A STUDY OF CONSUMERS' POST-DISCHARGE FINANCES: STRUGGLE, STASIS, OR FRESH-START?

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INTRODUCTION

There are numerous objectives underlying the operation of the consumer bankruptcy system. From the creditors' perspective, the bankruptcy system seeks to mediate the intrinsic conflicts among creditors with claims against a debtor's assets and wages. It further seeks to maximize creditor recovery by offering an organized, systematic procedure for debt repayment.

Bankruptcy's central theoretical objective, from the perspective of the individual debtor, is to afford debtors the opportunity for a "fresh start."[1] Presumptively, a debtor's "fresh start" is achieved upon the discharge of a debtor's pre-bankruptcy debts.[2] This respite from past-debts should mean that upon discharge, debtors are once again situated in a financially stable position—able to "earn, spend, borrow and repay money at a manageable pace."[3] Moreover, for the discharge to truly result in a financial fresh start, debtors should be able to readily re-accumulate dissaved assets lost during the pre-bankruptcy period of financial

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[1] *See, e.g.*, Local Loan Co. v. Hunt, 292 U.S. 234, 244 (1934) (emphasizing importance of fresh start for debtor, "unhampered by the pressure and discouragement of pre-existing debt"); *see* Bellco First Fed. Credit Union v. Kaspar (*In re* Kaspar), 125 F.3d 1358, 1361 (10th Cir. 1997) ("[E]xceptions to discharge are to be narrowly construed, and because of the fresh start objectives of bankruptcy, doubt is to be resolved in the debtor's favor."); *In re* Albarran, 347 B.R. 369, 379 (B.A.P. 9th Cir. 2006) (recognizing bankruptcy law favors allowing honest debtor to discharge debts and make fresh start).

[2] *See, e.g.*, 11 U.S.C. § 523 (2005) (listing debts debtor is not discharged from); Theodore Eisenberg, *Bankruptcy Law in Perspective*, 28 U.C.L.A. L. REV. 953, 974–75 (1981) (recognizing bankruptcy creditors either "collect now or never"); Margaret Howard, *A Theory of Discharge in Consumer Bankruptcy*, 48 OHIO ST. L.J. 1047, 1079 (1987) (articulating theory that reallocation of assets is needed to "assure greatest probability that economic function will be restored after bankruptcy"); TERESA A. SULLIVAN, ELIZABETH WARREN & JAY LAWRENCE WESTBROOK, THE FRAGILE MIDDLE CLASS (Yale University Press 2000).

[3] Katherine Porter & Deborah Thorne, *The Failure of Bankruptcy's Fresh Start*, 92 CORNELL L. REV. 67, 68 (2006). *See* Local Loan Co. v. Hunt, 292 U.S. 234, 244 (1934) (stating debtors with "new opportunity in life" sets them on path to prosperity).

distress.[4] Stated differently, for the discharge to result in a meaningful fresh start, a household's financial well-being must be restored.

A household experiences financial well-being when its income and assets are sufficient to maintain an adequate standard of living. An adequate standard of living includes minimally decent shelter, medical care, food, clothing, education, child care and transportation. When expenditures for such basic necessities constitute a substantial percentage of a household's regular monthly expenses,[5] correspondingly less money remains for discretionary spending and saving. When unexpected expenses, such as illness, car or home repairs, or divorce befall financially fragile families, [6] such consumers must "dissave"—meaning withdraw savings or sell assets.[7] In the absence of savings, investments or asset accumulation,

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[4] *See In re* Davis, No. 07-00662, 2007 WL2710403, at * 2 (Bankr. Idaho Sept. 13, 2007) ("As § 524 makes clear, a discharge voids most prepetition judgments against the debtor, and operates as an injunction prohibiting creditors holding prebankruptcy claims from commencing or continuing any legal actions against the debtor . . . ."); *In re* Reschick, 343 B.R. 151, 156 (Bankr. Pa. 2006) (affirming that certain assets are "exempt" from bankruptcy liquidation process and listing public policy goals of exemption laws); MICHAEL SHERRADEN, ASSETS AND THE POOR (M.E. Sharpe Publishing 1991) (discussing importance of wealth as measure of financial well-being).

[5] *See* Ronald Paul Hill, *Stalking the Poverty Consumer: A Retrospective Examination of Modern Ethical Dilemmas*, J. BUS. ETHICS 209, 210–11 (2002) (recognizing low-income families must contribute higher percentage of income for housing, food, and medical care); Katherine Porter, *Going Broke the Hard Way: The Economics of Rural Failure*, WIS. L. REV. 969, 1007 (2005) (stating rural families have less income, which leaves smaller cushion to put toward unforeseen expenses); *see also* Michael S. Barr, *Banking the Poor*, 21 YALE J. ON REG. 121, 137 (2004) (suggesting use of bank accounts for regular savings plans for low income workers through payroll deduction).

[6] The cost of housing, health care, fuel and other necessities is on the rise, and fewer workers have the benefit of the essentials of economic stability such as health insurance, retirement pensions, affordable housing and reasonable and reliable childcare. *See The Plastic Safety Net: The Reality Behind Debt in America*, 3–4, DEMOS & The Center for Responsible Lending, (2005), http://www.responsiblelending.org/pdfs/DEMOS-101205.pdf.; CHRISTOPHER L. PETERSON, TAMING THE SHARKS: TOWARD A CURE FOR THE HIGH-COST CREDIT MARKET 2–4 (2004). Although there was no change in the *percentage* of people without health insurance between 2003 and 2004 (it remained at 15.7% both years), the *number* of people without health insurance rose from 45.0 million to 45.8 million in the span of only one year. *See* U.S. Census Bureau, *Income, Poverty, and Health Insurance Coverage in the United States*, 16 (2004), http://www.census.gov/prod/2005pubs/p60-229.pdf. For example, in 2006 only 52% of all workers participated in medical care benefits in private industry; 57% had access to paid sick leave; only 15% had access to employer assistance for child care, and 20% participated in a defined benefit pension. *See* http://data.bls.gov/cgi-bin/ (follow "A-Z" hyperlink; click "E"; then "Employee Benefits"; check "Percent of All Workers Participating in" "Defined Benefit Pension" and "Medical Care Benefits"; check "Percent of All Workers with Access to "Paid Sick Leave" and "Employer Assistance for Child Care"; then "Retrieve Data"). The 1990s resulted in an increased need for affordable housing, which allows a household to pay no more than 30% of their income on housing. *See Affordable Housing*, U.S. Department of Housing and Urban Development, http://www.hud.gov/offices/cpd/affordablehousing/index.cfm. An estimated 12 million renter and homeowner households now pay more then 50 percent of their annual incomes for housing, and a family with one full-time worker earning the minimum wage cannot afford the local fair-market rent for a two-bedroom apartment anywhere in the United States. The lack of affordable housing is a significant hardship for low-income households preventing them from meeting their other basic needs, such as nutrition and healthcare, or saving for their future and that of their families. *See id.*

[7] ALAN R. ANDREASEN, THE DISADVANTAGED CONSUMER 34 (Free Press 1975) (defining "dissave"). *See* John K. McNulty, *Flat Tax, Consumption, Tax, Consumption-Type Income Tax Proposals in the United States: A Tax Policy Discussion of Fundamental Tax Reform*, 88 CAL. L. REV. 2095, 2169 n.250 (2000) (noting old age people begin to consume more than they earn, and dissave to do it); *cf.* F.H. Buckley, *The*

many consumers, out of necessity, have responded to their financial distress by incurring debt.[8]

While debt is commonly viewed as a central contributing factor to financial distress,[9] debt is also a central *consequence* of such distress. When income and assets are insufficient to meet the consumptive needs of a household, the household experiences financial distress—defined as the inability to pay debts as they come due.[10] In the absence of savings or assets, debt is often incurred in an effort to escape the distress. Not surprisingly, the incurrence of debt at a time of financial

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Debtor as Victim, 87 CORNELL L. REV. 1078, 1081 (2002) ("Dissaving is prudent when the gains from present consumption exceed the costs associated with deferred future consumption.").

[8] "In 2002, U.S. households added nearly $725 in debt to their balance sheets, an increase of over 9 percent from 2001. Not since the late 1980s have consumers taken on debt at so quick a pace." *Evaluating the Consumer Lending Revolution*, Federal Deposit Insurance Corporation, http://www.fdic.gov/bank/analytical/fyi/2003/091703fyi.html.

> [B]etween 1989 and 2001 . . . [c]redit card debt among very low-income families grew by an astonishing 184 percent. But middle-class families were also hit hard—their credit card debt rose by 75 percent . . . . Very low-income families are most likely to be in credit card debt: 67 percent of cardholding families with incomes below $10,000 are affected. Moderate-income families are not far behind: 62 percent of families earning between $25,000 and $50,000 suffer from credit card debt . . . . It is important to note that these figures may be substantially underreported. The absolute figures (for example, $4,126 of average debt) are based on data that consumers reported about themselves in surveys. Aggregate data on outstanding revolving credit reported by the Federal Reserve puts the average credit card debt per household at about $12,000—nearly three times more than the self-reported amount.

Tamara Draut & Javier Silva, *Borrowing to Make Ends Meet: Growth of Credit Card Debt in the 90s*, DEMOS, http://www.demos.org/pubs/borrowing_to_make_ends_meet.pdf.

[9] *See* Theresa A. Sullivan, Elizabeth Warren, & Jay Lawrence Westbrook, *Less Stigma or More Financial Distress: An Empirical Analysis of the Extraordinary Increase in Bankruptcy Filings*, 59 STAN. L. REV. 213, 218 (2006) (noting financial distress is marked by rising levels of debt). The Federal Reserve announced in July of 2006 that consumer borrowing rose in May of the same year for the seventh consecutive month as credit card and other types of revolving debt jumped by the most since October 2004. It also reported that "[c]onsumer credit, or non-mortgage loans to individuals, rose $4.4 billion, or 2.5 percent at an annual rate, to $2.174 trillion." *Borrowing Rises as Credit Card Use Jumps*, N.Y. TIMES, July 11, 2006, at C6. The figures suggest that Americans are using their credit cards to finance more purchases as rising interest rates and slowing increases in real estate values discourage borrowing against home equity. *See id.* For a graphical view of the increase in consumer spending, see *US Consumer Borrowing Slows to 2.4% annual rate in May*, http://www.metrics2.com/blog/economic_indicators/consumer/ (last visited Feb. 15, 2008).

[10] *See* Steven N. Kaplan, *Federated's Acquisition and Bankruptcy: Lessons and Implications*, 72 WASH. U. L.Q. 1103, 1121–22 (1994) (explaining in business context, how economists have been unable "to distinguish whether poor performance by a firm in financial distress is caused by the financial distress alone or by the same factors that pushed the firm into financial distress in the first place"); Lynn M LoPucki & George G. Triantis, *A Systems Approach to Comparing U.S. and Canadian Reorganization of Financially Distressed Companies*, 35 HARV. INT'L L.J. 267, 274–75 n.21 (1994) (defining financial distress in context of business reorganization "as including both the state of balance sheet insolvency (liabilities exceed assets) and inability to pay obligations as they become due"). Debts that were just manageable on a full salary fall into arrears as interest and penalties mount while the family tries to survive on a suddenly lower disability paycheck. If the family uses credit during the period of disability to make ends meet and to live at their pre-injury levels, the family goes further into debt. In a short time, the debt may be beyond control. *See* SULLIVAN ET AL., *supra* note 2.

distress has an exacerbating effect;[11] financial catastrophe may be temporarily staved off, but the household's fundamental financial stability is further compromised. When the level of debt carried by a household or individual becomes unmanageable, bankruptcy's discharge offers an attractive remedy for the immediate crisis. But does the remedial discharge provide a meaningful and sustainable recovery from the nadir of financial distress? Stated differently, does the bankruptcy system offer a long-term remedy to financial distress, as suggested by the "fresh start" rhetoric?

This Article addresses the question of whether bankruptcy's remedial discharge operates in a way consistent with its theoretical justification; whether the discharge provides honest, but unfortunate debtors a meaningful and sustainable financial fresh start. If the fresh start objective of bankruptcy is achieved, most consumers who receive a bankruptcy discharge should, before long, look financially similar, along a number of dimensions, to those consumers with similar financial profiles who have not experienced the financial distress that leads to a bankruptcy filing (after holding other differences between these two groups constant). Moreover, such recovery ought to take place in a relatively short time frame and be sustained over time. Conversely, long recovery times, or recurrent periods of financial distress suggests that bankruptcy law's theoretical objectives are not being met in practice.

This question of whether the bankruptcy discharge provides a meaningful long-term remedy is important: vast amounts of public and private resources are dedicated to supporting the bankruptcy system and for millions of consumers it remains one of the few avenues of respite from debt. Figure 1 shows over time an increasing number of consumers have filed for bankruptcy protection in an effort to escape financial distress and achieve a fresh start.[12] Because of the bankruptcy

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[11] *See generally* Jean Braucher, *Theories of Overindebtedness: Interaction of Structure and Culture*, 7 THEORETICAL INQUIRIES IN L. 323, 324 (2006).

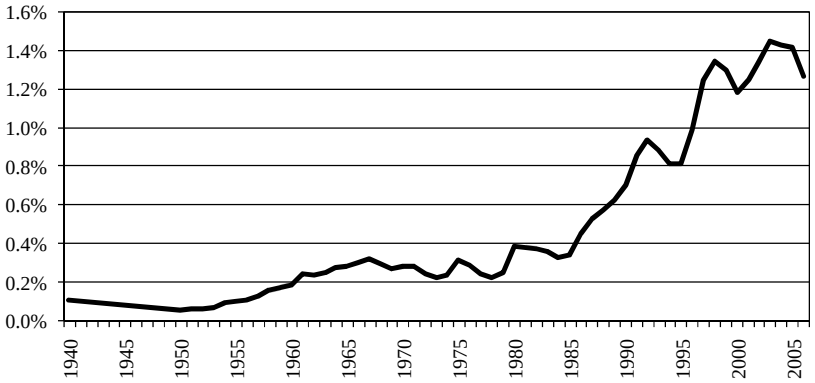
> Structural accounts of overindebtedness focus on the system of easy credit and on insecurities in personal finances not fully covered by the social safety net. Cultural accounts range from the highly judgmental, blaming consumer irresponsibility and even dishonesty, to the more sympathetic and psychologically nuanced, stressing consumer vulnerability due to lack of knowledge and differences in mood, attitudes and behavior.

See id. (footnotes omitted). Robert M. Lawless, *The Relationship Between Nonbusiness Bankruptcy Filings and Various Basic Measures of Consumer Debt*, http://www.law.missouri,edu/lawless/bus_bankr/filings.htm (detailing Federal Reserve's estimate of consumers' monthly income devoted to servicing household debt); Lois R. Lupica, *Consumers Caught in a Vise: Class and the Paradox of the Consumer Debt Crisis* (on file with authors). The relatively recent expansion of and aggressive marketing by the consumer finance industry has led, in part, to consumers' greater use of credit.

[12] *See infra*, Figure 1. Figure 1 shows the percentage of households who have filed for bankruptcy over time. In 1965, slightly more than one-quarter of a percent of all U.S. households filed for bankruptcy. Starting in 1985, the percentage of bankruptcies began climbing rapidly and is currently approaching almost 1.5% of all households per year. This upward trend in filing numbers was presented during the bankruptcy revision debates as evidence that the discharge was too generous a remedy for financial distress and one that

system's growth, it is worthwhile to study and consider whether the discharge is achieving what it is purported to do. First, however, the contours of what constitutes "financial distress" must be defined.

Figure 1: Percentage of U.S. Households Filing For Bankruptcy: 1940–2006.



Source: Various editions of the Statistical Abstract of the United States

If "financial distress" simply means a one-time incurrence of more debt than one can realistically repay, then it ought to be clear that distress can be remedied by the bankruptcy discharge. In such a circumstance, consumer debtors ought to experience an immediate and sustained "recovery" from distress upon the elimination of pre-bankruptcy debts. In the years following the discharge, the events leading to consumers' bankruptcy filings should no longer be reflected in their financial profile.[13]

If instead, financial distress is a symptom of the confluence of a complex web of social, economic, and financial conditions, then perhaps the discharge is merely a palliative solution that fails to address debtors' underlying problems in a meaningful way. If such is the case, following a bankruptcy discharge, debtors' finances should continue to deteriorate and debtors ought to continue to fall behind their peers, measured by key financial indicators. For them, the bankruptcy discharge is just a temporary respite along a continuing downward financial spiral.

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needed to be reigned in. After eight years of discussion, testimony and debate about bankruptcy "reform," in 2005, access to bankruptcy was limited and the discharge was contracted.

[13] People's financial lives are similar to a marathon race. Individuals start off the race grouped in packs of people with similar characteristics. Some individuals are seeded high and are placed in a pack at the very front. Other individuals are grouped far in the back and start running the race long after the starting gun has sounded. During the race some individuals experience a problem. The key question to those watching is what happens to these racers? Does the racer catch up with their pack, stay a constant distance behind their pack or fall further behind over time? This research asks these questions not about a marathon race but instead about the impact of bankruptcy on an individual's finances.

A third possibility is that the discharge, while not solving all the problems at the root of debtors' financial distress, may offer enough proverbial "breathing room" to enable debtors to catch up with peers who avoided the pitfall of financial distress. This recovery and achievement of financial well-being may take time, but eventually, bankruptcy filers' financial profiles should resemble those consumers who have never experienced the same degree of financial distress.[14]

We examine the issue of the impact of a bankruptcy discharge on consumers' financial distress through the analysis of a very large random national sample survey. This survey includes financial information about consumers who both did and did not file for bankruptcy.[15] This research is unable to predict how a specific individual fares after bankruptcy. However, by looking at a large group of individuals it reveals telling information about the post-discharge experiences of consumers who seek relief from financial distress through the bankruptcy system.

Part I of this Article reviews the literature discussing previous empirical research on consumer bankruptcy. Recent years have seen myriad studies on consumer bankruptcy, addressing issues such as the causes and triggers of bankruptcy,[16] debtor profiles,[17] as well as whether the bankruptcy discharge provides an instant "fresh start" for debtors.[18] Part III describes and provides some

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[14] *See* William E. Callahan, Jr., Note, *Dewsnup v. Timm and Nobelman v. American Saving. Banks: The Strip Down of Liens In Chapter 12 and Chapter 13 Bankruptcies*, 50 WASH. & LEE L. REV. 405, 409 (explaining most important aspect of bankruptcy fresh start are conservation of property and debtor's return to normal life (footnote omitted)). *But cf.* Jean Braucher, *Consumer Bankruptcy As Part of the Social Safety Net: Fresh Start or Treadmill?*, 44 SANTA CLARA L. REV. 1065, 1070 (2004) (remarking lack of research has led to "not know[ing] to what extent bankruptcy is a turning point in debtor's financial lives . . ."); Melissa B. Jacoby, *Ripple or Revolution? The Indeterminacy of Statutory Bankruptcy Reform*, 79 AM. BANKR. L.J. 169, 170 (2005) (calling into question effectiveness of bankruptcy if studies show filers continue to confront financial problems years later).

[15] This study initially recognizes that consumers who file for bankruptcy protection are in financial distress at the time of filing. It also recognized that even before the peak of financial distress, bankruptcy filers generally do not have the same social and economic characteristics as non-filers. Because of these differences, we use regression analysis to adjust and enable meaningful observations and comparisons. Regression analysis mathematically creates packs of people with similar characteristics. This technique enables us to isolate the impact of bankruptcy and the time since filing for bankruptcy protection from other characteristics of the pack. *See infra* Part IV–V.

[16] *See generally* Gordon Bermant et al., *Explaining the (Complex) Causes of Consumer Bankruptcy*, 20 AM. BANKR. INST. J. 20 (2001) (analyzing relationship between debt levels and filing for bankruptcy); Jason J. Kilborn, *Behavioral Economics, Overindebtedness & Comparative Consumer Bankruptcy: Searching for Causes and Evaluating Solutions*, 22 EMORY BANKR. DEV. J. 13, 15 (2005) (discussing behavioral economics potential role on consumer bankruptcy); TERESA A. SULLIVAN, ELIZABETH WARREN & JAY LAWRENCE WESTBROOK, AS WE FORGIVE OUR DEBTORS: BANKRUPTCY AND CONSUMER CREDIT IN AMERICA (Beard Books 1989) [hereinafter AS WE FORGIVE OUR DEBTORS].

[17] *See generally* Ed Flynn et al., *A Closer Look at Elderly Chapter 7 Debtors*, 21 AM. BANKR. INST. J. 22, 49 n.4 (2002) (distinguishing elderly debtor profiles by age, gender, income, debt, and number of accounts); Jean M. Lown, *New Study: Serial Bankruptcy Filers No Problem*, 26 AM. BANKR. INST. J. 36 (2007) (analyzing instances of times debtors file bankruptcy).

[18] *See generally* Jean Braucher, *A Fresh Start for Personal Bankruptcy Reform, The Need for Simplification and a Single Portal*, 55 AM. U. L. REV. 1295, 1331 (2006) (suggesting "[a] single chapter, essentially Chapter 7 with a repayment feature added, would better accomplish the abuse prevention purpose of the 2005 Act, but without presumably unintended consequences of reducing bankruptcy access for those who need it most"); Braucher, *supra* note 14, at 1091 (arguing basic research is needed to understand why

simple analysis of a new detailed data set: the National Longitudinal Survey of Youth 1979 (NLSY79). This survey contains a plethora of financial information on young baby boomer consumers—both bankruptcy filers and non-filers. Part IV provides a discussion of the statistical analysis used in this Article. Part V illustrates the long-term effect of the bankruptcy discharge on consumers' financial distress, measured by an array of key financial indicators using a simple table analysis. Part VI repeats the analysis using more complex regression methods. The results show an encouraging outcome. The average person who files for bankruptcy to relieve financial distress catches up with their peers, but the time needed before the impact of this distress is no longer recognizable in their finances is long. Finally, Part VII summarizes the research and suggests areas for future investigation.

I. PROFILES OF CONSUMER DEBTORS

The decades of studies that have examined bankruptcy's precipitates have revealed that debt is the essential cause of bankruptcy.[19] The question of whether the erasure of some debt eliminates financial distress cannot be answered, however, in the absence of consideration of the reasons such high levels of consumer debt is incurred.[20] The research conducted on the pre-bankruptcy condition of consumer debtors has revealed that financial distress is rooted in a complex web of factors.[21] Debtors report that they are generally struggling financially for quite a while prior to the decision to file for bankruptcy relief: bills are being paid late, medical and dental visits are postponed, and maintenance on cars and homes is deferred.[22] What has been further revealed is that job-loss, marital dissolution and health care-related

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many families accumulate "big burdens of debt"); Porter & Thorne, *supra* note 3, at 75 (examining economic situations of families after their bankruptcies).

[19] *See* Ed Flynn & Gordon Bermant, "*On the Evidence of These Numbers:" Why Consumers File for Bankruptcy*, 19 AM. BANKR. INST. J., 22 (2000) (asserting low income to be major cause of consumer debt). *See generally* SULLIVAN ET AL., *supra* note 2.

[20] *See* Peter C. Alexander, *Building "A Doll's House:" A Feminist Analysis of Marital Debt Dischargeability In Bankruptcy*, 48 VILL. L. REV. 381, 457 (2003) (recognizing bankruptcy "attempts to strike a balance between a financially-distressed debtor and his or her creditors"); *see also* Donald R. Korobkin, *The Unwarranted Case Against Corporate Reorganization: A Reply To Bradley and Rosenzweig*, 78 IOWA L. REV. 669, 687 (1993) (discussing managers create financial distress, which leads to bankruptcy). *See generally* PETER E. EARL & SIMON KEMP, EDS., THE ELGAR COMPANION TO CONSUMER RESEARCH AND ECONOMIC PSYCHOLOGY, "CREDIT, DEBT AND PROBLEM DEBT" (1999).

[21] *See, e.g.*, H.R. No. 95-595 (1977); TERESA A. SULLIVAN ET AL., AS WE FORGIVE OUR DEBTORS (1949); *see* Douglas G. Baird, *Bankruptcy's Uncontested Axioms*, 108 YALE L.J. 573, 581 (1998) (positing economic distress is one of many causes of financial distress).

[22] *See In re* Ferguson, 41 B.R. 118, 119 (Bankr. D. Va. 1984) (reporting debtor had been making late payments prior to filing bankruptcy); Lawrence Ponoroff & Julie C. Ashby, *Desperate Times and Desperate Measures: The Troubled State of the Ordinary Course of Business Defense—and What To Do About It*, 72 WASH. L. REV. 5, 40 n.167 (1997) (noting certain bankruptcy courts "require[] to show that particular customers routinely paid their bills late"); Andy Meek, *'Against the Wall,'* THE DAILY NEWS, Feb. 26, 2008 (discussing study found most debtors would only file for bankruptcy to avoid foreclosure or to deal with severe medical condition).

debt are the primary ultimate bankruptcy triggers—the proverbial straw that breaks the financially fragile family's back.[23]

One of the earliest and most comprehensive studies was conducted by Theresa Sullivan, Elizabeth Warren and Jay Westbrook.[24] They gathered data on 1,547 personal bankruptcy cases filed during 1981.[25] Using this data they paint a very detailed picture of who declared bankruptcy in the early 1980s and find that it is a "story of middle-class people drowning in debt."[26] Their 2000 book replicates the earlier study by gathering data on bankruptcy cases filed ten years later in 1991.[27] They then expand upon this information by asking a sub-sample of filers to complete a questionnaire that details these debtors' socio-economic situation.[28] The questionnaires revealed that job-loss, marital dissolution and health care-related debt are among the key bankruptcy triggers.[29]

A random sample of personal bankruptcies from 1980 was linked with information from the 1983 Survey of Consumer Finances in a study examining the events that trigger bankruptcy filings.[30] The study's authors, Ian Domowitz and Robert Sartain, found that medical and credit card debt are the most important trigger of bankruptcy.[31]

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[23] *See* CONSUMER BANKR. PROJECT

> Bankruptcy debtors are a cross section of America . . . . [B]ankrupt debtors are not an identifiable class. They are not all—or mostly—day laborer and household maids dwelling in squalid apartments on the wrong side of the tracks. More than half are homeowners, and they work at pretty much the same jobs as everyone else . . . . The financial trouble that leads to bankruptcy can be found in any community and no social or economic group is immune from it.

Melissa B. Jacoby, *Collecting Debts From the Ill and Injured: The Rhetorical Significance, But Practical Irrelevance, of Culpability and Ability To Pay*, 51 AM. U. L. REV. 229, 236 (2001) (reporting "illness or injury as a cause for filing for bankruptcy"); Rafael Efrat, *The Rise & Fall of Entrepreneurs: An Empirical Study of Individual Bankruptcy Petitioners In Israel*, 7 STAN. J.L. BUS. & FIN. 163, 171 (2002) (listing failing medical conditions and family troubles as leading causes of bankruptcy); SULLIVAN ET AL., *supra* note 21.

[24] SULLIVAN ET AL., *supra* note 21, at 149.

[25] *See id.*

[26] *Id.* at 331.

[27] *See* SULLIVAN ET AL., *supra* note 2, at 265–66.

[28] *Id.* at 266–71.

[29] *See id.* at 282–84; Efrat, *supra* note 23 (reporting family problems as leading cause for bankruptcy).

[30] *See* Ian Domowitz & Robert Sartain, *"Determinants of the Consumer Bankruptcy Decision,"* 54 J. FIN. 403, 403–20 (1999); *see also* Efrat, *supra* note 23, at 169 (sampling 213 people in study of Israeli personal bankruptcy causes); Jacoby, *supra* note 23, at 236 (reporting 1999 survey revealed high levels of medical-related bankruptcies).

[31] *See* Domowitz & Sartain, *supra* note 30. In another study, a large database of information taken directly from credit card companies was used to analyze consumers' personal bankruptcy decision. While this database contains relatively little demographic information, the study mirrors the information credit card companies use to determine the amount of credit to extend to customers. They find an increase in default rates from 1995 to 1997 and interpret this as a decline in the social or economic cost of defaulting on debts. *See* David Gross & Nicholas Souleles, *"An Empirical Analysis of Personal Bankruptcy and Delinquency,"* 15 REV. FIN. STUD. 319, 319–47 (2002); Daniel J. Losito, Note, *New York's Implied Merchant Warranty for the Sale of New Homes: A Reasonable Extension to Reach Initial Owners?* 1990 COLUM. BUS. L. REV. 373,

Data on how debtors fare post-discharge is very sparse. However, what minimal data did exist demonstrates the complexity of financial recovery.[32] These studies tended to focus on what percentage of debtors completed their chapter 13 plans and received a discharge.[33] On the whole, these studies found a low rate of plan completion among these debtors but noted that there were distinct trends among the nation's districts.[34]

An interesting study was conducted by T. David Stanley and Marjorie Girth in the mid-1960's.[35] As the Bankruptcy Code has transitioned greatly in the past 40 years, this study's data is now of limited use, but some of its results remain significant: they found that while most of the families they surveyed had improved financial conditions, a substantial minority remained in financial situations that were the same or worse than when they filed for bankruptcy.[36]

Until recently, there was no post-bankruptcy data on American families who received a chapter 7 discharge. Published in 2006, Professors Katherine Porter and Deborah Thorne conducted such a study and their findings challenge the prevailing assumption that chapter 7 bankruptcy discharges fully rehabilitate debtors and allows them a fresh start.[37] They determined that "steady and sufficient" income is the key to success post-bankruptcy, largely due to their finding that while more than a third of the families who were deemed to be better-off post discharge reported an increase in income, only 4% of those deemed to be worse-off reported the same.[38] Better-off families were nearly ten times as likely to have increased income and families whose financial situations remained static were the most likely to have static income levels.[39]

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392 (1990) (relating "mortgagees have increasingly found themselves in the possession of non-liquid real property in varying stages of development" as result of increased rate of defaults).

[32] *See* Melissa B. Jacoby, *Bankruptcy Reform and the Costs of Sickness: Exploring the Intersections*, 71 MO. L. REV. 903, 912 (2006) (discussing bankruptcy's contribution to financial recovery); Charles S. McCowan, Jr. & Calvin C. Fayard, Jr., *Louisiana Complex Litigation*, 80 TUL. L. REV. 1905, 1918 (2006) (discussing situations where financial recovery is not certain); Porter & Thorne, *supra* note 3, at 75 ("The prior research on life postbankruptcy is sparse but suggestive of the complex nature of financial recovery.").

[33] *See, e.g.*, William C. Whitford, *Has the Time Come to Repeal Chapter 13?*, 65 IND. L.J. 85, 104 (1989) [hereinafter *Repeal*]; William C. Whitford, *The Ideal of Individualized Justice: Consumer Bankruptcy as Consumer Protection, and Consumer Protection in Consumer Bankruptcy*, 68 AM. BANKR. L.J. 397, 415–17 (1994). *See generally* Jean Braucher, *Lawyers and Consumer Bankruptcy: One Code, Many Cultures*, 67 AM. BANKR. L.J. 501, 506 (1993) (discussing Whitefield's proposal to abolish chapter 13).

[34] *See* Braucher, *supra* note 33, at 506 n.22 (discussing time frame for taking discharge)*; Repeal*, *supra* note 33, at 85 ("The data strongly suggests the importance of local legal culture is the wide variance in the proportion of Chapter 13 filings between districts."); Whiteford, *supra* note 33, at 415 (providing Madison, Wisconsin, as example where "local legal culture does not particularly encourage steering debtors into either chapter 13 or chapter 7").

[35] *See* T. DAVID STANLEY & MARJORIE GIRTH, BANKRUPTCY: PROBLEM, PROCESS, REFORM (Brookings Institution 1971).

[36] *See id.* at 66–67.

[37] Porter & Thorne, *supra* note 3, at 67 (finding, for example, that "just one year postbankruptcy, one in four debtors was struggling to pay routine bills, and one in three debtors reported an overall financial situation similar to, or worse than, when that debtor filed bankruptcy").

[38] *Id.* at 95.

[39] *See id.*

Having determined a "relationship between post-bankruptcy income change and post-bankruptcy financial outcome," they concluded that bankruptcy is "an incomplete tool" for those in financial straits.[40] Accordingly, Porter and Thorne suggest bankruptcy law needs to be adjusted, and social programs implemented so that debtors are better equipped to achieve a post-bankruptcy fresh start.[41]

II. THE NLSY79 DATA

This Article examines information gathered as part of the National Longitudinal Survey of Youth (NLSY79). The NLSY79 is a nationally representative panel survey of randomly chosen consumer subjects.[42] This panel survey has tracked the lives of young baby boomers from 1979 to present, questioning the same group of people twenty-two times.[43] This repetitive surveying has provided researchers with an in-depth picture of the effects of baby boomers aging over time. While the NLSY79 began in 1979, this Article focuses on an analysis of data gathered in the 2004 survey, which is the only year respondents were asked questions about possible bankruptcy filings.[44]

Not only is the NLSY79 one of the few nationally representative datasets to include information about consumer bankruptcy filings, it also contains very detailed information about consumers' assets and liabilities. Moreover, the data includes extensive information about consumer respondents' demographics.[45]

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[40] *Id.* at 95–96 ("The relationship between postbankruptcy income change and postbankruptcy financial outcome is unmistakable.").

[41] *See id.* at 67. They continually emphasize the need of bankruptcy rehabilitation to be centered around increased and stable income. Without it, they conclude, bankruptcy only provided partial and temporary relief. *See id.* at 99, 124. Another study found that individuals do not file simply because of adverse events, but people calculate and file for bankruptcy whenever it is financially advantageous. Scott Fay, Erik Hurst and Michelle White use data from the Panel Study of Income Dynamics (PSID) to investigate this idea. In their study the amount of debt a family potentially discharges is the gain from filing. The loss of household assets that a family would incur from filing is the loss. They show that an increase of $1,000 in financial benefits (gain minus loss) from filing results in a 7 percent increase in the number of filers. Scott Fay, Erik Hurst & Michelle J. White, *The Household Bankruptcy Decision*, 92 AMERICAN ECONOMIC REVIEW 706 (2002). Ronel Elul and Narayanan Subramanian in a similar vein use the PSID to investigate if people move from state-to-state to find the most advantageous place to file. They find that roughly 1 percent of all moves are caused by this "forum-shopping." Ronel Elul & Narayanan Subramanian, *Forum-Shopping and Personal Bankruptcy*, 21 J. FINANCIAL SERVICES RESEARCH 233 (2002).

[42] The NLSY79 was created to understand how the education and training backgrounds of individuals affected their labor market outcomes. Fortunately, asset, debt and bankruptcy questions were added to expand the list of outcomes researchers could monitor. Additional details about the survey are found in The National Longitudinal Surveys NLSY79 Users' Guide, Center for Human Resource Research, Ohio State University (Jay L. Zagorsky ed., 1997), *available at* ftp://www.nlsinfo.org/pub/usersvc/NLSY79/NLSY79%202004%20User%20Guide/79text/front.htm [hereinafter NLSY79].

[43] In January 2008 the NLSY79 began the 23d round of interviewing respondents. Data from this survey, which includes updated bankruptcy information, will be available early in 2010.

[44] Not all NLSY79 respondents are used in this research; instead only individuals who participated in the 2004 survey and answered the bankruptcy module were used.

[45] The average respondent completes each survey in slightly more than one hour. This lengthy survey results in an exceptionally large amount of information on respondent's lives. Currently, the NLSY79 public data set has almost 100,000 different variables for researchers to analyze.

The NLSY79 bankruptcy data contain a number of weaknesses that must be noted. The primary weakness is that it only reveals information about consumers who are currently in their 40s; the experiences of younger and older individuals are not captured. Second, the recent surge in bankruptcies caused by the major revision of the Bankruptcy Code in October of 2005 is not captured since the most recent survey (and the only survey asking about consumers' bankruptcy filings) was conducted in 2004.[46] Third, the state where the respondent filed for bankruptcy is not known. The state of filing is important because the generosity of exemptions and in criteria for protecting assets from creditors in bankruptcy varies dramatically from state to state. Because many NLSY79 respondents are quite mobile and because state identifiers are not provided to the public, it is very difficult to use survey data to identify where consumers filed, thus our results are not adjusted to account for differences in state law. Fourth, a respondent who marries someone after they filed for bankruptcy could answer that they or their spouse filed for bankruptcy. Unfortunately, in such a case, the NLSY79 data are primarily tracking the respondent, even though the bankruptcy happened to their current spouse before the NLSY79 started tracking the individual. To mitigate this issue, this Article analyzes only on the 2004 financial information, which contains data on both parties.[47]

A. Bankruptcy Data

In 2004, a short series of bankruptcy-related questions were added to the NLSY79 survey instrument. The initial bankruptcy-related question asked was "Have you (or your spouse) ever declared bankruptcy?"[48] Out of the 7,661 respondents, 1,066, or 13.5% stated yes.[49]

> The individuals who stated they had filed for bankruptcy were then asked:
> - Number of times they had declared.
> - Whether the bankruptcy was related to the failure of a business?
> - Date the bankruptcy was declared.

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[46] In October 2005 the Bankruptcy Abuse Prevention and Consumer Protection Act modified the rules governing personal bankruptcy. The new law reduced individual's use of chapter 7 to wipe out credit card and other unsecured loans. It also imposed a means test so that people with assets will repay some bills. Last, it required bankruptcy petitioners to go through credit counseling to reduce the number of people who cycle through bankruptcy court more than once.

[47] While the Article focus is on financial and bankruptcy data from the 2004 survey, information collected in prior NLSY79 surveys is used to explain changes in these key indicators.

[48] The series is found in the questionnaire by searching for question PS-3.

[49] Almost all respondents answered the bankruptcy questions. There were 31 refusals and 5 don't know, for a 0.5% non-response rate. The NLSY79 over samples poor individuals, blacks and Hispanics to ensure more accurate research results for these groups. Because of this over-sampling results are reported in this Article after being adjusted by the survey weights, which removes the over-sampling effects and allows the answers to be considered national totals. The 2004 survey weights found in the data set as variable R84957.00 do not adjust the regressions, which are adjusted using the technique's discussed in chapter 2 of NLSY79.

- Type of bankruptcy (chapter 7, 11, or 13).[50]

Table 1 reveals the respondents' answers to these questions, both as a weighted percentage, and as unweighted numbers. The vast majority of the NLSY79 respondents have filed for bankruptcy only once[51] (91%). A minority of these filings were caused by a related business failure (12.1%).[52] Over two-thirds of the bankruptcies were filed under chapter 7 (liquidation bankruptcy) and almost one-third filed under chapter 13 (wage-earner bankruptcy, where creditors are paid over time from debtors' earnings).[53]

Table 1: NLSY79 Bankruptcy Data from 2004 Survey.

Category	**Weighted Percent**	**Number of Respondents**
Ever Filed Bankruptcy		
Yes	13.7%	1,066
No	86.3%	6,543
Number of Times Filed		
One time	91.0%	973
Two times	9.0%	90
Related to a Business Failure	12.1%	96
Average Year Declared	1995	1,021
Type of Bankruptcy		
Chapter 7	66.7%	635
Chapter 13	28.7%	334
Other	4.6%	43

Note: The percent column is adjusted by the 2004 survey weights to account for over-sampled respondents.

[50] No respondents chose chapter 12, which is the family farmer reorganization. There were 39 respondents who stated chapter 11, which is business reorganization.

[51] All tests were rerun by dropping respondents who filed multiple times. The results were very similar to what is reported.

[52] The average bankruptcy happened in 1995, but respondents declared bankruptcies as early as 1979 and as late as 2004.

[53] The NLSY79 data show a steadily rising pattern of bankruptcies. Each year on average 0.5% of all young baby boomers file for bankruptcy. This figure includes the early 1980s, when many respondents were teenagers and few declared bankruptcy (0.075%) and the early 2000s, when many respondents declared (0.8%). Assuming a steady half-percent pattern, one-fifth of all respondents should file for bankruptcy in 14 more years.

B. Pre- and Post-Discharge Financial Indicators

To understand the impact of the bankruptcy discharge on a debtor's financial distress, this research analyzes four sets of indicators: (i) key assets and debts; (ii) income; (iii) wealth; and (iv) savings.

Key assets and debts include owning a car, owning a home and having savings accounts, and the incidence of their encumbrance. The presence of such key assets held by a consumer is a prospective proxy for financial well-being. This well-being marker may, however, be compromised by a high level of encumbrance.

Income is the amount of money earned by respondents in each time period *(i.e.*, a weekly paycheck). It is the flow or stream of money off which people live.

In addition to income measures, this study looks at measures of wealth, both at the time of financial distress, as well as over time. Wealth measures include an assessment of savings and investments, both accumulated and inherited.[54] Numerous studies have shown the critical role wealth accumulation has in economic and social well-being.[55]

Wealth is a stock measure; the difference between a person's assets and liabilities. Wealth is the reserve or cushion that people fall back upon to meet large expenditures, unexpected emergencies and can be expended during periods when income is expected to be low.[56] Wealth accumulation gives consumers the ability to stave off severe financial distress, even when faced with unexpected adverse financial events (i.e. divorce, sickness-related expenses, job loss). Savings is the

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[54] *See* John D. and Catherine T. MacArthur, *Economic Status*, Research Network on Socioeconomic Status and Health, http://www.macses.ucsf.edu/Research/Social%20Environment/notebook/economic.html; *see also* Sarah Molseed, *An Ownership Society for All: Community Development Financial Institutions As the Bridge Between Wealth Inequality and Asset-Building Policies*, 13 GEO. J. ON POVERTY L. & POL'Y 489, 502 (2006) (defining "wealth management" as relationship between individual's debts and assets); David A. Weisbach and Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 YALE L.J. 955, 959, 1009–10 (2004) (arguing tax system needs to take into account market valuations of debts and income of taxpayers to properly assess overall wealth measurement).

[55] *See* John Karl Scholz and Barbara Wolfe, *How Health, Education, Wealth, and Family Resources Are Shaping Economic Inequality*, Institute for Research on Poverty, http://www.irp.wisc.edu/research/inequality/inequalproj.htm; Partha Dasgupta and Karla-Göran Mäler, *Net National Product, Wealth, and Social Well-being*, Cambridge Univ. Press. 4, 69–93 (2000); *see also* Benadette Atuahene, *From Reparation to Restoration: Moving Beyond Restoring Property Rights to Restoring Political and Economic Visibility*, 60 SMU L. REV. 1419, 1452 (2007) (finding that asset accumulation has tremendously positive effect on long-term well-being of communities and individuals).

[56] It is difficult to directly compare flows and stocks, which is why this Article looks at them separately. For example, the water pouring into a bathtub is a flow, such as income. The amount of water in the bathtub is a stock, such as wealth. The flow is a rate per minute measure while the stock is the volume at a particular time point. *See* Daniel S. Goldberg, *The Aches and Pains of Transition to a Consumption Tax: Can We Get There From Here?*, 26 VA. TAX REV. 447, 450–51 (2007) (calculating income for tax purposes as taxpayer's personal consumption during year plus increase in wealth during year); Twila L. Perry, *Transracial Adoption and Generation: An Essay on Race, Power, Family and Community*, 26 B.C. THIRD WORLD L.J. 25, 45 n.84 (2006) ("Income refers to a flow of money over time, like a rate per hour, week or year; wealth is a stock of assets owned at a particular time. Wealth is what people own, while income is what people receive for work, retirement, or social welfare.").

change in wealth over a given time frame. For purposes of this Article's analysis, the time frame is one year.

Table 2 shows there are large differences between filers and non-filers for the four sets of indicators. Respondents who filed for bankruptcy have a higher rate of vehicle ownership (92.4%) than non-filers (89.3%).[57] Not surprisingly, bankruptcy filers also have their vehicles encumbered at a higher rate (49.2%) than non-filers (41.6%). With respect to homeownership, 71.2% of all respondents stated they owned their home or apartment.[58] Respondents who filed for bankruptcy, however, are much less likely to own their home (59.3%) than those who did not file (73.3%). Correspondingly, respondents who filed for bankruptcy are less likely to owe money secured by their home and carry a mortgage than non-filers (52.5% vs. 58.2%). Additionally, people who have not filed for bankruptcy are more likely to have savings (80.8% vs. 73.3%) and have a credit card (68.7% vs. 53.7%).

Wage and income level measures are based on four sets of questions asked in the NLSY79 income module. The first set asked respondents about their before-tax income from wages, salaries, tips, and self-employment, for themselves and their spouse.[59] The non bankruptcy-filing respondents earned much more in wages (+$18,216) than their filing counterparts. The income module also asked for details about government transfers, welfare payments, and private transfers, such as child support, alimony and gifts and well as income from other sources such as scholarships, interest, dividends and rent. The answers to these additional income questions were added to the wage data to generate the "total income past year" figure. This number was much higher for those respondents who had never filed for bankruptcy (+$20,428). The income portion of the table further reveals that non-filers are more likely to be full-time workers (+2.9%) and work slightly more weeks during the year (+0.4) than filers.[60]

Wealth data were calculated from the module which asked respondents to report details about their assets and liabilities. For example, respondents provided information on the amount of money they had in checking and savings accounts; the

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[57] Table 2's top set of indicators, which shows the existence of key assets and debts, are based on simple yes-no questions in the survey. For example respondents were asked if they have "a car or other type of motor vehicle for personal use?" Those who said yes were asked the number they owned, the make, model, and if they owed money on the vehicle. For each vehicle owned, the respondent also provided the current market value and the amount of money, if any, they owed. Those who said yes were marked as owning a vehicle, after excluding company and leased vehicles. While the NLSY79 includes information on the number of leased cars this research excludes leased cars from the results. Including leased cars boosts car ownership by slightly more than one percentage point but has little impact on the other findings. A small number of people in the U.S. only own a motorcycle. Unfortunately, the motorcycle ownership question was not asked to poor individuals and when the question was asked the text included all other vehicles such as boats, trailers, motor homes snowmobiles and jet skis.

[58] In 2004, this is slightly higher than the national average of 69%. *See infra* Table 4; U.S. Census Bureau 2007 "Census Bureau Reports on Residential Vacancies and Homeownership" CB07-144, U.S. Department of Commerce, Washington D.C.

[59] Using this first set of questions we calculated "wages in past year."

[60] Respondents are classified as a full-time worker if variable R84974.00, which tracks weeks worked in 2003, is greater than or equal to 50 weeks. Weeks worked is from the same variable.

value of their stocks, bonds and mutual funds; the value of their businesses, farms and investment real estate; and about any retirement savings such as 401Ks, IRAs and 403B plans.[61] Beside asset information, respondents provided details on their liabilities, including secured debts, such as mortgages and vehicle debt as well as unsecured debt such as credit cards, student loans, and debts owed to businesses and hospitals.

[61] Since some respondents stated they did not know specific amounts for particular asset and debt questions, the survey had a number of mechanisms for handling missing information. First, respondents were asked if they could provide a bracketing set of values, such as between $20,000 and $24,000. If they provided an upper and lower range then the midpoint was used in this research. Second, if respondents did not provide a set of upper and lower numbers, they were asked a series of bracketing questions, such as is the asset worth more or less than $20,000. Each asset and debt has its own set of brackets.

Table 2: Financial Indicators for NLYS79 Respondents from 2004 Survey.

	Overall		**Never Filed Bankruptcy**	**Ever Filed Bankruptcy**	**Difference**
Key Assets & Debts					
Have Vehicle(s) (T/F)	89.5%		89.3%	92.4%	-3.1%
Have Car Debt (T/F)	42.4%		41.6%	49.2%	-7.6%
Own Home (T/F)	71.2%		73.3%	59.3%	14.2%
Have Mortgage (T/F)	57.2%		58.2%	52.5%	5.7%
Have Savings (T/F)	79.5%		80.8%	73.3%	6.5%
Have Credit Card (T/F)	66.4%		68.7%	53.7%	15.0%
Income					
Full Time Worker (T/F)	72.4%		72.9%	70.0%	2.9%
Weeks Worked (0–52)	41.3		41.4	41.0	0.4
Wages in Past Year	$63,464		$66,147	$47,931	$18,216
Total Income Past Year	$73,620		$76,580	$56,152	$20,428
Wealth					
Net Worth	$176,305		$192,251	$85,254	$106,997
Home Equity	$112,455		$118,510	$65,754	$52,756
Home Equity Percent	44.2%		45.3%	36.8%	8.5%
Vehicle Equity	$12,844		$13,606	$8,265	$5,341
Vehicle Equity Percent	70%		71%	61%	10%
Savings					
# Years Live Off Saving	1.7		1.9	0.8	1.1
Amount Saved Past Yr	$4,750		$5,525	$2,075	$3,450
Number of Families	7,661		6,543	1,066	

A "net worth" series was created for each respondent by summing the value of the assets disclosed in the wealth module and subtracting from that total, all of the reported debt.[62] Similar measures were taken to arrive at "home equity" and "vehicle equity" figures.[63] With respect to net worth, respondents who never filed for bankruptcy have much higher average net worth (+$106,997), home equity (+$52,756), home equity percent (+8.5%), vehicle equity (+$5,341) and vehicle equity percent (+10%) than their filing counterparts.

The final financial indicator examined in this study is savings. An evaluation of respondent savings is important because savings is the financial cushion that may enable the avoidance of the experience of severe financial distress. The first savings measure is the number of years a respondent can live off the pool of savings. This is calculated by dividing the respondent's total income by their net worth.[64] This ratio answers the question of how long a family can continue to pay its fixed expenses if no wages are earned, all assets are liquidated and all debts are paid off. For example, if someone has a yearly income of $25,000 and has a net worth of $75,000 they could exist for three years by spending down wealth. The table shows that non-filers can live off their savings slightly more than one year (+1.1) longer than their filing counterparts.

The other savings indicator is the amount of money saved in the past year. This indicator looks at the change in wealth over time and does not penalize bankruptcy filers for starting at a lower level of wealth.[65] This indicator shows whether bankruptcy filers are re-establishing their financial cushion or savings level at the same rate as non-filers. Non-filers are saving thousands more dollars each year (+$3,450).

C. Demographic Makeup of Respondents

Do people who file for bankruptcy have different backgrounds than those who have not filed? The NLSY79 survey reveals that respondents who filed for bankruptcy are more likely to be divorced, female, less educated, lower income, living in urban areas and have bigger families than people who have not accessed the bankruptcy system.[66]

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[62] More information on constructing the net-worth series is described in Jay Zagorsky, *Young Baby Boomers' Wealth*, 45 REVIEW OF INCOME AND WEALTH 135, 135–56 (1999).

[63] The real estate section starts by asking "Is the house/apartment in which you live either owned or being bought by you?" Those who said yes were asked how much their "residence would sell for on today's market?" Respondents were then asked about secured debts, such as mortgages, and other debts such as assessments. Respondents then reported second homes or time-shares not held for business purposes. The value and debt of second homes were added to the total home value and debt figures.

[64] To avoid outliers from influencing the results, all people who stated annual total income of less than $1,000 were not included in the calculations. Individuals with a negative net worth, which results in negative figures were kept. People with figures beyond 35 years were capped at 35 years to prevent the very rich from skewing the results.

[65] Amount saved in the past year is calculated by taking the change in net worth from 2000, the previous year the wealth module was fielded, to 2004 and dividing by four years.

[66] *See supra* note 27 and accompanying text.

Table 3 shows that the NLSY79 tracks the experience of whites[67] (79.3%), blacks (14.2%) and Hispanics (6.5%).[68] However, among those who have filed for bankruptcy, blacks (15.7%) represent a slightly larger proportion of this group than they represent in the overall population. The typical respondent is almost 43 years old in 2004, with respondents' ages ranging from 39 to 47 years.[69] The average respondent has completed 12th grade, and attended an additional 1.5 years of college.[70] Overall, the typical respondent has almost 2 children (1.86), but respondents who filed for bankruptcy have more children (2.04) and lower income ($54,646) than those who have never filed for bankruptcy (1.84 children and $74,709 in income).

Among those bankruptcy filers, women comprise a larger percentage (54.4%) than in the overall population (49.1%). The vast majority of respondents are working at full-time jobs (72.4%) but again there are differences based on bankruptcy status (never filed for bankruptcy 72.8%; filed for bankruptcy 70%). Among those who have filed for bankruptcy, fewer respondents are married (59.8%) than among those who have never filed (65.4%). Finally, those who have filed for bankruptcy are more likely to live in urban, than rural or suburban areas (69.9% vs. 66.9%).

The third section of the table contains information on the four factors that previous research has associated with bankruptcy. Individuals who have filed for bankruptcy have much higher divorce rates (52.5%) than non-filers (31.1%), though it is impossible to tell the extent to which divorce is a cause or one of the effects of bankruptcy. Bankruptcy filers are covered by health plans at lower rates (77.9%) than non-filers (84.5%).[71]

The last section of the table looks back to the respondent's financial status at age 28.[72] While some respondents report filed for bankruptcy in their late teens and early twenties, 83% of young baby boomers filed for bankruptcy after age 28, with the typical person filing between the ages of 34 and 35. The table shows that

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[67] A small number of Asians and Native Americans are grouped in the white category. A more precise name for this group is respondents who are not-black and not-Hispanic.

[68] Table 3 shows the demographic makeup of NLSY79 respondents who answered the 2004 survey. The table has three columns of data. The first column tracks the entire sample; the second column tracks those who until 2004 never filed bankruptcy, and the third column tracks those people who filed.

[69] This age range is commonly referred in the press as the young baby boomer generation. *See* Lynda Aiman-Smith, et al., *The Coming Knowledge and Capability Shortage*, 49 RESEARCH TECH. MGMT. 49 (4) (2006) (finding, as of July 2006, that 76 million "baby boomers" were born in United States between 1946 and 1964); *Millennium Launches Global Mature Marketing Initiative*, MARKETING WEEK, June 14, 2007, at 10 (aiming "Baby Boomer" marketing campaign at Americans attaining an age over fifty years old as of June 2007).

[70] Interestingly, those who have never filed for bankruptcy have gone to school for almost one more year (13.6 years) than those respondents who filed for bankruptcy (12.7 years).

[71] The "% Time Have Insurance" tracks from 1989 to 2004, the percentage of times a respondent answered that currently they were covered by health insurance. Respondents were asked at ten different points in time over this period about their health insurance coverage.

[72] Age 28 was chosen because almost all (97.7%) NLSY79 respondents provided financial information at that age. Other ages have much lower rates. For example, using age 25 resulted in data for just 61.8% of respondents.

people who filed for bankruptcy had roughly half the net worth (mean $27,699, median $5,200) during their late 20s of those who did not file (mean $43,791, median $12,200). In simple terms, respondents who filed for bankruptcy to relieve their financial distress did not start financially in the same place as their non-filing peers.

III. STATISTICAL ANALYSIS

This Article uses two different methods of analyzing the NLSY79 data: (i) a simple table analysis, and (ii) regression analysis.

Simple table analysis divides respondents into two groups; bankruptcy filers and non-filers. The filers are then sub-divided into the number of years since they last filed for bankruptcy. Individuals who filed are grouped into five categories based on when they filed: within the past year, between 1 to 5 years ago, 5 to 10 years, 10 to 15 years and more than 15 years. These specific breakdowns are arbitrary and do not adjust for the social or demographic differences highlighted previously. While crude, these simple breakdowns show results that match those produced by more sophisticated techniques; our results can be seen clearly in the raw unadjusted information.

The second technique used is regression analysis. Regression analysis allows adjustment of the data for bankruptcy filers' different backgrounds and experiences. Moreover, while table analysis shows roughly what happens, regression analysis provides a more precisely measured answer.[73]

This research uses regression analysis to estimate the impact of bankruptcy on various financial indicators, such as income, wealth and having a credit card. The analysis adjusts for factors such as time elapsed since a bankruptcy filing, a range of

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[73] Set forth below is a simple primer on regression analysis. Regression analysis estimates equations. An equation is simply a formula that shows the relationship between two variables. This research primarily uses the Ordinary Least Squares (OLS) regression technique, which assumes the best fitting equation is a line.

Here is a simple example: overeating leads to weight gain. Regression analysis formally determines the exact relationship between eating a certain number of calories and how much weight a person gains. Regression analysis not only determines the relationship between two items, such as calories consumed and weight gained, but also allows adjustment for other factors. For example, many younger people metabolize, or burn off, extra calories more quickly than older people. This means that weight gain is a function of both the extra calories eaten and a person's age. This sentence is written mathematically as:

Weight Gain in Pounds = function (Calories, Age).

Regression analysis estimates the impact of both factors (calories and age) on weight gain. Let's assume that for our data after running a regression we get an equation that looks like:

Weight Gain in Pounds = 1/3500 × Calories + 0.01 × Age.

This equation is useful for making predictions because it states that if you eat a very rich desert that contains 1,750 calories you will gain on average about half-a-pound, plus a little more depending on your exact age. The numbers in front of calories and age are called the regression coefficients and these numbers show the impact each factor has on the outcome, in this example weight gain.

personal characteristics, and a variety of problems that may lead to financial distress.[74] These concepts are written mathematically as:

> Financial Indicator = function (If Person Went Bankrupt, Time since Bankrupt, Personal Characteristics, Any Problems Contributing to Financial Difficulty).

Using the resulting regression, we can predict a person's financial outcome, such as their income, if we are given information about all the items inside the parenthesis, such as their age, education, marital status and if they filed for bankruptcy. We can also predict a person's financial outcome if we flip their bankruptcy status to the opposite of what actually occurred and keep all the other information exactly the same. Why would we want to make two predictions? The difference between the two predictions measures mathematically the impact bankruptcy has on the particular financial indicator, after taking into account and adjusting for the person's characteristics.

There is a mathematical short cut that precludes our need to make multiple predictions for every single person being analyzed. Because almost all of the terms are identical between the two prediction equations, the difference between the equations is simply the particular term or terms we are changing, times their coefficients.[75] In our bankruptcy analysis, the values for items such as age, education and marital status do not vary between the two predictions, because the person in the comparison has not changed their age, education or anything else. While these demographic items clearly impact overall financial status, they do not impact the difference in financial status for a person. Because they do not impact the difference, we can ignore them when trying to figure out bankruptcy's impact.

In looking at our regression results we focus our attention on two coefficients. The first coefficient is on bankruptcy. This number shows the financial impact or difference between people who did and did not file for bankruptcy, after adjusting for their characteristics. The second and more important coefficient measures the impact of time, in years, since bankruptcy. This coefficient shows the average difference in someone's financial situation when one more year has elapsed since

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[74] The first category checks if the person declared bankruptcy and if so how long since they declared. This category is the focus of interest and is explained in more detail below. The second category is personal characteristics. Let's use as the example income as the financial indicator. Why do some people have higher incomes than others? One factor or characteristic is that more education is related to higher income. In general, high school dropouts earn less than college graduates. Age is another key factor that is also related to income. In general older people earn more than younger because they have more experience. The third category is problems that contribute to financial difficulty. For example, people who get divorced often end up in financial difficulty because divorce is very costly in terms of time and money.

[75] Why does this short cut work? The predictions are first calculated by multiplying each coefficient, which tracks the impact of a particular factor, by the factor's value. In the weight example we first multiply the number of calories eaten by the 1/3500 coefficient. Then we multiply the person's age by 0.01. Then all of these various multiplied results are added together to get the overall impact. In the weight example we add the impact of calories to the impact of age.

bankruptcy. The next sections discuss which of these cases is reflected in the NLSY79 respondent's experiences.

IV. TABLE ANALYSIS FOR THE FILERS AND NON-FILERS

As set forth above in Table 2, except for vehicle ownership, individuals who file for bankruptcy are financially worse off at the time of their filing, than those who have never filed. What happens with the passage of time? Does the gap get wider, narrower or stay the same?

Table 4 sub-divides the bankruptcy filers into five categories based on when they filed. To simplify comparison with the non-filers, the last column replicates the never filed column in Table 2. This table does not adjust for the social or demographic differences highlighted previously. Nevertheless, the findings in Table 4 are clear. Individuals who file for bankruptcy see their financial status improve over time for almost all indicators. These data suggest the bankruptcy filers catch up with the non-filers. However, the table shows the time frame needed to catch up is very long.

The top section of Table 4 shows the impact of time on the six key assets and debts. The line labeled "Have Vehicle(s)" reveals filing for bankruptcy is associated with higher vehicle ownership rates than those who never filed, no matter how close or far the time from the bankruptcy filing date.[76] The second line labeled "Have Car Debt" shows that while the percentage of respondents with car debt declines over time from 52.4% among those who just filed for bankruptcy to 46.1% among those who filed for bankruptcy more than 15 years ago, the figures never reach the 41.6% rate found among the never-filed.

The "Own Home" line shows that home ownership increases steadily from about 50% of respondents who recently filed to 68.4% among those who filed more than 15 years ago.[77] Nevertheless, no matter how long ago bankruptcy occurred, the homeownership rate never reaches the 73.3% level of those who never filed. Mortgage debt is a different story. After more than 15 years since a bankruptcy filing, the percentage of families with a mortgage (58.9%) finally reaches the same level as those who never filed for bankruptcy (58.2%). However, since a smaller percentage of bankruptcy filers own homes, this may suggest bankruptcy filers are financially worse off than non-filers.

The section's final two lines show saving money is also dependent on time since bankruptcy. Only 60% of those who filed less than a year ago reported savings. However, among those who filed more than 15 years ago, almost 74% had savings.

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[76] Cars and trucks are very important items to most U.S. families since they are most family's primary method of transportation. Outside of individuals living in dense urban areas like New York and Chicago, most people living in the U.S. depend on a personal vehicle daily. Motor vehicles are so important in the U.S. that there are 1.2 registered vehicles for every licensed driver. *See* Statistical Abstract of the United States: 2007, U.S. CENSUS BUREAU, Table 1077 (Wash. D.C., 126th ed. 2006).

[77] As is the case with vehicles the Bankruptcy Code varies depending on the state of residence on the ability to protect a family's primary residence. *See* 11 U.S.C. § 522 (2006).

Regaining credit cards is also something that happens over time. Just 18.4% of those who filed less than a year ago had a credit card. After 15 years, however, the percentage of respondents who had a credit card almost reaches the 68.7% found among the never-filed.[78]

[78] There are various types of credit cards. Credit cards primarily issued by money-center banks have low fees, low interest rates and few chances for triggering penalties. Credit cards issued by less established banks and finance companies are marketed primarily to consumers with lower credit scores and shorter credit histories have high fees, high rates and many penalties. The NLSY79 survey only asks if the respondent holds a credit card or owes money to a credit card company. It does not distinguish among the various types of cards. While after 15 years roughly the same percentage of filers and non-filers hold credit cards, it is quite possible that a bankruptcy filer might hold a mix of more expensive credit cards. *See* ROBERT D. MANNING, CREDIT CARD NATION: THE CONSEQUENCES OF AMERICA'S ADDICTION TO CREDIT (Basic Books 2000).

Table 4: Financial Indicators Broken Down By Years Since Bankruptcy

	Filed < 1 YearAgo	**Filed 1 to 5 Years Ago**	**Filed > 5 to 10 Years Ago**	**Filed > 10 to 15 Years Ago**	**Filed > 15 Yrs. Ago**	**Never Filed**
Key Assets & Debt						
Have Vehicle(s)	90.1%	92.3%	92.3%	91.9%	94.6%	89.3%
Have Car Debt	52.4%	50.4%	48.2%	50.2%	46.1%	41.6%
Own Home	50.4%	51.8%	59.0%	62.3%	68.4%	73.3%
Have Mortgage	49.5%	48.3%	51.3%	55.6%	58.9%	58.2%
Have Savings	59.9%	73.9%	75.4%	74.7%	73.8%	80.8%
Have Cred. Card	18.4%	38.2%	59.0%	63.2%	68.1%	68.7%
Income						
Full Time Work	61.5%	73.5%	66.6%	74.4%	70.8%	72.9%
Weeks Worked	42.4	42.8	38.5	42.0	41.8	41.4
Wages Past Year	$44,261	$40,501	$46,405	$50,183	$61,623	$66,147
Total Income	$52,154	$46,233	$55,305	$57,596	$72,296	$76,580
Wealth						
Net Worth	$17,018	$64,106	$85,238	$93,343	$132,772	$192,251
Home Equity	$42,043	$50,018	$61,278	$62,522	$99,153	$118,510
Home Equity %	11.0%	36.8%	35.1%	31.3%	49.2%	45.3%
Vehicle Equity	$3,573	$4,621	$9,085	$8,872	$12,642	$13,606
Vehicle Equity %	54%	60%	60%	58%	70%	71%
Savings						

Yr Live Off Save	0.2	0.6	0.7	0.9	1.4	1.9
Amount Saved	-$1,450	$2,080	$2,112	$2,125	$2,662	$5,525
Number Families	45	296	297	209	174	6,543

The table's income section last column shows almost 73% of the never-filed worked full-time in the past year and on average they worked 41.4 weeks. A review of the various groups of filers over time shows there are two categories where a larger percentage of filers were working full-time and three categories where filers worked more weeks per year than non-filers. While there is no clear pattern in work dimensions, there is a pattern for income. Both average wage and total income do not start rising immediately after bankruptcy, but instead begin about five years later. Individuals 15 or more years after a bankruptcy filing have lower income than those who never-filed.

The table's wealth section shows that individuals who filed for bankruptcy within the past year had a net worth of $17,018. Wealth steadily climbs over time: those respondents who filed for bankruptcy from between 1 to 5 years ago have a net worth of $64,106; those respondents who filed from between 5 to 10 years ago have a net worth of $85,238; respondents who filed for bankruptcy from between 10 to 15 years ago have a net worth of $93,343; and respondents who filed more than 15 years ago have a net worth of $132,772.[79]

Home equity figures, similar to net worth, also follow an upward trajectory, showing that over time, individuals who filed narrow the distance with those who never filed. Nevertheless, the table shows the amount of home equity among filers is lower even after 15 years than among non-filers. This is likely due to their larger debt to value ratios.[80] Among young baby boomers, neither filers nor non-filers own more than half the value of their homes. However, home equity held by filers (49.2%) surpasses those who never filed (45.3%) 15 years after bankruptcy has been filed.

Vehicle equity figures also show an improvement over time indicating a catch-up effect.[81] Even after more than 15 years since bankruptcy, however, equity held

[79] To protect the identity of the richest respondent's the survey top-codes a small number of people which means all respondent's whose net worth was greater than $1.4 million were given the same value. All top-coded respondents were dropped since each has identical values. There were 145 respondents whose net worth was top-coded. Table numbers do not include the top-coded respondents.

[80] The percentage of home equity is important because once someone holds 100% equity they own the asset outright. The lower the equity percentage the less of the asset a person owns. Non-filers have higher market value homes ($202,135 for non-filers vs. $143,207 for filers). Debt values are roughly similar, with respondents who never filed for bankruptcy carrying about $94,000 in mortgage debt while the bankruptcy filers owe almost $88,000.

[81] Not all respondents knew the financial details of their vehicles. If a respondent did not know a vehicle's value, they were first asked if the car was worth more or less than $20,000. Based on that answer, the interviewer asked if the car was worth more or less than either $9,000 or $40,000. For vehicle debt

by filers ($12,642) is still slightly lower than non-filers ($13,606) equity.[82] In percentage terms, the trend over time is less clear. Both groups own a bigger percentage of the value of their vehicles than they own of their homes. Nevertheless, after 15 years, filers (70%) have roughly the same percentage equity as non-filers (71%).

The table's last section shows changes over time with respect to savings. Respondents who filed less than one year ago have sufficient savings to live for less than two-tenths of a year on just their savings. Not surprisingly, these respondents saw their net worth fall by $1,450 over the same year. However, as the bankruptcy filings recede in time, the amount of years the average person could live off their savings grows to 1.4 years. While this is still less than the 1.9 years non-filers can live, the trend shows that bankruptcy filers are reducing the gap over time. The data on the "amount saved" line also indicates a shrinking gap between the filers and non-filers as the time since filing recedes.

Overall, the table shows that for many but not all categories, the gap between the filers and non-filers recedes over time. For a few categories, such as vehicle ownership, filers start out ahead of non-filers. None of the data in Table 4 indicate that over time the size of financial gap between bankruptcy filers and non-filers either gets wider or stays the same; for the most part, the size of the financial gap between these two groups narrows over time.

V. REGRESSION ANALYSIS

A. The financial impact of bankruptcy over time.

It is impossible to draw definitive conclusions based on the data set forth in Table 4 because the table does not account for the different social and economic status of people who file for bankruptcy. Regression analysis, however, allows us to account for such differences and provide a specific measure of whether the financial gap between filers and non-filers gets bigger, smaller or does not change over time.

Table 5 contains the two key coefficients in the regression results. Complete regression results are shown in the Article's appendix. The first coefficient measures the financial impact of bankruptcy, after adjusting for a person's characteristics. The second coefficient measures the impact of time since bankruptcy. This coefficient shows the average difference in someone's financial

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questions, the first question asked if the respondent owed more or less than $17,000. The follow up questions asked if they owed more or less than $8,000 and $32,000. After the survey was over, the average car value for each bracket was computed from all respondents who knew their vehicle's value. These averages were then used as the best guess for people who only provided a bracketed answer.

[82] Families who have filed for bankruptcy own cars that are worth less and are encumbered with more debt. The average car value in 2004 among just vehicle owners for all non-filers is $20,233 and $15,154 for filers. Average car debt is very similar between non-filers ($6,617) and filers ($6,889).

situation for each year that has elapsed since a bankruptcy filing.[83] If the second coefficient is negative, each additional year since bankruptcy diminishes a person's financial condition; they continue to fall further behind their peers. If the coefficient is zero, then each additional year since bankruptcy has no impact on respondents' financial condition and they are neither catching up to nor falling further behind their peers. If the coefficient is positive, then each additional year since bankruptcy is associated with improving financial standing. This means the average respondent is catching up with their peers.[84]

[83] It is possible that some people might start their recovery slowly and then dramatically improve in later years or conversely improve more quickly in the beginning and then slow down their recovery pace. To check if these non-linear recoveries were important to consider, a variable that squared the number of years since bankrupt was included in the regressions. The results from these regressions suggest that linear recovery is the best approximation.

[84] Before looking at the table it is important to understand the concept of statistical significance. The data in the NLSY79 are from a sample—a very large and random sample, but a sample of the U.S. population, nonetheless. As such, each coefficient is a "best" guess of the true coefficient that would result if every young baby boomer was surveyed. This means the "best" guess is by definition imprecise. Coefficients that are measured with more precision are followed by a "*." Coefficients without a "*" are measured without precision and are potentially zero. Not having a "*"means there is a chance that factor has no impact. In this research a star is placed next to a coefficient only when statistically there is at least a 95 times out of 100 chance the coefficient is not zero. While the minimum level is 95 out of 100 times, the vast majority of starred coefficients exceed this threshold.

Table 5: Impact of Bankruptcy Compared to Peers Who Have Not Filed for Bankruptcy

Category	**Bankruptcy Coefficient**	**Years Since Bankruptcy Coefficient**	**Peer Comparison**
Key Assets & Debt			
Have Vehicle(s)	0.829*	-0.012	Surpass Non-Bankrupt
Have Car Debt	0.390*	-0.012	Surpass Non-Bankrupt
Own Home	-0.486*	0.034*	Catch Up In 14.3 Years
Have Mortgage	1.172*	-0.051*	Surpass Non-Bankrupt
Have Savings	0.033	-0.015	Surpass Non-Bankrupt
Have Cred. Card	-0.882*	0.074*	Catch Up In 11.9 Years
Income			
Full Time Work	0.203	0.008	Surpass Non-Bankrupt
Weeks Worked	2.46*	-0.01	Surpass Non-Bankrupt
Wages Past Year	-$13,187*	$1,023*	Catch Up In 12.9 Years
Total Income	-$15,375*	$1,074*	Catch Up In 14.3 Years
Wealth			
Net Worth	-$76,518*	$2,952*	Catch Up In 25.9 Years
Home Equity	-$41,989*	$1,603*	Catch Up In 26.2 Years
Home Equity %	-0.17*	0.0074*	Catch Up In 23.0 Years
Vehicle Equity	-$5,123*	$305*	Catch Up In 16.8 Years
Vehicle Equity %	-0.12*	0.0047*	Catch Up In 25.5 Years
Savings			
Yr Live Off Save	-1.52*	0.051	Catch Up In 29.8 Years
Amount Saved	-$7,306*	$600*	Catch Up In 12.2 Years

Notes: * means coefficient significant at the 95% level. The "Have Car Debt" and "Have Mortgage" regressions were done only on individuals who owned a car or owned a home.

The table's first section looks at bankruptcy's impact on the probability that a family holds key assets and debts. Since the dependant variable is a yes or no answer, not a specific figure, logistic regressions were run.[85] Four out of six of the "bankruptcy" coefficients are positive, or greater than zero, in this section. The four positive coefficients are "have vehicles, car debt, mortgage and savings." This means for these four indicators, filers are ahead of non-filers, not behind. The negative "years since bankruptcy" coefficients associated with these four indicators mean that over time, the gap between filers and non-filers narrows. The negative coefficients on "own home" and "have a credit card" means for these indicators, bankruptcy filers are behind their peers. However, the positive "year since" coefficients show that filers catch up over time.

The income section, similar to the key asset and debt section, shows a positive "bankruptcy" coefficient on being a full time workers and a positive coefficient on "years since." This suggests that bankruptcy filers are more likely to be working full time than non-filers.

The income section's "weeks worked" coefficients (2.46, -0.01) show the average bankruptcy filer works almost two-and-a-half more weeks per year than non-filers. Moreover, the -0.01 "years since" coefficient is close to zero in size and statistically not distinguishable from zero. This means that the passage of time does not reduce the number of weeks worked by bankruptcy filers. In simple language, bankruptcy filers start off and stay well ahead of their peers in time working.

The -$13,187 bankruptcy coefficient on the "wages past year" line shows that the average filer earns thirteen-thousand dollars less in wages per year. However, the $1,023 "years since" coefficient means this wage penalty is not permanent. After roughly thirteen years bankruptcy filers catch up with their peers. The coefficients on the "total income" line are slightly larger than the wage coefficients, which mean it takes slightly longer (+1.4 years) to catch up for the broader income measure.[86]

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[85] This section uses two types of regressions. Logistic regressions are used when the dependant or left-hand-side variable is a Boolean or true-false. Ordinary least squares (OLS) regressions are used when the dependant variable takes on many values, like income. Logistic regressions calculate the probability an event occurs while OLS regressions calculate the expected value. For both types of regressions each variable value is first multiplied by its coefficient and then the results are summed. For OLS regressions the summed result is the expected value. For logistic regressions there is one more step. The summed value is inserted into the equation $e^{value}/(1+e^{value})$ to get the probability. For more details on logistic regressions see ROBERT PINDYCK AND DANIEL RUBINFELD, ECONOMETRIC MODELS AND ECONOMIC FORECASTS, 307–11 (Irwin Professional Pub., 4th ed. 1997).

[86] It is worth revisiting Professor Porter's and Thorne's conclusion that increased and stable income is the most reliable indicator of post-bankruptcy success—at least in the post-discharge short-term. *See* Porter & Thorne, *supra* note 3, at 95.

The first line of the wealth section, labeled "net worth" shows that filers have a net worth of almost seventy-seven thousand dollars ($76,518) below non-filers. However, as bankruptcy filings recede, net worth grows by almost three-thousand dollars ($2,952) annually. This means after roughly twenty-six years bankruptcy filers have caught up with their peers.

The second and third lines track home equity in both absolute and percentage terms. Bankruptcy filers have forty-two thousand dollars ($41,989) less in home equity than those who have never filed for bankruptcy. As time elapses, equity increases an average of ~$1,600 annually which means after 26 years the typical filer has caught up with peers. The percentage of home equity, which tracks the amount of the home a family owns, shows that bankruptcy filers have seventeen percent less equity in their homes than non-filers. However, the 0.0074 "years since" coefficient means filers catch up by about three-quarters of a percent in each year following the bankruptcy filing.

The wealth section's last two lines track vehicle equity. In absolute terms, filers have five thousand dollars ($5,123) less vehicle equity than non-filers. As time elapses, filers' equity increases $305 annually. This means after 17 years the average filer has caught up with peers with respect to equity in their vehicle. The percentage of cars and trucks a family owns, tracked by "vehicle equity %" shows filers have twelve percent less equity than non-filers. However, the 0.0047 "years since" coefficient means filers catch up by about half a percent per year.

The first line in the sections setting forth the value of "savings" shows that financial distress leading to bankruptcy results in bankruptcy filers have less savings—thus giving them a live-off-savings cushion of ~ one-and-a-half (1.52) years less than non-filers. However, the "years since" 0.051 coefficient means that after almost thirty years, filers have caught up with their peers. The final line tracking "amount saved" represents the yearly change in wealth. The -$7,306 figure shows that bankruptcy filers' savings are reduced by over seven-thousand dollars when they file. However, each year beyond filing, the average filer is able to increase their savings by an average of $600.

B. Regression Analysis Results

Overall, what do the seventeen regressions show? Seven regressions were run on binary or true/false outcomes, such as, "is a car owned?" Five of these binary regressions revealed that bankruptcy filers had a high probability of owning a car, having a car loan, having a mortgage, having some savings and being a full-time worker, relative to non-filers. In simple terms these regressions show that even after adjusting for differences in characteristics between the filers and non-filers, the simplest financial indicators show that bankruptcy filers are not lagging behind their non-filing counterparts.

The more complex regressions show a more nuanced pattern. The wealth and savings section of the table shows that bankruptcy's impact follows a V shaped

pattern. Financial condition falls precipitously upon a bankruptcy filing and then catches up slowly over time. The wage and total income regressions show the same V shaped pattern. Overall, the findings in this section show that using the more complex regression analysis produces findings similar to those reached by using the simpler table analysis. Adjusting or not adjusting for the social and economic differences between filers and non-filers does not appear to impact the results.

C. Does the Chapter Matter?

Most consumers file for bankruptcy either under chapter 7, (liquidation bankruptcy) or under chapter 13 (wage earner bankruptcy). Looking solely at the issue of the time needed to recover from the financial distress that precipitates a bankruptcy filing, which bankruptcy chapter is more beneficial?

To calculate the time needed to recover from bankruptcy, all regressions were rerun, first by eliminating all bankruptcy filers who did not file under chapter 7 and then eliminating all bankruptcy filers who did not file under chapter 13. This means each regression was run using a select portion of the individuals who did file for bankruptcy, plus all individuals who did not file.[87]

The most important column is labeled "comparison," which shows how long it takes a bankruptcy filer to catch up. The "comparison" columns shows that except for income, individuals who filed under chapter 7 take longer to catch up with their non-filing peers than those respondents who filed under chapter 13. The case is reversed for "wage" and "total income," figures: respondents who filed under chapter 13 take longer to catch up than respondents who filed under chapter 7.

[87] To again save space just the two key regression coefficients needed to predict the average time for recovery are presented in Table 6. The other coefficients that track the impact of factors such as age, highest grade completed or income are not shown. Table 6's left hand side tracks chapter 7 while the right hand side tracks chapter 13. In both sides the column marked "bankruptcy coefficient" shows the impact of filing for bankruptcy while the next column shows the impact of an additional year since bankruptcy.

Table 6: Time to Recover By Chapter

Category	Chapter 7 Bankruptcy Coefficient	Chapter 7 Years Since Coefficient	Chapter 7 Comparison	Chapter 13 Bankruptcy Coefficient	Chap. 13 Years Since	Chapter 13 Comparison
Key Assets						
Vehicle(s)	0.425	0.020	Surpass	1.404*	-0.046	Surpass
Car Debt	0.447*	-0.016	Surpass	0.306	-0.019	Surpass
Home	-0.799*	0.059*	Catch Up 13.5	0.132	-0.013	Surpass
Mortgage	0.942*	-0.005	Surpass	1.626*	-0.115*	Surpass
Savings	0.033	-0.004	Surpass	0.004	-0.030	Surpass
Crd. Card	-0.788*	0.078*	Catch Up 10.1	-1.164*	0.069*	Catch Up 16.8
Income						
Full Time	-0.187	0.038*	Catch Up 4.9	0.919*	-0.043	Surpass
Wk Work	0.162	0.157	Surpass	6.60*	-0.31	Surpass
Wages	-$16,237*	$1,494*	Catch Up 10.9	-$7,610	$384	Catch Up 19.8
Income	-$17,494*	$1,488*	Catch Up 11.7	-$10,707	$516	Catch Up 20.8
Wealth						
Net Worth	-$77,351*	$2,517*	Catch Up 30.7	-$66,404*	$3,395*	Catch Up 19.6
Home Eq.	-$42,891*	$1,458	Catch Up 29.4	-$37,499*	$1,454*	Catch Up 25.8
Home %	-0.173*	0.0061	Catch Up 28.4	-0.17*	0.0070*	Catch Up 24.2
Vehicle Eq	-$4,989*	$207	Catch Up 24.1	-$5,100*	$497*	Catch Up 10.3
Vehicle %	-0.121*	0.004	Catch Up 30.3	-0.11*	0.0079*	Catch Up 13.9
Savings						
Yr Live	-1.61*	0.041	Catch Up 39.3	-1.31*	0.077	Catch Up 17.0

Saved	-$5,337	$426	Catch Up 12.5	-$10,040*	$867	Catch Up 11.6

CONCLUSION

The postwar U.S. has experienced an extremely sharp rise in consumer bankruptcies. What happens to these consumers' financial lives after they experience the financial distress that they seek to alleviate by filing for bankruptcy?

Interestingly, families that have filed for bankruptcy own more cars and are more likely to have savings than non-filers. Bankruptcy filers, however, are less likely to own a home or have a credit card. It takes 14 years for bankruptcy filers to reach the same level of homeownership as non-filers and 12 years to reach the same level of credit card holding. Bankruptcy filers are more likely to be employed in a full-time job and work more weeks each year than non-filers. While they earn less and have less total income immediately after bankruptcy, they catch up with non-filing peers approximately 13 years after receiving a discharge.

An examination of wealth indicators such as net worth, car equity and home equity also reveals much lower values for individuals immediately following a bankruptcy filing. Nevertheless, bankruptcy filers catch up with their non-filing peers after roughly two decades. A study of savings shows the same pattern, with filers taking at least a dozen years to catch up.

The finding that respondents filing under chapter 7 take longer to catch up, measured by a number of financially-related indicators, than respondents filing under chapter 13 has important implications for legal reform. If the theoretical justification behind chapter 7 is to offer consumers a "fresh start" then the law as currently implemented fails to meet its goal—at least in the short-term.

These research findings must be read with two caveats. First, while the individuals analyzed are a random cross-section of the U.S. population, the age range of these individuals does not encompass the full spectrum of people who file for bankruptcy; all respondents were under fifty years old. The recovery process for people in their late middle ages or the elderly might be very different from those who are in their peak earning years.

The other caveat is that the answers might have changed for people who have filed for bankruptcy since BAPCPA was enacted, effective October 17, 2005. The bankruptcy revision has made it more difficult than it was under the prior version of the Code, for consumers to file for bankruptcy protection, to receive a discharge, and to discharge as many types of debts. This means that the numbers discussed in this research might be underestimates for the length of time the average person who presently files might need to catch up.

The Article's title asks if after filing for bankruptcy a consumer struggles financially, is in stasis, or experiences a "fresh start." The results in this Article for U.S. young baby boomers are clear; consumers eventually experience a "fresh start"—but on average, it takes many, many years to restore financial well-being.

APPENDIX

Table 5 contains just the key regression coefficients. This Appendix contains the complete set of regression results and shows all coefficients. The tables include standard errors so readers can compute the accuracy of coefficients beyond the simple "*" or no "*."

Table A1: Logistic Regressions with Coefficient Standard Errors in ( ).

	(1) Have Vehicle	(2) Vehicle Debt	(3) Own Home	(4) Have Mortgage	(5) Have Savings	(6) Have C.C.	(7) Work Full-Time
Constant	-1.31 (0.80)	-0.99 (0.54)	-3.87* (0.63)	0.38 (0.80)	-3.76* (0.66)	-4.20* (0.80)	-1.29 (0.80)
Bankrupt (T/F)	0.829* (0.22)	0.390* (0.12)	-0.486* (0.13)	1.172* (0.26)	0.033 (0.14)	-0.882* (0.22)	0.203 (0.22)
Years Since Bankrupt	-0.012 (0.02)	-0.012 (0.012)	-0.034* (0.01)	-0.051* (0.02)	-0.015 (0.01)	0.074* (0.02)	0.008 (0.02)
Black (T/F)	-0.91* (0.10)	-0.19* (0.06)	-0.62* (0.07)	-0.41 (0.10)	-0.90* (0.09)	-0.95* (0. 10)	-0.15* (0. 10)
Hispanic (T/F)	-0.17 (0.12)	-0.18* (0.07)	-0.35* (0.08)	0.11* (0.12)	-0.48* (0.09)	-0.10 (0.12)	-0.07 (0.12)
Age (Years)	0.00 (0.02)	-0.01 (0.01)	0.05* (0.01)	-0.04* (0.02)	0.03* (0.01)	0.02* (0.02)	0.02 (0.02)
Female (T/F)	0.02 (0.08)	0.14* (0.05)	0.16* (0.06)	-0.19* (0.08)	-0.03 (0.07)	0.19* (0.08)	-0.69* (0.08)
Highest Grade	0.11* (0.02)	0.02 (0.01)	0.08* (0.01)	0.06* (0.02)	0.14* (0.02)	0.15* (0.02)	0.06* (0.02)
Currently Married	1.67* (0.11)	0.64* (0.06)	1.33* (0.07)	0.56* (0.10)	0.53* (0.08)	0.77* (0.11)	0.14* (0.11)
Number Children	-0.03 (0.03)	-0.06* (0.02)	0.00 (0.02)	0.01 (0.03)	-0.14* (0.02)	-0.15* (0.03)	-0.11* (0.03)
Live in Urban Area	-0.34* (0.10)	-0.07 (0.06)	-0.72* (0.07)	0.42* (0.08)	0.05 (0.08)	0.10 (0.10)	0.07 (0.10)
Ever Divorced (T/F)	0.55* (0.09)	0.29* (0.06)	0.05 (0.07)	0.20* (0.09)	0.11 (0.07)	0.04 (0.09)	0.17* (0.09)
Percent Time Health Insure	1.27* (0.16)	0.64* (0.13)	1.23* (0.14)	1.35* (0.19)	1.69* (0.14)	1.71* (0.16)	0.94* (0.16)

Primary Job Self Employed	-0.18 (0.09)	-0.20* (0.06)	0.03* (0.07)	-0.24* (0.09)	-0.07 (0.07)	0.20* (0.09)	0.04 (0.09)
Number Jobs	0.03* (0.01)	0.002* (0.005)	-0.02* (0.01)	0.03* (0.01)	0.00 (0.005)	-0.01* (0.01)	-0.02* (0.01)
Income	.000007* (0.00)	.000001* (0.00)	.00002* (0.00)	-.000001* (0.00)	.00002* (0.00)	.000005* (0.00)	.000005* (0.00)
Wealth At Age 28	-.000001* (0.00)	-.000001* (0.00)	-.000002* (0.00)	-.000002* (0.00)	.000002* (0.00)	-.0000003 (0.00)	-.0000004* (0.00)

Table A2: Least Squares Regressions with Coefficient Standard Errors in ( ).

	(8) Weeks Worked	(9) Wages	(10) Total Income	(11) Net Worth	(12) Home Equity
Constant	17.0* (4.64)	-83,504* (12203)	-85,921* (16490)	-272,220* (42900)	-132,298* (33825)
Bankrupt (T/F)	2.46* (1.09)	-13,187* (2902)	-15,375* (3899)	-76,518* (9964)	-41,989* (8638)
Years Since Bankrupt	0.014 (0.11)	1,022* (280)	1,075* (376)	2,952* (967)	1,630* (795)
Black (T/F)	-1.15* (0.58)	-14,315* (1524)	-14,778* (2069)	55,771* (5378)	31,251* (4386)
Hispanic (T/F)	0.25 (0.66)	-5,657* (1726)	-6,073* (2334)	11,544* (6042)	11,580* (4722)
Age (Years)	0.17 (0.10)	470 (272)	496 (367)	4,029* (953)	2,981* (738)
Female (T/F)	-5.45* (0.47)	-7,780* (1236)	-7,460* (1671)	-8,597* (4331)	1,845 (3350)
Highest Grade	0.69* (0.10)	5,766* (246)	6,385* (333)	10,898* (893)	4,108* (675)
Currently Married	2.25* (0.54)	34,170* (1409)	35,630* (1906)	40,050* (5083)	11,632* (4305)
Number Children	-1.11* (0.16)	688 (435)	770 (589)	-1,625 (1519)	-1,629 (1282)
Live in Urban Area	0.26 (0.53)	5,039* (1405)	4,130* (1897)	-3,353 (4911)	-6,345 (3629)
Ever Divorced (T/F)	1.87* (0.52)	237 (1381)	593 (1870)	-14,284* (4820)	-11,651* (3889)
Percent Time Health Insure	10.67* (1.06)	35,173* (2754)	35,755* (3760)	72,544* (9777)	42,155* (9063)
Primary Job Self Employed	0.65 (0.53)	-807 (1393)	3,898* (1887)	14,244* (4924)	17,638* (3834)
Number Jobs	0.03 (0.04)	-132 (104)	-189 (141)	-1,512* (366)	-454 (307)
Income	.000014* (0.00)	N.A.	N.A.	1.12* (0.04)	0.19* (0.02)
Wealth At Age 28	-.000002 (0.00)	0.05* (0.005)	0.06* (0.006)	0.32* (0.02)	0.06* (0.01)
R^2	0.08	0.30	0.22	0.35	0.12

Number Observations	6,916	7,203	6,916	6,636	4,431

	(13) Home Equity %	(14) Vehicle Equity	(15) Vehicle Equity %	(16) Year Live Save	(17) Amount Saved
Constant	0.52* (0.13)	-1,874* (3974)	0.81* (0.11)	-1.80 (1.09)	-17,422 (11748)
Bankrupt (T/F)	-0.17* (0.03)	-5,122* (905)	-0.121* (0.02)	-1.52* (0.25)	-7,306 (2625)
Years Since Bankrupt	0.007* (0.003)	305* (87)	0.004* (0.002)	0.05* (0.02)	600* (254)
Black (T/F)	-0.04* (0.02)	-936* (501)	-0.05* (0.01)	-0.88* (0.14)	127 (1474)
Hispanic (T/F)	-0.03 (0.02)	-453* (549)	-0.05* (0.01)	0.006 (0.15)	5,408* (1609)
Age (Years)	0.01* (0.003)	152* (87)	0.002 (0.002)	0.08* (0.02)	176 (259)
Female (T/F)	0.02* (0.01)	-967* (397)	-0.06 (0.01)	0.03 (0.11)	-1,324 (1166)
Highest Grade	-0.01* (0.002)	82* (81)	-0.004* (0.002)	0.09* (0.02)	475* (240)
Currently Married	0.02 (0.02)	3,159* (472)	-0.05* (0.01)	0.27* (0.13)	5,952* (1394)
Number Children	-0.01* (0.005)	-405 (146)	0.006 (0.004)	-0.07 (0.04)	-12 (434)
Live in Urban Area	-0.06* (0.02)	-1,606 (445)	-0.02 (0.01)	-0.40* (0.12)	1,290 (1310)
Ever Divorced (T/F)	-0.04* (0.02)	263* (447)	0.06* (0.01)	-0.16 (0.12)	-1,371 (1315)
Percent Time Health Insure	-0.06 (0.04)	4,309* (958)	-0.07* (0.03)	1.03* (0.26)	6,368* (2852)
Primary Job Self Employed	0.01 (0.02)	1,965* (452)	0.04* (0.01)	0.59* (0.13)	723 (1339)
Number Jobs	-0.01* (0.001)	-119* (34)	-0.001 (0.002)	-0.02* (0.01)	-44 (100)
Income	-.0000007*	0.05* (0.002)	-.00000001	-.000007*	0.11* (0.01)

	(0.00)		(0.00)	(0.00)	
Wealth At Age 28	-.0000001* (0.00)	0.02* (0.002)	.0000002* (0.00)	.000004* (0.00)	.008 (0.005)
R^2	0.05	0.15	0.03	0.06	0.06
Number Observations	4,467	5,960	5,960	5,623	5,185

Notes to Appendix Table A2: Vehicle and home regressions are done using just respondents who are vehicle or home owners in 2004, to ensure people with zero equity do not bias the results.

Each cell contains a coefficient, potentially a "*" and number in parenthesis. For example, the second row is labeled "Bankrupt (T/F)." The cell for this row in regression 11, which tracks net worth, contains the -$76,518* and (9964). The -$76,518 is the coefficient reported in Table 5. This coefficient means that the average respondent who filed for bankruptcy has a net worth almost seventy-seven thousand dollars less than someone who has not filed. The "*" means the seventy-seven thousand dollar figure is statistically distinguishable from zero at the 95% confidence level. In simple terms this means there is a very high chance the truth is a negative number that is close to -$76,518. The number in parenthesis shows how close. Multiplying the number in parenthesis by 1.96 and then adding and subtracting the result to -$76,518 shows the highest and lowest value we expect to find by sampling the young baby boomer population many times. In this example, while -$76,518 is the most likely impact of declaring bankruptcy, the range the impact could fall into is anywhere from (-$76518-(1.96*$9,964)) to (-$76518+(1.96*$9,964)). Simplifying these numbers means the impact of bankruptcy 95 out of 100 times ranges from -$96,047 to -$56,988, with the most likely outcome being -$76,518. All coefficients in regression 11 with a positive or plus sign in front of them increase net worth, while coefficients with a negative sign or minus sign decrease net worth.

The line marked R^2 tracks how good a job the right-hand side variables do in explaining the variation of the left-hand side variable. An R^2 of zero means the right hand side variables explain nothing, zero percent, while 1 means that the explanatory variables explain one-hundred percent and leave nothing out. For example, regression 11 has an R^2 is 0.35, which is high for wealth regressions.

The line marked "Number Observations" means how many individuals were used in the calculations. For regression 11, data on 6,636 respondents were used.