) = \psi_l(l) \tag{5}$$

where U_l and ψ_l indicate first derivatives with respect to labor supply, and α is the implicit tax on earnings associated with either wage garnishment or bankruptcy. Equation (5) yields the familiar result that a reduction in the implicit tax rate α through bankruptcy protection has an ambiguous impact on labor supply due to opposing substitution and wealth effects:

$$\frac{\partial l}{\partial \alpha} = \frac{(1+r)wU_l}{[(1-(1+r)\alpha)w]^2U_{ll} - \psi_{ll}} + \frac{(1+r)(1-(1+r)\alpha)w^2lU_{l\alpha}}{[(1-(1+r)\alpha)w]^2U_{ll} - \psi_{ll}} \lessgtr 0 \tag{6}$$

Thus, bankruptcy protection increases the earnings of the marginal recipient if the substitution effect associated with the reduced tax on earnings dominates. Conversely, bankruptcy protection decreases the earnings of the marginal recipient if the marginal non-recipient is not subject to wage garnishment or the wealth effect dominates. The effect of bankruptcy protection on labor supply is therefore an empirical question.

Labor supply estimates for the marginal recipient of bankruptcy protection influence the benefits and costs of the consumer bankruptcy system in at least two ways. First, any labor supply response will change the consumption smoothing benefits provided by bankruptcy protection. If bankruptcy protection increases the marginal recipient's earnings, the difference between consumption of the marginal filer and marginal non-filer is increased, as are the consumption smoothing benefits of bankruptcy protection. The reverse holds if bankruptcy has a negative impact on debtor earnings. Second, any labor supply response will change the sensitivity of borrowing costs to bankruptcy policy and the costs associated with bankruptcy protection. If bankruptcy protection increases the marginal recipient's earnings, the difference in the amount repaid to creditors by the marginal filer and marginal non-filer is reduced, decreasing the sensitivity of borrowing costs to bankruptcy policy and lowering the cost of the bankruptcy system. The reverse again holds if bankruptcy has

a negative impact on debtor earnings. Thus, a positive (negative) impact of bankruptcy protection on earnings suggests that the bankruptcy system has larger (smaller) benefits and smaller (larger) costs than implied by models with inelastic labor supply (e.g. Athreya 2002, Livshits, MacGee, and Tertilt 2007, Chatterjee and Gordon 2012).[7]

IV. Research Design

Consider a model that relates post-filing outcomes such as earnings to bankruptcy protection:

$$y_{it} = \alpha + \beta X_i + \gamma Bankruptcy_i + \varepsilon_{it} \tag{7}$$

where i denotes individuals, t is the year of observation, γ is the causal impact of bankruptcy protection, X_i includes controls such as race and gender, and ε_{it} is noise. The problem for inference is that OLS estimates of γ may be biased if bankruptcy protection is correlated with the unobservable determinants of later outcomes: $E[\varepsilon_{it}|Bankruptcy_i] \neq 0$. For example, the most proximate causes of bankruptcy, such as job loss and health shocks, may also impact later outcomes, biasing both cross-sectional (e.g. Han and Li 2007, 2011) and within-individual (e.g. Cohen-Cole, Duygan-Bump and Montoriol-Garriga 2009) estimates of equation (7).

We identify the causal impact of bankruptcy on debtors γ using judge leniency as an instrument for bankruptcy protection. Intuitively, we compare the post-filings outcomes of debtors assigned to bankruptcy judges that have different propensities to grant Chapter 13 protection, interpreting any differences as a causal effect of the change in the probability of receiving bankruptcy protection associated with these propensities.

Formally, we estimate the causal impact of receiving bankruptcy protection through a two-stage least squares regression using judge leniency as an instrumental variable for bankruptcy protection. The second stage estimating equation is:

$$y_{it} = \alpha + \alpha_{ot} + \beta X_i + \gamma Bankruptcy_i + \varepsilon_{it} \tag{8}$$

where α_{ot} are office by month-of-filing fixed effects and X_i includes race, gender, five-year age effects, a five-year average of baseline employment, and a five-year average of baseline earnings. The first stage estimating equation associated with equation (8) is:

$$Bankruptcy_{it} = \alpha + \alpha_{ot} + \beta X_i + \delta \sigma_j + \varepsilon_{it} \tag{9}$$

[7] In a model with endogenous borrowing, the consumer bankruptcy system increases loan demand through lower costs of default and improved risk sharing. Borrowing distortions from the lower costs of default are likely increasing with the benefits of filing for bankruptcy protection. As the benefits of bankruptcy protection are increasing with the magnitude of the labor supply estimates, the distortions to borrowing behavior are also likely to be increasing with the magnitude of the labor supply estimates. Severino, Brown, and Coates (2014) provide more direct evidence on this issue using within-state variation in asset exemptions, finding that increased protection under the Chapter 7 bankruptcy system increases unsecured borrowing without increasing the probability of default. These results are consistent with the consumer bankruptcy system increasing borrowing through improved risk sharing, without significantly increasing the prevalence of adverse selection and moral hazard.

where σ_j is the systematic component of judge behavior and δ represents the impact of that judge behavior on the probability of receiving bankruptcy protection. To account for any serial correlation across filers at the level of randomization, we cluster standard errors at the office level in both the first and second stage regressions. Results are qualitatively similar if we cluster at the office by judge or office by month-of-filing level.

Using an exhaustive set of judge fixed effects as an instrument for bankruptcy protection yields a consistent two-stage least squares estimate of γ as the number of filers $i \to \infty$, but is potentially biased in finite samples. This bias is the result of the mechanical correlation between a filer's own outcomes and the estimation of that filer's judge fixed effects. There are several potential solutions to this own-observation issue. Jackknife IV eliminates the bias by omitting a filer's own observation when forming the instrument (Angrist, Imbens, and Krueger 1999). Split-sample two-stage IV addresses the own-observation issue by randomly splitting the sample into two groups, using judge tendencies in one part of the sample as an instrument for bankruptcy protection in the other part of the sample (Angrist and Krueger 1995). Limited information maximum likelihood (LIML) eliminates the own-observation bias by collapsing the parameter space and using maximum likelihood to obtain a consistent estimate of the effect of bankruptcy protection.

We address the own-observation problem by using a leave-one-out measure of judge leniency as an instrument for bankruptcy protection (Kling 2006, Chang and Schoar 2008, Doyle 2007, 2008, Autor and Houseman 2010, French and Song 2011, Aizer and Doyle 2013, Maestas, Mullen, and Strand 2013). Our measure of judge leniency Z_{icjt} is defined as the leave-one-out fraction of filings granted by judge j in year t minus the leave-one-out fraction granted in his court c in year t:

$$Z_{icjt} = \frac{1}{n_{cjt} - 1}\left(\sum_{k=1}^{n_{cjt}}(B_k) - B_i\right) - \frac{1}{n_{ct} - 1}\left(\sum_{k=1}^{n_{ct}}(B_k) - B_i\right) \tag{10}$$

where i again denotes individuals, c denotes courts, j is the assigned judge, t is the year of observation, B_i is an indicator for receiving bankruptcy protection, n_{cjt} is the number of cases seen by a judge in year t, and n_{ct} is the number of cases seen by a court in year t. This leave-one-out procedure is essentially a reduced-form version of jackknife IV that purges the mechanical correlation between a filer's own outcomes and our measure of judge leniency.[8] Following the literature (Kling 2006, Chang and Schoar 2008, Doyle 2007, 2008, Autor and Houseman 2010, French and Song 2011, Aizer and Doyle 2013, Maestas, Mullen, and Strand 2013), we do not adjust our standard errors to account for the fact that the instrument is estimated.

Consistent with past research (Sullivan, Warren, and Westbrook 1994, Norberg and Compo 2007), we find considerable variation in the treatment of Chapter 13 cases within an office. The standard deviation of Z_{ijct} is 0.030 for Chapter 13 filers in our sample. There is also significant persistence in our measure of judge behavior. Appendix Figure 4 plots current and lagged judge

[8] Appendix Table 2 presents two-stage least squares, LIML, and Jackknife IV results using judge fixed effects as instruments for bankruptcy protection. The results are qualitatively similar to our preferred estimates presented in Table 4.

discharge rates, with each point representing a separate judge by year observation. Discharge rates are highly correlated across time, with an OLS regression relating each judge by year discharge rate to the lagged discharge rate yielding a coefficient of 0.814. These results suggest that we are capturing systematic differences in judge behavior, not random year to year noise.

In contrast to Chapter 13, there is almost no variation in the treatment of Chapter 7 cases across judges within an office. The standard deviation of Z_{ijct} for Chapter 7 filers is only 0.003 in our data, likely because almost all Chapter 7 filings are granted. This lack of variation makes it difficult to measure the effect of Chapter 7 bankruptcy protection using our instrumental variables strategy. In Section VE, we use an event study strategy to estimate the impact of Chapter 7 protection.

Using our reduced form measure of judge leniency Z_{ijct} as an instrument for the receipt of Chapter 13 bankruptcy protection, the identified two-stage least squares parameter from equation (8) measures the local average treatment effect of Chapter 13 for filers whose bankruptcy outcomes are altered by judge assignment. The conditions necessary to interpret these two-stage least squares estimates as the causal impact of Chapter 13 protection are: (1) that judge assignment is associated with bankruptcy protection, (2) that judge assignment only impacts debtor outcomes through the probability of receiving bankruptcy protection, and (3) that the impact of judge assignment on the probability of receiving bankruptcy protection is monotonic across filers.

The first assumption is empirically testable. Figure 1 plots average discharge vs. our leave-one-out measure of judge leniency. The estimation sample includes first-time filers between 1992 and 2005 in the 42 offices in the 31 courts that randomly assign Chapter 13 filings to judges. To construct the plot, we calculate mean residuals from a regression of an indicator for receiving Chapter 13 protection on office by month-of-filing fixed effects. We then add the mean discharge rate to the mean residual in each judge by year bin to aid in the interpretation of the scale. The resulting scatter plot provides a non-parametric representation of the conditional expectation function, but does not show the underlying variance in the individual-level data. The solid line and corresponding coefficient show the best linear fit estimated on the underlying individual-level data, controlling for office by month-of-filing fixed effects and with standard errors clustered at the office level. Table 2 presents analogous individual-level estimates with and without additional controls.

First stage results from Figure 1 and Table 2 show a large and precisely estimated relationship between judge leniency and the probability of receiving bankruptcy protection. With no filer level controls, a one percentage point increase in Z_{ijct} increases the probability that a debtor receives bankruptcy protection by 0.749 percentage points. Controlling for gender, race, age, and baseline earnings, a one percentage point increase in Z_{ijct} increases the probability that a debtor receives bankruptcy protection by 0.731 percentage points. Thus, a one standard deviation (three percentage point) increase in judge leniency increases the likelihood of receiving Chapter 13 bankruptcy protection by about 2.2 percentage points, a 4.9 percent change from the mean. To put these magnitudes in perspective, black filers are 9.0 percentage points less likely to receive bankruptcy protection, a one year younger filer is 0.5 percentage points less likely, and filers with baseline earnings that are \$10,000 lower are about 0.05 percentage points less likely.

The probability of receiving Chapter 13 protection does not increase one-for-one with our measure of judge leniency, likely because of measurement error that attenuates the effect toward zero. For instance, judge leniency may drift over the course of the year or fluctuate with case characteristics, reducing the accuracy of our leave-one-out measure. Nevertheless, the results from Figure 1 and Table 2 confirm that judge leniency is highly predictive of case outcomes.

Our second identifying assumption is that judge assignment only impacts debtor outcomes through the probability of receiving bankruptcy protection. This assumption would be violated if judge leniency is correlated with unobservable determinants of future outcomes. Table 3 presents a series of randomization checks to partially assess the validity of this exclusion restriction. Column 2 reports results from an OLS regression of judge leniency on a filer's age, gender, race, an indicator for being matched to a home at baseline, and baseline earnings, employment, self-employment earnings, self-employment, 401k contributions, receipt of Disability Insurance, job tenure, and average employer wages. Each baseline measure is the average over the five years before filing. We control for office by month-of-filing fixed effects, and cluster standard errors at the office level. Job tenure is associated with judge leniency at the ten percent level. None of our other baseline variables are significantly related to judge leniency, and a joint F-test of the hypothesis that all baseline differences are equal to zero has a p-value of 0.233.

Columns 3 adds controls for predicted earnings, employment, and mortality. We predict each outcome over the first five post-filing years using gender, race, five-year age effects, and employment and earnings in the sixth through tenth years before bankruptcy. Job tenure is the only significant measures, and a joint F-test that all the baseline differences listed in column 3 are equal to zero has a p-value of 0.252.[9]

Column 4 presents results from our final test of random assignment. We regress each baseline measure on an exhaustive set of judge fixed effects. Each regression controls for office by month-of-filing fixed effects. We report the p-value from a joint F-test that the judge effects are jointly different than zero, which provides an omnibus test for the null hypothesis that filer covariates do not differ significantly among filers assigned to judges within an office by month-of-filing combination. The joint F-test for age has a p-value of 0.051. None of the other joint F-tests in column 4 suggest that there is systematic non-random assignment of filings to judges.

The exclusion restriction could also be violated if judge leniency impacts future outcomes through channels other than bankruptcy protection. For example, the exclusion restriction would be violated

[9]To put the magnitude of the age and tenure correlations in Table 3 in context, we compare the implied bias in our reduced form earnings results reported in Section VA. Controlling only for office by month fixed effects, an OLS regression of average earnings over the first five post-filing earnings on age suggests that being a year older is associated with earnings that are $176.86 lower. Controlling for all of the covariates listed in Table 3, being a year older is associated with earnings that are $252.70 lower. An additional year of job tenure is associated with earnings that are $1,917.81 higher when controlling only for office by month fixed effects, and $1,265.64 higher when controlling for all other covariates in Table 3. Thus, a one standard deviation (three percentage point) increase in judge leniency is associated with a -$0.000037 to $0.000037 change in earnings due to the differences in age observed in Table 3, and a $0.002885 to $0.004430 change in earnings due to the differences in job tenure observed in Table 3. In contrast, our reduced form results plotted in Figure 3 show that a one percentage point increase in judge leniency is associated with a $128.55 increase in post-filing earnings. Results are similar for employment, mortality, and home foreclosure.

if more lenient judges are also more likely to provide financial counseling to debtors, and that financial counseling has an independent impact on future outcomes. If judge leniency impacts future outcomes through any other channels, then the resulting local average treatment effect would incorporate any additional impacts associated with judge assignment. The assumption that judges only systematically affect debtor outcomes through bankruptcy is fundamentally untestable, and our estimates should be interpreted with this potential caveat in mind. However, we argue that this exclusion assumption is reasonable in our setting. Recall that bankruptcy judges typically interact with debtors only at the confirmation hearing, while the separately assigned court trustee handles all pre- and post-filing issues. Thus, it seems unlikely that judges would confer significant benefits to debtors other than through their ruling on the bankruptcy filing.

Our third identifying assumption is that there is a monotonic impact of judge assignment on the probability of receiving bankruptcy protection. The monotonicity assumption implies that being assigned to a more (less) lenient judge does not result in a decrease (increase) in the likelihood of receiving bankruptcy protection. This monotonicity assumption would be violated if judges differ in the types of filings they treat more leniently. For example, the monotonicity assumption would be invalid if some judges treat women more leniently, while other judges do not treat women more leniently. If the monotonicity assumption is violated, our estimates from equation (8) would still be a weighted average of marginal treatment effects, but the weights would not sum to one (Angrist, Imbens, and Rubin 1996, Heckman and Vytlacil 2005). The monotonicity assumption is therefore necessary to interpret our estimates as a well defined local average treatment effect. The bias away from this local average treatment effect is an increasing function of the number of individuals for whom the monotonicity assumption does not hold and the difference in the marginal treatment effects for those individuals for whom the monotonicity assumption does and does not hold. The amount of bias is also a decreasing function of the first stage relationship described by equation (9) (Angrist, Imbens, and Rubin 1996).[10]

To partially test the monotonicity assumption, Appendix Figure 5 plots judge leniency measures that are calculated separately for each judge by gender, race, baseline income, age, and home ownership. We also report the coefficient and standard error from an OLS regression relating each measure of judge leniency. Consistent with our monotonicity assumption, judges exhibit remarkably similar tendencies across observably different filers. Regressing the judge leniency for male filers on those for female filers yields a point estimate of 0.838. For white and non-white filers, the point estimate is 1.005, for high and low baseline earnings the coefficient is 0.998, for filers older and younger than 40 the coefficient is 1.104, and for those matched to a home and those not matched to a home the coefficient is 0.889. None of the results suggest that the monotonicity assumption is invalid in our setting.

[10]Small and Tan (2007), Klein (2010), de Chaisemartin (2014), and Huber and Mellace (2011) establish conditions under which it is possible to interpret the instrumental variables estimates as a LATE for a different population when the monotonicity assumption is violated.

V. The Impact of Chapter 13 Bankruptcy Protection on Labor Supply, Mortality, and Home Foreclosure

A. Labor Supply

As a benchmark for evaluating the causal effects described below, we begin with a descriptive analysis of granted and dismissed filers. Figure 2 plots average pre- and post-filing earnings and employment for our estimation sample. Earnings include both wage and self-employment earnings including zeros.[11] To aid in the interpretation of the results, we plot expected outcomes calculated using a regression of the outcome five years before filing on controls for gender, race, a quadratic in age, a quadratic in tenure, industry fixed effects, and earnings in the previous five years. We then predict the outcome for the four years before filing and the five years after filing using age and tenure coefficients.

Filers granted Chapter 13 bankruptcy protection earn $5,000 to $5,500 more than dismissed filers in the years leading up to filing. Earnings for both groups fall two to three years before filing, with a larger dip for dismissed filers.[12] The post-filing earnings of dismissed filers dip further, falling about $4,000 below the expected trajectory five years after filing. In contrast to the large and permanent decline in earnings experienced by dismissed filers, individuals granted bankruptcy protection appear to have no long-term earnings losses. These descriptive trends suggest that any causal impacts of bankruptcy protection are likely to be driven by the deterioration of outcomes among dismissed filers, as opposed to gains by granted filers. This interpretation suggests that bankruptcy protection mitigates the long-term consequences of financial shocks that might otherwise harm debtors, but does not confer any benefits in the absence of a financial shock.

Reduced form estimates of the impact of judge leniency on average earnings and employment over the first five post-filing years are presented in Figure 3. Following our first stage results from Figure 1, we construct each plot by regressing each outcome on office by month-of-filing fixed effects, calculating residuals, and then adding the mean outcome to each residual to facilitate interpretation of the scale. The solid line and corresponding coefficient show the best linear fit estimated on the underlying micro data controlling for office by month-of-filing fixed effects, with standard errors clustered at the office level.

Figure 3 shows that being assigned to a more lenient judge significantly increases post-filing earnings and employment. A one standard deviation (three percentage point) increase in judge leniency increases post-filing earnings by $128.55 relative to the baseline mean of $22,115. Employ-

[11] Appendix Table 4 displays the same information in tabular form. Appendix Figure 6 plots mean and median earnings with and without zeros included. Median earnings are lower than mean earnings for both granted and dismissed filers, but the same qualitative trends exist before and after filing as in Figure 2. Mean and median earnings without zeros included also follow the same trend as Figure 2. Two-stage least squares estimates that condition on non-zero earnings are somewhat larger than those reported here (See Appendix Table 5).

[12] The fall in pre-filing earnings is likely related to the "Ashenfelter dip" – the drop in earnings among participants in job training programs – discussed by Ashenfelter (1978), Ashenfelter and Card (1985), and Heckman and Hotz (1989). In our context, the negative earnings shocks before bankruptcy filing may result in OLS estimates with a non-filing control group to overstate the true gains of bankruptcy if there is mean reversion in earnings, and to understate the impact of bankruptcy if shocks have consequences that increase over time.

ment over the same time period increases by 0.2 percentage points relative to the baseline mean of 81.3 percent.

Figure 4 presents corresponding two-stage least squares results measuring the causal impact of Chapter 13 bankruptcy protection on earnings and employment. We use judge leniency Z_{ijct} as an instrumental variable for bankruptcy protection, and control for gender, race, five-year age effects, a five-year average of baseline employment, a five-year average of baseline earnings, and office by month-of-filing fixed effects. For treatment effects in the baseline period, we control for gender, race, five-year age effects, office by month-of-filing fixed effects, and average employment and earnings in the years prior to the baseline year under consideration. Standard errors are clustered at the office level throughout. We estimate the impact of bankruptcy protection for each year separately. Table 4 presents estimates pooling outcomes across the first five post-filing years.

There is a large and precisely estimated impact of Chapter 13 bankruptcy protection on post-filing earnings and employment. In the first full year after filing, the marginal recipient of Chapter 13 protection earns $6,228 more than the marginal dismissed filer. The impact of Chapter 13 protection remains both economically and statistically significant for the first five post-filing years. Pooling outcomes across those five years, the marginal recipient of Chapter 13 earns $5,562 more than the marginal dismissed filer, a 25.1 percent increase from the baseline mean. The earnings estimates reported in Table 4 are similar to those suggested by the descriptive trends in Figure 2, and formal event study estimates presented in Section VE. Conversely, our two-stage least squares estimates are considerably larger than cross-sectional (e.g. Han and Li 2007, 2011) and within-individual estimates (e.g. Cohen-Cole, Duygan-Bump and Montoriol-Garriga 2009) that do not use dismissed filers as a comparison group.

Over the first five post-filing years, Chapter 13 also increases employment by 6.8 percentage points, a 8.3 percent increase from the baseline mean. This point estimate suggests that approximately $(\$22,115 \cdot 6.8) = \$1,503$, or 27 percent, of the earnings estimate can be explained by a decline in labor force attachment.

Our two-stage least squares estimates can only be interpreted as the causal effect of bankruptcy protection if judge leniency is not systematically related to unobserved filer characteristics. One way to evaluate the validity of this assumption is to a estimate the impact of bankruptcy protection in the years before a debtor files. Consistent with our identifying assumptions discussed above, there is no systematic relationship between bankruptcy protection and either earnings or employment in the pre-filing years, with the estimated coefficients being economically and statistically insignificant.

Appendix Table 2 presents estimates using a variety of specifications and instruments to assess the robustness of our main results. Column 2 replicates our preferred estimates from Table 4 using leave-one-out judge leniency as an instrument for Chapter 13 protection. Column 3 uses a leave-month-out measure of judge leniency – where we calculate judge leniency only using cases in the 11 other months of the filing year – as an instrument for Chapter 13 protection. Measuring judge leniency only using cases from the other 11 months purges any remaining correlation between a filer's outcomes and our instrument introduced by the estimation of the office by month-of-filing

fixed effects in our first and second stage regressions. Column 4 uses a leave-one-out measure of judge leniency measured over the first 90 post-filing days as an instrument. Column 5 uses a randomly selected subset of 50 percent of filers to calculate a leave-month-out measure of judge leniency that is used as an instrument in the mutually exclusive subset of filers. Columns 6 through 8 present results that use judge fixed effects as instruments for bankruptcy protection estimated using two-stage least squares, LIML, and jackknife IV, respectively. All regressions control for gender, race, five-year age effects, a five-year average of baseline employment, a five-year average of baseline earnings, and office by month-of-filing fixed effects, with standard errors clustered at the office level.

Our two-stage least squares estimates are robust to the choice of instrument and estimation method. The impact of Chapter 13 protection on post-filing earnings is $5,602 in the leave-month-out specification, $9,126 in the 90-day judge leniency specification, $4,628 in the split sample specification, $4,445 in the two-stage least squares judge fixed effects specification, $4,263 in the LIML specification, and $4,463 in the jackknife IV specification. Due to the relatively large standard errors when using judge fixed effects as instruments, we cannot reject the hypothesis that the estimated treatment effects are identical to our preferred estimate of $5,562 for all of our estimates except the 90-day judge leniency specification. The results follow a similar pattern for employment, while the mortality and foreclosure results are larger when using judge fixed effects. None of the point estimates for employment, mortality, and foreclosure are statistically distinguishable from our preferred estimates in column 2 of Table 4.

Appendix Table 6 presents two-stage least squares results using our preferred specification for the sixth through tenth post-filing years. We restrict the sample to filings originating between 1992 and 2000. Filings originating after 2000 are excluded because we do not observe post-filing outcomes for all ten years for these individuals. In this sample of older filings, Chapter 13 protection increases the marginal recipient's annual earnings by $6,772 in the sixth through tenth post-filing years. These results suggest that the impact of bankruptcy protection is persistent after the completion of the repayment plan. The probability of being employed is also 6.6 percentage points higher in the sixth through tenth post-filing years.

Table 5 presents two-stage least squares results from our preferred specification separately by filer gender, race, age, baseline earnings, and being matched to a home. The effects of Chapter 13 protection on annual earnings are somewhat larger for female and non-white filers, though neither difference is statistically significant. There are significantly larger impacts of Chapter 13 protection on younger filers, likely because older filers in our sample have already left the labor market. Specifically, Chapter 13 increases the annual earnings of filers who are 25 to 40 years old by $7,833 and the annual earnings of filers who are 40 and 60 years old by $6,299, while having no discernible effect on filers who are 60 or older at the time of filing. Chapter 13 protection also has a larger impact on filers with above median earnings. Chapter 13 increases annual earnings by $8,650 for filers with above median earnings, compared to an increase of $1,691 for filers with below median earnings. The impact of Chapter 13 protection on employment is also 6.0 percentage points higher for filers with above median baseline earnings. This may be the result of higher earning filers facing

a higher marginal rate of garnishment, or non-linearities in the elasticity of labor supply. In Section VD, we show that the garnishment channel is at least partially responsible for the pattern of results observed in Table 5.

Panel D of Table 4 presents results for additional labor supply outcomes available in the SSA data. We estimate the impact of Chapter 13 protection on the average of each outcome over the first five post-filing years. Among eligible filers, bankruptcy protection decreases the receipt of SSI by 12.8 percentage points, though the point estimate is only significant at the ten percent level. Bankruptcy protection also appears to have little impact on the receipt of DI or on annual 401k contributions.

B. Mortality

The reduced form estimate of judge leniency on five-year mortality is presented in Figure 3, and the corresponding two-stage least squares estimates are presented in Figure 4. The dependent variable for each regression is an indicator for being deceased in or before the specified year. Trends in the raw data are presented in Figure 2.

In the first full year after filing, only 0.3 percent of filers granted Chapter 13 protection are deceased, compared to 1.15 percent of dismissed filers. Five years after filing, 2.1 percent of filers granted Chapter 13 protection are deceased, compared to 4.0 percent of dismissed filers. These statistics suggest that dismissed bankruptcy filers have extremely high mortality rates. The annual mortality rate for individuals age 25-70 in the United States is about 0.45 percent, one-third to two-fifths the mortality risk of dismissed filers. The annual mortality rate for a national population with a similar age profile as our estimation sample is 0.3 percent, one-quarter to one-third the mortality risk of dismissed filers (CDC 2014).[13] The high mortality rates among dismissed filers are consistent with the high rates of medical debt (Domowitz and Sartain 1999, Sullivan, Warren, and Westbrook 2000, Warren, Sullivan, and Jacoby 2000, Himmelstein et al. 2009) and high levels of self-reported stress (Porter 2011) among bankruptcy filers. The mortality rates among dismissed filers are also consistent with the high mortality rates reported among displaced workers. Sullivan and von Watcher (2009) find average annual mortality rates of 0.52 percent among displaced workers age 28-57, nearly 30 percent higher than the national mortality rate for similarly aged individuals during the same time period.

Turning to our causal estimates, the reduced form results from Figure 4 show that being assigned to a more lenient judge decreases five-year mortality. A one standard deviation increase in judge leniency decreases five-year mortality by 0.0003 percentage points relative to the dismissed filer mean of 4.0 percentage points. Note that we use the dismissed filer mean as a reference point

[13]The CDC reports the annual population, number of deaths, and mortality rates for five year age groups. We calculate the annual mortality rate in 2011 for the 25 to 39 age group by dividing the number of deaths by the total population of people in the combined 25 to 29, 30 to 34, and 35 to 39 age groups. A similar approach is used to calculate the mortality rates for the 40 to 59 and 60 to 70 age groups, using the appropriate age groups from the CDC. We adjust for the age profile of our sample by calculating a weighted average of mortality rates where weights are proportionate to the size of the each age cohort in our sample.

because the deceased cannot file for bankruptcy protection, making the baseline mortality rate zero by construction.

In the two-stage least squares results, Chapter 13 bankruptcy protection lowers five-year mortality by a statistically significant 1.2 percentage points, a 30.0 percent decrease from the control mean. Aggregating the mortality effects across the first five post-filing years, our results imply that the marginal recipient of Chapter 13 protection is alive for 0.053 more years than the marginal non-recipient. In a sample of debtors filing between 1992 and 2000, Chapter 13 decreases ten-year mortality by 1.5 percentage points, though the estimate is not statistically significant. We wish to emphasize that due to the relative imprecision of our mortality estimates, the 95 percent confidence intervals include both very small and implausibly large point estimates.

Panel B of Table 5 reports two-stage least squares results interacted by filer gender, race, age, baseline earnings, and being matched to a home. The effect of Chapter 13 protection on mortality is larger for filers who are white, have above median baseline earnings, and are not matched to a home at baseline. However, the most striking pattern is by age. Chapter 13 protection decreases five-year mortality by 10.9 percentage points for filers 60 and older at the time of filing, despite having little to no impact on earnings for these filers. In contrast, Chapter 13 decreases five-year mortality by only 2.2 percentage points for filers between 25 and 40, and 1.7 percentage points for filers between 40 and 60.

C. Home Foreclosure

The reduced form estimate of judge leniency on five-year foreclosure is presented in Figure 3, and the corresponding two-stage least squares estimates are presented in Figure 4. The sample includes filings in our estimation sample in county by year bins covered by the DataQuick records. Home foreclosure is an indicator for a filer's home receiving a notice of default, receiving a notice of transfer or sale, or having been transferred to a REO or a guarantor on or before the indicated year. Note that we are unable to estimate the impact of bankruptcy protection on pre-filing foreclosure as we only have address information for the year of filing, and were unable to match pre-filing transactions to filers. Trends in the raw data are presented in Figure 2.

Chapter 13 bankruptcy protection significantly lowers the probability of home foreclosure. In the raw data plotted in Figure 2, five-year foreclosure rates are less than 2.5 percent for filers receiving bankruptcy protection, compared to 14.9 percent for dismissed filers. This implies that approximately one-third of dismissed filers matched to a home experience a home foreclosure within the first five post-filing years. Note that we use the dismissed filer mean for reference, as we only observe a filer's address at the time of filing. Because the vast majority of foreclosures result in a change of address, we are largely unable to measure the probability of foreclosure before filing.

Our reduced form results from Figure 3 show that being assigned to a more lenient judge has an economically and statistically significant effect on post-filing foreclosure. A one standard deviation increase in judge leniency decreases five-year foreclosure by 0.00459 percentage points relative to the dismissed filer mean of 14.9 percentage points. In the two-stage least squares estimates, Chapter 13

protection decreases foreclosure by 11.9 percentage points in the first full post-filing year and 16.7 percentage points in the second post-filing year. Foreclosure rates are 19.1 percentage points lower five years after filing, a 127.5 percent decrease from the dismissed filer mean. Conditional on being matched to a home, Chapter 13 protection decreases five-year home foreclosure by 35.3 percentage points.

In Appendix Table 5, we show that bankruptcy protection also significantly decreases voluntary and short home sales. Distress sales, which include both foreclosures and short sales, are 22.2 percentage points lower after five years. Home sales, which include all types of housing transactions, are 33.9 percentage points lower after five years.

Panel C of Table 5 reports subsample results. The effect of Chapter 13 protection on foreclosure is larger for filers with low baseline earnings and filers who are 60 or older at the time of filing. These results may be due to these filers being more at risk of foreclosure or having fewer alternatives if a bankruptcy filing is dismissed. However, the precise mechanisms for this pattern of results are unclear.

D. Discussion and Potential Channels

Why are there such large benefits of receiving bankruptcy protection? In this section, we first explore whether protection from wage garnishment and reduced economic instability can explain our labor supply results. We then conclude by considering potential explanations for our mortality result.

One explanation for our results is that Chapter 13 maintains the incentive to work by protecting future earnings from wage garnishment. In this scenario, dismissed filers reduce their labor supply due to the tax on earnings imposed by wage garnishment. Table 6 partially tests this hypothesis by estimating the impact of Chapter 13 protection interacted with proxies of garnishment risk. Columns 1 and 2 of Table 6 present results for filers in the four states that prohibit wage garnishment – Florida, Pennsylvania, South Carolina, and Texas – and filers in states that allow at least some wage garnishment. The impact of Chapter 13 on annual earnings over the first five post-filing years is $5,635 in states that allow garnishment, compared to $3,193 in the four states that prohibit garnishment. The pattern of results is reversed for employment, however, with larger impacts in the four states that prohibit garnishment, though the difference is not statistically significant.

Columns 3 through 7 exploit both within- and across-state variation in garnishment laws to estimate results for filers who are likely to be subject to different marginal garnishment rates. Within each state, wage garnishments are a non-linear function of earnings. For example, in states that follow the federal guidelines, creditors are allowed to garnish each additional dollar of disposable earnings between 30 and 40 times the minimum wage, but only 25 cents of every additional dollar after that point. There is also across-state variation in garnishment rates. Twelve states have lower marginal garnishment rates, ten have lower caps on the total amount that can be garnished, and four states prohibit wage garnishment altogether. In each of these states, the more stringent state regulation takes precedence over the federal guidelines.

We exploit this variation in garnishment laws by estimating the impact of bankruptcy interacted with the marginal garnishment rate a filer is likely to face under both state and federal law.[14] Our estimating equation is:

$$y_{it} = \alpha + \alpha_{ot} + \beta X_i + \gamma_0^0 B_i G_0^0 + \gamma_{25}^{25} B_i G_{25}^{25} + \gamma_{100}^{100} B_i G_{100}^{100} + \gamma_0^{25} B_i G_0^{25} + \gamma_0^{100} B_i G_0^{100} + \varepsilon_{it} \quad (11)$$

where G_x^y is an indicator for a filer facing a marginal garnishment rate of x in his or her state of filing and a marginal garnishment of y under federal law. We instrument for each $B_i G_x^y$ using the interaction between judge leniency and the garnishment bin $Z_{ijct} G_x^y$. We estimate the impact of bankruptcy separately for filers facing different state and federal garnishment rates to control for any differential effects of bankruptcy correlated with baseline earnings that are unrelated to the marginal garnishment rate. For example, γ_0^{25} measures the impact of Chapter 13 protection on filers with higher earnings who are exempt from garnishment in their state of filing, but who would have been subject to 25 percent garnishment under federal law, while γ_{25}^{25} measures the impact of Chapter 13 on filers with higher earnings in states that do not exempt them from garnishment. Thus, γ_0^{25} measures the effect of bankruptcy without garnishment protections for higher-earning filers, while γ_{25}^{25} measures the effect of Chapter 13 with garnishment protections for higher-earning filers.

The effect of Chapter 13 protection is small and imprecisely estimated for filers unlikely to face wage garnishment. The impact on annual earnings is negative $471 for filers subject to no garnishment under both state and federal law, $5,607 for filers who would have been subject to marginal garnishment of 25 percent had they lived in another state, and negative $1,759 for filers who would have been subject to marginal garnishment of 100 percent had they lived in another state. None of the point estimates are statistically significant at conventional levels.

In contrast, there is a large and precisely estimated impact of Chapter 13 on filers subject to the 25 percent marginal garnishment rate in their state of filing. The impact on annual earnings is $7,892 for filers subject to marginal garnishment of 25 percent under both state and federal law. Due to the imprecision of the point estimates, the estimate is not statistically different than that for filers subject to no garnishment under state law but 25 percent under federal law (p-value = 0.572). For filers subject to the 100 percent marginal garnishment rate, the impact is a statistically insignificant $7,435. The difference between this estimate and the estimate for filers subject to no garnishment under state law but 100 percent under federal law is marginally significant (p-value = 0.10). However, if we take these estimates from columns 4 and 6 at face value, the implied elasticity of earnings with respect to garnishment is about 0.94 for the 25 percent bracket.[15] All of

[14] We estimate disposable earnings using pre-tax earnings in the five most recent pre-filing years and the tax rate implied by the NBER TAXSIM federal and state income tax calculator. We assume that all filers are the only earner in their households, as we do not observe marital status in the bankruptcy or SSA data.

[15] The earnings elasticity with respect to garnishment is equal to the log change in taxable earnings divided by the log change in the net tax rate. We assume that the state and federal earnings tax rate is 20 percent, implying that the net tax and garnishment rate is $1 - (1 - 0.2)(1 - 0.25) = 40$ percent. Finally, we use the impact of bankruptcy on filers facing no garnishment in their state of filing who would have faced a 25 percent garnishment under federal law as a counterfactual impact. These assumptions imply an elasticity of earnings with respect to garnishment of

the results from Table 6 are broadly consistent with bankruptcy protection increasing the incentive to work by lowering the effective marginal tax rate on earnings. Nevertheless, it is unlikely that a lower marginal tax rate explains all of our results. Previous studies suggest that the intensive marginal elasticity of earnings with respect to the net-of-tax rate is approximately 0.25 (e.g. Chetty 2012), implying that a 25 percent marginal tax cut should increase earnings by about 6.25 percent, 24.9 percent of our earnings estimate from Table 4. Our implied elasticity measure is likely to be positively biased by other laws and regulations correlated with wage garnishment policies, such as restrictions on third-party debt collectors. We also note that the standard errors in Table 6 are large enough that the implied elasticity with respect to earnings includes a wide range of estimates.

A second explanation for the estimated effects is that bankruptcy protection maintains economic stability. Bankruptcy protection discharges most debts, allows debtors to repay mortgage arrears, and puts a hold on almost all debt collection efforts. These features of the bankruptcy code may maintain economic stability by allowing debtors to avoid eviction or home foreclosure, reducing the incentive to strategically move across state lines or change jobs to avoid creditors, or preventing sharp drops in consumption that have important long-term consequences. Consistent with this explanation, our earnings result is of similar magnitude (in the opposite direction) to the estimated effect of job loss (e.g. von Wachter, Song, and Machester 2009), suggesting that bankruptcy protection may be able to offset the adverse consequences of a financial shock such as job loss. This interpretation is also consistent with our results from Figure 2, which show a significant deterioration of outcomes among dismissed filers, but few gains for filers granted bankruptcy protection.

We present further evidence on this issue by examining filer mobility as proxied by firm EIN. Table 7 presents estimates of the impact of Chapter 13 protection on the probability of working in the same baseline job, industry, county, and state. We also present results for job tenure and average firm wages. The sample is restricted to filers with at least one year of employment in both the pre- and post-filing period.

Bankruptcy protection increases the probability of working in the same (2-digit NAICS) industry by 23.8 percentage points, a 42.7 percent change from the baseline mean of 55.7 percent, and increases the probability that a filer stays at his or her baseline job by 24.6 percentage points, a 49.0 percent change from the baseline mean of 50.2 percent. There is also a large impact of bankruptcy protection on geographic mobility, with bankruptcy protection increasing the probability that a filer works in his or her baseline county by 22.9 percentage points, a 39.7 percent increase, and his or her baseline state by 15.3 percentage points, a 24.4 percent increase. Job tenure and average firm wages are also higher, suggesting that this increase in economic stability is beneficial for the worker. In Appendix Table 7, we find some evidence that the mobility estimates are larger in states that allow garnishment, though not all of the differences are statistically significant. The estimated impacts also tend to increase with the marginal garnishment bracket, though the differences are not statistically significant and the estimated effects remain relatively large in the no garnishment bracket.

$\frac{log(0.248)-log(0.189)}{log(1-0.2)-log(1-0.4)} = 0.94$ for the 25 percent bracket. Note that we are unable to calculate the elasticity for the 100 percent bracket, as $log(0)$ is undefined.

Taken together with the foreclosure results, we interpret this pattern of results as suggesting that Chapter 13 protection maintains economic stability both by reducing forced moves from evictions and foreclosures and unforced, strategic moves to avoid creditors.

We conclude this section by considering potential explanations for our mortality results. In a sample of Pennsylvania workers, Sullivan and von Wachter (2009) find that job displacement increases five-year mortality by 1.2 percentage points. Thus, one potential interpretation of our estimates is that bankruptcy protection can offset much of the increased mortality risk from financial distress caused by events such as job loss. To partially test the hypothesis that the change in mortality that we estimate is driven by a change in earnings, we follow Sullivan and von Wachter (2009) and compare our two-stage least squares results for five-year mortality to the effect implied by the cross-sectional correlation between five-year mortality and both earnings and employment in our estimation sample. Our two-stage least squares results suggest that bankruptcy protection increases annual earnings by $5,562 and employment by 6.8 percentage points. In a regression with post-filing earnings, employment, and no additional controls, the estimated correlation between five-year mortality and average annual earnings (in $1,000s) is -0.00019, and the correlation between five-year mortality and average employment is -0.00996. Taken together, these results suggest that the change in labor supply associated with Chapter 13 protection can explain a $(0.068 \cdot 0.00996 + 5.562 \cdot 0.00019) \cdot 100 = 0.17$ percentage point decrease in five-year mortality, or about 14.1 percent of our estimated treatment effect of 1.2 percentage points. This result is in stark contrast to Sullivan and von Wachter (2009), who find that approximately 50 to 75 percent of the impact of job displacement on mortality is driven by the reduction in long-term earnings.

Further evidence that the change in earnings associated with bankruptcy protection plays little to no role in explaining the mortality results comes from our subsample results reported in Panel B of Table 5. Recall that Chapter 13 protection decreases five-year mortality by 10.9 percentage points for filers 60 and older at the time of filing, despite having little to no impact on earnings for these filers. In contrast, Chapter 13 decreases five-year mortality by only 2.2 percentage points for filers between 25 and 40, and 1.7 percentage points for filers between 40 and 60.

There are several potentially relevant channels for our mortality result that we cannot examine with our current data. For example, bankruptcy protection may decrease an individual's stress by reducing contact with creditors and allowing greater control over his or her financial future. Consistent with this idea, 84 percent of debtors report being under extreme stress before filing for bankruptcy, while only 35 percent report being under extreme stress after filing for bankruptcy (Porter 2011). Dismissed filers may also lose their health insurance or change family environments in a way that impacts health. Unfortunately, it is not possible to link information on morbidity, health insurance, or family status to our data. The precise mechanisms for our estimated mortality effect therefore remain unclear, and likely include a combination of these factors.

E. External Validity

In this section, we discuss the external validity of our results for Chapter 13 filers in our estimation sample, Chapter 13 filers in our full sample, and Chapter 7 filers.

One potential caveat of our results is that we estimate the effects of Chapter 13 protection for the marginal recipient of bankruptcy protection. Recall that our instrumental variable identification strategy identifies the impact of Chapter 13 for filers whose bankruptcy decision is altered by judge assignment due to disagreement on whether or not they should receive bankruptcy protection. This local average treatment effect may or may not reflect the average treatment effect of bankruptcy for all filers. To investigate heterogeneous treatment effects across unobservable debtor characteristics, we estimate MTEs (Heckman and Vytlacil 2005). In our setting, the MTE estimates illustrate how the outcomes for debtors on the margin of bankruptcy protection change as we move from more strict to more lenient judges. Thus, the MTE estimates shed light on the types of filers who benefit most from bankruptcy protection, and whether our local average treatment effects are likely to apply to filers who are further from the margin.

To calculate the MTE function, we follow Doyle (2007) and predict the probability of bankruptcy protection using a probit model with judge leniency Z_{ijct} as the only explanatory variable. We then predict the relationship between each outcome and the predicted probability of receiving bankruptcy protection using a local quadratic estimator with a bandwidth of 0.069.[16] The first derivative of this relationship is then evaluated at each percentile of the predicted probability of receiving bankruptcy protection using the coefficients from the local quadratic regression. We calculate standard errors using the standard deviation of MTE estimates from a bootstrap procedure with 250 iterations adjusted for clustering at the office by filing month level.

Appendix Figure 11 reports the MTE of Chapter 13 protection for earnings, employment, five-year mortality, and five-year home foreclosure. The MTE function for earnings is increasing in the predicted probability of bankruptcy protection, while the MTE function for mortality and home foreclosure are decreasing in the predicted probability of bankruptcy protection. The upward slope in the earnings MTE and downward slope in the mortality and home foreclosure MTEs suggest that filers on the margin of bankruptcy who are assigned to the most lenient judges experience the largest gains when granted bankruptcy protection. These are likely filers with unobservable characteristics that make them the least likely to be granted bankruptcy in the first place, as the margin for relatively lenient judges should entail relatively less deserving filers. This interpretation of the estimates suggests that the impact of Chapter 13 on earnings is modestly larger for less deserving debtors. Conversely, the MTE function for employment is flat, suggesting that the employment effects do not differ systematically across unobservable characteristics.[17]

[16] Following Doyle (2007), the pilot bandwidth was chosen by minimizing the sum of squared errors between the local quadratic estimator and a fourth-degree polynomial model for each outcome. Larger bandwidths lead to more linear relationships and flatter MTE estimates. We chose the minimum bandwidth across all outcomes to explore variations from linearity. The local quadratic estimator was chosen as it is thought to have better properties when evaluating first derivatives (Fan and Gijbels 1996). Results are nearly identical for higher and lower polynomials and both larger and smaller bandwidths.

[17] Appendix Figure 12 reports the MTE of Chapter 13 protection for 401k contributions, DI, and SSI, and Appendix

A second potential caveat is we are only able to use instrumental variables design in bankruptcy offices that randomly assign filings to judges. Recall from Table 1 that our estimation sample is broadly similar to the full sample of Chapter 13 filings. Yet, it is possible that the two groups of filers differ in some unobservable way. We provide estimates of the impact of Chapter 13 protection in our full sample using an event study methodology that compares the outcomes of granted and dismissed filers. Our event strategy design is in the spirit of Bound's (1989) analysis of accepted and rejected DI applicants, and more recent work estimating the effects of job loss on subsequent outcomes (Jacobson, Lalonde, and Sullivan 1993, von Wachter, Song, and Manchester 2009, Sullivan and von Wachter 2009).

Intuitively, our event study design uses granted filers as a treatment group and dismissed filers as a control group. The key identifying assumption is that dismissed filers would have experienced the same outcomes as granted filers had they been granted bankruptcy protection. However, recall from Figure 3 that dismissed filers start with lower earnings and experience larger earnings shocks before filing than granted filers. To account for the difference in pre-filing earnings between granted and dismissed filers, we include individual fixed effects that control for time-invariant differences across filers. To account for different earnings trends, we also include fixed effects for the decile of predicted propensity score separate by event time. We estimate the propensity score using an OLS regression of an indicator for bankruptcy protection on gender, race, five-year age bins, five-years of baseline employment, five-years of baseline earnings, and office by month fixed effects. We then group filers into deciles of the predicted probability of receiving bankruptcy protection. Thus, our event strategy design compares the outcomes of granted and dismissed filers with similar predicted probabilities of being granted bankruptcy protection.

Formally, we estimate various specifications of the following model:

$$y_{it} = \alpha_i + \alpha_t + \sum_{k=-5}^{5} \beta_k Pscore_i^k + \sum_{k=-5}^{5} \gamma_k Bankruptcy_i^k + \varepsilon_{it} \tag{12}$$

where y_{it} is our outcome of interest, α_i are individual fixed effects that control for time-invariant differences across filers, α_t are year fixed effects that control for time-varying factors that affect all filers similarly, and $Pscore_i^k$ is the decile of predicted propensity score separate by event time k. $Bankruptcy_i^k$ is an indicator for being in the k-th period before or after filing interacted with having been granted bankruptcy protection. The coefficients γ_k therefore measure the evolution of y_{it} for granted bankruptcy filers relative to dismissed filers. We omit effects for the year prior to filing, so that all parameter estimates measure differences relative to this base year. For mortality and home foreclosure where we do not observe differences in the year prior to filing, we omit the year of filing.

Figure 13 reports the MTE of the job mobility outcomes described in Table 7. Consistent with our main results, the MTE functions for DI and SSI are decreasing in the predicted probability of bankruptcy protection and the MTE functions for same state, same industry, same job, and average firm wage are increasing in the predicted probability of bankruptcy protection. These results suggest that filers on the margin of bankruptcy who are assigned to the most lenient judges experience the largest gains in stability when granted bankruptcy protection. The MTE functions for 401k contributions, same county, and job tenure are flat.

As a result, our event study estimates for these outcomes are likely attenuated towards zero as we attribute any treatment effects in the year of filing to the effects of bankruptcy protection.

Appendix Figure 14 presents event study estimates of equation (12) for Chapter 13 filers in our estimation sample and all Chapter 13 filers in our data. The "full" sample is restricted to a ten percent random draw of first-time filers for the non-foreclosure results for computational reasons. The home foreclosure sample includes all first-time filers in counties covered by DataQuick. Standard errors are clustered at the individual level.

There is a large and statistically significant effect of Chapter 13 protection on all of our outcomes in both the estimation sample and the full sample of Chapter 13 filers. Over the first five post-filing years, filers receiving Chapter 13 protection earn $4,034 to $5,581 more than dismissed filers in our estimation sample, and $3,783 to $5,114 more in our full sample. Employment is 2.6 to 8.1 percentage points higher in our estimation sample, and 2.3 to 6.7 percentage points higher in our full sample. Five-year mortality and foreclosure are 2.0 and 10.9 percentage points lower in our estimation sample, and 1.5 and 12.9 percentage points lower in our full sample. Thus, the impact of Chapter 13 protection appears to be similar in our full and estimation samples.

A final concern is that our analysis has focused on Chapter 13 bankruptcy, which makes up about 25 percent of all bankruptcy filings. Recall that there is not enough variation in the treatment of Chapter 7 cases to estimate the effects of Chapter 7 protection using our instrumental variables strategy. Appendix Figure 14 presents results for Chapter 7 protection using our event study methodology described above. We again restrict the non-foreclosure results to a ten percent random draw of all first-time filers. The home foreclosure sample includes all first-time filers in counties covered by DataQuick.

The effect of Chapter 7 protection is much more modest than the effect of Chapter 13 protection. Over the first five post-filing years, filers granted Chapter 7 bankruptcy protection earn $1,639 to $1,936 more than dismissed filers, and are 2.4 to 2.8 percentage points more likely to be employed. Filers granted Chapter 7 protection are 1.7 percentage points less likely to experience a home foreclosure after five years, but are no more or less likely to be deceased. The more modest impact of Chapter 7 is somewhat surprising given the fact that, in principle, all Chapter 7 filers have the option of filing under Chapter 13. The more modest benefits of Chapter 7 therefore seem likely to be the result of the different composition of filers under each Chapter. There may also be important impacts of Chapter 7 on other ex-post outcomes that we are not measuring here, such as credit availability or cost, that compare more favorably with respect to Chapter 13. Finally, it is possible that our event study design is less plausible for Chapter 7 cases. Less than two percent of Chapter 7 cases are dismissed, with these cases typically dismissed due to fraud or an inability to complete the bankruptcy paperwork correctly. Thus, dismissed Chapter 7 filers may not be a suitable control group for granted filers.

VI. Conclusion

In this paper, we estimate the impact of Chapter 13 bankruptcy protection on subsequent labor supply, mortality, and home foreclosure. We find that Chapter 13 increases the marginal recipient's annual earnings in the first five post-filing years by $5,562, a 25.1 percent increase from the baseline mean. Employment increases by 6.8 percentage points over the same time period, an 8.3 percent increase from the baseline mean. Five-year mortality is 1.2 percentage points lower, a 30.0 percent decrease from the dismissed filer mortality rate, with five-year foreclosure rates falling by 19.1 percentage points, a more than one hundred percent decrease from the dismissed filer foreclosure rate. We find evidence consistent with the results being driven by increased incentive to work and increased economic stability following the receipt of bankruptcy protection. A descriptive analysis of granted and dismissed filers further suggests the impacts are driven by the deterioration of outcomes among dismissed filers as opposed to any gains by granted filers.

Our results provide new evidence on the ex-post benefits of debt relief. These results are particularly important in light of the on-going debate surrounding the use of debt relief and mortgage modification to stimulate the economy. Work by Mulligan (2008), Hall (2011), and Eggertsson and Krugman (2012) suggests that household borrowing constraints can help explain the severity of the recession, while Mian and Sufi (2012) show that regional differences in debt overhang can explain differences in unemployment. Our estimates also suggest that the restrictions on bankruptcy filing introduced by the 2005 Bankruptcy Abuse Prevention and Consumer Protection Act may have important adverse consequences on debtors.

The main limitation of our analysis is that we are not able to estimate the impact of bankruptcy laws on ex-ante borrowing costs or behavior. There may also be important ex-post impacts of bankruptcy protection on outcomes such as credit availability that we are unable to measure with our data. Finally, our analysis has focused on Chapter 13 bankruptcy, which makes up about 25 percent of all bankruptcy filings. This paper should therefore be viewed as a first step towards characterizing the impact of consumer bankruptcy protection on debtors.

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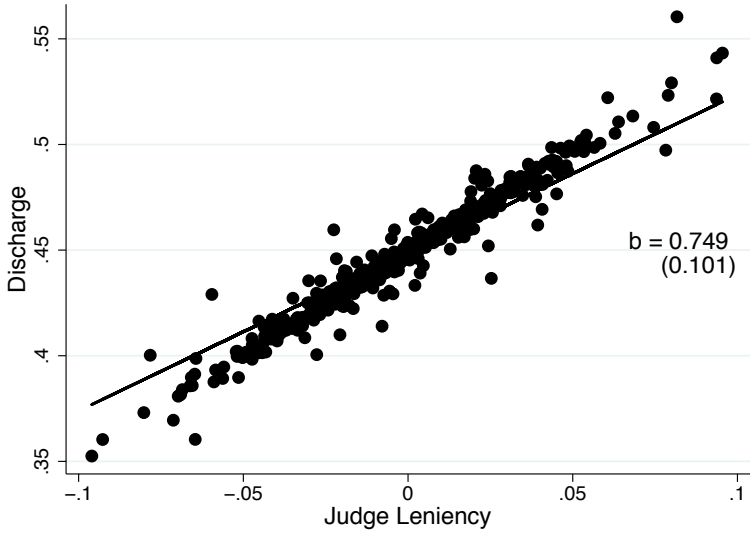
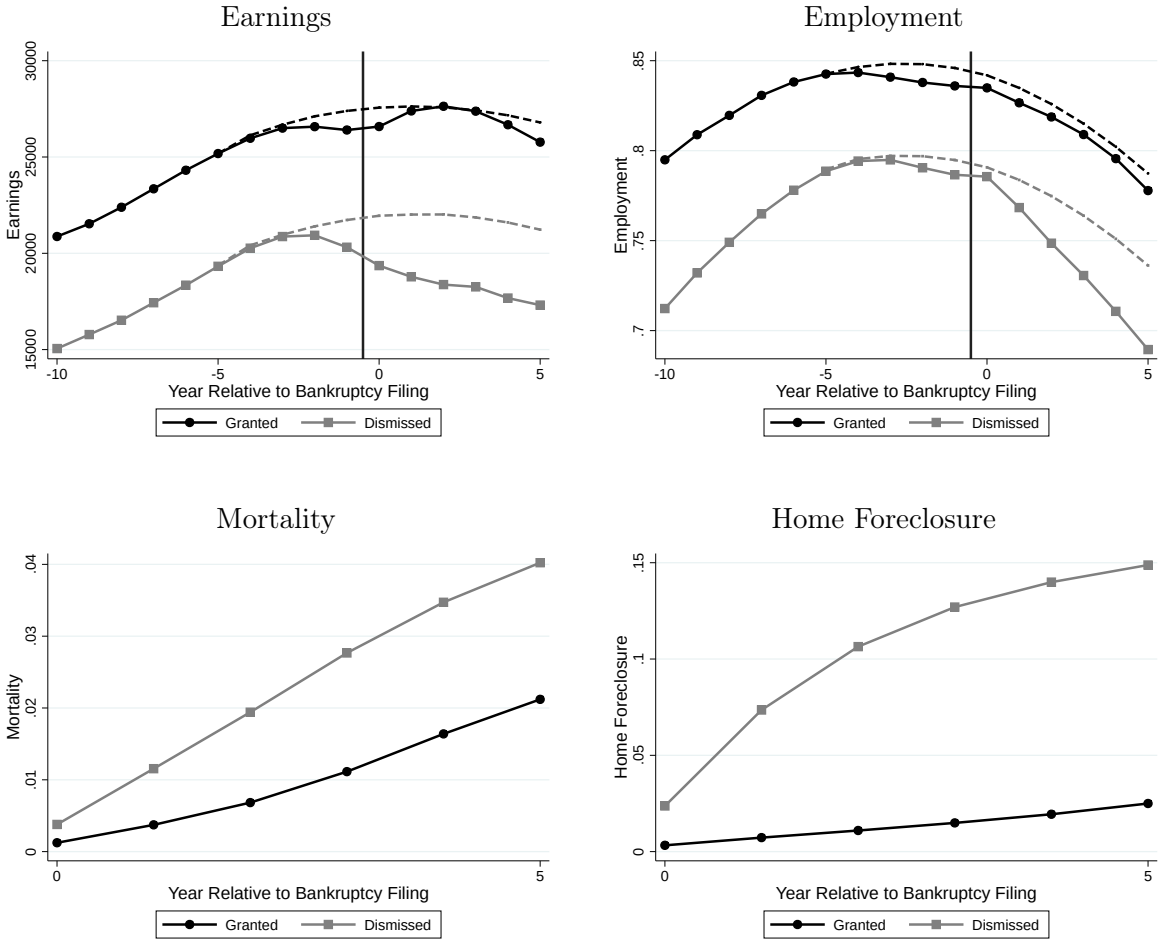
Figure 1
Chapter 13 Judge Leniency and Chapter 13 Bankruptcy Protection



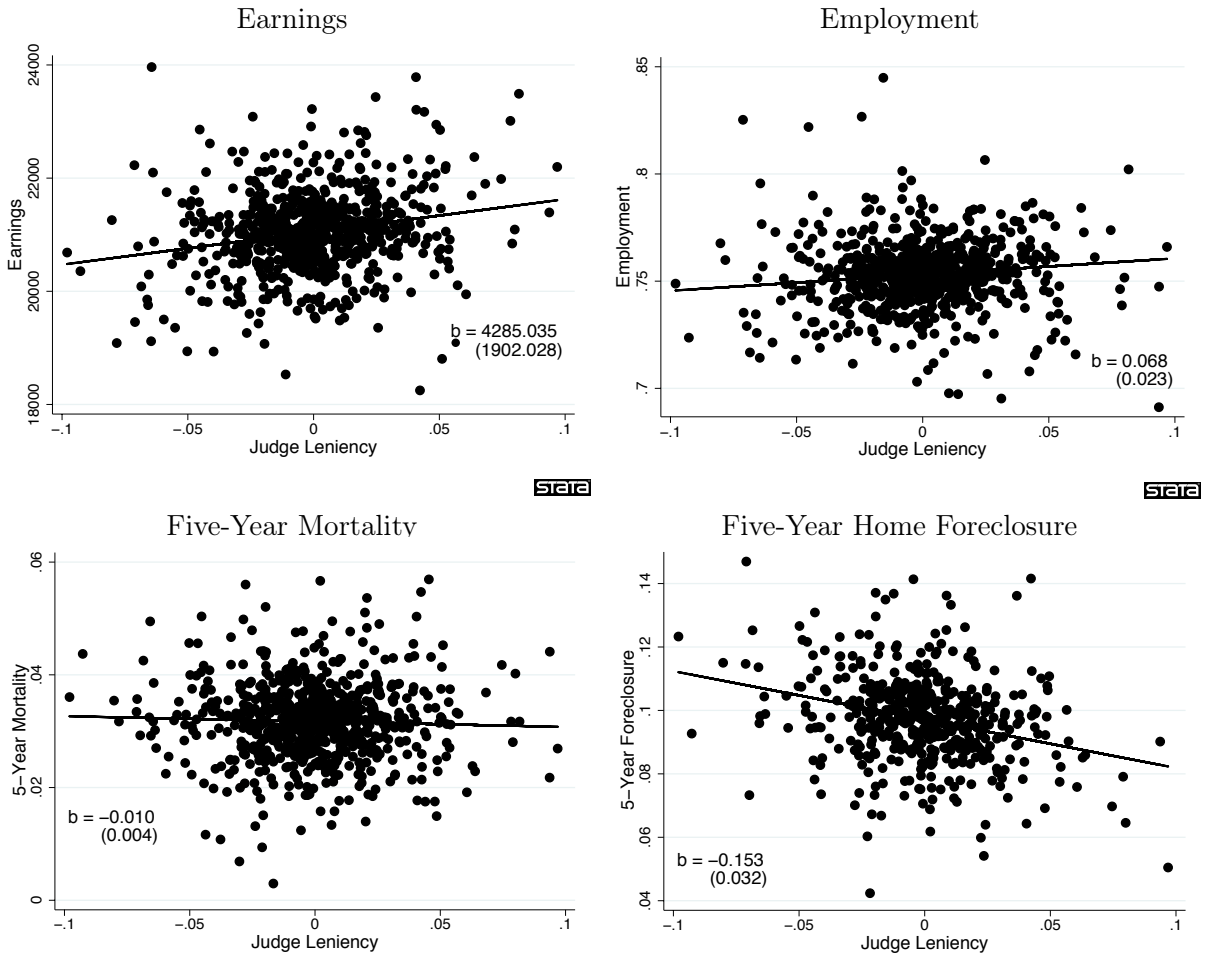
Notes: This figure plots Chapter 13 discharge vs. our leave-one-out measure of judge leniency. The sample consists of all first-time Chapter 13 filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. Judge leniency is the leave-one-out mean rate of granting Chapter 13 bankruptcy protection for the assigned judge minus the leave-one-out mean rate of granting bankruptcy protection for the court in the same filing year. To construct the binned scatter plot, we first regress an indicator for discharge on office by month-of-filing fixed effects and calculate residuals. We then take the mean residual in each judge by year bin, adding the mean discharge rate to each residual to aid in the interpretation of the plot. The solid line shows the best linear fit estimated on the underlying micro data estimated using OLS. The coefficients show the estimated slope of the best-fit line including office by month-of-filing fixed effects, with standard errors clustered at the office level reported in parentheses.

Figure 2
Labor Supply, Mortality, Home Foreclosure
for Granted and Dismissed Chapter 13 Filers



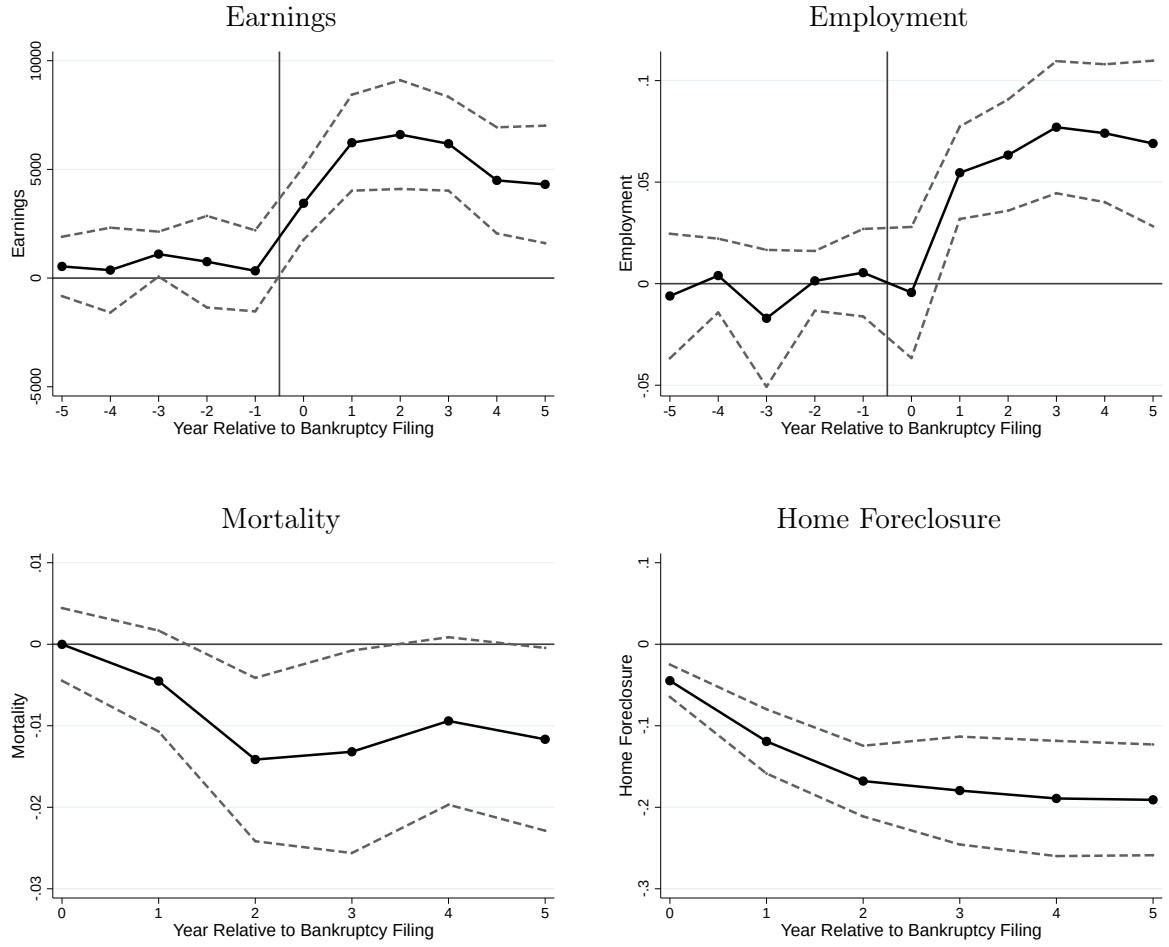
Notes: These figures plot average labor supply, mortality, and home foreclosure for granted and dismissed bankruptcy filers. The labor supply and mortality sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage. Predicted earnings and employment are based on the fitted values from a regression of earnings on gender, race, a quadratic in tenure, industry fixed effects, and earnings in the sixth through tenth years before filing. Year 0 indicates the year a debtor files for bankruptcy protection. Earnings are winsorized at the top and bottom one percent. Employment is an indicator for non-zero wage earnings on the W-2. All monetary values are expressed in real 2000 dollars. Mortality is an indicator for being deceased in or before the indicated year using information from the Death Master File. Foreclosure is an indicator for a filer's home receiving a notice of default, receiving a notice of transfer or sale, or being transferred to a REO or a guarantor in or before the indicated year.

Figure 3
Chapter 13 Judge Leniency and Labor Supply, Mortality, and Home Foreclosure



Notes: These figures plot earnings, employment, five-year mortality, and five-year foreclosure vs. our leave-one-out measure of judge leniency. The earnings and mortality sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage. Judge leniency is the leave-one-out mean rate of granting Chapter 13 bankruptcy protection for the assigned judge minus the leave-one-out mean rate of granting bankruptcy protection for the court in the same filing year. To construct the binned scatter plot, we first regress each outcome on office by month-of-filing fixed effects and calculate residuals. We then take the mean residual in each judge by year bin, adding the mean discharge rate to each residual to aid in the interpretation of the plot. The solid line shows the best linear fit estimated on the underlying micro data estimated using OLS. The coefficients show the estimated slope of the best-fit line including office by month-of-filing fixed effects, with standard errors clustered at the office level reported in parentheses. Earnings are winsorized at the top and bottom one percent. Employment is an indicator for non-zero wage earnings on the W-2. All monetary values are expressed in real 2000 dollars. Mortality is an indicator for being deceased in or before the indicated year using information from the Death Master File. Foreclosure is an indicator for a filer's home receiving a notice of default, receiving a notice of transfer or sale, or being transferred to a REO or a guarantor in or before the indicated year.

Figure 4
IV Estimates of the Impact of Chapter 13 Protection on
Labor Supply, Mortality, and Home Foreclosure



Notes: These figures plot two-stage least squares results of the impact of Chapter 13 bankruptcy protection on earnings, employment, cumulative mortality, and home foreclosure. The earnings and mortality sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage. We instrument for bankruptcy protection using judge leniency and control for gender, race, five-year age effects, baseline employment, baseline earnings, and office by month-of-filing fixed effects. The dashed lines are 95 percent confidence intervals from standard errors clustered at the office level. Year 0 indicates the year a debtor files for bankruptcy protection. Earnings are winsorized at the top and bottom one percent. Employment is an indicator for non-zero wage earnings on the W-2. All monetary values are expressed in real 2000 dollars. Mortality is an indicator for being deceased in or before the indicated year using information from the Death Master File. Foreclosure is an indicator for a filer's home receiving a notice of default, receiving a notice of transfer or sale, or being transferred to a REO or a guarantor in or before the indicated year.

Table 1
Summary Statistics

	Chapter 7	Chapter 13		
	Full Sample	Full Sample	Judge Sample	Difference
Demographics	(1)	(2)	(3)	(4)
Granted Bankruptcy	0.984	0.488	0.448	0.040*
Age	41.813	42.530	42.847	−0.317
Male	0.603	0.634	0.609	0.025*
White	0.742	0.558	0.528	0.030
Black	0.133	0.339	0.361	−0.022
Matched to a Home	0.386	0.455	0.485	−0.030
Baseline Outcomes 5 Years Before Filing				
Employment	0.806	0.802	0.813	−0.011
Self Emp.	0.060	0.061	0.061	0.000
Earnings	21.090	22.333	22.115	0.218
Wages	20.586	21.725	21.529	0.196
Self Earnings	0.504	0.608	0.585	0.023
401k Contributions	0.260	0.283	0.316	−0.033**
Disability Insurance	0.047	0.042	0.041	0.001
Sup. Security Income	0.097	0.084	0.086	−0.002
Job Tenure	3.413	3.612	3.624	−0.012
Firm Wages	22.424	22.983	19.109	3.874**
Observations	7393983	1869772	490216	

Notes: This table reports summary statistics. The full sample consists of first-time filers between 1992 and 2005 in 72 bankruptcy courts. The judge sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. Home match is calculated only for the subset of those filings originating in county by year bins with home data coverage (N = 280202). Granted bankruptcy is an indicator for receiving a discharge of debt. Home match is an indicator for being matched to a home in the DataQuick real estate data. Each baseline outcomes is averaged over five pre-filing years. Earnings and employment outcomes come from 1978 - 2010 W-2s, where employment is an indicator for non-zero wage earnings and self employment is an indicator for non-zero self employment earnings. 401k contributions come from annual W-2s. DI and SSI receipt come from the Master Beneficiary File. Job tenure is calculated using firm EINs. Firm wages are averaged over all employees listing the same EIN in the same calendar year. All monetary values are expressed in real 2000 dollars divided by 1,000.

Table 2
Judge Leniency and Chapter 13 Protection

	(1)	(2)
Judge Leniency	0.749***	0.731***
	(0.101)	(0.095)
Male		−0.015*
		(0.008)
Black		−0.090***
		(0.013)
Age		0.005***
		(0.000)
Earnings		0.005***
		(0.000)
Observations	490216	490216

Notes: This table reports first stage results. The sample consists of all first-time Chapter 13 filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. Judge leniency is the leave-one-out mean rate of granting Chapter 13 bankruptcy protection for the assigned judge minus the leave-one-out mean rate of granting bankruptcy protection for the court in the same filing year. All regressions control for office by month-of-filing fixed effects and cluster standard errors at the office level. See Table 1 for details on the data and variable construction. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Table 3
Test of Randomization

	Baseline Mean	Judge Leniency		F-test p-value
	(1)	(2)	(3)	(4)
Age	42.847	0.000005	−0.000005	[0.051]
	(16.374)	(0.000007)	(0.000007)	
Male	0.609	−0.000004	0.000028	[0.780]
	(0.491)	(0.000120)	(0.000103)	
White	0.528	0.000045	0.000046	[0.383]
	(0.499)	(0.000065)	(0.000073)	
Employment	0.813	0.000197	0.001479	[0.877]
	(0.343)	(0.000291)	(0.001414)	
Self Emp. Earnings	0.585	−0.000012	−0.000010	[0.489]
	(3.644)	(0.000012)	(0.000012)	
Earnings	22.115	0.000005	0.000009	[0.138]
	(17.176)	(0.000007)	(0.000009)	
Self Employment	0.061	0.000112	0.000093	[0.509]
	(0.183)	(0.000232)	(0.000234)	
Matched to Home	0.485	−0.000352	−0.000351	[0.181]
	(0.448)	(0.000362)	(0.000362)	
401k Contributions	0.316	−0.000119	−0.000117	[0.429]
	(0.855)	(0.000116)	(0.000116)	
Disability Insurance	0.041	0.000578	0.000573	[0.800]
	(0.191)	(0.000561)	(0.000563)	
Job Tenure	3.624	0.000076*	0.000077*	[0.519]
	(3.735)	(0.000042)	(0.000043)	
Firm Wage	19.109	0.000002	0.000003	[0.745]
	(18.387)	(0.000002)	(0.000003)	
Predicted Earnings	0.021		−0.000114	[0.549]
	(0.012)		(0.011114)	
Predicted Employment	0.753		−0.004109	[0.794]
	(0.282)		(0.004583)	
Predicted Mortality	0.032		−0.007110	[0.468]
	(0.045)		(0.009418)	
Joint F-Test		[0.233]	[0.252]	
Observations	490216	490216	490216	

Notes: This table reports reduced form results testing the random assignment of filings to judges. The sample consists of all first-time Chapter 13 filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. Column 1 reports means and standard deviations for dismissed filers. Columns 2 - 3 report estimates from an OLS regression of judge leniency on the variables listed and office by month-of-filing fixed effects, with standard errors clustered at the office level. Judge leniency is the leave-one-out mean rate of granting bankruptcy protection for the assigned judge minus the leave-one-out mean rate of granting bankruptcy protection for the court in the same filing year. The p-value reported at bottom of columns 2 - 3 is for a F-test of the joint significance of the variables listed in the rows. Each row of column 4 reports a p-value from a separate OLS regression of only the pre-determined variable listed in the corresponding row on judge and office by month-of-filing fixed effects. The p-value is for a F-test of the joint significance of the judge fixed effects. Predicted earnings, employment, and mortality are formed using all other variables listed. See Table 1 for details on the data and variable construction. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Table 4
IV Estimates of the Impact of Chapter 13 Protection on
Labor Supply, Mortality, and Home Foreclosure

	Baseline Mean	2SLS Results	
Panel A: Labor Supply	(1)	(2)	(3)
Earnings	22.115	5.721***	5.562***
	(17.176)	(1.644)	(1.141)
Employment	0.813	0.091***	0.068***
	(0.343)	(0.023)	(0.013)
Panel B: Mortality			
5-year Mortality	0.000	−0.013**	−0.012**
	(0.000)	(0.006)	(0.006)
Panel C: Home Foreclosure			
5-year Foreclosure	0.001	−0.190***	−0.191***
	(0.019)	(0.034)	(0.035)
Panel D: Misc. Outcomes			
401k Contributions	0.316	0.055	−0.008
	(0.855)	(0.048)	(0.044)
Disability Insurance	0.041	0.000	0.012
	(0.191)	(0.012)	(0.012)
Sup. Security Income	0.006	−0.140*	−0.128*
	(0.073)	(0.081)	(0.074)
Controls	–	No	Yes
Observations	490216	490216	490216

Notes: This table reports two-stage least squares results of the impact of Chapter 13 bankruptcy protection. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage (N = 280202). The SSI sample includes the subset of filers who are 65 or older (N = 53594). Column 1 reports the mean and standard deviation for the five years before filing. Columns 2 - 3 instrument for bankruptcy protection using the reduced form measure of judge leniency described in the text. All specifications control for office by month-of-filing fixed effects, and cluster standard errors at the office level. Column 3 adds controls for gender, race, age, and the five year average of baseline employment and baseline earnings. All monetary values are expressed in real 2000 dollars divided by 1,000. See Table 1 for additional details on the data and variable construction. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Table 5
Chapter 13 Results by Filer Characteristics

	Male	Female	White	Non-White	Age at Filing: 25 to 40	Age at Filing: 40 to 60	Age at Filing: 60 and up	High Income	Low Income	Matched to Home	Not Matched
Panel A: Labor Supply	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Earnings	6.259***	6.806***	6.195***	6.586***	7.833***	6.299***	0.147	8.650***	1.691*	6.740***	7.222***
	(0.943)	(1.614)	(1.092)	(1.700)	(1.405)	(1.362)	(1.725)	(1.430)	(0.954)	(1.031)	(1.322)
	[25.302]	[18.743]	[24.491]	[19.460]	[22.403]	[26.574]	[15.907]	[35.723]	[8.506]	[24.004]	[1.322]
Employment	0.066***	0.114***	0.084***	0.066**	0.057***	0.093***	0.079	0.099***	0.039	0.068**	0.093***
	(0.015)	(0.027)	(0.018)	(0.030)	(0.016)	(0.018)	(0.069)	(0.015)	(0.035)	(0.033)	(0.022)
	[0.832]	[0.843]	[0.825]	[0.800]	[0.908]	[0.840]	[0.597]	[0.978]	[0.648]	[0.804]	[0.022]
Panel B: Mortality											
5-year Mortality	−0.030***	−0.030	−0.039***	0.001	−0.022***	−0.017**	−0.109**	−0.027***	−0.027*	−0.015	−0.038***
	(0.010)	(0.025)	(0.009)	(0.011)	(0.006)	(0.008)	(0.050)	(0.007)	(0.016)	(0.009)	(0.007)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.007]
Panel C: Home Foreclosure											
5-year Foreclosure	−0.191***	−0.184***	−0.200***	−0.171**	−0.192***	−0.174***	−0.315***	−0.192***	−0.191***	−0.353***	−0.030*
	(0.036)	(0.046)	(0.026)	(0.069)	(0.040)	(0.040)	(0.038)	(0.034)	(0.044)	(0.059)	(0.017)
	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.002]	[0.017]
Panel D: Misc. Outcomes											
401k Contributions	0.011	−0.069	−0.055	0.081	0.148*	−0.108	−0.108	0.047	−0.136***	−0.001	0.004
	(0.063)	(0.086)	(0.062)	(0.074)	(0.076)	(0.085)	(0.096)	(0.064)	(0.039)	(0.043)	(0.077)
	[0.370]	[0.257]	[0.373]	[0.253]	[0.248]	[0.440]	[0.306]	[0.595]	[0.038]	[0.390]	[0.077]
Disability Insurance	0.014	−0.018	0.014	−0.007	−0.008	0.045**	−0.153**	−0.036***	0.094**	−0.014	−0.002
	(0.016)	(0.030)	(0.013)	(0.025)	(0.014)	(0.022)	(0.067)	(0.010)	(0.037)	(0.034)	(0.020)
	[0.041]	[0.039]	[0.040]	[0.043]	[0.012]	[0.048]	[0.161]	[0.007]	[0.076]	[0.043]	[0.020]
Sup. Security Income	−0.135*	−0.235	−0.089	−0.350***			−0.153**	−0.099	−0.198**	−0.171	0.019
	(0.079)	(0.162)	(0.070)	(0.126)	–	–	(0.067)	(0.085)	(0.096)	(0.106)	(0.121)
	[0.063]	[0.113]	[0.055]	[0.120]			[0.099]	[0.007]	[0.094]	[0.087]	[0.121]
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	290443	186323	258629	231587	183523	222750	34380	245108	245108	135955	144247

Notes: This table reports two-stage least squares results of the impact of Chapter 13 bankruptcy protection estimated separately by group. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage (N = 280202). The SSI sample includes the subset of filers who are 65 or older (N = 53594). We instrument for bankruptcy protection using the reduced form measure of judge leniency described in the text. All specifications control for gender, race, age, the five year average of baseline employment and baseline earnings, and office by month-of-filing fixed effects. We cluster standard errors at the office level. Outcomes are averaged over the first five years after filing. Baseline means for each group are reported in brackets. All monetary values are expressed in real 2000 dollars divided by 1,000. See Table 1 for additional details on the data and variable construction. Observations refer to the number of bankruptcy filers in the indicated group. The number of observations in each regression is the sum of all groups. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Table 6
Chapter 13 Results by Wage Garnishment Regulations

	Garnishment in State?		State/Federal Marginal Garnishment Rate				
	No	Yes	0/0	0/25	0/100	25/25	100/100
Panel A: Labor Supply	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Earnings	3.193	5.635***	−0.471	5.607	−1.759	7.892***	7.435
	(2.096)	(1.136)	(1.349)	(3.849)	(3.185)	(1.363)	(5.267)
	[19.730]	[22.460]	[3.211]	[29.552]	[11.630]	[31.761]	[11.859]
Employment	0.114	0.066***	−0.021	0.180	−0.095	0.098***	0.177
	(0.101)	(0.013)	(0.041)	(0.167)	(0.099)	(0.016)	(0.125)
	[0.736]	[0.824]	[0.432]	[0.954]	[0.835]	[0.971]	[0.893]
Panel B: Mortality							
5-year Mortality	−0.024	−0.011**	0.033	−0.072	0.020	−0.027***	−0.016
	(0.060)	(0.006)	(0.020)	(0.078)	(0.042)	(0.005)	(0.072)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Panel C: Home Foreclosure							
5-year Foreclosure	−0.239***	−0.190***	−0.237***	−0.232	−0.170***	−0.174***	−0.269
	(0.065)	(0.035)	(0.042)	(0.218)	(0.061)	(0.038)	(0.206)
	[0.000]	[0.001]	[0.001]	[0.000]	[0.001]	[0.001]	[0.000]
Panel D: Misc. Outcomes							
401k Contributions	0.408	−0.021	−0.095**	0.508	−0.253***	0.016	0.091
	(0.519)	(0.042)	(0.040)	(0.663)	(0.077)	(0.056)	(0.209)
	[0.273]	[0.323]	[0.006]	[0.439]	[0.036]	[0.490]	[0.041]
Disability Insurance	0.105	0.009	0.172***	0.012	−0.060	−0.044***	0.113
	(0.130)	(0.012)	(0.039)	(0.161)	(0.061)	(0.010)	(0.125)
	[0.035]	[0.042]	[0.124]	[0.007]	[0.022]	[0.008]	[0.022]
Sup. Security Income	−1.652	−0.104*	−0.263	0.349	−0.089	−0.376	−9.525
	(3.070)	(0.063)	(1.494)	(5.449)	(9.240)	(3.037)	(103.351)
	[0.008]	[0.005]	[0.019]	[0.000]	[0.001]	[0.000]	[0.001]
Observations	62040	428176	135418	38071	10122	277726	28879

Notes: This table reports two-stage least squares results of the impact of Chapter 13 bankruptcy protection interacted with state and federal garnishment laws. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage (N = 280202). The SSI sample includes the subset of filers who are 65 or older (N = 53594). Columns 1 - 2 interact Chapter 13 with indicators for living in a state that does not allow any wage garnishment and living in a state that does allow wage garnishment. Columns 3 - 7 interact Chapter 13 with indicators for binding garnishment bracket in the filer's state of filing and the non-binding federal bracket. Each column header refers to the marginal garnishment rate in the state/federal system. All specifications control for gender, race, age, and the five year average of baseline employment baseline earnings, and office by month-of-filing fixed effects, and cluster standard errors at the office level. All monetary values are expressed in real 2000 dollars divided by 1,000. See Table 1 for additional details on the data and variable construction. Observations refer to the number of bankruptcy filers in the indicated group. The number of observations in each regression is the sum of all columns. Baseline means for each group are reported in brackets. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

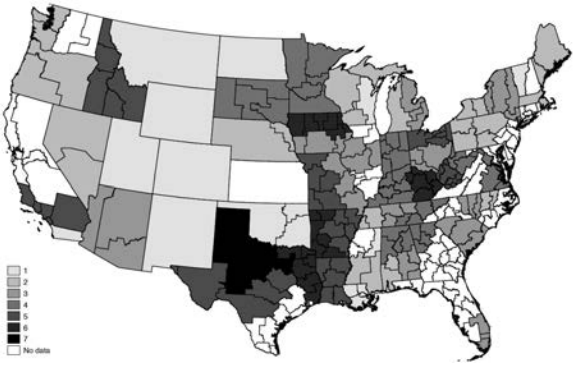
Table 7
Chapter 13 Job Mobility Results

	Baseline Mean	2SLS Results	
	(1)	(2)	(3)
Work in Same County	0.576	0.250***	0.229***
	(0.399)	(0.025)	(0.024)
Work in Same State	0.627	0.170***	0.153***
	(0.405)	(0.024)	(0.024)
Work in Same Job	0.502	0.272***	0.246***
	(0.386)	(0.026)	(0.025)
Work in Same Industry	0.557	0.262***	0.238***
	(0.396)	(0.030)	(0.026)
Job Tenure	3.624	0.987***	0.820***
	(3.735)	(0.196)	(0.175)
Firm Wages	19.109	4.635***	4.102***
	(18.387)	(1.347)	(1.096)
Controls	–	No	Yes
Observations	382385	382385	382385

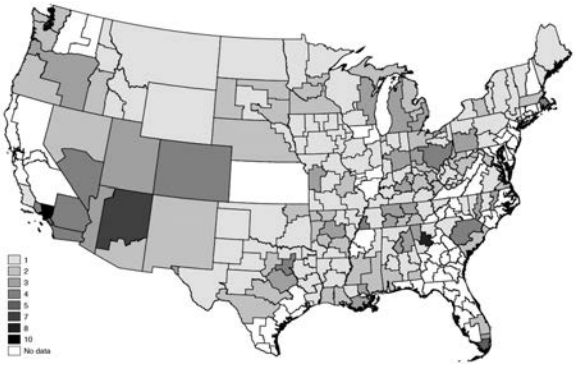
Notes: This table reports two-stage least squares results of the impact of Chapter 13 bankruptcy protection. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges that are employed for at least one time period post-bankruptcy. Column 1 reports the mean and standard deviation for the five years before filing. Columns 2 - 3 instrument for bankruptcy protection using the reduced form measure of judge leniency described in the text. All specifications control for office by month-of-filing fixed effects, and cluster standard errors at the office level. Column 3 adds controls for gender, race, age, and the five year average of baseline employment and baseline earnings. Same county, state, job and industry are defined using the filer's job in the year prior to filing. Baseline means for each group are reported in brackets. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Appendix Figure 1
The Geography of Consumer Bankruptcy

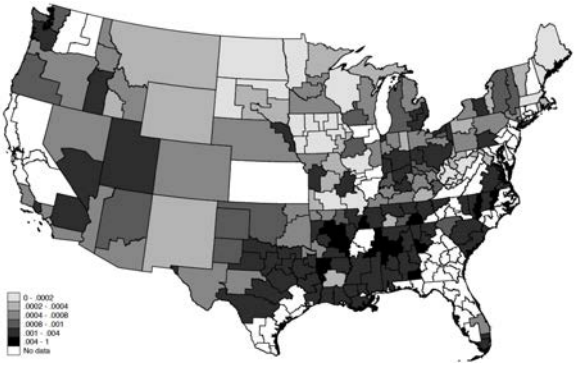
Number of Bankruptcy Offices in Each Court



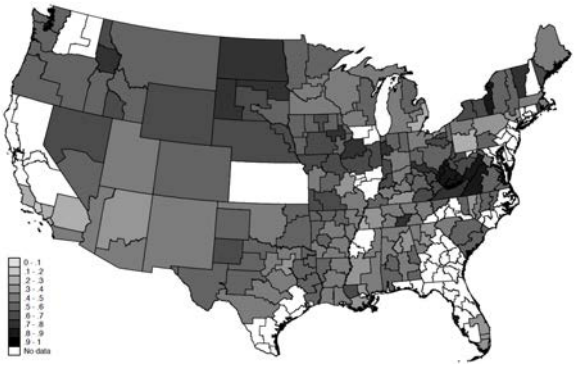
Number of Chapter 13 Judges



Chapter 13 Filings Per Capita



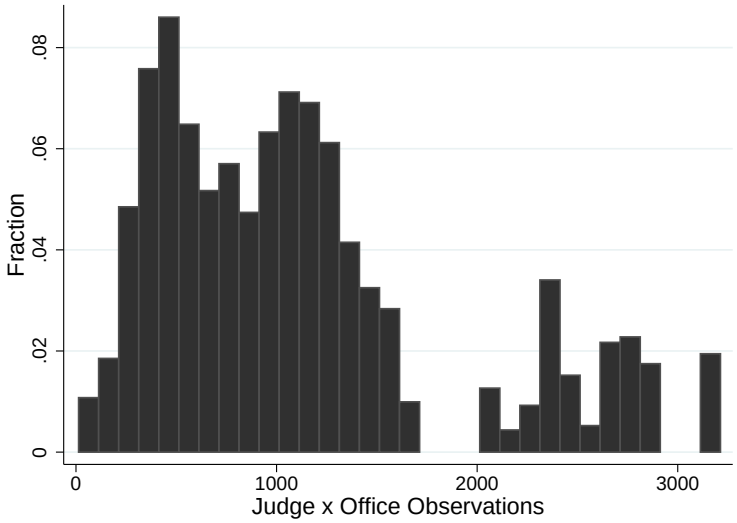
Chapter 13 Discharge Rate



Variation in Chapter 13 Judge Leniency

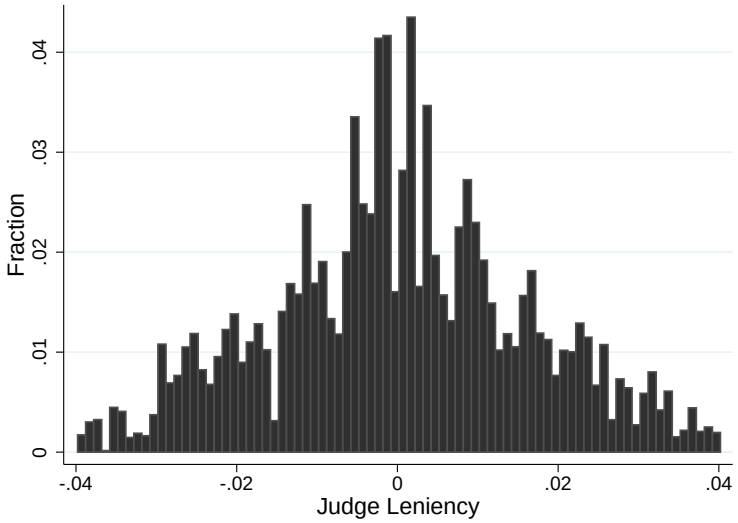
Notes: These figures display summary statistics by bankruptcy office. The sample includes the 72 bankruptcy courts that allow electronic access to their dockets. The number of Chapter 13 judges is based on 2003 filings. Per capita Chapter 13 filings are calculated using the average annual number of filings between 2000 and 2004 divided by population as reported by the 2000 census. The Chapter 13 discharge rate is calculated across all available years between 1992 and 2005. The Chapter 13 judge leniency sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges.

Appendix Figure 2
Distribution of Judge by Office Observations



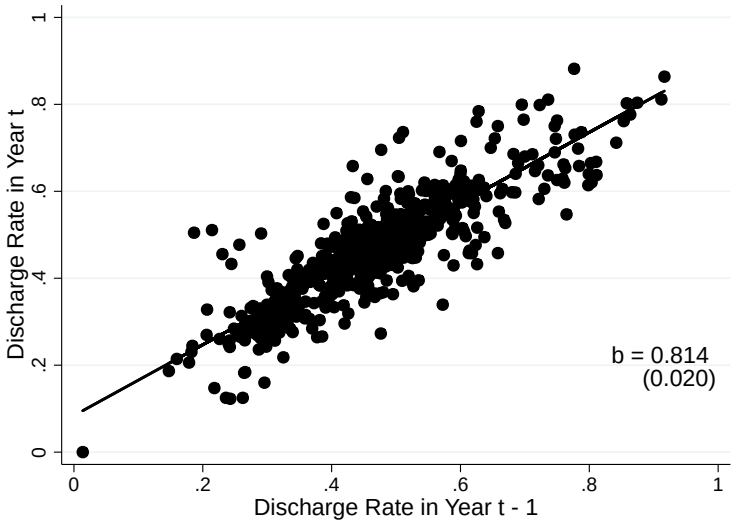
Notes: This figure displays the distribution of judge by office cell sizes in our estimation sample. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. See text for details.

Appendix Figure 3
Distribution of Chapter 13 Judge Leniency



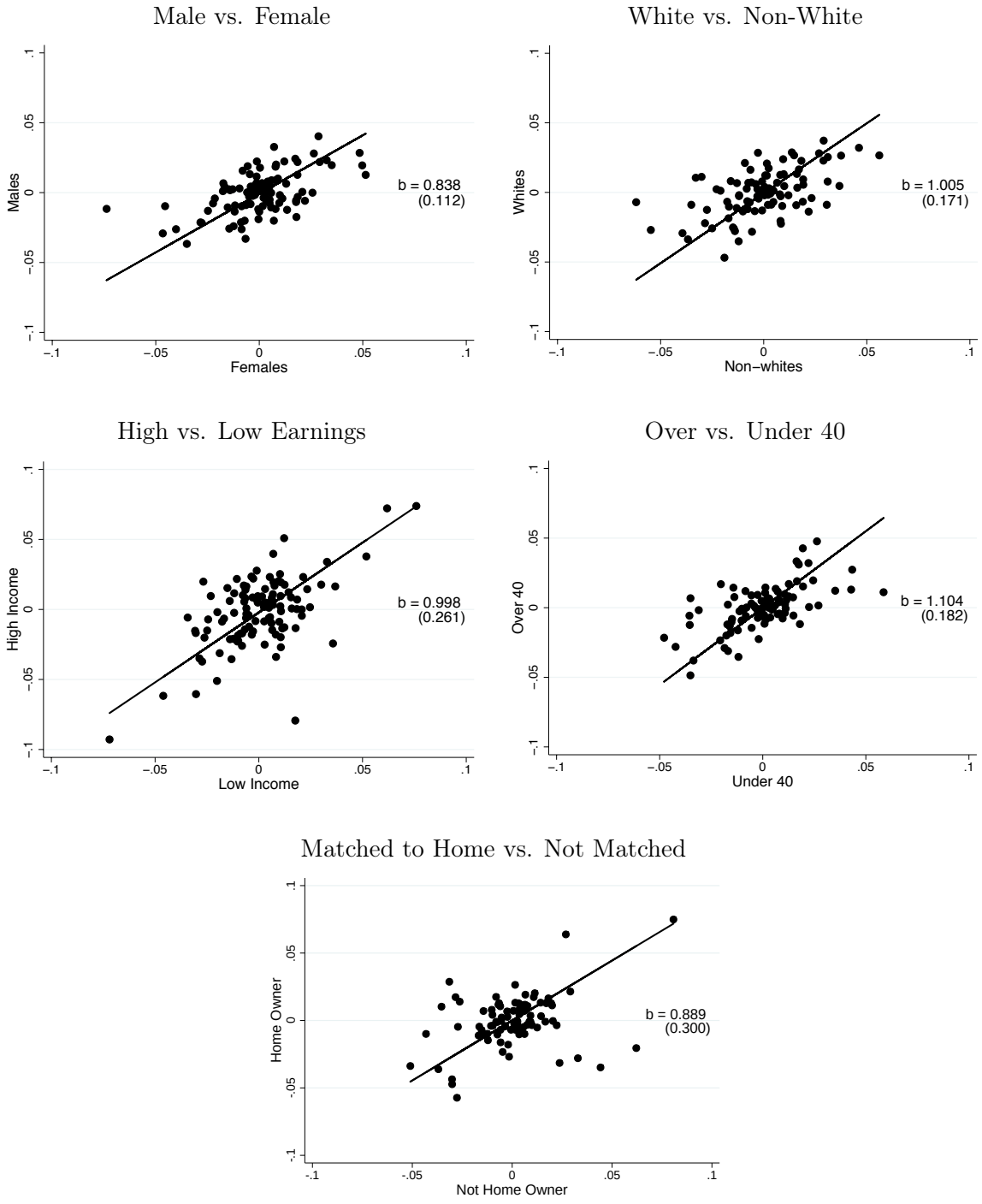
Notes: This figure displays the distribution of Chapter 13 judge leniency for the estimation sample. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. Judge leniency is defined as the leave-one-out mean rate of granting bankruptcy protection for the assigned judge minus the leave-one-out mean rate of granting bankruptcy protection for the office in the same filing year.

Appendix Figure 4
Persistence of Chapter 13 Judge Discharge Rates



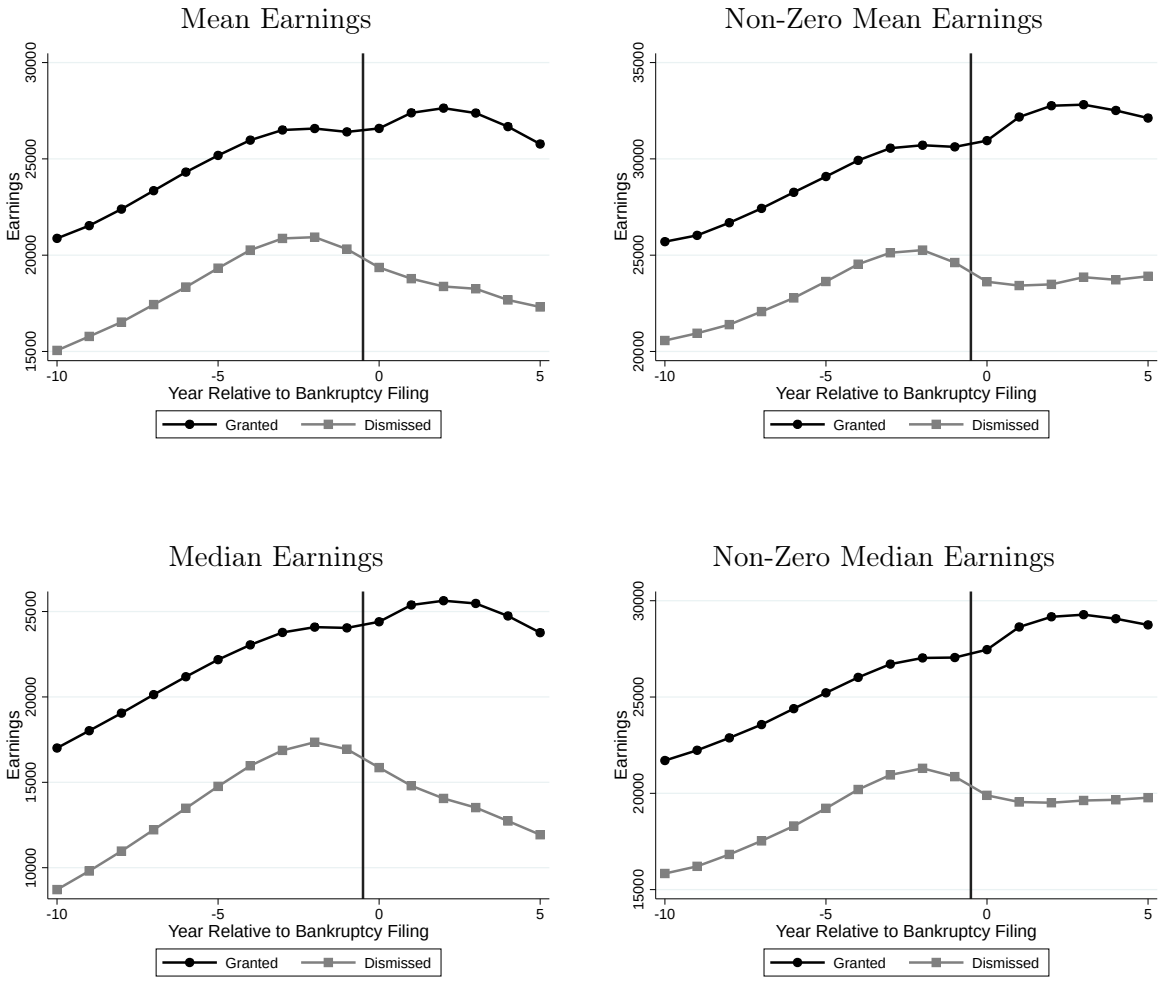
Notes: This figure shows the correlation between judge specific Chapter 13 discharge rates in the current and lagged years. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. See text for details.

Appendix Figure 5
Chapter 13 Judge Leniency by Filer Characteristics



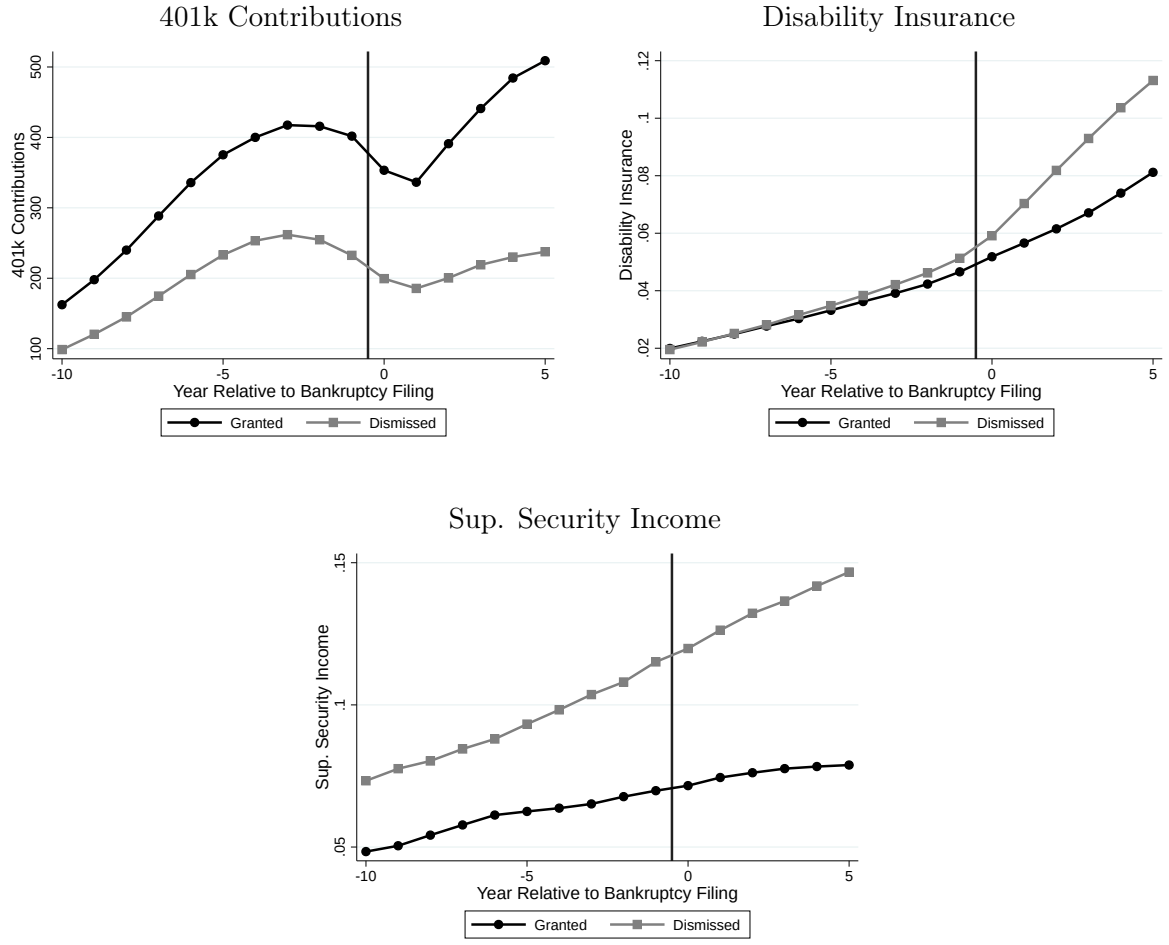
Notes: These figures show the correlation between judge leniency for different groups of filers. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. Judge leniency is defined as the leave-one-out mean rate of granting bankruptcy protection for the assigned judge minus the leave-one-out mean rate of granting bankruptcy protection for the office in the same filing year. We take the average leniency for each group over all available years of data. The solid line shows the best linear fit estimated using OLS relating each judge leniency measure.

Appendix Figure 6
Mean and Median Earnings for Granted and Dismissed Chapter 13 Filers



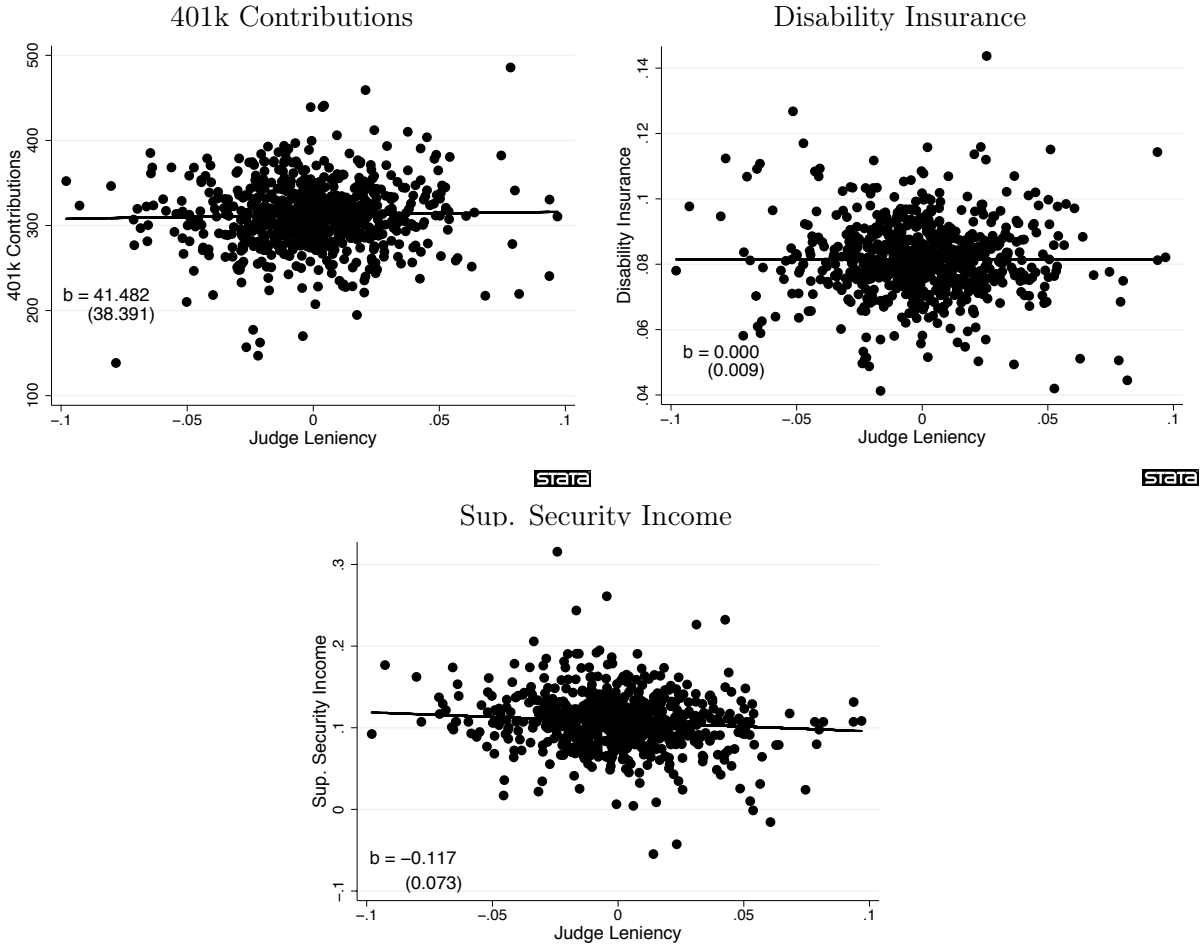
Notes: These figures plot mean and median earnings for granted and dismissed bankruptcy filers. The sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. Year 0 indicates the year a debtor files for bankruptcy protection. See text for additional details.

Appendix Figure 7
401k Contributions, Disability Insurance, and Supplemental Security Income
for Granted and Dismissed Chapter 13 Filers



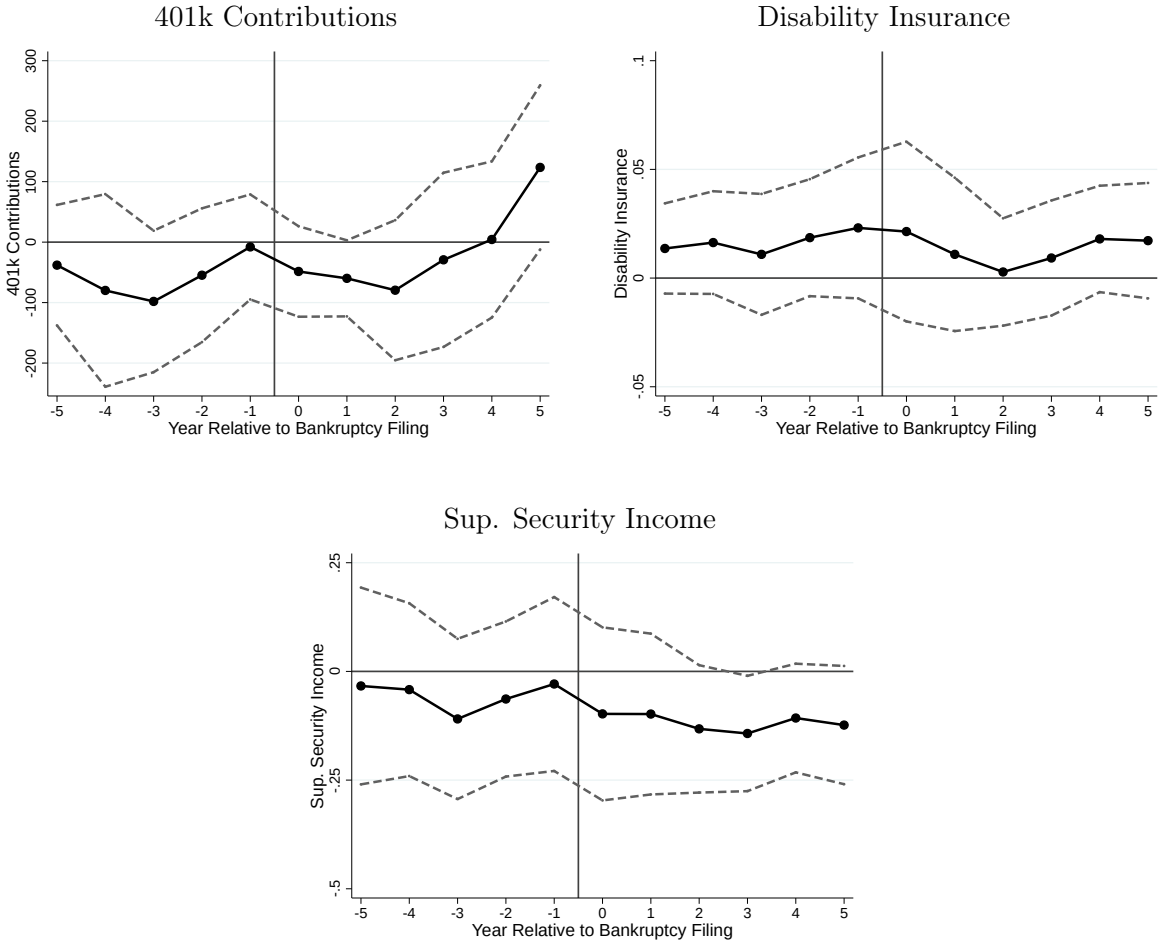
Notes: These figures plot average 401k contributions, Disability Insurance, and Sup. Security Income for granted and dismissed bankruptcy filers. The sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The Sup. Security Income sample includes the subset of filers 65 or older. Year 0 indicates the year a debtor files for bankruptcy protection.

Appendix Figure 8
Chapter 13 Judge Leniency and 401k Contributions,
Disability Insurance, and Supplemental Security Income



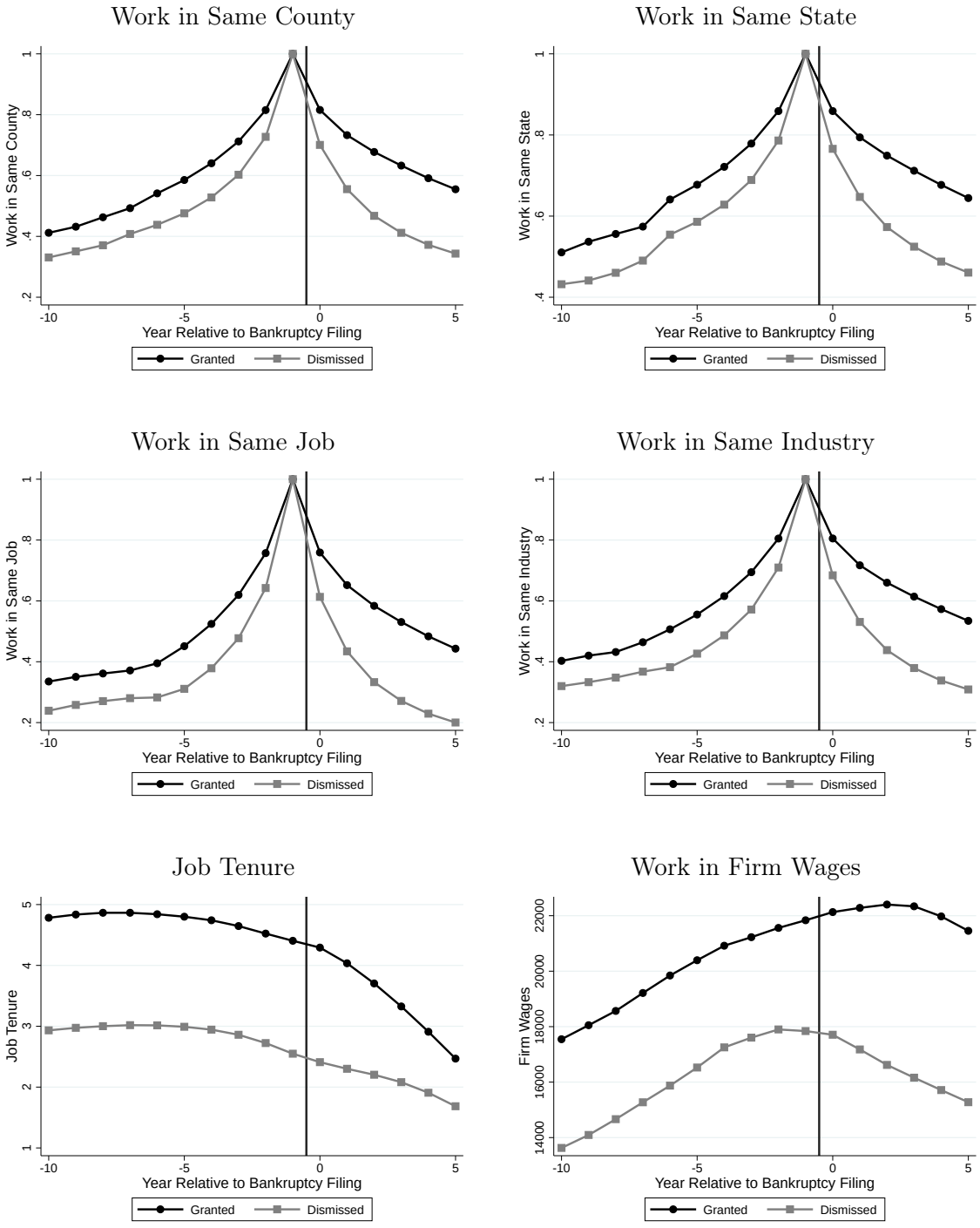
Notes: These figures plot 401k contributions, Disability Insurance, and Sup. Security Income vs. our leave-one-out measure of judge leniency. The sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The Sup. Security Income sample includes the subset of filers 65 or older. Judge leniency is the leave-one-out mean rate of granting Chapter 13 bankruptcy protection for the assigned judge minus the leave-one-out mean rate of granting bankruptcy protection for the court in the same filing year. To construct the binned scatter plot, we first regress each outcome on office by month-of-filing fixed effects and calculate residuals. We then take the mean residual in each judge by year bin, adding the mean discharge rate to each residual to aid in the interpretation of the plot. The solid line shows the best linear fit estimated on the underlying micro data estimated using OLS. The coefficients show the estimated slope of the best-fit line including office by month-of-filing fixed effects, with standard errors clustered at the office level reported in parentheses.

Appendix Figure 9
IV Estimates of the Impact of Chapter 13 Protection on
401k Contributions, Disability Insurance, and Supplemental Security Income



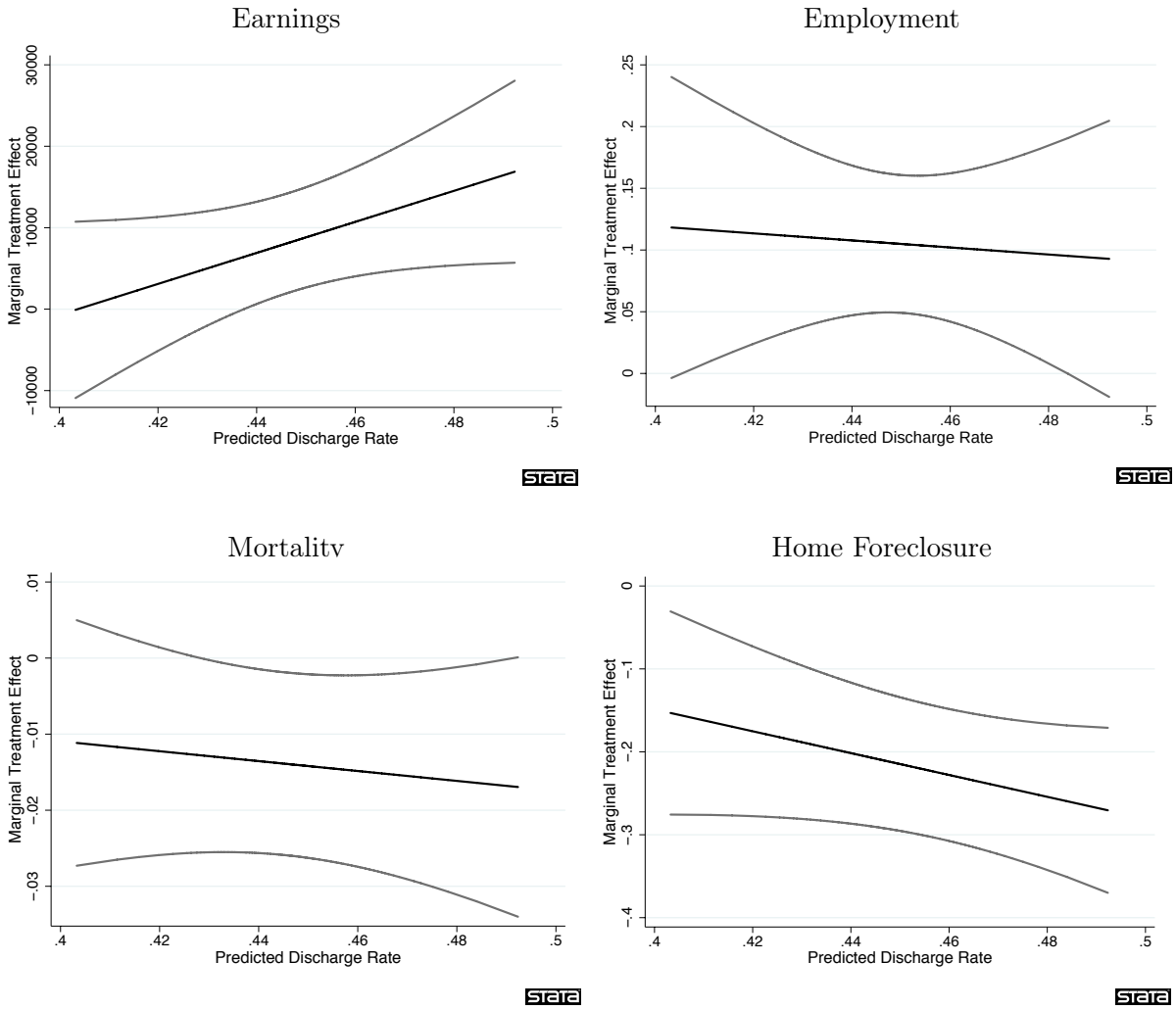
Notes: These figures plot two-stage least squares results of the impact of Chapter 13 bankruptcy protection. The earnings and mortality sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The Sup. Security Income sample includes the subset of filers 65 or older. We instrument for bankruptcy protection using judge leniency and control for gender, race, five-year age effects, baseline employment, baseline earnings, and office by month-of-filing fixed effects. The dashed lines are 95 percent confidence intervals from standard errors clustered at the office level. Year 0 indicates the year a debtor files for bankruptcy protection.

Appendix Figure 10
Job Mobility Outcomes for Granted and Dismissed Chapter 13 Filers



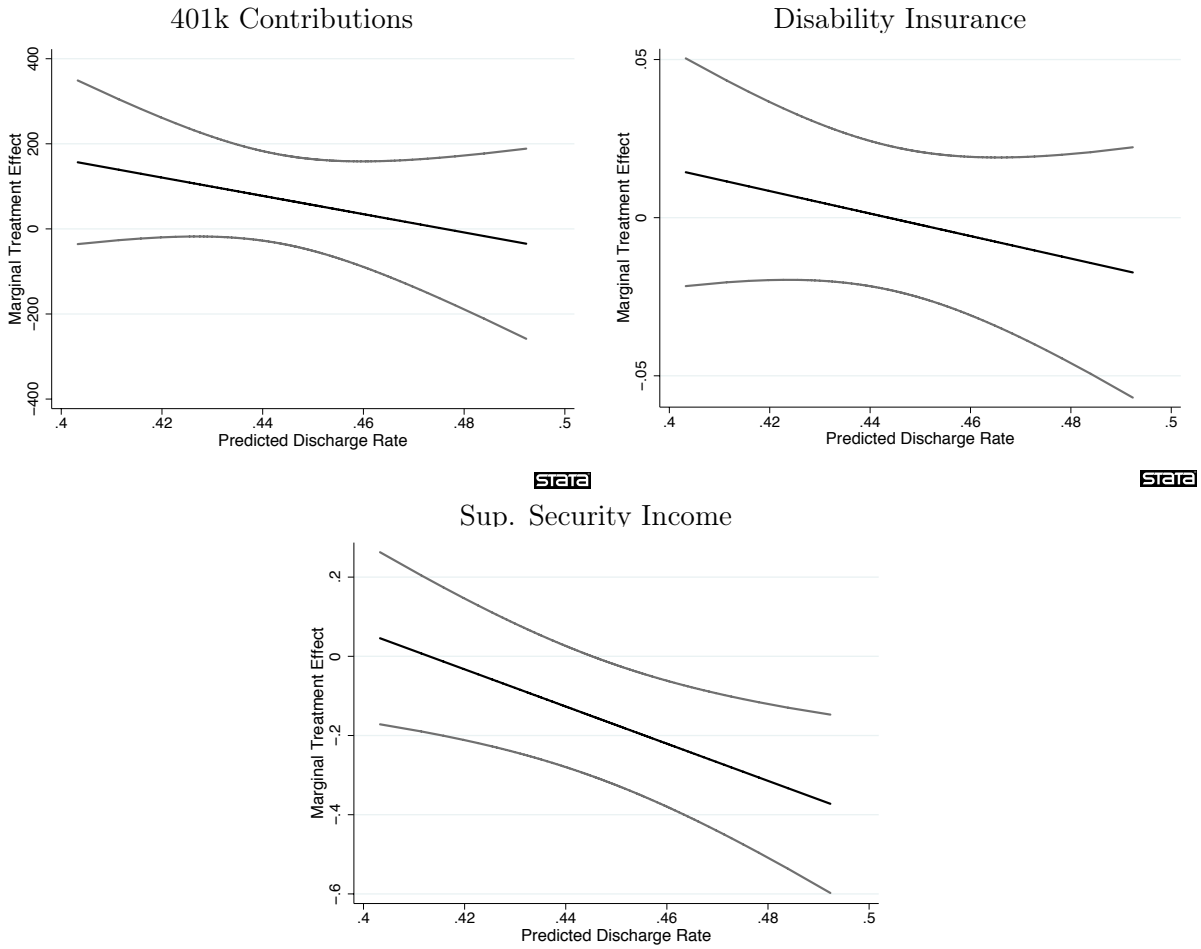
Notes: These figures plot average job mobility outcomes for granted and dismissed bankruptcy filers. The sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges that are employed for at least one time period post-bankruptcy. Year 0 indicates the year a debtor files for bankruptcy protection. Same county, state, job, and industry variables are defined relative to the year before filing. Each variable is therefore mechanically equal to one in year -1. See Table 7 for additional details.

Appendix Figure 11
Marginal Treatment Effects for Labor Supply, Mortality, and Home Foreclosure



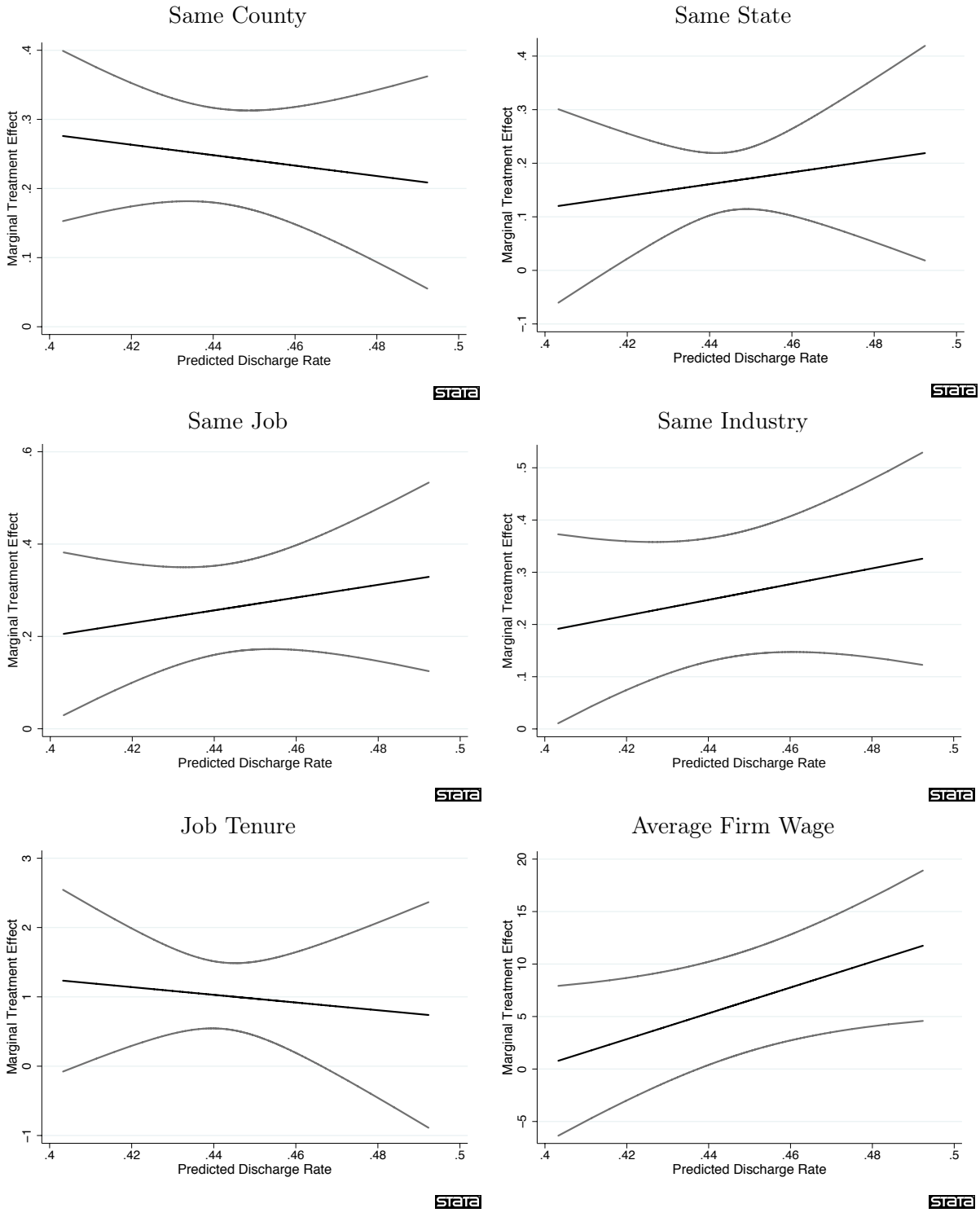
Notes: These figures plot marginal treatment effects and associated 95 percent confidence intervals. The sample includes first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage. We predict the probability of bankruptcy protection using our leave-one-out measure of judge leniency. We then predict the relationship between each outcome and the predicted probability of receiving bankruptcy protection using a local quadratic estimator with bandwidth 0.069. The estimates of the first derivative of this relationship are then evaluated at each percentile of the predicted probability. Standard errors are calculated using a bootstrap procedure with 250 iterations. All monetary values are expressed in real 2000 dollars divided by 1,000. Earnings information comes from the W-2, and is averaged over the first five post-filing years. Employment is an indicator for non-zero wage earnings on the W-2, and is averaged over the first five post-filing years. Five-year mortality is an indicator for being deceased within the first five post-filing years using information from the Death Master File. Five-year foreclosure is an indicator for a filer's home receiving a notice of default, receiving a notice of transfer or sale, or being transferred to a REO or a guarantor within the first five post-filing years using real estate records from DataQuick.

Appendix Figure 12
Marginal Treatment Effects for 401k Contributions, Disability Insurance, and Sup. Security Income



Notes: These figures plot marginal treatment effects and associated 95 percent confidence intervals. The sample includes first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. See Appendix Figure X notes for details on estimation procedure and Table 1 notes for variable definitions.

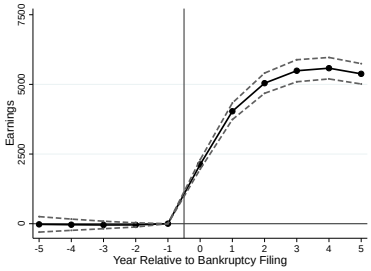
Appendix Figure 13
Job Mobility Marginal Treatment Effects



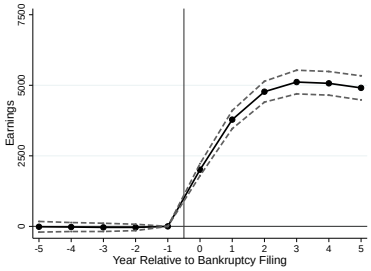
Notes: These figures plot marginal treatment effects and associated 95 percent confidence intervals. The sample includes first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. See Appendix Figure X notes for details on estimation procedure and Table 7 notes for variable definitions.

Appendix Figure 14
Event Study Estimates of Chapter 13 and Chapter 7 Protection

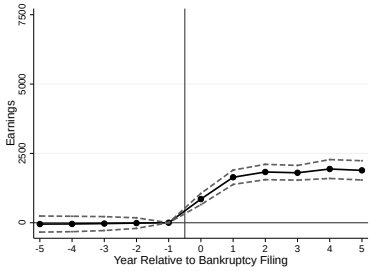
Earnings
Ch. 13 Judge IV Sample



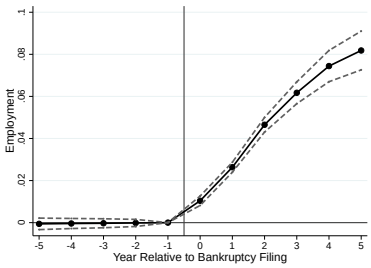
Earnings
Ch. 13 Full Sample



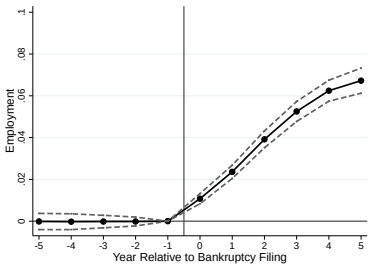
Earnings
Ch. 7 Full Sample



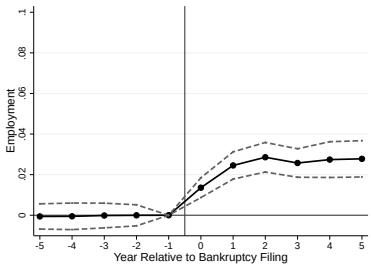
Employment
Ch. 13 Judge IV Sample



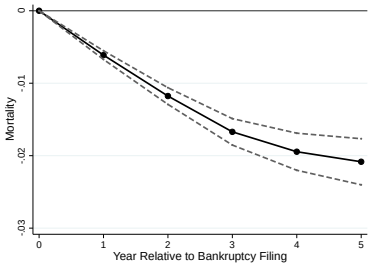
Employment
Ch. 13 Full Sample



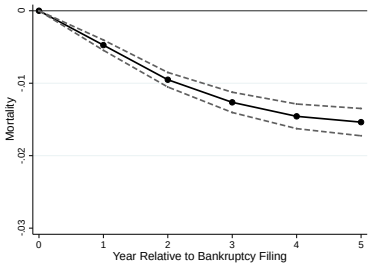
Employment
Ch. 7 Full Sample



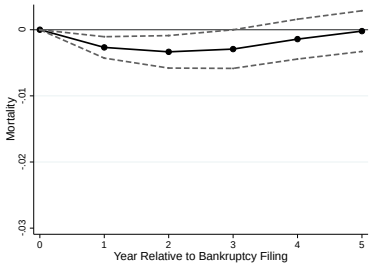
Mortality
Ch. 13 Judge IV Sample



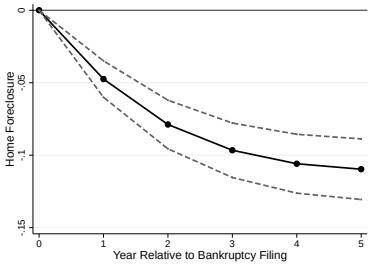
Mortality
Ch. 13 Full Sample



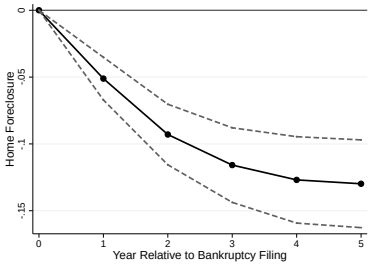
Mortality
Ch. 7 Full Sample



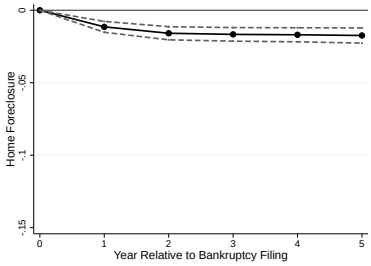
Home Foreclosure
Ch. 13 Judge IV Sample



Home Foreclosure
Ch. 13 Full Sample

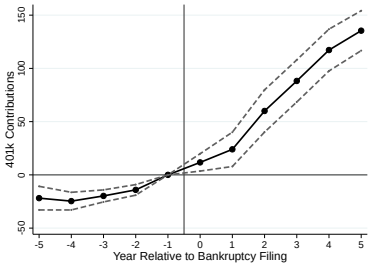


Home Foreclosure
Ch. 7 Full Sample

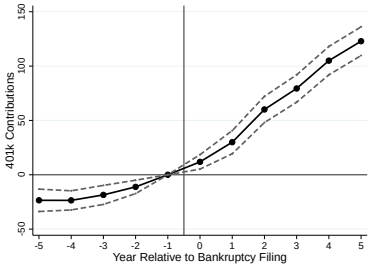


Appendix Figure 14 Continued
Event Study Estimates of Chapter 13 and Chapter 7 Protection

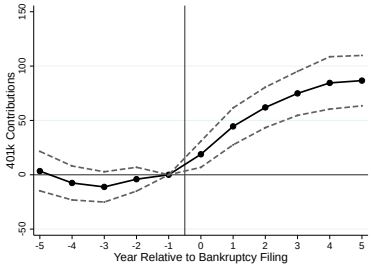
401k Contributions
Ch. 13 Judge IV Sample



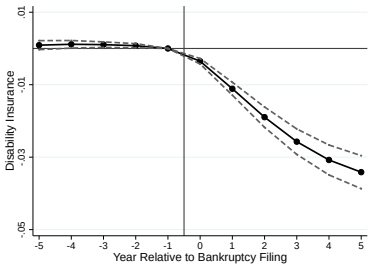
401k Contributions
Ch. 13 Full Sample



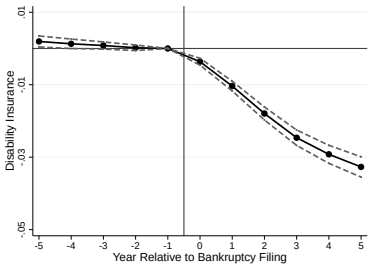
401k Contributions
Ch. 7 Full Sample



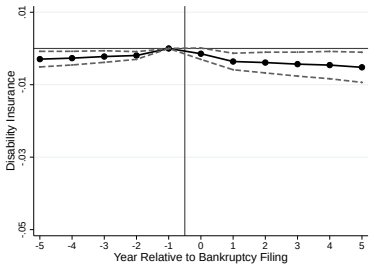
Disability Insurance
Ch. 13 Judge IV Sample



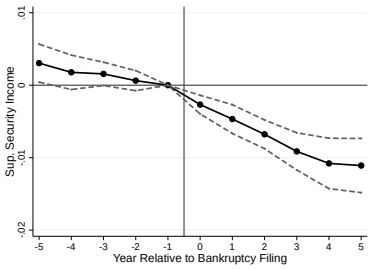
Disability Insurance
Ch. 13 Full Sample



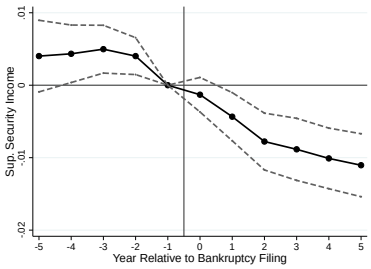
Disability Insurance
Ch. 7 Full Sample



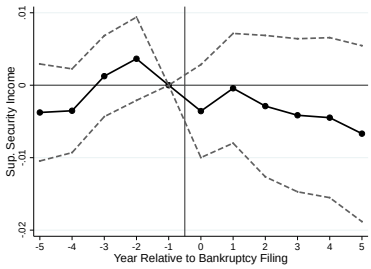
Sup. Security Income
Ch. 13 Judge IV Sample



Sup. Security Income
Ch. 13 Full Sample



Sup. Security Income
Ch. 7 Full Sample



Notes: These figures plot event study results of the impact of Chapter 13 and Chapter 7 bankruptcy protection. The Judge IV sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The full sample includes a 10 percent random sample of all first-time filings between 1992 and 2005 in the 72 bankruptcy courts that allow electronic access to their dockets. The foreclosure sample includes all filings originating in county by year bins with foreclosure data coverage. We report the coefficient on an indicator for receiving bankruptcy protection interacted with the specified year. We control for individual, year, and propensity score decile by year fixed effects. The propensity score is using a probit regression of an indicator for discharge on gender, race, five-year age bins, five years of baseline employment entered individually, five years of baseline earnings entered individually, office fixed effects, and filing year fixed effects. We then split the sample into deciles and interact each decile with year indicators for the five years before and after filing, omitting the year prior to filing. Standard errors are clustered at the individual level. Year 0 indicates the year a debtor files for bankruptcy protection. All monetary values are expressed in real 2000 dollars. Earnings information comes from the W-2. Employment is an indicator for non-zero wage earnings on the W-2. Mortality is an indicator for being deceased in the indicated year using information from the Death Master File. Foreclosure is an indicator for a filer's home receiving a notice of default, receiving a notice of transfer or sale, or being transferred to a REO or a guarantor. See text for additional details.

Appendix Table 1
Bankruptcy Offices in Chapter 13 IV Sample

Court	Office	Years	Judges	Discharge	σ_Z
Northern District of Alabama	Birmingham	1999-2005	3	0.312	0.032
Southern District of Alabama	Mobile	2000-2005	2	0.447	0.006
Eastern District of Arkansas	Little Rock	1996-2001	2	0.467	0.012
Southern District of California	San Diego	1997-2005	4	0.411	0.022
Southern District of Florida	Fort Lauderdale	1994-2005	2	0.335	0.019
Southern District of Florida	Miami	1994-2005	2	0.437	0.012
Northern District of Georgia	Atlanta	2004-2005	8	0.296	0.035
Northern District of Georgia	Rome	2004-2005	2	0.401	0.011
Southern District of Iowa	Davenport	1992-2001	2	0.552	0.019
Southern District of Iowa	Des Moines	1992-2001	2	0.608	0.042
District of Idaho	Boise	1999-2005	2	0.519	0.022
Southern District of Indiana	Indianapolis	2001-2005	3	0.495	0.015
Eastern District of Kentucky	Lexington	1999-2005	2	0.585	0.033
District of Massachusetts	Boston	1995-2003	3	0.344	0.028
Eastern District of Michigan	Detroit	2003-2005	3	0.291	0.007
Western District of Michigan	Grand Rapids	1993-2005	3	0.518	0.023
District of Minnesota	Minneapolis	1992-2005	2	0.462	0.009
District of Minnesota	St. Paul	1992-2005	2	0.485	0.030
Eastern District of Missouri	St. Louis	2003-2005	2	0.405	0.015
Western District of Missouri	Kansas City	2000-2005	3	0.478	0.021
Middle District of North Carolina	Durham	2005	2	0.558	0.017
District of New Mexico	Albuquerque	1999-2005	2	0.315	0.024
District of Nevada	Las Vegas	1996-2005	2	0.396	0.010
Southern District of Ohio	Cincinnati	1997-2005	2	0.598	0.014
Southern District of Ohio	Columbus	1992-2005	3	0.573	0.049
Southern District of Ohio	Dayton	1992-2005	2	0.592	0.030
Northern District of Oklahoma	Tulsa	1997-2005	2	0.486	0.030
District of Oregon	Eugene	1995-2005	2	0.503	0.027
District of Oregon	Portland	2000-2005	3	0.495	0.158
District of South Carolina	Columbia	2003-2005	2	0.751	0.021
Eastern District of Tennessee	Chattanooga	2002-2005	2	0.424	0.017
Middle District of Tennessee	Columbia	2000-2005	3	0.437	0.031
Middle District of Tennessee	Cookeville	2000-2005	3	0.437	0.047
Middle District of Tennessee	Nashville	2000-2005	3	0.467	0.017
Western District of Tennessee	Memphis	1997-2005	3	0.277	0.007
Western District of Texas	San Antonio	1997-2005	2	0.452	0.010
District of Utah	Salt Lake City	2003-2005	3	0.334	0.019
Eastern District of Virginia	Alexandria	2000-2005	2	0.507	0.013
Eastern District of Virginia	Newport News	1997-2005	2	0.523	0.035
Eastern District of Virginia	Norfolk	1997-2005	2	0.551	0.021
Western District of Washington	Tacoma	2000-2005	2	0.503	0.017
Eastern District of Wisconsin	Milwaukee	2003-2005	3	0.456	0.020

Notes: This table presents descriptive statistics for the 42 offices in the 31 bankruptcy courts that randomly assign filings to judges in our instrumental variables sample. σ_Z is the standard deviation of leave-one-out measure of judge leniency described in the text.

Appendix Table 2
Robustness of Chapter 13 Results

		Judge Leniency				Judge Fixed Effects		
	Baseline Mean	Leave One Out	Leave Mth. Out	90-day Discharge	Split Sample	2SLS	LIML	Jackknife
Panel A: Labor Supply	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Earnings	22.115	5.562***	5.602***	9.126***	4.628**	4.445***	4.263**	4.463**
	(17.176)	(1.141)	(1.065)	(1.779)	(2.020)	(1.593)	(1.912)	(1.812)
Employment	0.813	0.068***	0.068***	0.102**	0.024	0.070**	0.073**	0.072**
	(0.343)	(0.013)	(0.012)	(0.046)	(0.023)	(0.030)	(0.035)	(0.038)
Panel B: Mortality								
5-year Mortality	0.000	−0.012**	−0.011**	−0.025	−0.010	−0.023	−0.023	−0.023
	(0.000)	(0.006)	(0.005)	(0.025)	(0.015)	(0.021)	(0.024)	(0.023)
Panel C: Home Foreclosure								
5-year Foreclosure	0.001	−0.191***	−0.189***	−0.253***	−0.207***	−0.201**	−0.242**	−0.232**
	(0.019)	(0.035)	(0.033)	(0.047)	(0.045)	(0.081)	(0.122)	(0.113)
Panel D: Misc. Outcomes								
401k Contributions	0.316	−0.008	−0.006	−0.069	0.043	−0.067	−0.116	−0.116
	(0.855)	(0.044)	(0.040)	(0.110)	(0.100)	(0.077)	(0.106)	(0.104)
Disability Insurance	0.041	0.012	0.012	−0.002	0.017	−0.041	−0.045	−0.042
	(0.191)	(0.012)	(0.012)	(0.048)	(0.028)	(0.027)	(0.034)	(0.035)
Sup. Security Income	0.006	−0.128*	−0.130*	−0.184	−0.114	−0.183***	−0.297***	−0.197***
	(0.073)	(0.074)	(0.071)	(0.150)	(0.097)	(0.048)	(0.112)	(0.082)
Observations	490216	490216	490216	490216	245019	490216	490216	490216

Notes: This table reports two-stage least squares, LIML, and Jackknife IV estimates of the impact of Chapter 13 bankruptcy protection in the first five post-filing years. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage (N = 280202). Column 1 reports the mean and standard deviation for dismissed filers. Column 2 reports our preferred estimates from Table 4 using our leave-one-out measure of judge leniency as an instrument for bankruptcy protection. Column 3 uses a leave-month-out measure of judge leniency as an instrument Column 4 uses a leave-one-out measure of judge leniency measured over the first 90 post-filing days as an instrument. Column 5 uses a randomly selected subset of 50 percent of filers to calculate a leave-month-out measure of judge leniency that is used as an instrument in the mutually exclusive subset of filers. Columns 6 - 8 use judge fixed effects as instruments for judge leniency estimated using two-stage least squares, LIML, and Jackknife IV respectively. All specifications control for gender, race, age, five year averages of baseline employment and baseline earnings, and office by month-of-filing fixed effects. Standard errors are clustered at the office level. All monetary values are expressed in real 2000 dollars divided by 1,000. See Table 1 for additional details on the data and variable construction. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Appendix Table 3
Additional Tests of Randomization

	Baseline Mean	Judge Leniency		F-test p-value
	(1)	(2)	(3)	(4)
Number of cases	1118.637	0.000012		[0.000]
	(758.759)	(0.000016)		
Earnings Decile 2	0.100		−0.000444	[0.557]
	(0.300)		(0.000287)	
Earnings Decile 3	0.100		−0.000193	[0.474]
	(0.300)		(0.000147)	
Earnings Decile 4	0.100		−0.000221*	[0.992]
	(0.300)		(0.000129)	
Earnings Decile 5	0.100		−0.000136	[0.733]
	(0.300)		(0.000137)	
Earnings Decile 6	0.100		0.000084	[0.285]
	(0.300)		(0.000259)	
Earnings Decile 7	0.100		0.000044	[0.965]
	(0.300)		(0.000143)	
Earnings Decile 8	0.100		0.000078	[0.813]
	(0.300)		(0.000250)	
Earnings Decile 9	0.100		0.000355	[0.039]
	(0.300)		(0.000350)	
Earnings Decile 10	0.100		0.000147	[0.312]
	(0.300)		(0.000207)	
Joint F-Test		[0.468]	[0.288]	
Observations	490216	490216	490216	

Notes: This table reports reduced form results testing the random assignment of filings to judges. The sample consists of all first-time Chapter 13 filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. Column 1 reports means and standard deviations for dismissed filers. Columns 2 - 3 report estimates from an OLS regression of judge leniency on the variables listed and office by month-of-filing fixed effects, with standard errors clustered at the office level. Judge leniency is the leave-one-out mean rate of granting bankruptcy protection for the assigned judge minus the leave-one-out mean rate of granting bankruptcy protection for the court in the same filing year. The p-value reported at bottom of columns 2 - 3 is for a F-test of the joint significance of the variables listed in the rows. Each row of column 4 reports a p-value from a separate OLS regression of only the pre-determined variable listed in the corresponding row on judge and office by month-of-filing fixed effects. The p-value is for a F-test of the joint significance of the judge fixed effects. See Table 1 for details on the data and variable construction. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Appendix Table 4
Labor Supply, Mortality, and Home Foreclosure for Granted and Dismissed Chapter 13 Filers

Year Relative to Filing	Earnings		Employment		Mortality		Home Foreclosure	
	Granted	Dismissed	Granted	Dismissed	Granted	Dismissed	Granted	Dismissed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
-10	20871.66	15052.29	0.795	0.712	–	–	–	–
-9	21532.00	15779.59	0.809	0.732	–	–	–	–
-8	22390.54	16523.13	0.820	0.749	–	–	–	–
-7	23347.02	17433.49	0.831	0.765	–	–	–	–
-6	24311.48	18343.05	0.838	0.778	–	–	–	–
-5	25178.44	19323.27	0.843	0.789	–	–	–	–
-4	25971.66	20264.19	0.843	0.794	–	–	–	–
-3	26498.91	20868.53	0.841	0.795	–	–	–	–
-2	26574.25	20934.64	0.838	0.790	–	–	–	–
-1	26400.98	20314.23	0.836	0.787	–	–	–	–
0	26580.45	19359.44	0.835	0.786	0.001	0.004	0.003	0.024
1	27389.37	18778.57	0.827	0.768	0.004	0.012	0.007	0.074
2	27632.53	18374.64	0.819	0.749	0.007	0.019	0.011	0.106
3	27378.35	18255.57	0.809	0.731	0.011	0.028	0.015	0.127
4	26673.45	17674.69	0.796	0.711	0.016	0.035	0.019	0.140
5	25771.07	17309.49	0.778	0.689	0.021	0.040	0.025	0.149
Observations	219617	270599	219617	270599	219617	270599	115806	164398

Notes: This table reports average labor supply, mortality, and home foreclosure for granted and dismissed bankruptcy filers. The labor supply and mortality sample includes all first-time filings between 1992 and 2005 in the 42 offices that randomly assign cases to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage. Year 0 indicates the year a debtor files for bankruptcy protection. Dollar amounts are expressed in real 2000 dollars. See text for additional details.

Appendix Table 5
Chapter 13 Results for Additional Outcomes

	Baseline Mean	2SLS Results	
Panel A: Labor Supply	(1)	(2)	(3)
Self Emp. Earnings	0.585	0.290	0.367
	(3.644)	(0.271)	(0.299)
Self Employment	0.061	−0.005	0.001
	(0.183)	(0.016)	(0.018)
Earnings with no zeros	23.729	7.109***	4.416***
	(24.307)	(2.001)	(1.636)
Panel B: Mortality			
Years Alive (out of 5)	5.000	0.057**	0.053**
	(0.000)	(0.023)	(0.021)
Panel C: Home Sales			
5-year Distress Sale	0.001	−0.221***	−0.222***
	(0.021)	(0.035)	(0.036)
5-year Any Home Sale	0.001	−0.335***	−0.339***
	(0.031)	(0.046)	(0.048)
Controls	–	No	Yes
Observations	490216	490216	490216

Notes: This table reports two-stage least squares results of the impact of Chapter 13 bankruptcy protection. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges. The home sample includes the subset of those filings originating in county by year bins with home sales data coverage (N = 280202). Column 1 reports the mean and standard deviation for the five years before filing. Columns 2 - 3 instrument for bankruptcy protection using the reduced form measure of judge leniency described in the text. All specifications control for office by month-of-filing fixed effects, and cluster standard errors at the office level. Column 3 adds controls for gender, race, age, and the five year average of baseline employment and baseline earnings. All monetary values are expressed in real 2000 dollars divided by 1,000. See Table 1 for additional details on the data and variable construction. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Appendix Table 6
Chapter 13 Results for Years 6 - 10

	Baseline Mean	2SLS Results	
Panel A:Labor Supply	(1)	(2)	(3)
Earnings	20.517	8.127***	6.772***
	(16.147)	(1.949)	(1.603)
Employment	0.812	0.096***	0.066*
	(0.340)	(0.029)	(0.035)
Panel B: Mortality			
10-year Mortality	0.000	−0.026	−0.015
	(0.000)	(0.024)	(0.028)
Panel C: Home Foreclosure			
10-year Foreclosure	0.000	−0.272***	−0.277***
	(0.010)	(0.040)	(0.042)
Panel D: Misc. Outcomes			
401k Contributions	0.221	0.405***	0.298**
	(0.686)	(0.147)	(0.140)
Disability Insurance	0.033	−0.054***	−0.034*
	(0.172)	(0.020)	(0.020)
Sup. Security Income	0.004	−0.209**	−0.156*
	(0.065)	(0.089)	(0.088)
Controls	–	No	Yes
Observations	189100	189100	189100

Notes: This table reports two-stage least squares results of the impact of Chapter 13 bankruptcy protection over the sixth through tenth post-filing years. The sample consists of all first-time filers between 1992 and 2000 in the 42 offices that randomly assign filings to judges. The foreclosure sample includes the subset of those filings originating in county by year bins with foreclosure data coverage (N = 84181). Column 1 reports the mean and standard deviation for dismissed filers. Columns 2 - 3 instrument for bankruptcy protection using the reduced form measure of judge leniency described in the text. All specifications control for office by month-of-filing fixed effects, and cluster standard errors at the office level. Column 3 also includes controls for gender, race, age, and the five year average of baseline employment and baseline earnings. All monetary values are expressed in real 2000 dollars divided by 1,000. See Table 1 for additional details on the data and variable construction. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.

Appendix Table 7
Chapter 13 Job Mobility Results by Wage Garnishment Regulations

	Garnishment in State?		State/Federal Marginal Garnishment Rate				
	No	Yes	0/0	0/25	0/100	25/25	100/100
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Work in Same County	−0.053	0.236***	0.151	−0.033	0.351	0.236***	0.294
	(0.077)	(0.025)	(0.131)	(0.152)	(0.230)	(0.022)	(0.227)
	[0.532]	[0.582]	[0.275]	[0.696]	[0.511]	[0.712]	[0.535]
Work in Same State	−0.012	0.157***	0.109	−0.118	0.218	0.164***	0.059
	(0.084)	(0.026)	(0.158)	(0.149)	(0.272)	(0.028)	(0.311)
	[0.588]	[0.633]	[0.312]	[0.762]	[0.609]	[0.766]	[0.601]
Work in Same Job	0.143*	0.249***	0.206**	0.207	0.252	0.251***	0.226
	(0.084)	(0.026)	(0.095)	(0.179)	(0.209)	(0.025)	(0.202)
	[0.462]	[0.508]	[0.219]	[0.614]	[0.397]	[0.636]	[0.426]
Work in Same Industry	−0.085	0.246***	0.218	0.067	0.379**	0.245***	0.080
	(0.066)	(0.025)	(0.138)	(0.164)	(0.172)	(0.025)	(0.172)
	[0.515]	[0.564]	[0.249]	[0.683]	[0.458]	[0.701]	[0.489]
Job Tenure	1.027	0.814***	0.217	1.355	−0.010	0.996***	2.352***
	(1.102)	(0.176)	(0.195)	(1.281)	(0.498)	(0.245)	(0.817)
	[3.333]	[3.666]	[0.965]	[4.801]	[2.412]	[4.900]	[2.695]
Firm Wages	2.438	4.153***	−1.004	1.565	4.994	5.836***	5.469
	(3.343)	(1.115)	(1.039)	(4.266)	(5.101)	(1.384)	(6.029)
	[16.443]	[19.496]	[5.237]	[23.680]	[12.638]	[26.059]	[13.568]
Observations	62040	428176	135418	38071	10122	277726	28879

Notes: This table reports two-stage least squares results of the impact of Chapter 13 bankruptcy protection interacted with state and federal garnishment laws. The sample consists of all first-time filers between 1992 and 2005 in the 42 offices that randomly assign filings to judges that are employed for at least one time period post-bankruptcy. Columns 1 - 2 interact Chapter 13 with indicators for living in a state that does not allow any wage garnishment and living in a state that does allow wage garnishment. Columns 3 - 7 interact Chapter 13 with indicators for binding garnishment bracket in the filer's state of filing and the non-binding federal bracket. Each column header refers to the marginal garnishment rate in the state/federal system. All specifications control for gender, race, age, and the five year average of baseline employment baseline earnings, and office by month-of-filing fixed effects, and cluster standard errors at the office level. All monetary values are expressed in real 2000 dollars divided by 1,000. See Table 1 for additional details on the data and variable construction. Observations refer to the number of bankruptcy filers in the indicated group. The number of observations in each regression is the sum of all columns. *** = significant at 1 percent level, ** = significant at 5 percent level, * = significant at 10 percent level.