AN ECONOMIC ANALYSIS OF THE CONSUMER BANKRUPTCY CRISIS

Todd J. Zywicki*

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* Professor of Law, George Mason University School of Law; Senior Research Fellow, James M. Buchanan Center for Political Economy, Program in Philosophy, Politics, and Economics. J.D., University of Virginia; M.A., Economics, Clemson University; A.B., Dartmouth College. I would like to thank the Law and Economics Center at George Mason University School of Law for financial support for this Article. I would also like to thank Enrico Colombatto and the International Centre for Economic Research in Turin, Italy, where I was a Fellow during the drafting of part of this Article. I would like to thank Bill Bratton, James Bowers, Marjorie Girth, David Hyman, Richard Hynes, Iliana Ilieva, Bruce Johnsen, Edith Jones, Kenneth Klee, Tom Krattenmaker, Jim Lacko, David Newhouse, Jan Pappalardo, Joe Pomykala, George Shepherd, David Skeel, Dan Tarullo, Bill Vukowich, Jack Williams, and Kim Zywicki for comments on this Article. Previous versions of this Article were presented at the Society for the Evolutionary Analysis of Law annual conference, the Canadian Law and Economics Association, and workshops at Boston College Law School, Benjamin N. Cardozo School of Law, University of Colorado School of Law, Emory University School of Law, George Mason University School of Law Levy Fellows Workshop, Georgetown University Law Center, George Washington University School of Law, University of Georgia School of Law, Notre Dame University School of Law, University of Virginia School of Law, and the FTC Bureau of Economics Workshop.
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I. INTRODUCTION: THE CONSUMER BANKRUPTCY CRISIS

The test of the validity of a scientific theory is its ability to explain the world. The Traditional model of consumer bankruptcy theory views bankruptcy filings as a result of household financial distress. In the Traditional model, bankruptcy is seen as a largely involuntary act, a “last resort” to deal with insoluble financial problems brought on by exogenous factors such as heavy indebtedness or sudden and unexpected income or expense shocks, such as unemployment, medical problems, or divorce. In the Traditional model, bankruptcy is a form of social insurance, allowing individuals to “smooth” unexpected income or expense shocks. To this day, most bankruptcy scholars continue to believe in the descriptive accuracy of the Traditional model and advocate normative policy recommendations based on it. Moreover, the success of the Traditional model has not been purely academic. The consensus belief in the Traditional model animated the drafting of the 1978 Bankruptcy Code, the basic architecture of which remains in place today.

In the spring of 2005, however, Congress enacted comprehensive bankruptcy reform legislation by an overwhelming bipartisan majority. These political efforts came in response to a surge in consumer bankruptcy filings over the past twenty-five years, and the perception of excessive fraud and abuse in the consumer bankruptcy system. During that period, annual filings rose from 250,000 in 1979 to over 1.5 million last year. But these bankruptcy records come on the back of an era of unprecedented economic prosperity—low unemployment, low interest rates, and a roaring stock market. This anomaly of record-high bankruptcy filings during an era of

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2 For a recent statement of the Traditional model, see Teresa A. Sullivan et al., The Fragile Middle Class: Americans in Debt (2000). The conclusions of the Report of the National Bankruptcy Review Commission also generally reflect the traditional view as well as the policy implications associated with it. See National Bankruptcy Review Commission, Bankruptcy: The Next Twenty Years (1997).


unprecedented prosperity spurred efforts to amend the bankruptcy code and place greater restrictions and conditions on access to bankruptcy, which culminated in the enactment of the recent bankruptcy reform legislation.⁶

Throughout the legislative process, many leading bankruptcy commentators criticized these reform efforts as purely politically motivated and lacking intellectual justification.⁷ Adherents to the Traditional model argue that the surface appearance of prosperity disguises deeper economic problems that remain consistent with the Traditional model. If this is true, then bankruptcy reform designed to place greater conditions on access to bankruptcy appears to be cruel and short-sighted.⁸ Instead, critics argue, policy should focus on alleviating the underlying economic distress, of which increased bankruptcy filings is merely the symptom.⁹

On the other hand, if the upward trend in bankruptcy filings is not the result of increased financial distress, then it is appropriate to consider whether an alternative intellectual model better explains the available evidence. The Traditional model generates a clear, testable hypothesis about trends in consumer bankruptcy filings—consumer bankruptcies should rise as household financial condition deteriorates and should fall during times of prosperity. Household financial condition can change for many reasons, but whatever the causes, the forces must be sufficiently widespread and adverse to account for major changes in bankruptcy filings. With respect to an observable trend, such as the upward consumer bankruptcy trend of the past twenty-five years, the Traditional model predicts that there must be some important, systematic, and chronic negative effect on household financial condition that has continued to worsen over time.

An accurate understanding of the causes of the consumer bankruptcy crisis has important policy implications for American families. The economic and noneconomic costs and benefits of the American consumer bankruptcy system are evident. Consumer bankruptcy provides a fresh start to those who need it, relieves them of the financial and psychological bur-

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⁸ Professor Elizabeth Warren, a leading adherent to the Traditional model, for instance, states, “Those who want to say the way to solve rising consumer bankruptcy is by changing the law are the same people who would have said during a malaria epidemic that the way to cut down on hospital admissions is to lock the door.” Peter Pae & Stephanie Stoughton, Personal Bankruptcy Filings Hit Record; Easy Credit Blamed; Congress May Act, WASH. POST, June 7, 1998, at A1.

dens of insolvency, and provides incentives for work and entrepreneurship. In addition, the availability of bankruptcy reflects society’s noneconomic values of compassion, charity, and forgiveness. On the other hand, the option of bankruptcy creates a moral hazard problem and increases the risk associated with consumer lending, leading creditors to charge higher interest rates, demand collateral or a larger down payment, increase monitoring to prevent default, or increase penalties for risky behavior such as late payments. At least some of the costs of the consumer bankruptcy system thus are borne by all borrowers as a group; other costs are borne by lenders, and still other costs are social deadweight loss. The noneconomic costs can include the weakening of social and individual virtues of personal responsibility, trust, and reciprocity. The public policy challenge, therefore, is to identify the set of bankruptcy rules that strikes the optimal balance between the benefits and costs of consumer bankruptcy, and where appropriate, to identify reforms that minimize those costs while preserving desired benefits. Identifying the optimal balance begins with understanding the causes of consumer bankruptcy, including the striking developments of recent decades.

For much of the twentieth century, the Traditional model has provided a plausible (albeit imperfect) explanation of bankruptcy filings with normatively clear policy implications. During the Great Depression, for instance, bankruptcy filings surged, but they returned to a much lower level as prosperity returned. The surge in filings over the past twenty-five years, however, has come during a period of prosperity, not misery. Scholars have attempted to reconcile this anomaly by incorporating the available evidence within the Traditional model. If the underlying model is sound, the process of ordinary science will generate increasingly accurate and instructive refinements to the model. If the model is flawed, however, it will become increasingly difficult to account for anomalies, as efforts to account for some anomalies will create incoherence in the model and new anomalies.

11 These economic costs to consumers can be substantial. See Kartik B. Athreya, Welfare Implications of the Bankruptcy Reform Act of 1999, 49 J. MONETARY ECON. 1567, 1583, 1585 (2002) (estimating that American bankruptcy system costs $280 per household in higher credit costs and increases interest rates by 3.2%).
14 See discussion infra Part II.
15 Thomas Kuhn defines an “anomaly” in a scientific model as a violation of “the paradigm-induced expectations that govern normal science,” KUHN, supra note 1, at 52–53, or more simply as a “violation[ ] of expectation.” Id. at ix.
16 See id. at 24.
At some point, the model itself will reach an intellectual “crisis” and collapse, creating an opportunity for a new model to arise and replace it.\footnote{As Kuhn observes, when anomalies arise that appear to falsify the dominant model, scientists “will devise numerous articulations and \textit{ad hoc} modifications of their theory in order to eliminate any apparent conflict.” \textit{Id.} at 78.}

This Article reviews the efforts of the Traditional model to explain the world of consumer bankruptcy in the United States over the past century, and especially the rapid escalation in bankruptcy filings during the past quarter-century. As will become evident, for much of this period, the Traditional model, though crude and imperfect, provided a relatively persuasive explanation for consumer bankruptcy filing patterns, especially when compared to alternative models. Bankruptcies generally rose during economic downturns and fell when prosperity returned. Beginning around the time of the enactment of the 1978 Code, however, dramatic changes fundamentally altered the consumer bankruptcy system. The Traditional model has tried to explain these subsequent developments within its intellectual framework but has been unsuccessful. The inability of the Traditional model to account for the unprecedented developments of the past twenty-five years has brought the Traditional model of consumer bankruptcy to a state of intellectual crisis. Perhaps, then, it is more accurate to speak of the bankruptcy \textit{crises}—the twin crises of the consumer bankruptcy crisis itself as well as the intellectual crisis that has resulted from the inability to accommodate this development within the prevailing intellectual framework.

As Figure 1 indicates, although bankruptcy filings were low and generally cyclical for most of the twentieth century there has been a stunning increase in consumer bankruptcy filing rates during the past twenty-five years, which has increased at accelerating rates over the past two decades.\footnote{See \textit{id.} at 77 (“[C]rises are a necessary precondition for the emergence of novel theories . . . .”). Kuhn describes as an example the attempts that were made to salvage Ptolomy’s astronomic theories in the face of mounting anomalies, leading to increasingly complex and internally inconsistent models. The elaborateness and inaccuracy of the Ptolomeic system paved the way for Copernicus’s breakthroughs. Rigorous scientific testing similarly exposed anomalies in Newton’s theories of physics, which led to the rise of the theory of relativity. \textit{Id.} at 68–74.}
Examining the upward trend in bankruptcy filing rates during the past twenty-five years is the primary focus of this Article. An important caveat is that there are at least four different ways to examine trends in personal bankruptcy filing rates. First, one could model the “background” bankruptcy filing rate that will prevail in any modern industrial economy where bankruptcy results largely from external forces, such as unemployment, divorce, or other unanticipated financial shocks. The Traditional model focuses on these exogenous forces, which continue to have some explanatory power with respect to regional and cyclical bankruptcy filing patterns. Second, one could model the steady-state level of predicted bankruptcy filing rates, based on some assumptions about individual behavior, and explore observed deviations from those predictions. Third, one could create a model that assumes a certain underlying trend line in filing rates and then examines short-term fluctuations in bankruptcy filing rates from period to period. Finally, the fourth model would focus on the nature of the underlying trend line itself, which is the focus of this Article. This Article will ex-

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19 Prior to 1940, separate records were not kept for individual and business bankruptcies; nonetheless, the general cyclical pattern of bankruptcy filings for the first half of the twentieth century is evident. Moss and Johnson estimate that from 1899 to 1909 consumer filings were roughly 25 to 50% of total filings. See David A. Moss & Gibbs A. Johnson, The Rise of Consumer Bankruptcy: Evolution, Revolution, or Both?, 73 AM. BANKR. L.J. 311, 314 (1999). Professor Joseph Pomykala estimates that in 1930, approximately 70% of filings were nonbusiness filings, which grew to approximately 75% of filings by the end of the decade. E-mail from Joseph Pomykala to Todd Zywicki (Aug. 5, 2003) (on file with author).

20 See infra note 240 and accompanying text.
plore the Traditional model’s explanation for the trend.21 Although explain-
ing the trend line is the primary purpose of this paper, the other three ways
of examining bankruptcy will be relevant as well. In particular, it will be
important to understand how these other factors operate in order to isolate
the underlying causes of the upward trend in bankruptcy filing rates. This
is the fundamental question of the age for consumer bankruptcy, with cru-
cial intellectual, legal, and political ramifications.

This Article contains six parts. Part II briefly describes the Traditional
model, its rise, and emerging crisis. During its rise, the Traditional model
appeared adequate to explain trends in consumer bankruptcy filings as fil-
ings roughly tracked the business cycle. Indeed, it seems to retain validity
today in explaining some aspects of the underlying exogenous causes of
bankruptcy filings. Nonetheless, the Traditional model is an inadequate
means to explain the unremitting upward trend in bankruptcy filings during
the past twenty-five years.

Parts III and IV examine the efforts that some have made to try to res-
cue the Traditional model. These proponents argue that crude impressions
of consumer well-being fail to capture the reality of consumer financial dis-
tress. Part III examines the first part of the model, which is that consumer
indebtedness has grown over time and has led to increased consumer bank-
ruptcies. Part IV addresses the second part of the model, which is that
bankruptcies have been caused by an increase in household financial
shocks, such as unemployment, downsizing, divorce, health problems,
health costs, and lack of health insurance. This Article will demonstrate
that none of these factors alone or in combination can explain the rise in
bankruptcy filings in recent years.

Although the focus of this Article is to critique the Traditional model,
Part V briefly sketches a description of an alternative model of consumer
bankruptcy, rooted in new institutional economics, which can potentially
explain the rising bankruptcy trends of the past several years better than the
Traditional model. Part VI presents concluding thoughts regarding the fu-
ture course of bankruptcy research in light of the intellectual crisis of the
Traditional model.

II. THE RISE AND CRISIS OF THE TRADITIONAL MODEL

Modern bankruptcy law is grounded in the intellectual foundation of
the Traditional model. For most of the twentieth century, both the intellec-
tual and policy frameworks were generally successful. Over the past
twenty-five years, however, unprecedented intellectual and political chal-

21 Merely critiquing the Traditional model, however, is only half the task—it is necessary also to
provide an alternative model that explains the observed evidence better than the prevailing model or
paradigm, see KUHN, supra note 1, at 77, which I do elsewhere, see Zywicki, supra note 13.
A. The Rise of the Traditional Model: 1898–1978

Throughout the eighteenth and nineteenth centuries in America, debtor relief consisted of a hodge-podge of state laws intermixed with periodic flurries of federal legislation. For the most part, state law governed background debtor-creditor relations, as it continues to do today. In the absence of federal legislation, therefore, state law provided the basic substantive and procedural structure for the formation, enforceability, and collection of debt contracts. During most of the eighteenth and nineteenth centuries, no federal bankruptcy law was in effect, leaving debtor-creditor law solely in the hands of the states.

There were, however, periodic flurries of federal bankruptcy law-making. During periods of extreme financial crisis, such as recessions or depressions, the federal government would enact federal bankruptcy legislation in response to the financial crisis. During the nineteenth century, the federal government enacted three temporary bankruptcy laws prior to the permanent 1898 Act: the Bankruptcy Acts of 1800, 1841, and 1867. Each Act was spawned in the midst of financial crisis and was repealed soon thereafter. The 1800 Act lasted only three years, the 1841 Act lasted only two years, and the 1867 Act was repealed eleven years later. All together, therefore, these three Acts lasted a total of sixteen years. This inability to enact a lasting federal bankruptcy law was, in part, a result of shifting legislative coalitions in Congress, reflecting a variety of regional views regarding the government’s appropriate role in this area. But more fundamentally, this pattern of legislation reflected an underlying belief that the proper role for federal bankruptcy legislation was to track the business cycle—i.e., that bankruptcy relief was a necessary response to widespread financial misery, but that as the economic crisis passed so should the law itself. Thus, although legislative opinions diverged regarding the need and proper scope of a permanent bankruptcy law, there was a shared consensus that in times of economic trouble, federal bankruptcy relief was both

22 See SKEEL, supra note 4, at 1–47.
24 See Todd J. Zywicki, The Bankruptcy Clause, in THE HERITAGE GUIDE TO THE CONSTITUTION (2004). The inclusion of the Bankruptcy Clause in the Constitution was primarily to aid creditors in interstate debt collection, not to protect debtors. Id.
25 SKEEL, supra note 4, at 25.
26 See CHARLES WARREN, BANKRUPTCY IN UNITED STATES HISTORY (1935). As David Skeel observes, though this simplified history is not wholly accurate in all its specifics, nonetheless it is a useful general observation about the history of bankruptcy law in the nineteenth century. See SKEEL, supra note 4, at 24–25.
27 Id. at 25.
28 Id. at 28.
necessary and appropriate. As the crises waned, however, so did the consensus on the need for a bankruptcy law.

This era of temporary bankruptcy law-making ended in 1898 with the enactment of the first permanent bankruptcy law in America. The primary focus of the 1898 Act was business bankruptcy rather than individual bankruptcy, but the 1898 Act did create a new permanent edifice for consumer bankruptcies as well.29 Nonetheless, the 1898 Act did not substantially change the justification for bankruptcy or the observed use of bankruptcy. The justification for bankruptcy continued to provide relief for the “honest but unfortunate debtor” who stumbled into financial catastrophe through job loss, illness, or other major financial setback.30 It also was recognized implicitly that large-scale changes in the nature of the American economy had increased the vulnerability of Americans to such economic setbacks. The general migration from rural farms to urban industrial jobs brought with it a greater and more regular exposure to chronic business cycles and involuntary unemployment.31 It was recognized that some degree of individual and business financial distress was a permanent part of a capitalist economy, thereby implying the need for a permanent bankruptcy law to ameliorate these recurrent economic difficulties.32 At the same time, the increasing national structure of the American economy suggested the need for a bankruptcy law of national scope. Even in the best of times it was expected that there would be some level of individual and business failure, and that one way to deal with this was to make available a permanent federal bankruptcy law.

Consumer bankruptcy filings for most of the twentieth century remained generally consistent with the predictions of the Traditional model.33 As indicated by Figure 2, filings generally rose in tandem with financial distress but then declined with the passage of financial crisis:

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30 Local Loan Co. v. Hunt, 292 U.S. 234, 244 (1934) (noting that the purpose of consumer bankruptcy is to relieve the “honest but unfortunate debtor” from “the weight of oppressive indebtedness and permit him to start afresh”).

31 See ROBERT D. PUTNAM, BOWLING ALONE 368–70 (2000).

32 See WARREN, supra note 26, 144–45.

Perhaps the most striking evidence is provided by the era of the Great Depression and its aftermath. During the Depression, bankruptcy filings peaked in the early 1930s at approximately just under 60 per 100,000 population. Beginning with the entry of the United States into World War II and the subsequent post-War boom, filing numbers plunged, bottoming out to less than 10 per 100,000 filings by 1945. Following the return home after the War and the mild post-War recession, consumer bankruptcies began a brief rise before leveling out at around 20 per 100,000 per year in the late 1940s. During this entire period, however, annual filings never exceeded 70,000 total, as compared to more than 1.5 million filings in 2004 (or over 500 per 100,000 population). Indeed, it was not until 1955 that consumer bankruptcy filings eclipsed the record set in 1931 at the height of the Great Depression. For the next several decades, consumer bankruptcy filings followed a similar trend of peaking during recessions but then tailing back off afterwards during subsequent economic recoveries. Over time, the expansion of consumer credit markets added a new element to the Traditional model of bankruptcy. Increased access to consumer credit, scholars and policymakers argued, was increasing the financial vulnerability of American households, making them more susceptible to other financial stresses.


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34 Overall, substantially more Americans filed bankruptcy in 2004 alone than during the entire decade of the Great Depression.

35 This thesis forms the heart of the “Brookings Study” of the consumer system by David T. Stanley and Marjorie Girth. Published in 1971, this study heavily influenced the Bankruptcy Commission of the 1970s that drafted the 1978 Bankruptcy Code. See David T. Stanley & Marjorie Girth, Bankruptcy: Problem, Process, Reform (1971); see also Vern Countryman, Improvident Credit
Like other adverse economic events, such as unemployment or divorce, this increase in consumer credit and the increased susceptibility it created for American households were thought to explain and justify more liberal bankruptcy laws and gradually rising consumer bankruptcy filings over time.  

In light of the apparent fit between bankruptcy filings and macroeconomic conditions, as well as the absence of any competing models, most scholars and policymakers came to accept the Traditional model and base policy on it. In turn, an intellectual consensus coalesced around the model. Once such a consensus on a working theory emerges and is sustained over time, scholars are reluctant to abandon it. The widespread acceptance of this model animated the drafters of the 1978 Code in their decision to further liberalize consumer bankruptcy laws and to make the discharge of debts more generous. This consensus as to the causes of consumer bankruptcy and the proper policy responses to it continues to underlie the widespread opposition of academics to the proposed bankruptcy reform legislation today. Although the Traditional model continues to have substantial power in explaining an underlying background bankruptcy rate as well as variation around the upward filing trend line (such as regional variations), it breaks down when applied to the fundamental question of the day—what is the cause of the upward trend in bankruptcy filings over the past few decades?

B. The Challenge to the Traditional Model

Consumer bankruptcy scholarship continues to be dominated by the Traditional model of bankruptcy. In the Traditional model, bankruptcy is seen as a form of insurance, designed to protect individuals from overwhelming indebtedness or from sudden and unexpected exogenous shocks to their incomes or expenses. As a result, the decision to file bankruptcy is seen as a largely involuntary act, a last resort for individuals who need a financial fresh start. The rise in bankruptcy filings over the past several years

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36 See Countryman, supra note 35, at 1–2; see also David A. Skeel, Jr., Vern Countryman and the Path of Progressive (and Populist) Bankruptcy Scholarship, 113 Harv. L. Rev. 1075 (2000).

37 On the other hand, the Traditional model was not subject to the sort of rigorous empirical analysis that is available today and bankruptcy filings only loosely tracked macroeconomic conditions, so although an intellectual consensus formed around the model, it is not clear whether that was the result of the model’s strength or rather the absence of any other persuasive model.

38 See Kuhn, supra note 1, at 66.

39 See Skeel, supra note 4, at 136–41.

has not shaken the faith of adherents to the Traditional model; in fact, the increase in filings is in itself seen as evidence of growing financial distress.\footnote{See SULLIVAN ET AL., supra note 2, at 15.} Although the causes of increased bankruptcy filings can be argued, there is little doubt that consumer bankruptcy filings have exploded in the past two decades, as shown in Figure 3:

![Figure 3: Bankruptcy Filings, 1947–2004](source)

As Figure 3 indicates, the per capita bankruptcy rate in America has risen over time, accelerating in the 1980s and 1990s. The total number of bankruptcies more than doubled during the 1980s and then doubled again from 1990 to 2003, such that by 2003 annual consumer bankruptcy filings were five times higher than they were just twenty years earlier. This rapid increase in filings has been especially difficult to explain in light of the prosperous state of the American economy during most of the past two decades, and, especially, the extraordinary prosperity of the late 1990s. Although the American economy set new records for economic growth, low unemployment, and low interest rates, this same period was also marked by record-high bankruptcy filings. The Traditional model has tried to reconcile this anomaly of record-high prosperity matched with record-high bankruptcy filing rates by arguing that the economic prosperity of the past two decades is superficial and masks real underlying economic distress. Proponents of the Traditional model thus do not question its fundamental validity; rather, they advocate digging deeper into the evidence to locate factual support for its continuing explanatory power.\footnote{See id. at xiii–xiv.}
The Traditional model provides a testable hypothesis that the increase in consumer bankruptcy filings is explained by worsening household financial conditions. Scholars applying the Traditional model have identified several areas where they believe that rising economic distress can explain the rise in bankruptcy filings over time. First, they argue that rising bankruptcy rates are a direct function of rising consumer indebtedness. As consumers become more leveraged, they are less able to pay their debts and become more vulnerable to sudden and unexpected income or expenditure shocks. Second, proponents of the Traditional model argue that increasing bankruptcy filing rates result from the same basic forces that have always driven bankruptcy filings, such as sudden and unexpected exogenous shocks to income and expenditures, but that these shocks have increased in frequency and severity.

Closer examination reveals, however, that none of these hypotheses can explain the upward trend in the bankruptcy filing rate, either standing alone or in combination with each other. Before examining each factor in detail, several more general comments about the flaws in the empirical analysis of the Traditional model are in order, as the Traditional model suffers from several theoretical and empirical failings that run through the specific arguments addressed below. First, in some cases the Traditional model has relied on a poor choice of proxy variables to measure the impact of certain factors on bankruptcy filing rates, which has led to problems of endogeneity and erroneous conclusions of cause and effect. Second, many key empirical studies of the Traditional model have lacked a proper control group for their tests. By studying only those in bankruptcy, they have failed to recognize that there may be many people with similar financial difficulties who have not filed bankruptcy, thereby making it impossible to generalize from their sample to the population at large. Third, in several cases the conclusions of the Traditional model appear to be grounded largely in anecdote, rather than systematic data, generating inaccurate generalizations about the full picture. Finally, the Traditional model fails to account for offsetting behavioral adjustments by consumers that will tend to undermine the effects of their proposed reforms.

The bulk of this Article will examine each of the factors that have been identified by the Traditional model as purported causes of rising consumer bankruptcies. As this Article will show, a close examination of the relevant data fails to confirm the hypothesis of the Traditional model that rising consumer bankruptcies have been caused by rising household financial distress.

43 Each of these critiques will be developed in more detail in the discussion that follows to illustrate their relevance, but it is useful to list them briefly at the outset.
44 See infra notes 54–55 and accompanying text.
45 See infra notes 159–161 and accompanying text.
46 See infra notes 164–183 and accompanying text.
47 See infra notes 216–217 and accompanying text.
Part III will examine the hypothesis that increased consumer indebtedness is the primary cause of financial distress, either proximately or as a background cause that is triggered by other factors. Part IV will examine the hypothesis that unexpected financial shocks to households have become more frequent or severe over time.

III. CONSUMER INDEBTEDNESS

The cornerstone of the Traditional model is that consumer bankruptcies are caused either directly or indirectly by heavy consumer indebtedness. In particular, it is observed that there is a high correlation between consumer bankruptcies on one hand and consumer debt-to-income ratios on the other. From this correlation, the logical assumption is that the high debt levels, as measured by the debt-to-income ratio, cause high bankruptcy filing levels.\(^{48}\) The existence of this purported causal relationship enjoys widespread support among leading bankruptcy scholars. Douglas Baird, for instance, writes, “Bankruptcy filings . . . are affected most by the amount of debt individuals carry relative to their annual income. . . . The higher this ratio, the more likely individuals will be unable to pay their debts if they encounter economic misfortune.”\(^{49}\) Elizabeth Warren similarly states, “The macrodata are unambiguous about the best predictor for consumer bankruptcy. Consumer bankruptcy filings rise and fall with the levels of consumer debt.”\(^{50}\) She adds, “The simple explanation of the rise in filings—bankruptcies rise as household debt rises—is undeniable.”\(^{51}\) The agreement of Baird and Warren, two leading scholars who draw from fundamentally different intellectual traditions, suggests the depth of the consensus of the Traditional model.\(^{52}\)

According to the Traditional model, heavy debt loads, as measured by the aggregate debt-to-income ratio, causally drive consumers into bankruptcy in one of two ways. Either the debt itself becomes simply “overwhelming,” forcing consumers to file bankruptcy simply to get off the treadmill of debt, or to get out of an ever-deepening hole of debt, interest charges, and late fees. Or, even if the debt itself does not directly and proximately cause bankruptcy, large amounts of consumer debt make individuals more highly leveraged, making them more vulnerable to unexpected shocks to their incomes or expenditures. There is an observable correlation


\(^{49}\) Baird, supra note 3, at 575 n.7.

\(^{50}\) Warren, supra note 3, at 1081.

\(^{51}\) Id. at 1084.

\(^{52}\) See SKEEL, supra note 4 (describing different bankruptcy schools of thought and identifying Baird and Warren as intellectual leaders of respective schools).
between bankruptcy filings and changes in household debt-to-income ratios, and total consumer debt has increased over time. But the mere observation of correlation is not sufficient to infer causation. Indeed, although the “debt causes bankruptcy” thesis is widely accepted, it suffers from several theoretical and empirical flaws. First, it simply assumes the direction of the purported causal link between debt and bankruptcy filings, ignoring that there is a serious endogeneity problem between the two variables because consumers’ decisions about how much debt to take on will be a function, in part, of the ease with which they can later discharge that debt in bankruptcy if necessary. Second, it relies on an unusual measure of household financial condition, debt-to-income ratio, as empirical support for the hypothesis. The real challenge, therefore, is whether the Traditional model withstands scrutiny if tested using a more accurate measurement of household financial condition, instead of the troubling debt-to-income ratio.

First, the Traditional model assumes that debt-to-income ratio is the independent variable that causes bankruptcy filings as the dependent variable. But the direction of this causation is simply assumed, not proven. This ignores the fact that the relationship between debt and bankruptcy is a codependent relationship, in that the level of debt that individuals are willing to incur will be a function, at least in part, of the degree of generosity of the bankruptcy system itself. Thus, if it is easy to file bankruptcy and to discharge debt, individuals will want to borrow more and incur more risk than if bankruptcy makes it difficult to discharge debt. Indeed, this is a primary purpose for bankruptcy law—to make individuals less risk-averse and willing to incur more debt than they would absent a bankruptcy law. Lenders, of course, have opposite incentives and will be more willing to provide more credit when bankruptcy laws are strict and less where bankruptcy is easy. There is thus a classic endogeneity problem—consumer debt is a function of the bankruptcy regime and the likelihood of filing bankruptcy is, in part, a function of indebtedness. It is not clear that any empirical study of consumer bankruptcy from a traditionalist perspective has attempted to correct for this endogeneity problem of the codependent relationship between debt and bankruptcy.

53 Increased total consumer debt may be relevant to understanding why bankruptcies have risen, not because it reflects increased financial distress, but rather because it increases the benefits to individuals from filing bankruptcy.


Second, endogeneity problems aside, adherents to the Traditional model rely on a questionable empirical basis for its argument, the debt-to-income ratio. Bankruptcy has two well-established measures of financial distress and insolvency. The first is “equity” or liquidity insolvency which examines the ability to generally pay one’s debts as they come due.\textsuperscript{56} This measurement is essentially a ratio of one’s current income to current expenses, including current or monthly payments on debt obligations. The second is “balance sheet” or “bankruptcy” insolvency, which finds a debtor to be insolvent if the “sum of the debtor’s debts is greater than all of the debtor’s assets at fair valuation.”\textsuperscript{57} Equity insolvency is a “flow” measure of current income and expenditures; balance sheet insolvency is a “stock” measure of total assets and total debt, or household net wealth.

Advocates of the Traditional model, however, have posited a novel measurement of financial distress: the ratio of debt to income. This purported measurement is illogical because it compares monthly income (a short-term flow measure of financial assets) to total debt (a long-term stock measure of financial liabilities), including principal balances owed on debt such as mortgages, car payments, and student loans that are repaid in monthly installments, not lump-sum. It is not clear why the comparison of short-term income flows to long-term stock debt obligations is thought to be useful, especially when more conventional and useful measures of financial condition are available.\textsuperscript{58}

This next section of the Article will examine the purported link between financial distress and bankruptcy using these standard measures of insolvency. This section will demonstrate that neither of the standard measures of financial condition supports the hypothesis that the upward trend in bankruptcy filings is the result of excessive debt burdens. Next, this section will discuss two additional factors that have been offered as unique explanations for the purported rise in consumer indebtedness: credit cards and mortgage indebtedness.

\textsuperscript{56} See \textsc{Unif. Fraudulent Transfer Act} § 2(b) (1984); see also \textsc{11 U.S.C.} § 303(b)(1) (2000) (allowing entry of order for relief for involuntary bankruptcy if “debtor is generally not paying such debtor’s debts as such debts become due”).

\textsuperscript{57} See \textsc{Unif. Fraudulent Transfer Act} § 2(a); see also \textsc{11 U.S.C.} § 101(32) (2000) (“[I]nsolvent” means “financial condition such that the sum of such entity’s debts is greater than all of such entity’s property, at a fair valuation . . . .”).

\textsuperscript{58} Economist Michael E. Staten observes, “Perhaps the best-known and most misleading measure of household debt burden is the ratio of aggregate consumer installment credit outstanding to disposable income.” Michael E. Staten, \textit{Consumer Debt: Myths About the Impact of the Recession}, CAPMAC RES. SUPPLEMENT, Autumn 1993, at 5, available at http://www.msb.edu/prog/crc/pdf/reprint21.pdf; see also Glenn B. Canner et al., \textit{Household Sector Borrowing and the Burden of Debt}, 81 \textsc{Fed. Res. Bull.} 323, 323–24 (1995). To further illustrate the point, it would be equally illogical to measure the ratio of current debt obligations (required monthly payments) to one’s total assets (home equity, retirement assets, etc.), regardless of whether liquid or illiquid.
A. Equity Insolvency and Consumer Bankruptcy

The first way to measure financial condition is through equity insolvency, or the ability to pay one’s debts as they come due. Household indebtedness comes in a variety of forms: long-term, low-interest debt, such as a home mortgage or home equity loan; medium-term, moderate-interest debt, such as student loans or car loans; or short-term, high-interest debt, such as credit cards, unsecured personal loans, or pawn shops. The first standard measure of consumer equity insolvency is the household debt service ratio, the percentage of one’s income each month that is dedicated to monthly debt payments. As the debt service ratio rises, households will tend to become more vulnerable to income or expense shocks that disrupt their ability to service their debt. As the debt service ratio falls, households should find it easier to pay their bills on an ongoing basis and should be more resistant to income or expense shocks.

Unlike total indebtedness, the debt service ratio accounts for the maturity term and interest rate on a loan; the “debt-to-income ratio,” by contrast, considers only the principal amount and ignores both the interest rate and the term of the loan. Consider first the term of a loan. Holding the principal amount constant, the fraction of household income dedicated to debt service will depend on the loan term—for a given borrowed principal amount, a shorter loan maturity term will require higher month-to-month payments than one with a longer maturity. As the loan maturity term rises, borrowers can borrow the same or even more while improving their financial condition because their monthly payments will fall. Second, unlike the debt-to-income ratio, the debt service ratio accounts for changes in interest rates. Interest rates have plummeted to record low rates during the past decade, enabling households to borrow equivalent or greater principal amounts without a deterioration in their month-to-month household financial condition.

59 Consider a hypothetical borrower who borrows $100,000 at a 10% interest rate. If the loan is for a term of one year, the borrower will be required to pay $8791.59 per month; if the term is five years, the payments fall to $2124.70 per month; for ten years it is $1321.51 per month; and for thirty years (the conventional term for a mortgage) the required payments are only $877.57 per month. Clearly the maturity term of the loan makes a large difference in monthly payments and the percentage of income dedicated to loan service.

60 For instance, a borrower who borrowed on a thirty-year term could borrow over $1 million for the same monthly payment as a one-year loan of $100,000.

61 The effect of lower interest rates on the debt service ratio can be substantial. Consider a thirty-year mortgage of $100,000. As noted, at an interest rate of 10%, the monthly payments on the mortgage will be $877.57 per month. But if the interest rate falls to 5%, the same mortgage requires only $536.82 per month—a reduction in the current debt burden of $340 per month. This means that at an interest rate of 5%, the household could afford to increase its total principle debt burden on the mortgage by 60% (to over $160,000) and leave its debt service ratio remain unaffected.
enabling the substitution of low-interest, longer-maturity debt for high-interest, short-term consumer debt.

Since the early 1990s interest rates have fallen and loan maturities have lengthened on average. Thus, even though total household indebtedness has gradually and consistently risen during this period, the household debt service ratio has remained fairly constant. Indeed, it is likely that total indebtedness has risen precisely because of falling interest rates and a lengthening of loan maturities. Low interest rates enable consumers to borrow more, such as to buy a larger house, without a substantial increase in monthly payments. Many refinance liquefy equity, and a majority of those who do have used it to pay off short-term, higher-interest consumer debt, increasing total indebtedness but improving the debt service ratio.

62 See Fed. Reserve Bank of Cleveland, Household Debt Burdens, at http://www.clevelandfed.org/research/Er97/0297/charts/houdeb1a.htm (last visited Aug. 1, 2005); see also Canner et al., supra note 58, at 325 (“Although outstanding debt has risen relative to income since 1992, the debt payments-to-income ratio has changed very little. One reason for the recent stability is that the average interest rate on the stock of debt has continued to decline, offsetting the effect of the recent more rapid growth in outstanding debt.”); Glenn B. Canner et al., Recent Developments in Home Equity Lending, 84 Fed. Res. Bull. 241, 241 (1998) (noting that substitution of home equity credit for other consumer credit “generally lowers the interest expense of carrying debt and may further reduce monthly debt service payments in the short run by lengthening loan maturities”). Increases in income, holding current debt obligations constant, also reduce the debt service ratio.

63 As Federal Reserve Board Chairman Alan Greenspan has observed, long-term statistical regularities suggest that when it comes to mortgages, homeowners appear to set a target for their mortgage payments as a proportion of income and adjust their borrowing accordingly. Alan Greenspan, Understanding Household Debt Obligations, Remarks Given at the Credit Union National Association 2004 Governmental Affairs Conference (Feb. 23, 2004), available at http://www.federalreserve.gov/boarddocs/speeches/2004/20040223/default.htm. If so, then consumers are basing their actual decisions regarding their mortgage on their anticipated debt service ratio (including the interest rate), rather than the principal amount of the indebtedness. See also Ruth Simon, Why Your Home Might Sell for Less, WALL ST. J., Nov. 6, 2003, at D1 (noting that low interest rates have enabled home buyers to buy more expensive houses than they could at higher interest rates).

64 Mortgage rates, for instance, have declined from over 8% in mid-2000 to under 6% in 2005. From January 2001 to December 2002 the weighted average interest rate for non-mortgage consumer debt fell from approximately 12.5% to approximately 9%, fell still further through 2004, and has remained below 10% for most subsequent time. See Fed. Reserve Bank of N.Y., Household Borrowing Rates, at http://www.ny.frb.org/research/directors_charts/i-page21.pdf (last visited Aug. 1, 2005). Canner et al. argue that the drop in non-mortgage interest rates has resulted in part from aggressive marketing of low-interest auto loans and credit cards. See Canner et al., supra note 58, at 325.


66 Margaret M. McCombs et al., After the Refinancing Boom: Will Consumers Scale Back Their Spending?, CURRENT ISSUES IN ECON. & FIN., Dec. 2003, at 1, 6; Susan Burhouse, Evaluating the Consumer Lending Revolution, FYI BULLS. (FDIC), at http://www.fdic.gov/bank/analytical/fyi/2003/09f03fbi.html (revised Sept. 23, 2003) (noting that during 2001–2002 refinancing boom “homeowners reduced their interest rates and extended loan maturities, resulting in an average annual reduction in mortgage payments (net of taxes) of close to $300, even with higher principal balances in many cases”); Canner et al., supra note 62, at 241; see also Peter J. Brady et al., The Effects of Recent Mortgage Refinancing, 86 Fed. Res. Bull. 441 (2000); Greenspan, supra note 63. This increased use
Consumers can, and have, borrowed greater principal amounts, but there is no reason to believe that increasing their outstanding debt load alone should substantially increase their financial risk if it also reduces the debt service ratio.

Figure 4 compares the Federal Reserve’s measurement of the household debt service ratio with consumer bankruptcy filings.67

![Figure 4: Debt Service and Bankruptcy](image)

Source: Federal Reserve Board Household Debt Service Burden and Figure 3.

The data in Figure 4 demonstrates that there may be a slight relationship between short-term fluctuations in household debt service ratio and changes in household bankruptcy filings.68 This is to be expected, as unan-

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67 The Federal Reserve has recently updated their methodology and data series for calculating the debt service ratio. See Fed. Reserve Bd., Household Debt Service and Financial Obligations Ratios, at http://www.federalreserve.gov/releases/housedebt/default.htm (last visited Aug. 1, 2005) (“The household debt service ratio is an estimate of the ratio of debt payments to disposable personal income. Debt payments consist of the estimated required payments on outstanding mortgage and consumer debt.”). The Federal Reserve reports quarterly figures; for purposes of the discussion in the text, I have converted the quarterly data into average annual data so as to keep it consistent with data on bankruptcy filings.

ticipated changes in interest rates or income would be predicted to impact bankruptcy filings on a short-term basis by interrupting monthly debt service. With respect to the background upward trend in bankruptcy filings, however, the household debt service burden does not provide a reliable predictor of the filing trend. Between 1980 and 2002, the household debt service ratio fluctuated within a relatively small range, from a low of 10.7 in 1981 and 10.8 in 1993, to highs of 13.3 over the past few years. In 1986 and 1987, for instance, when the household debt service burden was at its decade’s peak value of 12.2%, there were 449,129 consumer bankruptcy filings in 1986 and 492,850 in 1987, or about 4 per 1000 households. After remaining below that peak level for over a decade, in 1997 and 1998, the debt service ratio returned to 12.2%. By that time, however, bankruptcy filings had tripled to 1,350,118 and 1,398,182 respectively, or about 12 per 1000 households. Thus, whereas the household debt service burden was identical in 1986–1987 and 1997–1998, total consumer bankruptcy filings more than doubled. Even more striking is that in 1993, when the debt service burden bottomed out at 10.8%, total bankruptcies were almost double the rate in 1986, which had a higher debt service ratio.

Moreover, the debt service ratio is relatively constant across households of varying wealth positions in that low-, medium-, and high-wealth households all spend roughly the same amount of their income on current debt service obligations, although poor and wealthy households have slightly lower debt service burdens than middle-class households.69 With respect to the lowest quintile of income earners, there appears to be little relationship between changes in the debt service burden of the lowest quintile and overall bankruptcy filing rates, as shown in Figure 5:

http://www.federalreserve.gov/pubs/feds/2000/200012/200012pap.pdf; see also Glenn B. Canner & Charles A. Luckett, Payment of Household Debts, 77 FED. RES. BULL. 218, 225 (1991) (finding correlation between debt service burdens and late payment problems). But see Mester, supra, at 35 n.7 (noting that there have been periods, such as between 1988 and 1991 when debt service burden and filings moved in opposite directions). Professor Lawless also finds no correlation between household debt service burden and bankruptcy filings, but argues that this anomaly probably results from errors in the Federal Reserve’s estimation of debt service burden and the need for more sophisticated empirical analysis, rather than concerns about the underlying theory, although he offers no superior measurement of household equity insolvency. See Robert M. Lawless, The Relationship Between Nonbusiness Bankruptcy Filings and Various Basic Measures of Consumer Debt, at http://www.law.unlv.edu/faculty/rlawless/busbrk/filings.htm (last modified Jan. 10, 2004).

69 See Maki, supra note 68, at 6–7 & tbl.2 (noting that poor households spend 14.2% of income on debt service, middle-class households spend 18.7%, and wealthy households spend 13.5%). This mildly higher ratio for middle-class households in the last Survey of Consumer Finances is because during the period between 1998 and 2001, the income of the lowest and highest quintiles rose more rapidly than among the middle-class. Thus it was the denominator (income) that changed, not the numerator (current debt obligations). See Ana M. Aizcorbe et al., Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances, 89 FED. RES. BULL. 1, 3 (2003).
Again, although there appears to be a loose correlation between changes in the debt service ratio and changes in the bankruptcy filing rate, changes in the debt service ratio of the lowest quintile cannot explain the upward trend in bankruptcy filing rates over the past decade. Thus, whereas the debt service ratio for the lowest income quintile of the population was unchanged between 1995 and 1998, the overall bankruptcy filing rate soared. Similarly, whereas the debt service ratio fell from 1998 to 2001, bankruptcy filings were the same in 1998 and 2001. The debt service ratio of the lowest quintile was also the same in 1992 and 2001, but bankruptcies were much higher in the latter period. In short, changes in the lowest-income sector of society do not explain rising bankruptcy filing rates. Thus, the aggregate debt service measurements are not concealing some sort of unrecognized distress among poor households.

B. Balance Sheet Insolvency and Bankruptcy

A second standard measure of household financial condition is the ratio of total assets to total debt, also referred to as “balance sheet” or “bankruptcy” insolvency. In the context of consumer households, balance sheet insolvency can be measured by household net wealth. Like balance sheet insolvency, household net wealth is calculated as the difference between “total assets” and “total liabilities.” “Total assets” includes such elements as investments (stocks, bonds, and mutual funds), savings, household equity, and durable consumer goods such as automobiles. “Total liabilities” includes the total principal amount of outstanding debt, such as mortgage balance, student loans, revolving credit obligations, and loans for consumer durables. The comparison of total assets and total liabilities, therefore,
takes no account of the interest rate or maturity of the assets and liabilities. Nor does it consider the ease with which these assets could be liquidated or otherwise converted into readily available assets.\footnote{In general, it has become easier for consumers to reach their assets and convert them into liquid sources of income. The development of home equity loans, for instance, has made it easier to reach accumulated home equity and more flexible money-market-style accounts, and investment in mutual funds has also made it easier to access accumulated wealth in securities.}

A balance sheet measure of financial solvency holds that, as net wealth rises, financial security should rise. As household wealth rises bankruptcy filing rates should decline. During the past fifty years, Americans have benefited from a dramatic increase in household net wealth. Moreover, this increase in wealth has accelerated dramatically during the past twenty years, and exploded during the 1990s. Figure 6 reports the data since 1945 on household assets, liabilities, and net wealth:

Household wealth has risen steadily and dramatically over the past several decades.\footnote{See also James M. Poterba, Stock Market Wealth and Consumption, 14 J. ECON. PERSP. 99 (2000) (noting that from 1989 to 1999, the real net wealth of American households increased by nearly $15 trillion, or by more than 50%).} In fact, after a relatively stable level of net wealth for over half a century, net wealth began to rise rapidly in the 1970s, accelerating in the 1980s, and exploding in the 1990s. At the same time, bankruptcy filings have also risen steadily and dramatically. In the mid-1990s, for example, household net wealth grew by about 10% per year, even as bankruptcies jumped as much as 20% per year. From 2000 to 2002, household wealth suffered a slight dip before turning upward again. Moreover, the ratio of consumer credit to net worth has remained almost perfectly constant.
at 4% of net worth since 1956. This combination of rising bankruptcies and rising personal wealth contradicts the hypothesis that mounting bankruptcies reflect increased household financial distress.

The sources of the rise in net wealth have varied over time. During the 1970s, for instance, much of the growth in net wealth could be attributed to increases in the value of tangible assets, primarily housing values. From 1970–1979, household financial assets rose on average 9% per year, whereas tangible assets rose almost 12% per year. During the 1980s, both housing values and financial assets rose steadily and relatively equally. During the mid-1990s, most of the growth in household wealth was attributable to increases in household financial assets, largely as a result of the roaring stock markets of the 1990s. Even during the financial market downturn over the past few years, housing prices have continued to rise, offsetting some of the damage to household wealth from the stock market decline. Households have taken advantage of low interest rates to boost their purchase of household durables, such as cars and appliances, which also increases wealth. Overall, about one-fourth of household wealth derives from stock holdings, another one-fourth from tangible assets such as real estate and consumer durables, and the remaining one-half is comprised of other financial assets (such as bonds and interest-bearing accounts) as well as such assets as equity in unincorporated businesses.

Moreover, net wealth has risen for households of all wealth levels, including the poorest quintiles. Overall, the poor remain poorer than average. However, households have benefited from the asset growth along with everyone else. Figure 7 demonstrates that the average net worth of the lowest quintile of households has risen slowly but steadily over the past decade:

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72 See Thomas A. Durkin, Discussion, in THE IMPACT OF PUBLIC POLICY ON CONSUMER CREDIT 35, 40 (Thomas A. Durkin & Michael E. Staten eds., 2002). Not coincidentally, this ratio is also consistent with the long-run estimated marginal propensity to consume out-of-household wealth, which has been stable between three percent and five percent for many years. See infra note 96 and accompanying text.


74 See also Poterba, supra note 71, at 99 (noting that more than sixty percent of the wealth creation during the 1990s was due to increased value of household stock holdings).

75 Id. at 100.

In percentage terms, the most rapid growth in net wealth during the 1990s was among low-income households.\textsuperscript{77} This seems to be primarily because home values appreciated somewhat more rapidly among poor households than the public at large.\textsuperscript{78} Poor households also bought houses more rapidly than average, thus increasing their ownership of this appreciating asset more rapidly than the average and further boosting their wealth as a class.\textsuperscript{79} In substantial part, this increase in home ownership, and thus wealth, reflects the development of the subprime lending market during the 1990s.\textsuperscript{80} Legal scholars and regulators have tended to focus on the “predatory” aspects of subprime lending and default rates for subprime loans compared to standard mortgages.\textsuperscript{81} Although there obviously have been

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure7.png}
\caption{Net Worth, Lowest Quintile}
\end{figure}

\textit{Source: Survey of Consumer Finances.}

\begin{itemize}
\item \textsuperscript{77} See Aizcorbe et al., supra note 69, at 8.
\item \textsuperscript{78} See Karl E. Case & Maryna Marynchenko, \textit{Home Price Appreciation in Low- and Moderate-Income Markets}, COMMUNITIES AND BANKING, Spring 2002, at 8.
\item \textsuperscript{79} Aizcorbe et al., supra note 69, at 17.
\item \textsuperscript{80} Subprime mortgage originations grew from $34 billion in 1994 to more than $213 billion in 2002 and in 2002 represented 8.6% of all mortgage originations. \textit{See} COMPTROLLER OF THE CURRENCY, \textit{ECONOMIC ISSUES IN PREDATORY LENDING}, at 5 (Office of the Comptroller of the Currency, Working Paper, July 30, 2003), \textit{available at} http://www.mortgagebankers.org/industry/docs/03/occ_workpaper0730.pdf. Between 1993 and 1998 the subprime market grew more than 1400%, from approximately 70,000 to 10,540,000 loans, whereas the whole mortgage market grew 22% during this same period. Anthony Pennington-Cross, \textit{Subprime Lending in the Primary and Secondary Markets}, 13 \textit{J. HOUSING RES.} 31, 32 (2002). Purchase money subprime loans comprise approximately 23% of all subprime loans and 5% of the total purchase-money mortgage market by 1998. From 1993 to 1998 subprime purchase money mortgages grew 900% during the same period. \textit{Id.}
\item \textsuperscript{81} See, e.g., \textit{WARREN & TYAGI}, supra note 3, at 134–37 (referring to the “pernicious effect” of subprime lending); Kathleen C. Engel & Patricia A. McCoy, \textit{A Tale of Three Markets: The Law and Economics of Predatory Lending}, 80 \textit{TEX. L. REV.} 1255 (2002); Elizabeth Warren, \textit{The New Economics of
“predatory” practices in this market, the overwhelming majority of sub-
prime loans do not default, even though the default rate on subprime loans
is higher than for prime loans. For the majority of borrowers, therefore,
the growth of the subprime market has enabled them to move from renting
to buying housing, permitting them to build equity in their homes as a valu-
able asset to build wealth, rather than merely paying rent. Moreover,
homeownership is the best way for many low-income households to build
wealth, as investments in stocks and bonds are not likely to be realistic op-
tions. In fact, homeownership has been such a potent vehicle for wealth
accumulation that the polarization of wealth between homeowners and ren-
ters has risen dramatically in recent years, even as the wealth polarization
among different income classes has decreased. For those who also use
their homes for a home equity loan, this can be an attractive alternative to
the poor credit options otherwise available to high-risk, low-income bor-
rowers. The expansion of the subprime lending market, therefore, has en-
abled low-income households to acquire an asset that has appreciated in
value over the past decade, and thereby has enabled rapid wealth-building.
Thus, the data indicates that wealth has increased across the board (albeit at
different rates), which suggests that the aggregate figures on household

82 See U.S. DEP’T OF HOUSING & URBAN DEV., U.S. DEP’T OF TREASURY, CURBING PREDATORY
1999, foreclosure rates average 0.2% for prime mortgage loans and 2.6% for subprime mortgage loans);
Mortgage Bankers Ass’n, Q3 Residential Mortgage Delinquency Rates Lowest in Three Years: Number
of Foreclosures Started Increase Slightly, While Foreclosure Inventory Remains Flat According to MBA
delinquency rate of 2.45% in third quarter 2003 and 11.71% delinquency rate for subprime loans);
ANTHONY PENNINGTON-CROSS, PATTERNS OF DEFAULT AND PREPAYMENT FOR PRIME AND NONPRIME
rates of prepayment and default for nonprime loans).

83 See Karen Dynan et al., Recent Changes to a Measure of U.S. Household Debt Service, 89 FED.
RES. BULL. 417, 425 (2003). In fact, the relative position of homeowners versus renters has improved
substantially in recent years. See infra note 153 and accompanying text.

84 See ZHU XIAO DI ET AL., THE IMPORTANCE OF HOUSING TO THE ACCUMULATION OF HOUSEHOLD
NET WEALTH (Joint Center for Housing Studies, Harvard University, Working Paper, Nov. 2003).

85 See CONCHITA D’AMBROSIO & EDWARD N. WOLFF, IS WEALTH BECOMING MORE POLARIZED IN
http://econwpa.wustl.edu:80/eps/mac/papers/0106/0106006.pdf. Wealth inequality appears to have in-
creased over time, but wealth “polarization” is different from “inequality” in that polarization studies the
clustering of homogeneous groups, such as homeowners, within a heterogeneous population. See id. at
2. Thus, it is a more useful tool for examining the effect on wealth of particular subsets, such as home-
owners.

86 For instance, renters spend substantially more of their income on consumer debt payments than
do homeowners, primarily because the interest rates on student loans, automobile loans, and credit cards
are higher than for mortgages and home equity loans. Dynan et al., supra note 83, at 424; Greenspan,
supra note 63.
wealth are not disguising unrecognized hardship among some demographic
groups. 87

In part, bankruptcy scholars’ failure to recognize the real state of household wealth may be because of their unduly narrow focus on household “savings,” rather than wealth. For example, Sullivan et al., argue, “The declining savings rate [of the 1990s] spoke of how much closer many families had moved toward the margin.” 88 Throughout much of the 1990s, the measured household savings rate was indeed falling. 89 But this alone says little about household financial condition because of problems with the way in which the national “savings” rate is calculated.

The standard economic model of household savings decisionmaking is the Permanent Income Hypothesis or “Life Cycle” Hypothesis. 90 The permanent income model postulates that households will seek to smooth their expected consumption patterns over their lifetime. Thus, youth (such as college students) borrow against their expected future income streams, middle-aged working families save and accumulate assets (such as houses, retirement savings, and financial assets), and retired households dis-save by selling their houses and running down their retirement savings. It is completely irrelevant, therefore, what form this asset accumulation takes, whether savings from current income or appreciation in the value of certain assets such as a home, interest on a savings account, stocks, or a mutual fund.

The conventional measure of the American savings rate, however, is the National Income and Product Accounts (“NIPA”) savings rate assembled by the Bureau of Economic Analysis of the Department of Commerce. 91 The NIPA measurement of savings is essentially an annual periodic measurement of total income minus personal consumption outlays and tax payments. 92 In other words, the “savings” rate is simply the residual amount left over from household income after subtracting household con-

88 Sullivan et al., supra note 2, at 31; see also Warren & Tyagi, supra note 3, at 112–13; Braucher, supra note 9, at 12.
89 See Sullivan et al., supra note 2, at 31–32 (noting declining savings rate of 1990s).
92 Id.; Webb, supra note 87, at 70–71.
sumption and tax payments. This is a poor measurement of true household savings behavior, and an even poorer measure of overall household financial condition, because it focuses solely on savings out of current income and therefore fails to take account of most household wealth accumulation. Therefore, by definition, the NIPA savings rate could rise or fall for any one of three reasons: (1) a change in income, (2) a change in consumption out of current income, or (3) a change in taxes as a percentage of income.

The experience of the 1990s exemplifies the problems with drawing inferences about household financial condition from the NIPA savings measure. Household income rose dramatically during the economic prosperity of the 1990s; nonetheless, the savings rate dropped dramatically as well. At first this may seem to lend credence to the hypothesis that the roaring economy disguised household economic struggles, but in fact it is more likely the opposite—the declining savings rate was actually a sign of overall household financial strength, not weakness. This counterintuitive conclusion results from the limitations of the NIPA measurement of savings. The 1990s was a period of massive appreciation in household stocks of existing assets, primarily due to the roaring stock market of that decade but also the steady appreciation in housing values. Capital gains, however, are not counted as part of the NIPA savings figures because they are not considered income from current production. Nevertheless, consistent with the permanent income hypothesis, consumers rationally treat these asset appreciations as if they are an increase to current and future income, and spend some of it today. Consumers might borrow against the asset to increase consumption (such as with a home equity loan), sell some of the assets in order to liquefy the appreciated value, or simply spend a greater percentage of current income earnings because the increase in asset values means that it is not necessary to save as much out of current income in order to plan for retirement or future consumption. The NIPA savings calculation excludes the in-

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93 See Lusardi et al., supra note 91, at 96 (“NIPA personal saving is not a useful measure of whether households are prepared for retirement or an economic downturn.”); see also FRIEDMAN, supra note 90, at 10 (criticizing NIPA definition).
95 See Gale & Sabelhaus, supra note 73, at 186.
96 The marginal propensity to consume out of increased wealth has been between three and five percent for several decades. See DEAN M. MAKI & MICHAEL G. PALUMBO, DISENTANGLING THE WEALTH EFFECT: A COHORT ANALYSIS OF HOUSEHOLD SAVING IN THE 1990s 17–18 (Fed. Reserve Bd., Working Paper No. 2001-21, Apr. 2001), available at http://www.federalreserve.gov/pubs/feds/2001/200121/200121pap.pdf. This increase in consumption as a result of the wealth increases of the 1990s explains almost all of the decrease in the measured savings number during the 1990s. Id. at 19. With respect to different forms of wealth, one estimate is that the long-run impact of a $1 increase in stock market wealth increases consumption by 4.2 cents and each $1 increase in non-stock market wealth (such as home equity) increases consumption by 6.1 cents. See Poterba, supra note 71, at 105. Another study estimates that each $1 increase in stock-market wealth increases consumption 2 to 12 cents. See Lusardi
crease in household wealth from these capital gains, but includes the increase in consumption expenditures that result from it, thereby artificially increasing consumption and decreasing savings. Thus, whereas the NIPA personal savings rate hovered around zero to 2% of income (or below) during the 1990s, once capital gains are accounted for, the “true” savings rate for households was actually around 40%, the highest level in at least forty years. Further, the NIPA treats purchase of consumer durables, which should properly be understood as a household capital investment (such as a car), as a one-time purchase consumed in the period purchased, rather than as a household capital good that generates implicit income over a long period of time and which can retain equity value.

Large increases in capital gains undermine the accuracy of the NIPA measure in a second way. The sale of appreciated assets triggers a realization event for tax purposes. Again, the gains off the realization are not counted as income, but capital gains taxes are counted as a tax expenditure from current income for NIPA purchases. Thus, the appreciation in financial and tangible assets during the 1990s also triggered a massive increase in capital gains taxes upon realization of those gains, further reducing the NIPA savings measure even as households were unambiguously better off.

In addition, the fastest rate of income growth was among high-income households—a 31% increase from 1990 to 2000. Gale & Sabelhaus, supra note 73, at 183, 206–07; Lusardi et al., supra note 91, at 96–97; Peach & Steindel, supra note 97, at 2. More precisely, the sharp increase in stock prices after 1995 is paired with a precipitous decline in the savings rate. Gale & Sabelhaus, supra note 73, at 183, 206–07; Lusardi et al., supra note 91, at 96–97; Peach & Steindel, supra note 97, at 2. 97 Gale & Sabelhaus, supra note 73, at 183, 206–07; Lusardi et al., supra note 91, at 96–97; Peach & Charles Steindel, A Nation of Spendthrifts? An Analysis of Trends in Personal and Gross Saving, CURRENT ISSUES IN ECON. & FIN., Sept. 2000, at 1, 2. In 1999, for instance, the NIPA savings rate was less than 5% and the savings rate with stock market wealth included was 38%. Lusardi et al., supra note 91, at 98–99; see also id. at 99 (“More precisely, the sharp increase in stock prices after 1995 is paired with a precipitous decline in the savings rate.”). 98 Those with the largest stock market gains also decreased their NIPA-measured savings the most, from 8.5% in 1992 to −2.1% in 2000, whereas the saving rate for the lowest 40% of the income distribution doubled their savings rate during the same period. MAKI & PALUMBO, supra note 96, at 13–14.

99 See Browning & Lusardi, supra note 90, at 1813; Gale & Sabelhaus, supra note 73, at 194; see also Carol Corrado & Charles Steindel, Perspectives on Personal Saving, 66 FED. RES. BULL. 613, 614 (1980). The boom in the purchase of high-cost SUVs and luxury cars in the 1990s exacerbated this mismeasurement, as they tend to retain substantial economic value over time.

100 Lusardi et al., supra note 91, at 96; Peach & Steindel, supra note 97, at 2.
income taxpayers, who pay higher marginal tax rates and so increased income tax revenues proportionally faster than overall income growth.\textsuperscript{101} Similarly, appreciation in housing values triggers higher property taxes that are paid from current income, even though the increase in housing equity is not counted as income. This flow of tax revenues created budget surpluses at all levels of government, creating a form of collective government “savings” that still further offset the decline in individual household savings.\textsuperscript{102} The build-up of a positive net balance in Social Security during the 1990s (which will be depleted in coming years as the current operating balance turns negative with the Baby Boomers’ retirement) is similarly excluded.\textsuperscript{103} Corporations similarly “saved” more, as the increase in the stock market reduced the amount of new contributions that corporations had to make to fund pension plan obligations. They also retained greater amounts of profits than in the past, rather than paying out dividends.\textsuperscript{104}

Thus, even though income rose throughout the 1990s, actual household wealth rose even more rapidly. In turn, both consumption and tax expenditures by households also increased, leading to a decline in NIPA-measured savings. In fact, whereas consumption expenditures rose roughly in step with income increases during the 1990s, taxes rose faster than income growth during that time.\textsuperscript{105} The decrease in household savings is a reflec-
tion of the strength and prosperity occasioned by the roaring economy of the 1990s, not a sign of household financial weakness.106

C. Credit Cards and Bankruptcy

A variation on the consumer overindebtedness argument is that credit cards cause overindebtedness that then causes increased bankruptcy filings.107 The argument is that credit cards combine high rates of interest with an “insidious” form of gradual and subconscious debt accumulation through many routine purchases.108 There is no doubt that credit card use has increased dramatically over the past several decades. Because credit cards increase indebtedness while adding high-interest debt, their use should be reflected in a higher debt service ratio; however, this is not the case.109 This fact alone should cause hesitation before embracing the theory that credit cards present a unique burden in this context; were this theory sound, there would be evidence that this high-interest, short-term debt contributed to the debt service ratio.

In fact, credit cards have not worsened household financial condition. Although consumers have increased their use of credit cards as a borrowing medium, this increase represents primarily a substitution of credit card debt for other high-interest consumer debt. Although this may seem irrational at first glance given the “high” interest rates charged on credit cards, consider that for consumers, the alternatives may include pawn shops, personal finance companies, retail store credit, and layaway plans, all of which are either more costly or otherwise less attractive than credit cards.110 Thus, while credit cards may not be ideal in some absolute terms, their growing popularity reflects the relative attractiveness of credit cards versus these other forms of credit. Credit cards also are generally less expensive for lenders to issue, which is reflected in the overall price of credit cards relative to these other forms of credit. The result, therefore, has not been to increase household indebtedness but primarily to change the composition of debt within the household credit portfolio. Figure 8 illustrates the nature of this substitution:111

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106 See Browning & Lusardi, supra note 90, at 1818 (reviewing evidence); Peach & Steindel, supra note 97, at 2. The decline in inflation during the 1990s still further reduced the measured savings rate. See Gale & Sabelhaus, supra note 73, at 194.

107 See Warren, supra note 3, at 1082.

108 See Sullivan et al., supra note 2, at 108–40 (arguing that credit card debt differs from other forms of debt in that credit card debt can accumulate insidiously and unconsciously through the gradual accretion of many, often small, purchases); Juliet B. Schor, Who’s Going Bankrupt and Why?, 79 Tex. L. Rev. 1235, 1238–39 (2001).

109 See supra Part III.A.

110 See Zywicki, supra note 66, at 94–110.

111 Consumer credit as shown in Figure 8 covers most short- and intermediate-term credit extended
As Figure 8 indicates, the growth in revolving (credit card) debt primarily has been a substitution from nonrevolving consumer debt to revolving debt, thus leaving overall consumer indebtedness (as a percentage of income) largely unaffected from the beginning of the 1970s, when consumers first began widespread use of credit cards. Revolving outstanding debt has risen during this period from zero to roughly 9% of outstanding debt. Nonrevolving installment debt, by contrast, has fallen from its level to individuals. It includes revolving and nonrevolving credit, but excludes loans secured by real estate such as mortgage loans, home equity loans, and home equity lines of credit. Credit cards are the primary source of unsecured open-end credit, but unsecured open-end credit also includes outstanding balances on unsecured revolving lines of credit at banks and finance companies. Nonrevolving credit includes most traditional forms of consumer credit, such as secured and unsecured credit for automobiles, mobile homes, trailers, durable goods, vacations, and other purposes. See Thomas A. Durkin, Credit Cards: Use and Consumer Attitudes, 1970–2000, 86 FED. RES. BULL. 623, 623 n.1 (2000).

112 See id. at 623–24 (noting that total consumer credit outstanding has risen in tandem with income growth); Durkin, supra note 72, at 35, 38–9; supra Figure 2 (noting that ratio of consumer credit to income has remained relatively stable since 1956).

113 In fact, this figure probably overstates the amount of revolving debt held by American households. The majority of credit card users are convenience users who use credit cards as a transactional device and pay their balances in full each month, rather than revolvers. See Aizcorbe et al., supra note 69, at 25 (reporting that 55.3% of households pay their credit card bills in full each month); Zywicki, supra note 66, at 101; Joanna Stavins, Credit Card Borrowing, Delinquency, and Personal Bankruptcy, NEW ENG. ECON. REV., July/Aug. 2000, at 15, 20 (noting that 58% of households in Survey of Consumer Finances stated that they paid their credit cards in full each month in the past year); see also Thomas F. Cargill & Jeanne Wendel, Bank Credit Cards: Consumer Irrationality Versus Market Forces, 30 J. CONSUMER AFF. 373, 379 (1996) (noting that 68% of credit card users “nearly always” pay their full balance every month). The percentage of convenience users relative to revolvers has risen steadily over time as credit cards have replaced checks and cash as a transaction medium. See Delinquency on Consumer Loans: Testimony Before the House Comm. on Banking and Fin. Servs., 104th
of 19% of disposable income in the 1960s, to roughly 12% today. Thus, the increase in revolving debt has been almost exactly offset by a decrease in the installment debt burden. In fact, the recent bump in total indebtedness in recent years was not caused by an increase in revolving debt, which has remained largely constant for several years, but by an increase in installment debt, primarily as a result of a recent increase in car loans for the purchase of new automobiles.\textsuperscript{114} Thus, there is little indication that increased use of credit cards has precipitated greater financial stress among American households. The increase in credit card usage has resulted primarily from a substitution of credit cards for other types of consumer credit, rather than an overall increase in indebtedness.\textsuperscript{115}

This substitution effect also explains the popularity of credit cards among lower-income households. Whereas higher-income borrowers can access low-interest, tax-deductible home equity loans, for instance, many low-income households do not own homes, and so as a result they must choose among a set of relatively unattractive forms of credit.\textsuperscript{116} Those who borrow money from pawnbrokers, for instance, report that they do so because their alternative sources of borrowing were family and friends or check-cashers.\textsuperscript{117} Similarly, those who purchase goods from rent-to-own retailers generally do so because they are unable to obtain approval to buy the goods on credit.\textsuperscript{118} Thus, even if credit cards appear to be a poor credit vehicle, they may be relatively more attractive than many of the options confronting those who in fact revolve credit card balances—pawn shops,
check-cashers, and rent-to-owns. As a report of the Chicago Federal Reserve Bank concluded that

[the increase in the credit card debt burden for the lowest income group appears to be offset by a drop in the installment debt burden. This suggests that there has not been a substantial increase in high-interest debt for low-income households, but these households have merely substituted one type of high-interest debt for another. In fact, credit cards have displaced a number of traditional consumer installment credit options. Economist Thomas Durkin observes that credit cards “have largely replaced the installment-purchase plans that were important to the sales volume at many retail stores in earlier decades,” especially for the purchase of appliances, furniture, and other durable goods. Credit cards have been especially important in providing an alternative to traditional personal finance companies offering high-interest, unsecured personal installment loans with fixed payment terms. Previous studies suggest that some of this substitution may also have come from reduced use of pawn shops and personal loans from friends and relatives. Previous studies also have shown that although one effect of regulating some forms of consumer credit is to restrict access to credit by higher-risk borrowers, the effects of such regulation are, predominantly, to shift the pattern of

119 See Zywicki, supra note 66.
120 Wendy M. Edelberg & Jonas D. M. Fisher, Household Debt, CHI. FED. LETTER, Nov. 1997, at 1, 3 (1997); see also id. at 4 (“[I]ncreases in credit card debt service of lower-income households have been offset to a large extent by reductions in the servicing of installment debt.”); Glenn B. Canner & James T. Fergus, The Economic Effects of Proposed Ceilings on Credit Card Interest Rates, 73 FED. RES. BULL. 1, 4 (1987) (noting that rise in credit card use may have been the result of “a substitution of credit card borrowing for other types of installment credit that do not provide flexible repayment terms”); Arthur B. Kennickell et al., Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances, 83 FED. RES. BULL. 17 (1997) (noting that the share of families using installment borrowing fell between 1989 and 1995 as a result of increased use of mortgages, credit cards, and automobile leasing).
121 Durkin, supra note 111, at 623.
122 Id. at 624.
123 See Greenspan, supra note 63 (noting that “the rise in credit card debt in the latter half of the 1990s is mirrored by a fall in unsecured personal loans”); Kennickell, supra note 76, at 17 (noting that many lenders have stopped offering unsecured lines of credit). A recent survey of consumer banking rates in the Washington, D.C. area found the prevailing interest rate on credit cards was 8.16%, whereas the prevailing rate for personal loans was 10.45%, a two percentage point spread which has remained constant over time. See Consumer Banking Rates, WASH. TIMES, July 23, 2004, at C9. Although the newspaper chart did not list the fees associated with originating a personal finance loan, they are generally much higher than for credit cards, which have no origination fees. See Dagobert L. Brio & Peter R. Hartley, Consumer Rationality and Credit Cards, 103 J. POL. ECON. 400, 402 (1995). In addition, credit card applications are generally easier and more convenient than an application for a personal loan.
credit use by encouraging the substitution of some forms of credit for others, rather than to restrict the overall use of credit.\textsuperscript{126} In fact, similar competition and consumer choice dynamics are at work within the credit card market itself: The overall amount of revolving credit relative to income has leveled off in recent years, yet the popularity of general purpose bank cards has risen, reflecting a substitution of these cards for proprietary retail store cards and gasoline company cards.\textsuperscript{127}

Nevertheless, some scholars argue that increases in credit card debt play a major role in precipitating bankruptcy filings by increasing consumer indebtedness.\textsuperscript{128} Domowitz and Sartain, for instance, conclude that “[t]he largest single contribution to bankruptcy at the margin is credit card debt.”\textsuperscript{129} Ausubel also finds a correlation between credit card defaults and bankruptcy.\textsuperscript{130} But while credit card debt and bankruptcy may be correlated, it is questionable whether increased credit card debt is properly understood as \textit{causing} an increased likelihood of bankruptcy filing. It is equally plausible as an a priori matter that debtors increase their credit card borrowing prior to or even in anticipation of filing bankruptcy. Thus the anticipation of bankruptcy “causes” the increase in credit card borrowing prior to filing bankruptcy. There is thus again an endogeneity problem—credit card debt may be increasing because a bankruptcy filing is impending or because other sources of credit have dried up. The causal relationship cannot be assumed a priori, and empirical evidence tends to rebut the causal inference assumed by the Traditional model. In fact, the correlation between credit cards and bankruptcy could reflect at least two alternative possible causal connections.

First, the correlation between credit cards and bankruptcy may reflect the unique role of credit card borrowing in the downward spiral of a defaulting borrower. Credit cards provide an open line of unsecured credit to be tapped at the discretion of the borrower. As a result, for many debtors, credit cards are a “credit line of last resort” used to stay afloat in order to

\textsuperscript{126} See PETERSON & FALLS, supra note 124, at 12.

\textsuperscript{127} See Kenneth A. Carow & Michael E. Staten, Debt, Credit, or Cash: Survey Evidence on Gasoline Purchases, 51 J. ECON. AND BUS. 409 (1999); Kenneth A. Carow & Michael E. Staten, Plastic Choices: Consumer Usage of Bank Cards Versus Proprietary Credit Cards, 26(2) J. ECON. & FIN. 216 (Summer 2002); see also Aizcorbe et al., supra note 69, at 25 (noting 5.2% increase in percentage of families with bank cards, and 4.8% reduction in percentage with store cards and 3.1% decrease in percentage of households with gasoline cards). In the 1970s, limited-use cards issued by retail firms, usable only in the firm’s stores (such as department stores) were the most commonly held type of credit card. By 1995, however, the holding of bank-type cards was more common than retail store cards. See Durkin, supra note 111, at 624. The recent decision of Sears to sell its credit card operations to a bank issuer will further accelerate this substitution from store cards to general purpose cards.

\textsuperscript{128} See SULLIVAN ET AL., supra note 2, at 111–40; Warren, supra note 3, at 1083.

\textsuperscript{129} Ian Domowitz & Robert L. Sartain, Determinants of the Consumer Bankruptcy Decision, 54 J. FIN. 403, 414 (1999).

\textsuperscript{130} See Lawrence M. Ausubel, Credit Card Defaults, Credit Card Profits, and Bankruptcy, 71 AM. BANKR. L.J. 249 (1997).
avoid defaulting on other bills. Thus, there may be nothing more than a simple correlation—a debtor confronting a downward spiral may increase his credit card borrowing in the period preceding bankruptcy simply because it is his most easily accessible line of credit. It may appear that because credit card borrowing preceded bankruptcy it also precipitated bankruptcy filing, but if the credit card was being used as a source of credit of last resort, this correlation would not support a causal inference.

Second, a debtor’s increased use of credit cards preceding bankruptcy may also reflect strategic behavior taken in anticipation of filing bankruptcy. Credit card debt is unsecured debt that can be discharged in bankruptcy. By contrast, some unsecured debts are not dischargeable in bankruptcy and secured debts, such as home and auto loans, are minimally affected. For unsecured credit card debt, by contrast, generally the debtor can retain the property purchased with the credit card and discharge the obligation. Given the choice between defaulting on secured or nondischargeable obligations on the one hand versus dischargeable credit card debt on the other, the incentive is to use credit cards to finance payment of nondischargeable and secured debt. In fact, empirical evidence shows that although credit card defaults have risen in tandem with bankruptcy filings, defaults on secured home and auto loans have remained steady during this period. Debtors also will have an incentive to “load up” their credit cards on the eve of bankruptcy, especially by purchasing goods that

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131 Under the 2005 amendments to the Bankruptcy Code, credit card debt is presumed to be nondischargeable if the charges exceed $500 for luxury goods and services and were incurred within ninety days, or cash advances of more than $750 were incurred within seventy days. 11 U.S.C. § 523(a)(2)(C) (2005). Moreover, the burden is on the creditor to prove that the goods purchased were for luxury goods or services.

132 See id. § 523(a). This includes debts for things such as taxes, alimony and child support, fraudulently-induced debts, student loans, and others.

133 See Ausubel, supra note 130, at 249.

134 See Durkin, supra note 72, at 38–39. It is important to note in this context that although the default rate on mortgages has remained relatively constant over time, the foreclosure rate on home mortgages has risen slightly. Economists who have studied home lending markets have concluded that the decision to default and permit foreclosure reflects rational decisionmaking by consumers, who respond to the incentives presented to them whether to keep their mortgage in good standing or exercise an option to default. Empirical testing tends to support the economic model. For instance, a fall in the underlying value of the property securing the loan is more likely to encourage a debtor to default and permit foreclosure on the home than an increase in value of the underlying property. See Patrick H. Hendershott & Robert Van Order, Pricing Mortgages: An Interpretation of the Models and Results, 1 J. Fin. Services Res. 19 (1987); James B. Kau & Donald C. Keenan, An Overview of the Option-Theoretic Pricing of Mortgages, 6 J. Housing Res. 217 (1995); Kerry D. Vandell, How Ruthless Is Mortgage Default? A Review and Synthesis of the Evidence, 6 J. Housing Res. 245 (1995). Warren and Tyagi, however, speculate that the rising foreclosure rate “suggests that families today are less likely than families were twenty-five years ago to come up with the money to pay the mortgage company or sell the house rather than lose it in foreclosures.” 1497

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expensive and the timing of which might be discretionary. Still others simply spend the money or save in exempt assets rather than pay outstanding bills.

Gross and Souleles, for example, find that in the year before bankruptcy, borrowers significantly increase the use of their credit cards, running up their balances rapidly in the period leading up to bankruptcy. This finding is inconsistent with the predictions of the Traditional model, which identifies credit cards as a special problem because of the gradual, subconscious, and “insidious” manner in which they accumulate over time. If this is true, then the accumulation of credit card debt should be gradual and spread out evenly over time. Rapidly rising credit card debt concentrated in the period immediately preceding bankruptcy suggests that credit card indebtedness does not cause bankruptcy in many cases. Rather, the debtor is already on his way to bankruptcy when the credit card borrowing begins and is either acting strategically or is tapping her credit line of last resort.

It also has been argued that credit cards have contributed to increased bankruptcies through a profligate expansion of credit card credit to high-risk borrowers, especially low-income borrowers. Although often-repeated, empirical studies have failed to support this theory. Two studies in particular examined the hypothesis empirically and found little support.

For instance, in one recent case reported in the news, the debtor charged a substantial amount on his credit card for discretionary car repairs and new tires within weeks before filing bankruptcy, which could have been postponed until after bankruptcy, but would nonetheless be dischargeable because they were not “luxury goods or services.” See Bernard Dagenais, Bankruptcy: Not Quite a Free Ride, WASH. TIMES, May 10, 1999, at D3; Manuel Perez-Rivas & Martin Weil, Massie Filed for Bankruptcy; Montgomery Schools Halt Consideration of Finalist, WASH. POST, May 4, 1999, at A1.


See supra note 108 and accompanying text.


Two other articles claim to have shown a link between increasing bankruptcies and the expansion of credit to higher-risk borrowers, but those articles merely show that credit card credit debt has expanded at roughly the same time as bankruptcies have increased, and inferred causation from that coincidence. Neither of those papers considers the possibility that the increase in credit card debt is a substitution for high-interest consumer debt. See Ausubel, supra note 130; Moss & Johnson, supra note 19. Moss and Johnson observe that bankruptcies have increased more rapidly than consumer indebtedness in recent years and simply assume that this acceleration in the multiplier effect is caused by an increase in credit card lending to higher-risk borrowers. They do not address, however, whether this reflects an increased propensity to file bankruptcy. A study of bankruptcy trends in Canada uses a similar methodology and suffers from similar flaws. See Dianne Ellis, The Effect of Consumer Interest Rate

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The first, by economists Donald P. Morgan and Ian Toll, concludes: “If lenders have become more willing to gamble on credit card loans than on other consumer loans, credit card charge-offs should be rising at a faster rate [than non-credit card consumer loans] . . . . Contrary to the supply-side story, charge-offs on other consumer loans have risen at virtually the same rate as credit card charge-offs.”¹⁴¹ This “suggest[s] that some . . . force [other than extension of credit cards to high-risk borrowers] is driving up bad debt.”¹⁴² A second study, by David B. Gross and Nicholas S. Souleles, concludes that changes in the risk-composition of credit card loan portfolios “explain only a small part of the change in default rates [on credit card loans] between 1995 and 1997.”¹⁴³ Moreover, if lower-income households were dramatically increasing their indebtedness through credit card debt, then this should be reflected in the debt service ratio for lower-income households. As previously noted, however, this ratio has remained largely constant for lower-income households as with all others. Overall then, low-income households have tended to use revolving credit card credit debt as a substitute for other less attractive forms of debt, thereby leaving their total debt service obligations and overall risk profile largely unchanged.

D. Housing Costs and Bankruptcy

Consumer borrowing secured by residential real estate has grown substantially over the past several years. This trend has resulted from several factors, including: low interest rates on home mortgages and home equity lines; the tax deductibility of interest payments on mortgages and home equity loans; and market innovations that have increased the flexibility of refinancing and home equity loans, enabling consumers to use their equity in their homes for other purposes. All of these factors tend to increase the value of housing by increasing the willingness of purchasers to pay higher prices for the houses. Lower interest rates, for instance, encourage buyers to pay a higher price for the house by reducing the monthly payment associated with a given principle sum borrowed.¹⁴⁴ Higher tax rates increase the economic value of housing by increasing the effective value of the mortgage tax deduction. In a period where effective tax rates are high, buyers will be encouraged to spend more on houses relative to the other elements


¹⁴² Donald P. Morgan & Ian Toll, Bad Debt Rising, CURRENT ISSUES ECON. & FIN. (Research & Mkt. Analysis Group, Fed. Reserve Bank, New York, N.Y.), Mar. 1997, at 1, 3. Consistent with the argument presented in the text here, Morgan and Toll conclude that increased consumer demand for credit cards, relative to other forms of consumer credit is driving the increase in credit card debt, not a supply-side shift. Id.

¹⁴³ Id. at 4.

¹⁴⁴ Gross & Souleles, supra note 54.

¹⁴⁵ See supra note 61 and accompanying text.
of their wealth portfolio. It also appears that the cost of renting relative to homeowning has risen dramatically over the past decade, which also tends to encourage homeownership. Standard economics thus provides a compelling explanation for the increase in household mortgage obligations—low interest rates, high effective tax rates, and the increased capital value of residential real estate. Moreover, increased mortgage liabilities have been offset by an increase in home values, thereby increasing household assets by the same amount as the liability incurred.

Although the rise in housing prices thus seems to be easily explained by standard economics, Elizabeth Warren and Amelia Tyagi argue in The Two-Income Trap that recent decades have seen an excessive “bidding war” for housing, as families compete to get their children into preferred school districts. This bidding war for housing has, in turn, driven mothers from the home into the workplace, in order to earn sufficient income to pay the mortgage on high-priced homes. In turn, this increased female workforce participation has given rise to a whole new host of expenses, such as additional cars and child care expenses. In the end, Warren and Tyagi argue, the family is no more financially stable or well-off, because now both incomes are needed to pay for the house, as well as the expenses associated with maintaining a two-income family. Warren and Tyagi have dubbed this phenomenon the “two-income trap,” which, at its core, is said to be driven by the rapid appreciation in housing prices.

Most of the support for the housing “bidding war” hypothesis in The Two-Income Trap is anecdotal. The only numerical data offered to support the thesis is an example of the balance sheet of an average household in the 1970s compared with an average household in the 2000s. On closer inspection, however, the authors’ data does not support the “bidding war” hypothesis. In the standard one-wage earner household of the 1970s, the median income was $38,700. Major expenses were $1030 a year for health insurance, $5310 for mortgage payments (14% of family income), and $5410 for automobile loan payments and expenses. The effective tax rate was 24%, equaling $9288 from the household salary, leaving $17,834 in discretionary income. The overall family budget is described below in Figure 9:

145 See supra note 105 and accompanying text (discussing rise in effective tax burden during 1990s).
146 See Dynan et al., supra note 83, at 424–25. It is not clear why the cost of renting has risen relative to homeowning.
147 See WARREN & TYAGI, supra note 3, at 22–32.
148 Id.
149 See id. at 25.
150 Id. at 50–51. The data in this discussion is drawn from id.
In the typical family of the 2000s with both spouses working, total family income is $67,800. Mortgage payments are $9000, an increase of $3690, but a slight reduction to only 13% of income. The expense of two cars rises to $8000, or an increase of $2860. Day care is now needed because both parents are working, adding a total of $9670 for two children. Health insurance has increased to $1650, an increase of $620. Because of the progressiveness of the tax code, the higher family joint incomes have increased taxes to 33%, or a total of $22,374, an increase of $13,086. Discretionary income has, in fact, fallen in the second period. But this appears to be primarily the result of a much higher tax burden and additional new child care expenses. As seen below in Figure 10, the supposed “bidding war” for housing, by contrast, has increased the family housing expense by only $3690:

As Figure 10 indicates, mortgage, automobile, and health insurance expenses have all risen modestly in absolute terms from the 1970s to the early 2000s, but all have fallen as a percentage of the family budget. By contrast, taxes have increased by over $13,000, almost as much as all of the other expenses combined, and over three times the increase in housing expenses. Child care is a new expense that represents fourteen percent of the budget. But if the bidding war hypothesis is that the spouse is forced to work in order to pay for housing expenses, the fact that the family incurs $9670 in new child care expenses in order to pay $3690 in new housing expenses (which have actually fallen as a percentage of the family budget) is inconsistent with the hypothesis. *The Two-Income Trap* focuses on the reduction in discretionary income between the two periods, but the culprit for this appears to be increased taxes and child care expenses, not increased housing expenses. Moreover, unlike new taxes and child care expenses, increases in the cost of housing and automobiles are offset by increases in the value of real and personal property as household assets that are acquired in exchange. In short, even though the debt obligation associated with housing has increased in recent years, it is not clear that the “bidding war” hypothesis is consistent with either economic theory or available empirical evidence.

Moreover, data from the Federal Reserve on the mortgage debt service ratio also fails to find any major or consistent upward trend that supports the “bidding war” hypothesis. Like the debt service ratio presented above, the mortgage debt service ratio is the percentage of monthly income dedicated to mortgage debt service. Over the past twenty years, the mortgage debt service ratio has hovered within a narrow range between 5.01% and
6.35% of monthly income, rising from 1982 until 1991, then falling before rising slightly above 6% again in 2000, as Figure 11 shows:

![Figure 11: Mortgages and Bankruptcy](image)

Source: Federal Reserve Board and Figure 3.

Thus, the mortgage debt service ratio has increased, but only slightly—a little over one percent of income—which is certainly not enough to explain the increase in bankruptcies. In addition, default rates on mortgages have remained fairly constant for many years. Moreover, while both the debt service ratio and financial obligations ratio have been constant for homeowners during this period, it is renters, not homeowners, who have experienced an increase in their financial obligations. On average, renters spend seventeen percent of their total after-tax income on rent payments, more than twice as much, in percentage terms, as homeowners. If anything, therefore, the financial condition of homeowners has improved dramatically relative to that of renters during the past decade.

Nor is it clear from the example in the Two-Income Trap whether the price of housing is exogenous or endogenous to family income in the

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151 In fact, this small increase reflects the fact that between the 1970s and 2000s, the tax deductibility non-mortgage consumer debt was phased out, thereby increasing the attractiveness of housing credit relative to other forms of consumer credit. Thus, even this modest increase in the mortgage debt service burden probably has little to do with the bidding war hypothesis.

152 See Durkin, supra note 72, at 38–39.

153 Dynan et al., supra note 83, at 424–25. For the first quarter of 2004, for instance, the household financial obligations ratio was 31.10% for renters and 15.54% for homeowners. See also Fed. Reserve Bd., Household Debt Service and Financial Obligations Ratio, available at http://www.federalreserve.gov/releases/housedebt/default.htm (last modified Mar. 9, 2005). According to the Federal Reserve, “The financial obligations ratio (FOR) adds automobile lease payments, rental payments on tenant-occupied property, homeowners’ insurance, and property tax payments to the debt service ratio.” Id.
model. Warren and Tyagi implicitly assume that the price of housing is the independent variable that encourages women to enter the workforce. But it is at least equally plausible, if not more so, that the decision to work increases the income available to the household, which then enables and encourages the family to buy a more expensive house. The effect on vehicle purchases likely is similar. Thus, it is questionable whether the “bidding war” hypothesis accurately explains much of even this modest rise in housing prices.

IV. FINANCIAL SHOCKS

The second prong of the Traditional model is that even if consumer indebtedness does not proximately cause bankruptcy filings, when combined with unexpected financial shocks, consumer debt can cause household financial collapse, leading to bankruptcy. Leading advocates of the Traditional model argue that financial shocks have become both more common and more severe over time. As Elizabeth Warren has written:

Today’s families may face the same kinds of risks that they have faced for generations, but the likelihood of something going wrong has changed. The odds of job loss, the economic fallout from medical problems, and the risk of divorce have all increased. That means that today’s families face a greater likelihood of suffering one of these devastating financial hits.¹⁵⁴

The Traditional model, therefore, predicts that there has been an increase in the frequency or severity of unexpected financial shocks to American households. The model thus generates testable hypotheses—an examination of the evidence on job loss, divorce, and medical problems should suggest that these factors are increasing over time in connection with the increasing bankruptcy filing rate. This Part of the Article examines the predictions of the Traditional model in light of available evidence.

A. Unemployment, Downsizing, and Bankruptcy

1. Unemployment and Bankruptcy.—The first argument considered is whether increased bankruptcy filing rates can be explained by unemployment, “downsizing,” and employment interruptions.¹⁵⁵ The theory is

¹⁵⁵ See SULLIVAN et al., supra note 2, at 75 (“Our data suggest that job-related income interruption is by far the most important cause of severe financial distress for middle-class Americans.”); Braucher, supra note 9, at 5; id. at 105 (“The jobs data are overwhelming: by every measure, the debtors in bankruptcy are those who failed at work.”). But see VISA U.S.A., INC., CONSUMER BANKRUPTCY: CAUSES AND IMPLICATIONS (1996), discussed in Charles A. Luckett, Personal Bankruptcies, in THE IMPACT OF PUBLIC POLICY ON CONSUMER CREDIT 75–77 (Thomas A. Durkin & Michael E. Staten eds., 2002) (finding that total level of unemployment had limited predictive value for number of bankruptcy filings although changes in unemployment rate had a large effect). Unemployment has been a linchpin of the Traditional model for decades. See STANLEY & GIRTH, supra note 35, at 24–28.
straightforward: households adapt their living standards and debt levels to an expected level of income, but sudden and unexpected unemployment, especially of a head wage-earner, creates an exogenous shock to the household budget. Although government unemployment insurance and other programs can provide short-term protection from income interruptions, they are not perfect insurance, especially if the worker is unable to readily find another job. As a result, if unemployment rates were rising over the past several years, this rise would provide a plausible explanation for rising bankruptcy filing rates. But the available evidence does not support the theory that the bankruptcy boom is the result of rising unemployment.

Figure 12 demonstrates that a simple examination of consumer bankruptcy and unemployment raises serious doubts about the proffered relationship:

As Figure 12 suggests, there appears to be little or no correlation between aggregate unemployment and the upward trend in the bankruptcy filing rate. In fact, during the run-up in bankruptcy filings in the mid-1990s, unemployment and bankruptcy filings appear to be inversely correlated. Throughout most of the 1980s and 1990s, the general trend in the unemployment rate was downward. Nonetheless, the trend in the bankruptcy filing rate was upward. Although official unemployment rates are not a perfect measurement for job loss and job adjustments, this evidence undermines the hypothesis that rising bankruptcy rates are caused, to any substantial degree, by rising unemployment rates.

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156 See Warren, supra note 154, at 413 (“By virtually any measure, however, in the past twenty-five years the chances that a worker will be laid off, downsized, or restructured out of a paycheck have substantially increased.”).
On the other hand, this finding is not inconsistent with finding that those in bankruptcy are more likely to be unemployed than those in the population at large. Sullivan, Warren, and Westbrook, for instance, conclude that some 18% to 21% of their sample was unemployed at the time of filing, much higher than the official prevailing rate at that time (6.7% in 1991).\(^{157}\) To the extent that unemployment is not the problem, they insist that rising bankruptcies are the result of underemployment, job adjustments, or other diffuse measures of income interruption. They do, in fact, find that two-thirds of bankrupts in their study suffered some sort of “job-related financial stress” in the years preceding bankruptcy. From this evidence they conclude that unemployment, “downsizing,” and employment interruptions are the primary cause of bankruptcy. They conclude, “[O]ur data reveal that many people are finding themselves a part of the rising bankruptcy curve because they have lost their jobs . . . .”\(^{158}\)

But this reasoning is flawed. In order to infer causation from correlation, basic statistical methodology requires a control group that can serve as a baseline for comparison.\(^{159}\) If the argument is that unemployment causes bankruptcy filings, then it is necessary to find out how many people suffered unemployment but did not file bankruptcy. If there is a large number of people who suffered unemployment but were not forced to file bankruptcy, then this undermines the conclusion that unemployment exogenously leads to bankruptcy filings. To illustrate the point, consider the following hypothetical. Suppose that research indicated that two-thirds of those who file bankruptcy own a car. Would it be justified to conclude that owning a car increases the likelihood of filing bankruptcy? Clearly not—it would be necessary to know how many people own a car but do not file bankruptcy. Whether the incidence of a variable is important requires comparison with a control group. It is a well-established truism that the mere correlation between two variables without more cannot establish causation.

Advocates of the unemployment-bankruptcy thesis provide no information on what percentage of the population suffered a similar job disruption but did not file bankruptcy. Other researchers have done so, however, and generally have concluded that job disruption by the head of the household is not a statistically significant predictor of bankruptcy. Buckley and Brinig found little support in their study for the hypothesis that job loss was a significant factor in bankruptcy filings after controlling for other relevant economic variables.\(^{160}\) Fay, Hurst, and White’s study also found that unem-

\(^{157}\) SULLIVAN et al., supra note 2, at 80.

\(^{158}\) Id. at 16–17.


ployment by a head of household or spouse is not a statistically significant predictor of bankruptcy filings. In other words, many American families suffer job disruptions every year, but the overwhelming majority of them do not respond by filing bankruptcy. Instead, they reduce their spending, tap into their savings, and ride out the short-term storm until a new job is acquired. Quite clearly, then, there is some intervening factor that causes some people to respond to job loss by filing bankruptcy, while others do not, and this factor has become increasingly prevalent over time.

In addition, the unemployed have always been overrepresented in bankruptcy as compared with the general public. Indeed, the percentage of bankruptcy filers who are unemployed appears to have been relatively constant for at least thirty years. As a result, although unemployment can explain some percentage of the background steady-state as well as regional cross-sectional differences in filings, it cannot explain why the bankruptcy rate has been rising. A static variable or declining variable over the past twenty years, such as the unemployment rate, cannot explain an upward trend in bankruptcy filing rates.

2. “Downsizing” and Bankruptcy.—The unemployment argument recently has been refined to argue that the real link between unemployment and bankruptcy is not captured in the official unemployment figures, but rather results from “downsizing” or “job skidding.” Although not clearly defined, downsizing or job skidding seems to be distinguished from unemployment more generally in that downsizing applies to middle-class, middle-management, white collar workers. To the extent that these middle managers are laid off, they may be unable to find a job with similar salaries and responsibilities. Because they have jobs, downsized workers will not be counted in the official unemployment statistics. Nonetheless, they will have suffered income interruption and a lower income level than previously, thereby creating an income shock that can precipitate bankruptcy.

161 See Scott Fay et al., The Household Bankruptcy Decision, 92 AM. ECON. REV. 706, 714 (2002).
162 See TEREHA A. SULLIVAN ET AL., AS WE FORGIVE OUR DEBTORS: BANKRUPTCY AND CONSUMER CREDIT IN AMERICA 96 (1989) (estimating fourteen percent of debtors in sample were unemployed at time of bankruptcy); see also SULLIVAN et al., supra note 2, at 102–03 (reporting results of PSID study that found similar percentage of unemployed bankruptcy filers during 1970s, 1980s, and 1990s).
164 SULLIVAN ET AL., supra note 2, at 88–90.
theory, if this phenomenon is in fact new, widespread, and distinct from
Traditional models of the relationship between unemployment and bank-
ruptcy, it could provide some of the explanation for the underlying upward
trend line in bankruptcy filings.

There is a widely shared perception that downsizing became more
prevalent in the 1990s than it had been in the past. This perception, how-
ever, is based primarily on a handful of high-profile anecdotes, rather than
on systematic data. Reliable data on downsizing is difficult to come by,
which has led some scholars to focus on anecdotal evidence of downsizing
in some large, well-known corporations.165 In fact, even as the number of
middle managers was being reduced at some corporations, it appears that
middle management was growing even more rapidly at other corporations.
In other words, for every layoff at IBM or Kodak, there were offsetting
managerial employment increases at Microsoft, General Electric, or Target.
As economist David Gordon observed:

Lots of managers can be laid off, resulting in evidence of substantial gross job
turnover, but lots of managers can also be rehired at similar positions in the
same or other companies, potentially producing no net change or even a net in-
crease in managerial employment. If workplace reductions at the middle
managerial level are offset by job expansions in those same job categories,
then the bureaucratic burden would not be affected. The aggregate numbers
on the expanding managerial employment share . . . suggest that this is exactly
what’s been happening—that new managerial positions have been opening up
to compensate for those eliminated.”166

Or as the Wall Street Journal put it in 1995, “Despite years of relent-
less downsizing, ‘right-sizing’ and re-engineering in corporate America, all
aimed in part at shedding excess bureaucracy, reports of middle manage-
ment’s demise are proving much exaggerated.”167

Not only is middle management growing across corporations, but there
have been trends within corporations that have offset downsizing through
increases in the ranks of managers.168 First, the movement toward more
horizontal management structures spread out management work and ele-
vated some rank-and-file workers to managerial status. Outsourcing and
technology, cited by some as reducing job stability, actually increased the
need for managers within a corporation because of the need to supervise
these assets and to coordinate their relationship to the rest of the corpora-

165 See id. at 104 (discussing several episodes at Kodak and other corporations that were heavily re-
166 DAVID M. GORDON, FAT AND MEAN: THE CORPORATE SQUEEZE OF WORKING AMERICANS AND
THE MYTH OF MANAGERIAL “DOWNSIZING” 55 (1996). He adds, “For all the talk of ‘downsizing,’ there
were more managers in 1994 than there were in 1989 before the ‘downsizing’ began.” Id. at 53.
167 Alex Markels, Restructuring Alters Middle-Manager Role but Leaves It Robust, WALL ST. J.,
168 See id.
Adherents to the downsizing story cite examples of downsized managers who were forced to take new jobs with reduced responsibility and salary, a "job skid." But these examples ignore the fact that by making corporate bureaucracies flatter, many more people are given greater responsibility and decision-making authority simply because there are fewer layers of bureaucracy to navigate.

Data on the thickening management ranks at the majority of corporations, however, has not been widely reported, leading many to conclude that the well-publicized layoffs were indicative of a larger economic trend. Gordon, however, found that the percentage of white collar workers in the economy has grown substantially over time. His evidence is summarized in Figure 13:

![Figure 13: Managers as Percent of Employment, 1948–94](image)

Source: David Gordon, Fat and Mean (1994).

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169 Id. Xerox frequently is cited as a downsizer of management positions during the early-1990s, but most managers were simply moved around so that in the end the total number of middle managers in the core document-processing unit was unaffected. Id. Outsourcing, therefore, has little effect on the job status of managers, although it can create layoffs of rank-and-file workers. See id. Of course, the corporations that are the beneficiaries of the outsourced contracts have to hire their own managers to manage the contract and workers to perform the duties previously performed internally.

170 See KATHLEEN S. NEWMAN, FALLING FROM GRACE: THE EXPERIENCE OF DOWNWARD MOBILITY IN THE AMERICAN MIDDLE CLASS (1988); see also SULLIVAN ET AL., supra note 2, at 88–90 (providing anecdotes of job skid leading to bankruptcy).

171 See Markels, supra note 167 (citing examples of business reorganizations leading to an elevation of workers to managerial status).

172 GORDON, supra note 166, at 52 (noting widespread media coverage of managerial layoffs at IBM and elsewhere).
If the number of nonproduction and supervisory employees in the private sector approximates the middle-class white collar workers described by Sullivan, Warren, and Westbrook, then there is little evidence of overall downsizing during the past few decades. Although Gordon’s data ends in 1994, it appears that the general growth of the managerial sector of the economy has continued since then, and at the very least there has been no evident decline in the management sector of the economy.173 Instead of a job slide, there appears to be a job ladder as an increasing percentage of rank-and-file workers have been graduating into managerial ranks, rather than managers sliding down to blue collar work. The combination of low unemployment and a growing managerial composition of the private workforce indicate that the general macroeconomic trend has been for workers to rise from laboring jobs to managerial jobs, not fall.

The overwhelming conclusion of all academic research regarding the downsizing hypothesis has been that there was no discernible reduction in job security during the 1990s.174 This conclusion is consistent regardless of whether one examines large corporations or businesses of all sizes. Indeed, one study found that in large corporations—the purported source of downsizing angst—mean employment tenure and the percentage of employees with ten or more years of service have actually increased over time.175 There is also no evidence that older or mid-career employees have been singled out in downsizing decisions; the impact of downsizing is borne by the most junior workers.176


175 See ALLEN, supra note 174, at 28.

176 Id.; see also Jennifer M. Gardner, Worker Displacement: A Decade of Change, MONTHLY LAB. REV. 45, 45 (1995) (noting that “the proportion of long-tenured workers displaced from their
Downsized managers are also less adversely affected by their layoffs than most other categories of employees. A study by the Bureau of Labor Statistics following the recession of the early 1990s found that although many white collar workers were laid off during the recession, many more blue collar workers were laid off.\textsuperscript{177} Once the economy began to recover, managerial workers were rehired much more rapidly than any other occupational grouping.\textsuperscript{178} Among the workers displaced in 1991 and 1992, 80.6\% of managers were employed in February 1994, as compared to, for example, 74.8\% of craft workers and 68.8\% of other blue collar workers.\textsuperscript{179} Roughly 60\% of managers and professionals were reemployed as managers and professionals in February 1994.\textsuperscript{180} By contrast, less than half of those in service occupations wound up in the same kinds of jobs.\textsuperscript{181} Thus, the job interruptions to middle-managers appear to be less severe than for other categories of employees, suggesting that downsized white collar workers should be less financially affected by unemployment and thus less likely to file bankruptcy than most other categories of employees.

Moreover, although the media stereotype of the job skidder is a veteran highly-paid executive, those who did “skid” out of the managerial ranks tended to be those who had spent the least amount of time as managers prior to losing their positions.\textsuperscript{182} The victims of downsizing tend to be the least-experienced managers, not experienced executives.\textsuperscript{183} While downsizing of junior executives is obviously wrenching for those affected, the Traditional model suggests that the purported connection between downsizing and bankruptcy should apply with greater force to long-time senior executives who are unable to find comparable replacement employment because of their advanced age and who have built their lifestyles and financial obligations around their managerial positions and pay.\textsuperscript{184} Junior managers, by contrast, would be less likely to have constructed executive lifestyles and financial obligations and therefore should be more able to adapt to their dis-jobs . . . was about the same in the 1991–92 [recession] period, 3.8\%, as it was during the 1981–92 [recession] period.”).

\textsuperscript{177} GORDON, supra note 166, at 55.
\textsuperscript{179} GORDON, supra note 166, at 56. The resilience of the victims of layoffs during the 1991–92 recession is especially probative in this context, as the data for Sullivan, Warren, and Westbrook’s study was collected in 1991. See SULLIVAN ET AL., supra note 2, at xiii.
\textsuperscript{180} GORDON, supra note 166, at 56; Gardner, supra note 176, at 45 (noting that re-employment rate was higher for 1991–92 recession than prior recession).
\textsuperscript{181} GORDON, supra note 166, at 56.
\textsuperscript{182} Id. at 57 (citing STEPHEN I. ROSE, DECLINING JOB SECURITY AND THE PROFESSIONALIZATION OF OPPORTUNITY (Nat’l Comm’n for Employment Policy, Research Report No. 95-04, 1995)).
\textsuperscript{183} Id. at 57–58.
\textsuperscript{184} SULLIVAN ET AL., supra note 2, at 88–90.
appointment. In addition, during periods of economic expansion, managerial employment rises faster than non-managerial employment. Assuming that this historical trend held during the boom period of the late-1990s, then the number of white collar managers should have been rising rapidly during that period, raising doubts about how “downsizing” could explain much if any of the large jumps in bankruptcy filing rates during that period. Thus, even where there is downsizing and job skid, the data do not support a coherent theory of how this translates into rapidly-rising bankruptcy rates.185

B. Divorce

Divorce also can be a precipitating cause of bankruptcy.186 First, divorce reduces the economies of scale of living in a single household. Rather than living in one house, it becomes necessary to maintain two households, with two sets of food, housing, and other expenses. Second, divorce often creates an unexpected shock to household income, although alimony and child support payments ameliorate that disruption. Third, if one spouse has less-valuable market skills or has been out of the labor market for several years (such as to raise children) then that individual will have to support the new household on a lower wage than previously. Thus, divorce is a background cause of bankruptcy and explains some cross-sectional regional variation.187 The Traditional model, however, contends that divorce can explain the upward trend in bankruptcy filings as well.188

But divorce cannot explain the rise in consumer bankruptcy filings over the past several decades. If divorce were a cause of rising bankruptcies, then by definition, divorce rates would have to be rising. Instead, the American divorce rate peaked out in 1981 at 5.3 divorces per 1 million population and has fallen steadily since then, as shown in Figure 14:

185 Of course, increasing unemployment insurance will also encourage workers to reduce precautionary savings, which will indirectly increase exposure to other financial shocks. Kartik Athreya, Unemployment Insurance and Personal Bankruptcy, ECON. Q. (Fed. Reserve Bank, Richmond, Va.), Spring, 2003, at 33, 44.
186 See Fay et al., supra note 161, at 716; see also Sullivan et al., supra note 2, at 172–74.
187 See Barron et al., supra note 163, at 452; Buckley & Brinig, supra note 160.
188 See Warren, supra note 154, at 420 (“The risk of divorce has also risen over the past generation.”).
The Traditional model cannot reconcile these trends. The divorce rate has been stable and even falling a bit over time, so the number of bankruptcies caused by divorce should also be falling over time, not rising. Instead, bankruptcies have continuously risen even as divorce rates have fallen. The bankruptcy filing rate has risen rapidly during an era where the divorce rate has fallen. From 1979 to 2002, the divorce rate fell by 25%; during that same period, the bankruptcy filing rate rose by 583%. This inverse relationship is especially puzzling, given that the financial impact of divorce should be less catastrophic today than in prior eras, owing to legal and social reforms that have increased the financial resiliency of divorced parents, such as stronger mechanisms for collection of child support, greater job flexibility, and more available child care.

Econometric evidence also fails to support the view that divorce explains the rising bankruptcy filing rate. Once a control group is added for comparison, it becomes apparent that many people get divorced every year, but relatively few file bankruptcy as a consequence. Thus, although there is clearly some relationship between divorce and bankruptcy, divorce simply cannot be a cause of the rising bankruptcy filing rates of recent years.

[Figure 14: Divorce and Bankruptcy]

Source: Bureau of Census and Figure 3.

189 See Luckett, supra note 155, at 76 (“[T]he divorce rate has been so stable over the past several years, it is hard to see it playing much of a role in the substantial increases in bankruptcy.”).

C. Health Problems, Medical Costs, and Insurance

In theory, health problems can precipitate a bankruptcy filing through a whipsaw effect that combines several adversities. First, it can create a shock to household income because disabling health problems make it impossible to work. Second, health problems also can create a shock to household expenses because they can create large, unanticipated expense and resultant debt, especially if the debtor does not have adequate health insurance. The combination of these two factors probably contributes to many people filing for bankruptcy.\footnote{See SULLIVAN ET AL., supra note 2, at 141–71; Domowitz & Sartain, supra note 129, at 404; Melissa B. Jacoby et al., Rethinking the Debates over Health Care Financing: Evidence from the Bankruptcy Courts, 76 N.Y.U. L. REV. 375 (2001).} 

First, there seems to be no foundation for the view that people are suffering greater income disruptions from illness or injury. There is no evidence that Americans have somehow become more intrinsically unhealthy, such that they now miss greater amounts of work. If anything, modern medicine and education have tended to make people healthier, dramatically reduced the recuperation time associated with recovery from a major health event, and almost certainly reduced the number of seriously disabling health events suffered by individuals. Moreover, statutory innovations such as the Family Medical Leave Act have made it easier for individuals to have medically related job interruptions with reduced income interruptions. Thus, it is difficult to believe that Americans are losing more income from missed work than in the past.

Assuming that the income interruptions due to illness or injury have not increased, therefore, the argument for the Traditional model seems to boil down to the second element, namely that even if Americans are healthier than in the past, they have higher health care costs.\footnote{Note that there is an important relationship between the two, however—to the extent that the increased health care expenditures increase health and shorten convalescent time, they also reduce the negative impact of health problems on income-earning ability. It does not appear that the Traditional model has tried to account for this offsetting effect.} Sullivan et al. assert, “Medical costs have burgeoned, especially in the past decade.”\footnote{SULLIVAN ET AL., supra note 2, at 141 (referring to “spiraling cost of medical care”). It should be noted that the phrase “in the past decade” is somewhat ambiguous in this context, as the book was published in 2000, which suggests that the “past decade” refers to the 1990s, yet the data that underlies The Fragile Middle Class was collected in 1991. See id. at xiii.} They continue, “These problems may have increased during the past decade. That increase may explain in part the dramatic rise in bankruptcies in recent years.”\footnote{See id. at 141.} According to the Traditional model, medical problems can explain the rising bankruptcy filing rate if any of the following are found: First, that medical costs have been rising over time similarly to the bankruptcy filing rate; second, that an absence of health insurance has increased substantially the incidence of financial ruin; and third, that health problems

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\footnote{See SULLIVAN ET AL., supra note 2, at 141–71; Domowitz & Sartain, supra note 129, at 404; Melissa B. Jacoby et al., Rethinking the Debates over Health Care Financing: Evidence from the Bankruptcy Courts, 76 N.Y.U. L. REV. 375 (2001).}
have caused workers to miss more work and thus lose greater amounts of their income. Upon closer examination, however, these factors cannot explain the rise in the bankruptcy filing rate.

1. Health Care Costs and Bankruptcy.—Consider first, the contention that “[m]edical costs have burgeoned, especially in the past decade” and that this can explain the rise in bankruptcy filing rates. The precise meaning of this assertion is unclear, as is the causal link being postulated. Is the claim that total health costs have risen? If so, it is not clear why a rise in the total cost of health care would directly affect consumers, if they do not pay for it directly. Or is the claim that the actual amount paid out-of-pocket by consumers has risen? The assertion here is specified in an extremely poor manner, so the evidence will have to be examined in a variety of ways. Like everything else, the cost of health care has risen over time, as has family income. The fact that health care has gotten more expensive, therefore, says little about the contribution of health care costs to bankruptcy.

The long-term relationship between health care inflation and bankruptcy, however, is questionable. As Figure 15 demonstrates, there is little evidence that fluctuations in the cost of health care bear a significant relationship to increases or decreases in bankruptcy filing rates:

![Figure 15: Health Care Costs and Bankruptcy](image)

Source: CMS (Health Expenditures), Bureau of Economic Analysis (Per Capita Income) and Figure 3.

Perhaps most striking is the evidence of the mid-1990s, which indicates that bankruptcies were rising most dramatically during the period when health care inflation had virtually disappeared.\textsuperscript{196} In fact, adjusting for inflation, it appears that during some periods during the 1990s there was actually a \textit{decline} in health care costs from one year to the next.\textsuperscript{197} From 1995 to 1996, for example, consumer bankruptcies jumped 29\% and then jumped another 20\% the next year. By contrast, during this same period, real health care costs rose just 2\% and 3.3\% respectively each year.\textsuperscript{198} Then, when health care costs began to rise again more rapidly, bankruptcy filing rates began to actually decline slightly. This leveling off of health care costs in the mid-1990s resulted from the advent and spread of managed care, which temporarily reined-in health care costs.\textsuperscript{199} If changes in health care costs were a substantial contributor to changes in bankruptcy filings, it would have been expected that bankruptcy filing rates would have leveled off during this period as well. Instead, bankruptcy filing rates rose rapidly, even as health care costs leveled off. An examination of out-of-pocket health expenditures, as demonstrated in Figure 16, similarly shows little relationship between changes in health care expenses and the bankruptcy filing rate:

\begin{itemize}
\item\textsuperscript{196} See Henry Aaron, \textit{The Unsurprising Surprise of Renewed Health Care Cost Inflation}, \textsc{Health Aff.}, Jan. 23, 2002, at W85, \textit{available at} \texttt{http://www.healthaffairs.org}.
\item\textsuperscript{197} See Drew E. Altman & Larry Levitt, \textit{The Sad History of Health Care Cost Containment as Told in One Chart}, \textsc{Health Aff.}, Feb 23, 2002, at W83, \textit{available at} \texttt{http://www.healthaffairs.org}.
\item\textsuperscript{199} See Aaron, \textit{supra} note 196; CUTLER & SHEINER, \textit{supra} note 198. The cost-restraints imposed by managed care began to crumble in the late 1990s, leading to a resumption of high health care inflation. See Strunk et al., \textit{supra} note 198.
\end{itemize}
Again, although income-adjusted out-of-pocket health expenditures have risen over this period, the bankruptcy filing rate has risen much more rapidly. The disconnect is again most evident for the bankruptcy boom of the 1990s, when out-of-pocket health expenditures leveled off, but the bankruptcy filing rate rose dramatically.

Most studies of bankruptcy filers also have failed to find a relationship between health debt and bankruptcy, although a few studies find that medical debt does play a role in bankruptcy. These studies, however, do not examine whether rising health care costs contribute to a rising bankruptcy filing rate. Nonetheless, the mixed evidence to support even the basic

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201 See SULLIVAN ET AL., supra note 162, at 168–69; Barry A. Gold & Elizabeth A. Donahue, Health Care Costs and Personal Bankruptcy, 7 J. HEALTH POL., POL’Y & L. 734 (1982) (finding that medical debts are not a major cause of bankruptcy); Philip Shuchman, The Average Bankrupt: A Description and Analysis of 753 Personal Bankruptcy Filings in Nine States, 88 COM. L.J. 288, 294–96 (1983) (finding medical debt scheduled in over half of bankruptcies and median medical debt of $567); Philip Shuchman, New Jersey Debtors, 1982–83: An Empirical Study, 15 SETON HALL L. REV. 541, 570–71 (1985) (finding average amount of medical bills as expressed as a percentage of total unsecured debt “was relatively small”—five percent of total unsecured debt); Larry Sitner et al., Medical Expense as a Factor in Bankruptcy, 52 NEB. ST. MED. J. 412 (1967) (finding medical debts not to be an important factor in most bankruptcies); see also Jacoby et al., supra note 191, at 378 (noting that “[u]ntil the 1990s . . . most empirical studies of bankruptcy did not find illness, injury, or medical debt to be a major cause of bankruptcy”). But see Susan D. Kovac, Judgment-Proof Debtors in Bankruptcy, 65 AM. BANKR. L.J. 675, 709–721 (1991) (finding large amounts of medical debt and medical debt present in many cases in her sample, but noting limited ability to generalize from her judgment-proof debtors to the larger population of Americans or bankruptcy filers).
model of the relationship of medical costs to bankruptcy does not increase confidence in the claim that rising bankruptcies can be attributed to rising health care costs.

Notwithstanding the long consensus that relatively few bankruptcies are caused by health problems and health costs, a recent study concludes that approximately half of consumer bankruptcies are caused by medical problems, a twenty-three-fold increase over a twenty-year period. Both conclusions are fundamentally unsupportable, however, and rest primarily on the way in which the researchers define and count what constitutes a medical bankruptcy rather than an actual increase in the number of bankruptcies caused by medical problems.

The finding that almost half of all bankruptcies are caused by medical problems is based on a fundamentally flawed and over-expansive definition of “medical bankruptcies.” The researchers, for example, count as “medical bankruptcies” such dubious events as gambling addiction, a death in the family, or the birth of a child in addition to unexpected illness or injury. Moreover, they count as a serious medical problem any accumulation of unpaid medical bills of over $1000 within two years of bankruptcy. Considering that, in 2001, average private medical expenditures were almost $2500 per person, such a low threshold of $1000, well below the average for private expenditures, seems indefensible. Nor do the researchers provide any evidence on how many filers had substantially more than $1000 in unpaid medical bills. Finally, they provide no evidence as to the size of the other obligations of the “medical bankruptcy” filers; thus, for instance, a debtor could have $50,000 in student loans and $1001 in unpaid medical bills, and the authors would nonetheless count this as a medical bankruptcy.

The finding of a twenty-three-fold increase in medical bankruptcies is equally unsupportable. This figure appears to be almost completely the result of a change in the way in which the researchers define medical bankruptcies. The baseline for the purported twenty-three-fold increase was a finding in the book As We Forgive Our Debtors that only eight percent of bankruptcies were medically-related. It is not exactly clear what was considered to be a “medical bankruptcy” in the earlier study, but it appears that the definition was much narrower, and did not include such things as gambling addiction or the $1000 threshold. If the $1000 threshold was ac-

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204 See supra note 200 and accompanying text. Total expenditures by individuals, employers, government, and philanthropy were over $5000 per person for 2001. See Health Accounts, at http://www.cms.hhs.gov/statistics/nhe/default.asp.

205 Himmelstein et al., supra note 202, at W5-71.
tually included in the earlier study, the authors of the current study do not appear to have adjusted it for inflation or growth in income. In fact, *As We Forgive Our Debtors* seems to directly reject the more expansive definition of “medical bankruptcies” of the current study, stating:

> Our central finding is that crushing medical debt is not the widespread bankruptcy phenomenon that many have supposed. To the extent that the typical debtors in bankruptcy are painted as sympathetic characters because they are struggling with insurmountable medical debts, these data show that “typical” is the wrong adjective. Only a few debtors find themselves in such extreme circumstances . . . About half of all debtors carry some medical debt, and many carry substantial medical debt. Although these medical debts are not the obvious cause of the debtors’ bankruptcies, they are part of their financial troubles.

The earlier study, like the most recent one, therefore, found medical debt present in about half of bankruptcy filings. By contrast, the earlier study concluded that relatively small amounts of medical debt were unlikely to be a significant cause of bankruptcy. The authors added, “The central finding is that medical debt is not an especially important burden for most debtors.”

The more recent study, however, dramatically increases the classification of what types of events constitute medical bankruptcies, creates an entirely new category of “medical bankruptcies” for anything over $1000 in unpaid medical bills, and does not weigh the size of a given debtor’s medical bills against his or her overall unsecured debt. In short, this study does little to disrupt the existing consensus that medical problems exert only a small effect on bankruptcy filings.

Overall, it is unclear what exactly the Traditional model is referring to when it references the “burgeoning cost” of health care. Yet, however it is measured, it is difficult to see how this factor has dramatically contributed to increased bankruptcy filing rates. Finally, if there were an overall increase in indebtedness resulting from health care, the increase would be expected to appear somewhere in the larger measurements of indebtedness, such as the debt service ratio or household wealth, which it does not.

2. **Health Insurance and Bankruptcy.**—Lack of health insurance also can theoretically contribute to bankruptcy filings. If a family lacks health insurance, a catastrophic or long-term illness can deplete family savings and

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207 *SULLIVAN ET AL., supra note 159, at 173* (emphasis added).

208 *Id.* at 170.
overwhelm the household with debt.209 As a result, a lack of health insurance may exacerbate the other difficulties created by health problems, such as increased debt and reduced income. However, Figure 17 shows that a lack of health insurance cannot on its own explain the upward trend in bankruptcy filings:

Figure 17: Health Insurance and Bankruptcy

![Figure 17: Health Insurance and Bankruptcy](image)

Source: Census Bureau and Figure 3.

Figure 17 indicates that since 1987, when the Census Bureau started reporting annual records of the percentage of the population without public or private health insurance, the percentage of Americans without insurance has been relatively stable, fluctuating between roughly 13% at the outset of the period to a high of 16% in 1998 before declining again. By contrast, during this same period, bankruptcy filings rose from 5 per 1000 households to 14 per 1000 households. On the other hand, even though lack of insurance cannot explain the upward trend line, the data is suggestive of some relationship regarding short-term fluctuations in the bankruptcy filing rate. Overall, however, the bankruptcy filing rate rose much more rapidly than the percentage of the population without health insurance.

Empirical research also finds little relationship between lack of health insurance and bankruptcy. Gross and Souleles found that a lack of health insurance was not a statistically significant predictor of bankruptcy.210 Economist Joanna Stavins similarly found “no notable difference” between

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209 SULLIVAN ET AL., supra note 2, at 147–50.

210 Gross & Souleles, supra note 54, at 334–35, tbl.2. Although they did not find lack of health insurance to be a predictor of bankruptcy, they did find it to be a predictor of credit card default.
the percentage of bankruptcy filers with health insurance and the percentage of the non-filers with health insurance.\footnote{211}

Moreover, it is not clear the actual extent to which an absence of health insurance could substantially influence bankruptcy filing rates.\footnote{212} A recent study found that of those who blamed health care problems for their bankruptcy filing, approximately 80% had health insurance during the relevant period.\footnote{213} Thus, if it is true that 20% of 1.5 million annual bankruptcies are caused by health problems (as suggested by some scholars\footnote{214}) and that 20% of those in bankruptcy as a result of health problems also lack health insurance, then this accounts for a mere 60,000 of the 1.5 million bankruptcies per year. Or to put it in larger perspective, from 1995 to 1996, overall bankruptcies jumped by 250,000. If these estimates are accurate, then a lack of health insurance accounts for approximately 10,000 of that 250,000 increase. Thus, even if a lack of health insurance is a relevant variable for understanding the bankruptcy crisis, it is simply too small of a figure (20% of the 20% of bankrupts who blame health care problems for their bankruptcies) to account for the massive rise in bankruptcy filings during recent decades.\footnote{215}

In addition, providing health insurance also will probably lead to offsetting behaviors that would tend to create new vulnerability to bankruptcy. Though lack of health insurance is probably a factor in only relatively few bankruptcies, providing health insurance to all of the uninsured would probably not lead to a direct one-to-one reduction in bankruptcy filing rates for two reasons. First, the availability of social insurance programs tends to lead to a reduction in precautionary savings to deal with non-medical financial crises.\footnote{216} Second, to the extent that individuals are provided with medi-

\footnote{211} See Stavins, supra note 113, at 22. In fact, Stavins found that those who filed bankruptcy in the past were more likely to have health insurance than those who did not, although they may have acquired health insurance after the filing. Id. at 25. Although it is unlikely that bankruptcy filers are more likely to be insured than non-filers, Stavins’s findings certainly cast doubt on the claim that they are substantially more likely to lack insurance.

\footnote{212} Also, for many people, the decision whether to purchase health insurance, and how much coverage to purchase is discretionary. See Helen Levy & Thomas DeLeire, What Do People Buy When They Don’t Buy Health Insurance and What Does That Say About Why They Are Uninsured? (Nat’l Bureau of Econ. Research, Working Paper No. 9826, 2003), available at http://www.nber.org/papers/9826. Because bankruptcy is itself a form of financial insurance, the decision whether to purchase health insurance, in part, will be a function of whether those debts are otherwise dischargeable in bankruptcy.

\footnote{213} Jacoby et al., supra note 191, at 377. Shuchman found that ninety-two percent of the debtors in his study had health insurance before the date of the bankruptcy filing. Shuchman, supra note 201, at 571.

\footnote{214} See Sullivan et al., supra note 2, at 171. Jacoby et al. estimate that health problems were a factor in about 500,000 bankruptcies in 1999 (over one-third of all personal filings), and that of those in bankruptcy as a result of health problems, approximately twenty percent lacked some form of health insurance. Jacoby et al., supra note 191, at 377.

\footnote{215} Accord Luckett, supra note 155, at 78.

\footnote{216} See Jonathan Gruber & Aaron Yelowitz, Public Health Insurance and Private Savings, 107 J.
cal insurance, this will allow them to increase their consumption, which will also increase their exposure to other economic stresses.217 Thus, as a result of offsetting behavior, universal health insurance will not fully eliminate all of these bankruptcies.

3. Health Problems and Income Interruptions.—The third argument advanced for the purported link between health problems and bankruptcy is that health problems often result in disability, making it impossible to work. This, in turn, leads to income interruptions that can catapult an individual into bankruptcy even without an increase in debt. Again, this factor probably explains some of the background bankruptcy filing rate. However, can the rising bankruptcy rates of recent years be explained by these health-caused income interruptions?

An increase in bankruptcy filing rates could be caused by injury-induced income interruptions in two possible ways: either substantially more people are getting ill or injured, or substantially more people are suffering worse injuries and thus missing longer periods of work. There is no evidence to support either of these propositions. Available evidence tends to point in the opposite direction as well. Domowitz and Sartain, for instance, find little correlation of medical debt with other sources of financial distress, such as job loss or income interruption.218 Fay, Hurst, and White find that health problems by the head of a household or spouse that cause missed work are not a statistically significant factor in bankruptcy filings.219

In fact, common sense suggests that income interruptions caused by health problems should be getting less severe over time rather than more severe. There is no reason to believe that more people are suffering disabling illnesses or injuries that lead to bankruptcy filings. In fact, there is circumstantial evidence that the opposite is true. It is well-established that individual health improves as income rises,220 and that there is a strong correlation between wealth and health.221 Thus, given the steady and at times
dramatic increases in health and wealth over the past two decades, there is every reason to believe that Americans are getting more—rather than less—healthy.

Nor is there any evidence to suggest that those who are ill or injured have suffered more debilitating or long-lasting injuries than in the past. Indeed, constant medical advances make it probable that fewer people are suffering debilitating injuries and illness than ever before. Moreover, those who do suffer illness and injury almost certainly are less likely to be disabled temporarily or permanently by those injuries, and probably recuperate more rapidly than ever before, meaning that the amount of time of missed wages is probably falling over time.

Nor is there any reason to believe that income loss as a result of illness or injury has become worse over time. First, as noted above, household wealth has risen dramatically over time, increasing the assets available to households to smooth over short-term losses in income. Moreover, the advent of home equity loans, as well as various mechanisms for individuals to borrow against other wealth holdings, has made it substantially easier for individuals to access accumulated wealth and transform wealth into income in order to smooth over short-term income losses. Second, as it has become increasingly common for both spouses to work in married families, households should be growing more resilient in the face of job disability—having two workers in a family creates greater income risk diversification against loss of income by one worker. If the head of the household becomes unable to work because of illness or injury, the employment of the other spouse should mitigate the impact of the income loss resulting from a disabling injury or illness.

Workers also have a variety of systems intended to replace some of their income when they suffer illness and injury on the job, such as workers’ compensation, Social Security Disability Insurance, and private disability insurance. Of course, these systems do not fully replace all lost income,

serve, the causal link is ambiguous, as wealth may be endogenous to health because healthy people may be able to work longer or more productively. This caveat is unimportant for the point offered in the text, however, as all that is necessary is the observed correlation. In the correlation, wealth is being offered simply as a proxy for health—therefore, it is irrelevant whether high wealth causes good health or poor health the opposite.

222 Notwithstanding standard economic analysis, it has recently been argued that having two workers somehow makes the household more vulnerable to financial shocks by eliminating a “reserve” worker who could enter the workforce if there is an income disruption to the primary wage-earner in a one-income family. See Warren & Tyagi, supra note 32, at 55–70. This analysis ignores that the two-income family could simply save the second earner’s income in anticipation of a potential disruption to one spouse’s income. Thus, a two-income family should still be much more resistant to income shocks than a one-income family. In fact, the tremendous increases in household wealth over the past decades suggest that this is exactly what families are doing, by increasing their wealth holdings prior to an economic problem. Whether a given household decides to use this wealth to pay its debts, or instead files bankruptcy and keeps it, is, of course, a different question from whether it has sufficient wealth in the first place.
which is why they are not complete protection against bankruptcy. But these systems have been largely stable for all of the relevant period, and there do not appear to be changes that are dramatic enough to explain the changes in the bankruptcy rate.

**D. Additional Evidence Questioning the Traditional Model**

The major factors identified by the Traditional model as explanations for rising bankruptcies in recent decades lack theoretical and empirical support. In addition, corroborative evidence indicates that, controlling for the variables identified as important by the Traditional model, there remain substantial statistical residual effects that cannot be explained by the Traditional model. Although finding large unexplained residuals provides no evidence in itself of what explains the residual, it does indicate that the variables comprising the Traditional model cannot account for all of the facts. Empirical studies have tended to find large unexplained statistical residuals, often swamping the influence of those variables thought to cause bankruptcies under the Traditional model.

David Gross and Nicholas Souleles studied a dataset of credit card accounts to analyze the causes of personal bankruptcies, among other things. Gross and Souleles compared the incidence of personal bankruptcy in 1995 versus 1997. Gross and Souleles found that, after controlling for risk composition and other standard economic variables, the propensity to declare bankruptcy significantly increased during this period. Gross and Souleles concluded, “[E]ven after controlling for account age, balance, purchase and payment history, credit line, risk scores, and economic conditions, a given account was more likely to go bankrupt in 1996 and 1997 than in 1995. Some other systematic default factor must have deteriorated . . . .” Indeed, the magnitudes of the difference “are almost as large as if the entire population of cardholders had become one standard deviation riskier” during this period, as measured by credit risk scores.

A study by Barron, Elliehausen, and Staten, using aggregate credit bureau data, similarly found an upward trend in bankruptcy filing rates over time that cannot be explained by any variables that measure economic risk or household financial condition. Brown also found an upward nationwide trend line in bankruptcy filing rates that could not be explained by any

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223 There have been some minor changes in state workers’ compensation programs, but not any major changes. See Emily A. Spieler, *Perpetuating Risk? Workers’ Compensation and the Persistence of Occupational Injuries*, 31 *HOUS. L. REV.* 119, 247–49 (1994).

224 Gross & Souleles, supra note 54.

225 Id. at 335–36.

226 Id. at 322.

227 See John M. Barron et al., *Monitoring the Household Sector with Aggregate Credit Bureau Data*, *BUS. ECON.*., Jan. 2000, at 63; see also Barron et al., supra note 163, at 453 (finding trend variable to be statistically significant).
traditional variables.228 Similarly, Bishop found a “large difference” between actual bankruptcy filing rates and the rates that would be predicted by the Traditional model, “suggest[ing] that there are other factors of importance,” such as changes in social norms, attorney advertising, and the like.229 Still further questions about the Traditional model are raised by Buckley’s finding of a substantial residual difference in filing rates when comparing the United States and Canada that cannot be explained by any traditional factors.230 Overall, there is consensus in empirical literature that the Traditional model omits an underlying trend and is, therefore, incomplete.

Other factors may explain some aspects of the differences among bankruptcy filing rates from state to state, such as the presence of legalized gambling, whether a state requires motorists to have automobile insurance, and the strictness of a state’s garnishment laws. However, they cannot explain the upward trend nationwide.231 Each of these factors may marginally contribute to bankruptcy filing rates, but as with the other factors identified, these factors appear to be either too small or too stable to explain the surge in bankruptcy filing rates. Legalized gambling, for example, has grown in the United States in the past decade and seems to spawn more bankruptcies in local communities housing casinos.232 On the other hand, legalized gambling is not sufficiently widespread that its effects have been shown to have a major impact outside of the local communities in which it is found. Furthermore, legalized gambling is simply not large enough to explain the additional million or so bankruptcies that are filed each year when compared to those filed two decades ago.233 And while uninsured motorists and garnishment rules have been found to have a link to bankruptcies, there is no indication that these rules have changed so much in recent decades to explain the dramatic change in bankruptcy filing rates.234 Overall, the Traditional model is unable to explain the increase in consumer bankruptcies throughout the past twenty-five years.

V. AN ECONOMIC MODEL OF CONSUMER BANKRUPTCY

The foregoing discussion suggests that the rising consumer bankruptcy filing rate throughout the past several years is not the result of increasing
household economic distress. Unemployment, divorce, health, and indebtedness have been a part of the human condition since human societies have existed and do not appear to be worsening over time. This suggests that the cause of the consumer bankruptcy crisis is not an increase in consumer financial vulnerability but rather an increase in consumers’ propensity to respond to financial problems by filing bankruptcy and discharging their debts instead of reining in spending or tapping accumulated wealth. The novelty, therefore, is not in the underlying problems but rather the increasing willingness of individuals to use bankruptcy as a response to those underlying problems.235

The fundamental error in the Traditional model is that it collapses the issues of household financial condition and bankruptcy filings by assuming that rising bankruptcies are caused by deteriorating financial conditions. This assumption conflates two distinct questions: first, how families get in to financial distress in the first place; and second, how they choose to get out of financial distress. Although the two may be related, they remain distinct questions and their similarity cannot merely be assumed. Financial difficulty presents a menu of options in addition to bankruptcy, from increasing one’s income (such as by taking on a second job), decreasing one’s expenditures (such as by eating out less or vacationing less), or by liquidating assets and using the proceeds to pay debts (such as moving into a smaller house). The combination of a rise in bankruptcy filings with no evident rise in underlying financial distress suggests that what has changed is the increased popularity of bankruptcy as a choice from the menu of financial options confronting financially-troubled households. As shown above, the evidence fails to support the hypothesis that rising bankruptcy filing rates are caused by worsening household financial conditions. Understanding why bankruptcy filings have risen by 500% over the past two decades requires looking beyond the causes of household financial distress, and instead to the changes that have generated an increased propensity for households to choose bankruptcy as their response to financial problems. This requires an examination of the consumer bankruptcy institutions that provide the incentives and constraints on filing bankruptcy, not the factors that cause financial distress.236

This Part briefly describes an alternative model of the consumer bankruptcy process that examines the incentives and institutions shaping the bankruptcy filing decision. A full development of the model and its implications goes beyond the scope and space permitted by the present project;

235 Accord Canner & Luckett, supra note 68, at 223.
236 Douglass North has defined an “institution” as follows: “[T]he humanly devised constraints that structure human interaction. They are made up of formal constraints (e.g., rules, laws, constitutions), informal constraints (e.g., norms of behavior, conventions, self-imposed codes of conduct), and their enforcement characteristics. Together, they define the incentive structure of societies and specifically economies.” Douglass C. North, Economic Performance Through Time, 84 AM. ECON. REV. 359, 360 (1994).
nonetheless, it is appropriate to offer an alternative model to supplement the critique of the Traditional model. The model presented here is necessarily tentative because most theoretical and empirical research on consumer bankruptcy has been developed within the confines of the Traditional model. Therefore, alternative hypotheses have not been developed as fully or empirically tested. The goal of this Part is to briefly describe the alternative model and to suggest future avenues for empirical research to test the model more fully.

The alternative model focuses on three factors that may explain the increased propensity of Americans to file bankruptcy. Those factors are: (1) changes in the relative economic costs and benefits of filing bankruptcy; (2) changes in the social norms regarding bankruptcy; and, (3) changes in the nature of consumer credit that have led to an increased willingness of consumers to discharge their obligations in bankruptcy. The empirical evidence that is available to test these propositions is somewhat sparse, but tends to support the model advanced here. Reducing consumer bankruptcies is not an end in itself. The policy goal is to design an efficient mix of institutions that preserves these consumer benefits and increased economic efficiencies while at the same time responding with additional institutional innovations that will mitigate the negative side effects of increased bankruptcies.

A. Changes in the Relative Costs and Benefits of Filing Bankruptcy

The first factor that has contributed to the rise in bankruptcies is a fundamental change in the economic costs and benefits associated with bankruptcy, especially since the enactment of the 1978 Bankruptcy Code. These changes in the relative costs and benefits associated with declaring bankruptcy create incentives at the margin to file bankruptcy that are reflected in the increasing bankruptcy filing rates of recent decades. Given the substantial economic benefits available to bankruptcy filers, even a small decline in the relative costs of filing bankruptcy could elicit a substantial increase in the number of bankruptcy filings.

There is widespread recognition that the economic benefits to an individual from filing bankruptcy increased with the enactment of the 1978 Bankruptcy Code (“1978 Code” or “Code”). It has been estimated that as

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237 As Kuhn observes, it is not sufficient to simply reject the prevailing model or “paradigm;” it is also necessary to provide an alternative model that better explains the evidence. See Kuhn, supra note 1, at 77. The model presented in this section is presented more fully elsewhere. See Zywicki, supra note 13.

238 See Gross & Souleles, supra note 54, at 320.

many as one-third of American households could gain financially from filing bankruptcy through maximum use of pre-bankruptcy planning, and that the financial benefit from filing is greatest for well-off debtors.\textsuperscript{240} Calculation of the economic benefits from filing bankruptcy also partially explains debtors’ choices between Chapter 7 and Chapter 13.\textsuperscript{241} Bankruptcy also provides debtors with additional benefits, such as the imposition of an automatic stay against all efforts by creditors to collect pre-petition debts.\textsuperscript{242} This provides the debtor with relief from bill collectors, litigation, and the other inconveniences of defaulting on credit obligations. In essence, substantial benefits from filing bankruptcy have created an arbitrage opportunity for many debtors. The rising bankruptcy rates of the past decade suggest that this arbitrage opportunity is gradually being recognized and exploited.\textsuperscript{243}

The 1978 Code also enlarged one of the more powerful incentive mechanisms governing bankruptcy filings—the structure of property exemptions in bankruptcy.\textsuperscript{244} Exemptions govern the amount of property, and what types of property, a debtor can retain when she files bankruptcy. Moreover, exemption law traditionally has been a creature of state law, rather than federal law. Although the Code provides a standardized federal menu of exemptions, it also provides states with the power to opt out of the federal menu and to allow debtors to use the state exemption regime instead.\textsuperscript{245} Moreover, the federal menu of exemptions in general is more gen-


\textsuperscript{241} See Domowitz & Sartain, \textit{supra} note 239, at 481–82.


\textsuperscript{243} Most of the relevant reforms occurred in 1978 and bankruptcies have risen steadily since then. This lag, or gradual response by consumers to the new incentives created by the 1978 Code, is consistent with the predictions of economic theory. See Zywicki, \textit{supra} note 13.


\textsuperscript{245} 11 U.S.C. § 522 (2000). Prior to the 1978 Code, the states had exclusive control over exemptions. Where a state does not opt out, the 1978 Code provides a choice between the state exemptions and the federal menu of exemptions. See 11 U.S.C. § 522(d). Thus the 1978 Code did not reduce the value of state exemptions, but offered residents of some states the option of federal exemptions as well.
erous than most states’ exemptions; thus, in states that permit a choice between state and federal exemptions, providing debtors with a choice tends to operate in favor of enlarging the value of exemptions to the debtor.\footnote{See Fay et al., supra note 161, at 707.}

There is some evidence that individuals do respond to these incentives, and that more generous exemption laws may lead to increased bankruptcy filings at the margin.\footnote{Id. at 712. On the other hand, if the effects are positive, they appear to be modest in magnitude. See Note, A Reformed Economic Model of Consumer Bankruptcy, 109 Harv. L. Rev. 1338, 1347 (1996) (summarizing studies); Richard Hynes & Eric A. Posner, The Law and Economics of Consumer Finance, 4 Am. L. & Econ. Rev. 168, 189 (2002); Kartik Athreya, Fresh Start or Head Start? Uniform Bankruptcy Exemptions and Welfare (Fed. Res. Bank of Richmond, Working Paper No. 03-03R, 2004).}

The economic costs of learning about and filing bankruptcy also have fallen.\footnote{It should be stressed that although a decline in search and transaction costs for filing bankruptcy will tend to increase bankruptcy filings, this is a normatively desirable goal, as rationing access to bankruptcy by high search and transaction costs furthers no coherent or persuasive policy goal.} This decline in costs has taken a number of different forms, including reductions in the search costs of learning about bankruptcy, and the transaction costs of filing bankruptcy. At the same time, increases in the availability of subprime and home equity secured lending have reduced the costs of obtaining credit following bankruptcy. These various reductions in the costs of filing bankruptcy have also created incentives at the margin to increase bankruptcy filing rates.

First, the search costs of learning about bankruptcy have fallen. Individuals today receive information about bankruptcy from a large variety of sources: attorney advertising, high-profile celebrity filings, and from friends and family. This has tended to create a familiarity with the bankruptcy system that has made people increasingly aware of the benefits associated with filing bankruptcy.

Attorney advertising about bankruptcy is far more widespread than in the past.\footnote{See Bates v. State Bar of Ariz., 433 U.S. 350 (1977) (ruling that lawyer advertising is commercial speech protected by First Amendment).} Attorney advertising of bankruptcy services correlates with the number of bankruptcy filings in the relevant community, although the direction of the causal influence is ambiguous.\footnote{See Zywicki, supra note 13; Vukovich, supra note 239, at 1131. SMR Research “did a brief study of telephone book ads and found that cities with high bankruptcy filing rates usually do have higher levels of lawyer advertising than cities with low filing rates.” See The Rise in Personal Bankruptcy: Causes and Impact, Before the Subcomm. on Commercial and Admin. Law of the House Comm. on the Judiciary, 105th Cong. 18–19 (1998) [hereinafter SMR Research] (testimony of Stuart A. Feldstein, President of SMR Research), available at 1998 WL 105080. It is not clear whether lawyers are responding to extant demand for attorney services for bankruptcy, creating demand for bankruptcy filings through informative advertising, or both.} In general, though, there is ample empirical evidence that attorney advertising tends to increase the

Where the federal exemptions are more generous than the state and state law permits a choice, bankruptcy filers can elect the more generous federal menu.\footnote{See Fay et al., supra note 161, at 707.}
demand for lawyers’ services. There is no reason to believe that demand for bankruptcy would be inconsistent with this general model which suggests that attorney advertising probably increases bankruptcy filings.

Several high-profile celebrity bankruptcies have also increased public awareness of the benefits of bankruptcy. The list includes celebrities such as Mike Tyson, Toni Braxton, Kim Basinger, Burt Reynolds, and M.C. Hammer. Lawyers frequently point to these famous bankrupts in order to persuade clients of the propriety of filing bankruptcy. Although the direct impact of this publicity is hard to measure empirically, it certainly contributes to public awareness of bankruptcy and increases the social acceptance of bankruptcy generally.

Perhaps more important in increasing public awareness of the substantial benefits of bankruptcy is “word of mouth” as a result of the sheer number of bankruptcies, which surpassed 1.6 million households last year and continues to rise. The large number of bankruptcy filings means that over time most people have come into contact with the bankruptcy system either by filing themselves or by knowing a friend or family member who has filed. This phenomenon is known as a “contagion” or “herding” effect in economics, and can produce a hydraulic upward pressure on bankruptcy filing rates. Friends and family are the single most important source of information about bankruptcy, and studies indicate that a majority of bankruptcy filers knew a friend or family member who had previously filed bankruptcy.

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252 A study by Visa reported that nineteen percent of bankruptcy filers learned about bankruptcy through attorney advertisements. See Vern McKinley, BALLOONING BANKRUPTCIES: ISSUING BLAME FOR THE EXPLOSIVE GROWTH, REGULATION, Fall 1997, at 33, 38.


255 Jean Braucher, LAWYERS AND CONSUMER BANKRUPTCY: ONE CODE, MANY CULTURES, 67 AM. BANKR. L.J. 501, 510 (1993) (“[Some debtors’] lawyers . . . in essence try to give their clients ‘permission’ to opt for quick discharge in Chapter 7 . . . by naming famous people who have received a bankruptcy discharge.”).

256 See Jones & Zywicki, supra note 54, at 212–13 (summarizing studies); Braucher, supra note 255, at 545 (reporting that many client referrals come from more people telling relatives, friends, and co-workers about their bankruptcies). It has been reported that there has been a 500% increase in less than two years in the number of filers who say they first heard about the idea of filing from a friend or relative. See BANKRUPTCY LAW REVISION BEFORE THE SUBCOMM. ON COMMERCIAL AND ADMIN. LAW OF THE HOUSE COMM. ON THE JUDICIARY, 105th Cong. 8 (1998) (testimony of Mallory B. Duncan, Vice-President,
Second, the transaction costs associated with filing bankruptcy have also declined. The high volume of consumer bankruptcy filings has spawned bankruptcy “mills” that have developed processes and procedures that produce bankruptcy cases as largely standardized commodities. Their practice is a high-volume, repetitive one. Making heavy use of technology that allows them to generate “cookie cutter” bankruptcy pleadings, these mills have been able to drive down the cost of filing bankruptcy substantially. Using teams of paralegals and secretaries to supplement their efforts, these attorneys represent hundreds of debtors per year.\textsuperscript{257} Lawyers in high-volume practices may meet only once with the client before filing a bankruptcy petition.\textsuperscript{258} Filing pro se has also become easier, especially in light of vast amounts of information available on the Internet and in “do-it-yourself” books.

Finally, the total cost of filing bankruptcy has fallen as a result of an increased availability of post-bankruptcy credit. A major cost of filing bankruptcy is the negative effect it has on access to credit following bankruptcy.\textsuperscript{259} This cost persists, but it is no longer prohibitive because consumer credit markets have changed over time—including especially the rise of the subprime market catering to credit-impaired borrowers. One survey conducted a decade ago found that more than 16% of bankruptcy filers were able to gain unsecured credit within one year after filing bankruptcy and over 55% within five years.\textsuperscript{260} A more recent survey finds that three-quarters of bankruptcy filers have at least one credit card within a year after filing.\textsuperscript{261} Bankruptcy filers are able to gain access to a broad cross-section of revolving credit, such as bank cards, department stores, gas cards, and finance companies, as well as installment lenders.\textsuperscript{262} Given the growth in the subprime lending market, it is likely that figure would be substantially higher today. To be sure, the debtor will likely suffer some penalty as a result of having a bankruptcy filing on her credit rating. Nonetheless, developments in credit markets mean that this hardship is no longer as severe as

\begin{itemize}
  \item \textsuperscript{257} Thus, in the Sullivan, Westbrook, and Warren study, only four percent of 1981 debtors were not represented by attorney. See \textsc{Sullivan et al.}, supra note 159, at 23. Between 1991 and 1992, however, paralegals in one California district prepared fourteen percent of consumer Chapter 7 and 13 filings. See Susan Block-Lieb, \textit{A Comparison of Pro Bono Representation Programs for Consumer Debtors}, 2 \textsc{Am. Bankr. Inst. L. Rev.} 37, 40 (1994); Geraldine Mund, \textit{Paralegals: The Good, the Bad and the Ugly}, 2 \textsc{Am. Bankr. Inst. L. Rev.} 337, 340–41 (1994).
  \item \textsuperscript{258} \textsc{Braucher, supra note 255, at 554.}
  \item \textsuperscript{259} Today, filing bankruptcy remains on one’s credit rating for ten years. See 15 \textsc{U.S.C. § 1681c(a)(1)} (2000).
  \item \textsuperscript{260} See \textsc{Michael E. Staten, Impact of Post-Bankruptcy Credit on the Number of Personal Bankruptcies 13–14} (Credit Research Ctr., Krannert Graduate School of Management, Working Paper No. 58, 1993). Staten argues that for various reasons this estimate probably underestimated access to credit at that time. \textit{Id.} at 14.
  \item \textsuperscript{261} \textsc{Visa, Consumer Bankruptcy: Annual Bankruptcy Debtor Survey (1997).}
  \item \textsuperscript{262} Staten, \textit{supra} note 260, at 14–15.
\end{itemize}
it once may have been. As a result, this too has reduced the costs associated with declaring bankruptcy.

B. Changes in Social and Personal Norms Regarding Bankruptcy

Increasing bankruptcy filing rates can also be explained by changes in social and personal norms regarding bankruptcy. There is a widespread perception that bankruptcy has lost much of its previous social stigma, and that this explains at least some part of the increase in bankruptcy filing rates. Federal Reserve Chairman Alan Greenspan, for instance, has stated, “Personal bankruptcies are soaring because Americans have lost their sense of shame.” Reducing the generalized social stigma of filing bankruptcy will tend to increase bankruptcies by reducing the negative impact that a particular individual will suffer to his personal reputation from filing bankruptcy. At the margin, therefore, reduced social stigma from filing bankruptcy will make people less reluctant to file bankruptcy. In fact, it is not even necessary that there be a decline in the actual stigma attached to filing bankruptcy so long as potential bankruptcy filers perceive that there has been a reduction in the stigma attached to filing bankruptcy.

A change in social norms regarding bankruptcy could substantially increase the bankruptcy filing rate. Social norms are valuable as a mechanism for social control because they are generally a low-cost mechanism for promoting exchange that substitutes for more costly financial institutions such as security and increased monitoring by creditors. Thus, a widespread willingness to voluntarily perform one’s contracts and to eschew strategic bankruptcy will reduce the costs to all lenders and borrowers of consumer credit transactions. The current regime, therefore, is in a degree of dis-

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263 One could also consider reduced stigma as a reduction in the social “cost” of filing bankruptcy. Cf. Gary S. Becker, A Theory of Social Interactions, 82 J. POL. ECON. 1063 (1974). For purposes of exposition, I have treated the effects of reduced social stigma separately, although they certainly could be classified as a relevant “cost” of bankruptcy if one were inclined to treat it that way.

264 For instance, in his floor statement on the Bankruptcy Reform Act of 1999, Senator Charles Grassley referred to a public opinion poll that indicated that eighty-four percent of Americans believe that bankruptcy has less social stigma than in previous eras. 145 Cong. Rec. 28,412 (1999) (statement of Sen. Grassely) (“According to a poll conducted by the Democratic polling firm of Penn & Schoen on perceptions of bankruptcy, 84% of Americans think that bankruptcy is more socially acceptable today than a few years ago.”). Professor Braucher also quotes several bankruptcy lawyers who opine that the increase in bankruptcy filing rates has been driven in part by a decline in the traditional social stigma associated with filing bankruptcy. See Braucher, supra note 255, at 540; id. at 545; see also Luckett, supra note 155, at 73 (“It is widely recognized, though hard to measure, that the stigma of bankruptcy is not what it used to be . . . .”).


266 An analogy is the well-established finding that voluntary norms of tax compliance substantially reduce the amount of resources that the Internal Revenue Service has to expend on audits, enforcement, litigation, and other compliance measures. If voluntary tax compliance were to fall, this would require greater expenditures on tax compliance. See James Andreoni et al., Tax Compliance, 36 J. ECON. LIT. 818 (1998); Eric A. Posner, Law and Social Norms: The Case of Tax Compliance, 86 VA. L. REV. 1781 (2000).
equilibrium, as current consumer credit arrangements are premised on the assumption that most debtors will repay their debts because they fear the shame of failing to do so. If these alternative institutions are more expensive than the low-cost traditional values of personal responsibility and social stigma, there will still be a higher rate of bankruptcy filings, as well as less attractive terms for consumer credit. Moreover, under the Code, middle-class households have the strongest financial incentives to file bankruptcy, because they are most likely to make use of the property exemptions granted by the Code and will often have significant amounts of dischargeable debt.\(^{267}\) As a result, a reduction in social stigma will disproportionately increase middle-class filing rates at the margin.

Although the theory is straightforward, empirically measuring changes in broad and diffuse social factors such as shame and stigma is difficult—such factors do not easily lend themselves to direct testing.\(^{268}\) Scholars have applied several indirect proxies to try to test for the effect of changes in social stigma regarding bankruptcy.\(^{269}\) For instance, scholars have used cross-section data to try to identify time-series trends within various communities that suggest a lower level of disapproval of bankruptcy over time.\(^{270}\) Other commentators have identified unexplained trend data in time series as po-

\(^{267}\) This is because middle-class families will be more likely to have the type of property that can be protected through bankruptcy exemptions, such as houses, cars, and retirement plans. Thus, those who can protect more property in bankruptcy will gain a larger benefit from filing. See, e.g., 11 U.S.C. § 522(d) (2000) (enumerating property exemptions under federal menu of exemptions).

\(^{268}\) See Gross & Souleles, supra note 54, at 321 (“The various costs of default, especially social, legal, and information costs, are inherently difficult to measure. Most of the proxies that have been suggested run into problems of endogeneity and reverse causality.”); Luckett, supra note 155, at 76 (noting that “none of the typically cited social or legal factors are easily quantifiable”); Moss & Johnson, supra note 19, at 326 (stating that “stigma is very difficult to measure”). For instance, it is not methodologically correct to ask whether someone feels “ashamed” from filing bankruptcy or perceives social disapproval. For economic purposes, whether an individual feels ashamed of having filed bankruptcy after he or she actually files is irrelevant; what matters is whether the shame of filing is sufficiently large to deter the prospective filer before he or she actually files. If a bankruptcy filer feels ashamed of bankruptcy, but nonetheless files a bankruptcy petition, the shame and stigma of bankruptcy was not sufficiently strong to deter a filing. Nonetheless, some scholars have concluded that because bankruptcy filers feel ashamed when they file, the shame and stigma of bankruptcy persists. See, e.g., Constance M. Kilmark, Inside the World of the Troubled Debtor, 10 J. BANKR. L. & PRAC. 257 (2001); see also SULLIVAN, ET AL., supra note 2, at 32; WARREN & TYAGI, supra note 3, at 73–75. Perhaps a better indicator of the decline of the constraint associated with the social stigma of bankruptcy is not bankruptcy filing rates per se, but rather whether there is an increased willingness to live closer to the financial edge. This, however, would be even more difficult to measure.

\(^{269}\) These studies are discussed in more detail in Zywicki, supra note 13. A review and critique of some of the studies on the relationship between changes in social norms and rising bankruptcies can also be found in Gordon Bermant, What’s Stigma Got to Do with It?, ABI J., July/Aug. 2003, at 22.

\(^{270}\) See Fay et al., supra note 161, at 712; see also id. at 716 (“These results are consistent with local trends occurring in which increases in a district’s bankruptcy filing rate cause attitudes toward bankruptcy to become more favorable and therefore individual households’ probabilities of filing rise.”); Gross & Souleles, supra note, at 340.
tentially resulting from changing social norms.\textsuperscript{271} Still others have used other indirect proxies such as migration,\textsuperscript{272} divorce,\textsuperscript{273} or population density levels\textsuperscript{274} to try to capture the role played by social norms. Although all of these various measures of social norms are imperfect, no matter the proxy variable used, the findings of these studies have been consistent insofar as their hypothesis is that rising bankruptcy filing rates can be explained at least in part by changes in social norms regarding bankruptcies.

\section*{C. Changes in the Nature of Consumer Credit}

The consumer credit industry has changed in several ways that could lead to increased bankruptcy filing rates. Consumer credit has become more national and impersonal in nature. This has tended to increase the benefits to consumers from filing bankruptcy and decrease some of the tangible and intangible costs from filing.

Recent decades have seen a shift in consumer credit toward unsecured credit, primarily general purpose bank credit cards.\textsuperscript{275} Unsecured debts, such as credit cards and medical bills, are generally dischargeable in bankruptcy absent some particular limitation imposed by bankruptcy law making certain unsecured debts nondischargeable.\textsuperscript{276} Prior to widespread access to credit cards, consumers relied on many types of credit, such as secured credit (home mortgages, home equity loans, security interests in personal property, layaway plans, or pawn shops), high-cost unsecured personal loans, or even informal loans from family members (historically the dominant source of most consumer credit).\textsuperscript{277} Because bankruptcy could not effectively discharge secured or informal loans, its benefit was limited. As debtors have increased their use of unsecured credit cards, however, the value of the bankruptcy discharge has also increased, leading to increased bankruptcy filings. The incentives provided by the interaction of bankruptcy and increased consumer credit also are evidenced by the observed tendency of credit card defaults and defaults on other forms of unsecured

\textsuperscript{271} See supra notes 224–230 and accompanying text.

\textsuperscript{272} SULLIVAN ET AL., supra note 159, 244–46 (noting correlation of migration history with propensity to file bankruptcy); Buckley & Brining, supra note 160. The theoretical support for the model is that communities with high levels of migrations are likely to have lower levels of social norms development and enforcement and thus a higher level of undesirable behavior such as bankruptcy filings.

\textsuperscript{273} Buckley & Brining, supra note 160. Buckley and Brining conclude that the correlation between divorce and bankruptcy in cross-sectional data suggests that both are caused by an independent variable of a communities’ attitudes toward promise-breaking behavior.

\textsuperscript{274} See Barron, Elliehausen, & Staten, supra note 227, at 71; SMR Research, supra note 250; see also Luckett, supra note 155, at 85. The hypothesis is that population serves as a proxy variable for social stigma because large urban areas tend to be more anonymous and thus have weaker systems of social norms and norm enforcement than smaller, less anonymous areas.

\textsuperscript{275} See discussion at supra notes 107–142 and accompanying text.


\textsuperscript{277} See CALDER, supra note 125, at 61.
consumer debt to track bankruptcy filing rates. By contrast, there seems to be little correlation between bankruptcy filings and defaults on home mortgage loans.\textsuperscript{278} This juxtaposition suggests that bankruptcy filers are consciously choosing to pay their secured debts while defaulting on their dischargeable unsecured debts.

The modern trend in consumer finance has also been toward an increased “impersonalization” of consumer credit, as consumers increasingly transact with large institutional lenders through electronic and paper-based lending processes.\textsuperscript{279} This increased impersonalization of consumer credit has affected the willingness of individuals to file bankruptcy in three different ways: (1) by undermining the development of commercial trust relationships; (2) by undermining the constraints imposed by repeat dealings; and (3) by reducing the constraints of commercial reputation.

The historical model of commercial consumer credit was of a highly personalized nature, e.g., a corner grocery store or Main Street tailor selling goods to their customers on credit.\textsuperscript{280} Bank credit required the debtor to withstand a personal and intrusive series of face-to-face interviews and probing inquiry into his social and business relationships to determine the debtor’s trustworthiness and reliability. Further, much of traditional credit was wholly informal in nature (e.g., loans between family members).\textsuperscript{281} Personalized credit is often face-to-face and the credit relationship is embedded within an ongoing economic and social relationship with the credit issuer. Where the credit relationship is embedded in a larger social and economic relationship, it is more likely that a trust relationship will arise between the parties, thereby reducing the willingness of a borrower to default.\textsuperscript{282}

Today, by contrast, many consumer financial relations are conducted with large interstate banks and South Dakota- and Delaware-based credit card issuers such as Citibank and MBNA. Impersonal credit relations, such as dealing with these institutional lenders, are less likely to evolve into high-trust relations.\textsuperscript{283} In part, this is because individuals do not tend to form trust relationships with artificial entities, such as corporations, in the same way that they do with other human beings. These economic exchange

\begin{footnotesize}
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  \item[278] See supra note 152 and accompanying text.
  \item[280] See CALDER, supra note 125, at 35–208.
  \item[281] Id. at 60–64.
  \item[282] Efrat, supra note 279, at 159. This same analysis might apply to the development of trust relationships by creditors. But it is not as clear that a decline of trust by the lender would necessarily increase post-contractual opportunism by creditors. Although trust may matter for lenders, historically lenders have been constrained by contracts and other more formal institutions, including legislation and bank regulation, thus informal constraints such as trust probably play a smaller marginal role for lenders than borrowers, although repeat dealing and reputation may conceivably play a major role.
  \item[283] Id.
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relations lack the embedded personal components that characterize older and more local forms of credit. Thus, an individual is less likely to feel himself bound in a trust relationship with his credit card issuer than he would be if he purchased a suit on store credit from his local tailor, whom he may later see at church or at the Kiwanis club.\textsuperscript{284} The more impersonal nature of modern unsecured credit tends to undermine the social and moral obligation that a debtor feels toward his creditors, thereby increasing the likelihood that the debtor will engage in post-contractual opportunism and avoid repaying the debts.

Individuals also psychologically evaluate transactions differently depending on whether they are of a personalized or an impersonalized nature.\textsuperscript{285} The closer the social connection between the trading partners, the longer they have known each other, and the more integrated they are into a common social network, the greater the likelihood that the individuals will trust one another.\textsuperscript{286} Individuals also appear to be more likely to recognize the positive-sum (or “win-win”) nature of personal relations marked by an ongoing reciprocity of mutual advantage.\textsuperscript{287} By contrast, individuals tend to see impersonal relationships as zero-sum in nature, removing a psychological constraint on acting opportunistically.\textsuperscript{288}

There also has been a reduction in the constraints imposed by repeat dealing. Repeat dealing constrains opportunistic behavior by holding out the prospect that the long-term benefit from the maintenance of the continued relationship exceeds the gain that an individual could make by acting opportunistically.\textsuperscript{289} Because of the expansion of credit markets, borrowers are no longer limited to dealing only with local merchants for credit. Consumer borrowers historically were quite limited in their credit options, primarily because of geographic limitations on the number of credit issuers

\textsuperscript{284} As Efrat observes:

[A] consumer debtor is less likely to develop a trust relationship beyond the deterrence-based level with a large credit card company. The consumer debtor is not likely to have any face-to-face contact with the institutional creditor. The parties infrequently communicate, and when they do, they mainly use impersonal channels such as a telephone. Furthermore, a courtship will not likely develop between the parties. The parties are not likely to watch each other act in social situations or observe each other in [a] variety of emotional states. Therefore, the lack of personal bonding precludes most of these types of relationships from developing into a knowledge-based credit trust relationship.

\textit{Id.} at 159–60. In addition, consumers may be willing to think that “no one is hurt” when they default on a debt owed to Citibank or a large bank, but may be willing to recognize the “real person” who stands behind a local business.


\textsuperscript{288} \textit{Id.} at 207.

with whom the debtor could reasonably interact. Moreover, retail goods and credit transactions were often tied together, such that a borrower who failed to pay his credit bills would be unable to purchase goods on credit in the future. It was also relatively more expensive for debtors in prior eras to relocate to a new community to start over after filing bankruptcy. Because of the small number of potential lenders, a borrower who defaulted would likely have difficulty getting credit in the future. This need to preserve long-term repeat relationships with possible lenders discouraged debtors from defaulting. As noted, however, in today’s national consumer credit markets it is much easier to find some lender to extend credit even after bankruptcy, reducing the importance of the repeat-dealing constraint.

These developments have attenuated the constraining effects of individual reputation for similar reasons. Maintaining a reputation-based system of contract enforcement also requires the maintenance of a system of ostracism, both for the defector (the bankrupt), and also for any member who enters into later dealing with that defector. This willingness to punish a defector even at some cost to oneself creates a public goods problem. The willingness to punish someone who fails to punish the initial party creates a second-order public goods problem. Such punishment raises substantial collective action problems, as it becomes necessary not only to monitor misbehavior by the original party, but also the behavior of all the other members of the group to ensure that they are not reneging on their independent promise to ostracize those who cheat one member of the group. As the size of the group increases, it becomes increasingly difficult to overcome these collective action problems and to detect and punish those who fail to punish the original defector.

In part, this explains the relative ease with which bankruptcy filers can now find access to credit following bankruptcy as compared to prior eras. Whereas lenders may prefer as a group to ostracize borrowers who file bankruptcy, in practice each lender has an individual incentive to lend to a debtor who files bankruptcy. Ironically, a debtor who files bankruptcy and receives a discharge is a relatively better credit risk, ceteris paribus, than prior to filing bankruptcy, because she cannot receive another discharge for six years. Thus, each lender individually has a private incentive to deal

290 A similar system, albeit in a non-consumer context, is described by Karen Clay in her analysis of trade and credit in Mexican California in the 1840s. See Karen Clay, Trade, Institutions, and Credit, 34 EXPLORATIONS IN ECON. HIST. 495, 505 (1997); Karen Clay, Trade Without Law: Private-Order Institutions in Mexican California, 13 J.L. ECON. & ORG. 202 (1997).

291 See discussion supra notes 259–262 and accompanying text.


293 Staten found, for instance, that bankruptcy filers who reacquired credit were much more likely to obtain credit from a new lender rather than a pre-bankruptcy lender. See Staten, supra note 260, at 12. Nor did it make a difference whether a debtor discharged his debts in Chapter 7 or filed Chapter 13 and presumably attempted to repay some of his prepetition debts. Id. at 16.

with a bankrupt at the right price, notwithstanding the fact that lenders as a group might prefer not to extend credit to bankruptcy filers.

This second-order punishment problem becomes more acute where the existing group cannot restrain entry into the group. If they are unable to exclude new entrants, and if barriers to entry are sufficiently low, new entrants will be able to enter the market to serve those subject to ostracism at the hands of the incumbents. In the past, lenders in a small stable community could share information and “blackball” those who failed to pay their bills. Consumer credit markets today, however, are characterized by relatively low barriers to entry, particularly in the subprime market that caters to credit-impaired borrowers. Moreover, many of the subprime lenders in this market are new entrants who specialize in such matters, rather than older general-purpose banking institutions. Given the ease of entry and large number of firms in this market, it is now virtually impossible for lenders to enforce any sort of ostracism against one another for dealing with a bankruptcy filer.

**D. Institutions, Incentives, and the Economics of Consumer Bankruptcy**

In the scientific process, it is not sufficient simply to offer a critique of an existing model, even if that model is increasingly confronted with anomalies that it is unable to explain. It is also necessary to propose an alternative model that better explains the data and anomalies than the prevailing model. This Part has sketched an alternative model to the Traditional model of consumer bankruptcy. Whereas the Traditional model conflates the analysis of household financial condition with the rising bankruptcy filing rate, the model described here focuses directly on the factors that could contribute to increasing filing rates under the conditions of the past twenty-five years. By focusing directly on the factors that affect a debtor’s decision to file bankruptcy and the changing incentives and institutional constraints a debtor confronts in making that decision, the model offered here focuses more precisely on the variables related to the tendency to file bankruptcy. The evidence fails to support the Traditional model’s prediction that rising bankruptcy filing rates have resulted from changes in household financial condition. A model that focuses on the economic and social costs of filing bankruptcy, by contrast, can provide an explanation for the blossoming of a consumer bankruptcy crisis in an era of prosperity and economic stability. While space permits only a brief description of the alternative model here, future research will further develop the model and its testable implications.

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295 See POSNER, supra note 292, § 8.5.

296 Many subprime lenders are not even permanent banks or traditional financial institutions, but rather finance companies that finance their operations through a series of securitized asset sales.
VI. CONCLUSION: THE CONSUMER BANKRUPTCY CRISIS

Although the Traditional model continues to hold explanatory power for the background level of bankruptcy filings both nationally and geographically, this Article has shown that the Traditional model cannot explain the rising bankruptcy filing rates of the past twenty-five years.297

Contrary to the predictions of the Traditional model, there is little evidence to support the belief that household financial condition has worsened over the past twenty-five years. Neither of the standard measures of household financial condition—equity insolvency or bankruptcy insolvency—finds that households have increased their indebtedness relative to their ability to meet their financial obligations. Until recently, low interest rates and strong income growth have kept the debt service burden below its all-time high of the early 1980s. Extraordinary growth in household assets, because of growth in financial assets and housing values, has increased household net wealth to record levels. The increase in credit card debt has been primarily a substitution from other types of credit, rather than an overall increase in debt burdens. Nor can a “bidding war” for housing explain it—housing has certainly risen in price but primarily because low interest rates and the tax deductibility of interest payments have allowed prices to rise without noticeably increasing mortgage debt service obligations. Moreover, the steady rise in housing prices has caused the value of houses to rise at least as rapidly as prices, thereby increasing the asset value of the house along with the mortgage liability.

Furthermore, there is no evidence of a substantial change in the frequency or severity of financial shocks to households; indeed, by many measures, households are significantly more stable today than twenty-five years ago. The unemployment rate was steady through the 1980s and at record lows in the mid-1990s, just as the surge in personal bankruptcies occurred. After rising through the 1970s, the divorce rates leveled off in the 1980s and fell through the 1990s, but bankruptcies rose throughout. Finally, although health care costs have increased over time (as have the prices of many other goods and services), bankruptcy filing rates have risen much more rapidly, regardless of whether the health care costs are measured in terms of overall or private increases. In fact, the advent of managed care arrested health care inflation in the mid-1990s while this same period saw bankruptcy filing rates explode. Static or declining variables, such as unemployment, divorce, or health care costs, cannot explain a variable that is increasing in value, such as bankruptcy filing rates.

The Traditional model also suffers from several conceptual problems. In some cases the Traditional model has relied on a poor choice of proxy variables to measure the impact of certain factors on bankruptcy filing rates.

297 Even adherents to the Traditional model acknowledge that its predictive power has weakened substantially in the past two decades. See Moss & Johnson, supra note 19, at 322.
such as in its use of debt-to-income ratio to measure household financial condition rather than one of the standard financial measurements.\footnote{See supra notes 56–58 and accompanying text.} Many key empirical studies of the Traditional model study only those in bankruptcy, and, thus, they lack a control group. It is therefore impossible to determine how many people suffer the same financial setbacks, such as unemployment or other job interruption, as those in bankruptcy, but do not file bankruptcy.\footnote{See supra note 159 and accompanying text.} Some of the conclusions of the Traditional model appear to be grounded in anecdotes rather than systematic data analysis. In the case of downsizing, for instance, this focus on a handful of isolated high-profile layoffs has obscured the growth in management jobs at other firms as well as the rapid rate at which white collar workers have reclaimed their former positions.\footnote{See supra notes 164–183 and accompanying text.} Finally, in drawing policy inferences, the Traditional model fails to account for compensating behavior by consumers that will offset policy proposals, such as the likelihood that consumers would respond to guaranteed health insurance by increasing consumption and reducing precautionary savings.\footnote{See supra notes 216–217 and accompanying text.}

The foregoing discussion suggests that the rising consumer bankruptcy filing rate over the past several years is not the result of increasing economic distress, but, rather, from the result of an increasing propensity for American households to file bankruptcy in response to economic problems. In the past, households that suffered an economic dislocation tended to respond by reducing spending, tapping savings, and eventually repaying their obligations. Although most Americans today still respond to financial distress in the same way, an increasing number are likely to respond to financial problems by filing bankruptcy and discharging their debts, rather than reining in their spending or tapping their accumulated wealth. Problems of unemployment, divorce, health, and indebtedness have been a part of the human condition since human societies have existed. The underlying problems are not therefore what is novel. Rather, it is the increasing willingness of individuals to use bankruptcy as a response to those underlying problems.\footnote{See also Canner & Luckett, supra note 68, at 223.}

The Traditional model has dominated consumer bankruptcy study for a century. It has prevailed not only in U.S. law schools but also in Congress. The Traditional model provides the intellectual framework for the modern American bankruptcy system. As cracks have appeared in the intellectual framework of the Traditional model, the legislative architecture constructed on this foundation has also come under increasing attack. Unpersuaded by these efforts of the Traditional model to reconcile surging consumer bankruptcies with a decade of unprecedented prosperity, this past spring, Con-
gress reformed the consumer bankruptcy system to place greater conditions on bankruptcy and to increase the safeguards against fraud and abuse. These efforts ran into vehement opposition by many consumer bankruptcy scholars whose intellectual opposition is rooted in the premises of the Traditional model. The overwhelming bipartisan support for the bankruptcy reform legislation can be viewed as a direct repudiation of these efforts by adherents to the Traditional model to salvage its intellectual viability.

The collapse of the Traditional model of consumer bankruptcy brings with it an opportunity to reconsider the nature of the current consumer bankruptcy system and the law and policies that flow from it. This Article has focused primarily on the emerging intellectual crisis of the Traditional model of bankruptcy by scientifically assessing its predictions about the world. Offering a comprehensive alternative model of consumer bankruptcy is outside the scope of this Article, although I have offered my views elsewhere.\textsuperscript{303} The future development of the intellectual understanding of consumer bankruptcy and the political development of the consumer bankruptcy system remains uncertain. What is clear, however, is that although the Traditional model of consumer bankruptcy once explained the world fairly well, today it is in crisis. It is for the coming generation of bankruptcy scholars to address the twin crises in bankruptcy law today: the actual crisis of consumer bankruptcy and its intellectual counterpart.

\textsuperscript{303} See Zywicki, supra note 13. In addition to the theoretical issues described in this Article, there are also several empirical challenges, in particular the difficulty of developing useful techniques for empirical analysis of the contributions played by intangible variables such as changes in broad social norms or understanding information flows through social networks.