

THE POLITICAL ECONOMY OF PROPERTY EXEMPTION LAWS*

RICHARD M. HYNES,
College of William
and Mary

ANUP MALANI,
University of Virginia

and

ERIC A. POSNER
University of Chicago

ABSTRACT

Exemption laws enable people who default on loans to protect certain assets from liquidation. Every state has its own set of exemption laws, and they vary widely. The 1978 federal bankruptcy law contains a set of national exemptions, which debtors in bankruptcy are permitted to use instead of their state's exemptions unless the state has formally "opted out" of the federal system. We contend that states' decisions to opt out shed light on their exemption levels. We find that states are more likely to opt out if their state exemption is lower than the federal exemption and that states are more likely to opt out if they also have a high bankruptcy filing rate and transfer little money to the poor. These latter findings suggest that studies that examine the impact of exemptions on, for example, the bankruptcy rate should not treat exemption levels as exogenous variables.

EVERY state has laws that protect some of the assets of debtors from the satisfaction of claims by creditors. These property exemption laws, which are also called bankruptcy exemptions, have long and important political histories. Texas entered the union as the first state with property exemptions—designed, it was said at the time, to draw settlers from other states—but the southern states responded quickly with exemptions of their own, and today every state has property exemptions, frequently quite generous. Like usury,

* Our thanks to Mark Baker, Randy Kroszner, Bill Landes, John Lott, Casey Mulligan, and Michelle White; to audiences at a UCLA conference *The Political Economy of Bankruptcy Law*, and at a panel at the American Law and Economics Association 1999 annual meeting for comments; and to Hector Acevedo-Polanco, Elizabeth Beetz, Thomas Manning, Dimitri Karcazes, Kate Kraus, Ken Murphy, Nick Patterson, Chris Perrin, and Louise Weston for valuable research assistance. We are also grateful for the comments of the editor, Sam Peltzman, and of an anonymous referee. Posner thanks the Sarah Scaife Foundation Fund, the Lynde and Harry Bradley Foundation Fund, and the Research Fund of the University of Pennsylvania for generous financial support.

[*Journal of Law and Economics*, vol. XLVII (April 2004)]
© 2004 by The University of Chicago. All rights reserved. 0022-2186/2004/4701-0002\$01.50

stay, and currency laws, exemption laws have played an important role in the perennial conflict between debtors and creditors.

Exemption laws also play an important role in federal bankruptcy law, and it is here that they enjoy a higher profile. The treatment of state property exemptions in the federal bankruptcy code of 1978 resulted from a compromise between the House, which sought to establish a mandatory system of federal exemptions, and the Senate, which sought to incorporate state exemption laws as the older bankruptcy law did. The compromise law established a set of federal exemptions and permitted debtors to choose between these federal exemptions and the exemptions of the state in which they reside, unless that state had by statute “opted out” of the federal system, in which case the debtors would have to use that state’s exemptions. Feelings about exemptions were strong enough in 1978 that this compromise almost did not occur, and these strong feelings persist today.¹ Recent efforts to amend the federal bankruptcy law have foundered over, among other issues, the question of whether state exemptions should be capped by a federal ceiling, and more than 65 law professors have written to Congress to ask for greater federal control over bankruptcy exemptions.²

Exemptions are important because of their role in the regulation of consumer credit and the light they shed on the federal relationship between the states and the national government. But they are a puzzle for economists because, like usury laws, they restrict credit markets in the absence of a well-defined market failure to which they would be a suitable response.³ Studies of the impact of exemptions on credit markets show that, while exemption laws may provide some insurance against income shocks, they increase the cost of credit, particularly for the poor.⁴

Many scholars have tried to explain the effect of exemption laws on economic behavior, including lending practices and the bankruptcy filing

¹ For a discussion by a bankruptcy judge, see William Houston Brown, Exemption Limitations: Political and Ethical Considerations, in 70th Annual Meeting of the National Conference of Bankruptcy Judges 7–5 (1996). Most legal scholars criticize incorporation of state exemptions; see, for example, Jean Braucher, Increasing Uniformity in Consumer Bankruptcy: Means Testing as a Distraction and the National Bankruptcy Review Commission’s Proposals as a Starting Point, 6 Am. Bankr. Inst. L. Rev. 1 (1998).

² See Letter from Barry E. Adler *et al.* to Senator Patrick Leahy and Congressman F. James Sensenbrenner (May 22, 2002) (on file with authors) (advocating a federal cap on homestead exemptions in bankruptcy).

³ One might suppose that exemption laws solve an adverse-selection problem that unravels the market for the sort of insurance exemptions provide. However, exemptions can be substantially circumvented by security interests.

⁴ See, for example, Reint Gropp, John Karl Scholz, & Michelle J. White, Personal Bankruptcy and Credit Supply and Demand, 112 Q. J. Econ. 217 (1997).

rate.⁵ The latter had been rising gradually through the 1960s and 1970s, but after the enactment of the Bankruptcy Reform Act of 1978, the filing rate increased markedly.⁶ Some commentators have blamed the increase on the generosity of federal exemption laws, but the evidence is conflicting.⁷ Nevertheless, concerns about the default rate and the bankruptcy filing rate have provoked calls for reform of the Bankruptcy Code, including a provision that would cap exemptions so that states can no longer provide generous relief to the wealthiest debtors, but this could hardly be expected to affect the filing rate, because very few debtors who have valuable assets file for bankruptcy.

A separate concern is that state property exemptions are not sufficiently generous and that they vary too much across states. Many state property exemption laws have archaic provisions that have not been changed since the nineteenth century. In Oklahoma, for example, the debtor can exempt a gun, 20 head of sheep, and “all provisions and forage on hand.”⁸ Commentators assume that state legislatures must not care enough about exemptions to update them, which would justify a federal role. Although, as we will see,

⁵ For a survey of this literature, see Richard Hynes & Eric A. Posner, *The Law and Economics of Consumer Finance*, 4 *Am. L. & Econ. Rev.* 168 (2002). The literature includes Vincent P. Apilado *et al.*, *Personal Bankruptcies*, 7 *J. Legal Stud.* 371 (1978); Jeremy Berkowitz & Michelle J. White, *Bankruptcy and Small Firms' Access to Credit*, 35 *Rand J. Econ.* 69 (2004); Jeremy Berkowitz & Richard Hynes, *Bankruptcy Exemptions and the Market for Mortgage Loans*, 42 *J. Law & Econ.* 809 (1999); F. H. Buckley & Margaret F. Brinig, *The Market for Deadbeats*, 25 *J. Legal Stud.* 201 (1996); Amanda E. Dawsey & Lawrence Ausubel, *Informal Bankruptcy* (Working paper, Univ. Maryland 2001); Emily Y. Lin & Michelle J. White, *Bankruptcy and the Market for Mortgage and Home Improvement Loans*, *J. Urb. Econ.* 138 (2001); Richard L. Peterson & Kyomi Aoki, *Bankruptcy Filings before and after Implementation of the Bankruptcy Reform Act*, 36 *J. Econ. & Bus.* 95 (1984); T. A. E. Sullivan & J. L. Westbrook, *As We Forgive Our Debtors: Bankruptcy and Consumer Credit in America* (Oxford 1989); Laurence A. Weiss, J. S. Bhandari, & Russel P. Robins, *An Analysis of State-wide Variation in Bankruptcy Rates in the United States* (Working Paper 96/56/AC, INSEAD 1996); Michelle J. White, *Personal Bankruptcy under the 1978 Bankruptcy Code: An Economic Analysis*, 63 *Ind. L. J.* 1 (1987). We discuss some other articles below.

⁶ Currently, more than 1.5 million bankruptcy petitions are filed annually. See Administrative Office of the U.S. Courts, *Record Breaking Bankruptcy Filings Reported in Calendar Year 2002* (February 14, 2003) (http://www.uscourts.gov/Press_Releases/cy02.pdf).

⁷ For a survey of this literature, see Hynes & Posner, *supra* note 5. It is true that the exemptions created under the 1978 act were higher than those of many states. However, the federal exemptions were not available in the states that opted out of the federal scheme, the federal exemptions were actually reduced in 1984, the federal exemptions were not adjusted for inflation until 1994, and most states did not increase their exemptions faster than inflation after 1978. Yet all this time the bankruptcy filing rate increased steadily. Finally, Scott Fay, Erik Hurst, & Michelle J. White, *The Household Bankruptcy Decision*, 92 *Am. Econ. Rev.* 706 (2002), claims to find a link between exemptions and bankruptcy. However, those claims are without support. Although the authors find a positive correlation between the overall benefits of filing for bankruptcy and the decision to file for bankruptcy, when they break down the overall benefit into family debt and nonexempt family assets, the latter do not appear to lower the probability of filing for bankruptcy. Therefore, Fay, Hurst, and White do not find evidence of a connection between exemptions and bankruptcy.

⁸ 31 Okla. Stat. § 1 (2000).

these concerns are exaggerated, the debate reflects the important role of federalism in bankruptcy policy.⁹

Despite the absence of an intuitive theory to explain the market failure for which exemptions would be the solution, no one has tried to explain why states create exemption laws in the first place or why these laws differ across states.¹⁰ Understanding this relationship also has important implications for studies that attempt to determine the effect of exemptions on lending and bankruptcy. These studies often treat exemptions as exogenous variables. If exemptions are instead driven by the very economic outcomes that these studies examine, the studies may suffer endogeneity bias and be suspect.

This paper attempts to fill this gap in the literature. An initial examination of a data set of the exemption laws of the 50 states between 1975 and 1996 reveals only that the best predictor of current levels of a state's exemption is that state's historical exemptions. To overcome this difficulty, we exploit the opt-out provision of the 1978 Bankruptcy Code, which confronted states with a stark choice of whether to allow their residents to use new, federal exemption that were often much more generous than the exemptions in effect in the state at the time or whether to restrict their residents to the state's exemptions. By examining how states reacted, we can discover some of the factors that influence their exemption choice. We find that states with state exemptions that were below federal exemptions and with higher bankruptcy rates and/or lower rates of income transfers to the poor were more likely to opt out of federal exemptions and return to lower state exemption levels.

Section I provides background on state and federal exemption laws. Section II examines why states opted out of the federal exemption law.

I. BACKGROUND

A. *History of Exemption Laws*

Laws that enable debtors to avoid paying creditors extend back to Biblical times. There are important precursors of American state exemption laws in

⁹ For a discussion of exemption policy and federalism, see G. Marcus Cole, *The Federalist Cost of Bankruptcy Exemption Reform*, 74 *Am. Bankr. L. J.* 227 (2000).

¹⁰ These explanations need not focus on market failures. One theory is that exemptions are motivated by altruism. However, it is unlikely that exemptions are charity because debtors pay for them with higher interest rates. Other theories focus on interest groups that may benefit from generous exemptions: existing debtors, lawyers, tort defendants, and secured lenders. But there are problems with these theories. For existing debtors to benefit from exemptions, they would have to be retroactive, otherwise debtors would pay with higher interest rates. It is unclear that lawyers would benefit from exemptions: while the amount clients retain may be higher, the number of bankruptcies may fall. Moreover, lawyers for creditors may see business decline. Doctors and other individual tort defendants might benefit from high exemptions, but the benefits are limited given, for example, that medical malpractice insurance is mandatory in all states. Finally, if the secured credit industry is competitive, whatever rents are earned through raising the cost of unsecured credit would be transferred to debtors.

the English common law, some of which persist today. For example, some states allow married debtors to shield property held in the form of tenancy by the entirety (TBE) from creditors of only one spouse. But recognizable property exemption laws did not appear in the United States until the middle of the nineteenth century. The first exemption law was adopted by the (then) Republic of Texas in 1839 and was expanded when Texas became a state in 1845. It is thought that the purpose of this law was to attract settlers. The state had advertisements targeted toward settlers, and these advertisements drew attention to its exemption laws.¹¹ Although it is difficult to establish causality, the population of Texas rose rapidly over the subsequent decades, and the state developed a reputation as a debtors' haven. Many other states followed suit, and by the end of the 1860s, almost every state had adopted a homestead exemption law.

The first laws set a pattern that prevails today. States make a basic distinction between homestead exemptions, which protect real property, and exemptions that protect personal property.¹² Homestead exemptions usually list dollar amounts but sometimes refer to particular acreage limits that may vary depending on whether the land is in a town or a rural area. In the past, some exemptions could be waived if the owner (and sometimes his spouse) signed a waiver or filed with a registry, but this is now prohibited by federal law, except with regard to secured credit.¹³ Personal property exemptions usually list specific kinds of property, with individual and/or aggregate dollar ceilings, but sometimes allow the debtor to choose the property he will exempt. Personal property exemptions often refer to categories of basic necessities, like food, clothes, furnishings, or tools of trade, but sometimes they refer to specific items, like herds of sheep or military uniforms. Exemption levels may vary depending on whether the debtor is the head of a household or is single, is a veteran or not, and is elderly or not.

In 1898, the federal government created the first durable bankruptcy law. The federal law incorporated state bankruptcy exemptions. This meant that if an individual filed for bankruptcy under federal law, he could (1) obtain a discharge from all or most of his debts and (2) keep whatever assets were exempted under the law of the state in which he resided. The federal law did not replace state debt collection laws as much as supplement them. A debtor could choose to enter bankruptcy or not; if he did not, his creditors could sue him for unpaid debts but still could not liquidate his exempt assets. In 1978, the federal government replaced the old bankruptcy system with the current one. The House tried to replace state exemptions with a uniform

¹¹ Paul Goodman, *The Emergence of Homestead Exemptions in the United States: Accommodation and Resistance to the Market Revolution, 1840–1880*, 80 *J. Am. Hist.* 470 (1993).

¹² The states and the federal government also provide exemptions for insurance and for future income in the form of limitations on garnishment. These exemptions are beyond the scope of this paper.

¹³ 16 C.F.R. § 444.2.

system of federal exemptions, while the Senate sought to maintain the old system of federal incorporation of state exemptions.¹⁴ The compromise was a set of uniform federal exemptions that a debtor could choose over his state's exemptions, except in those states that formally opt out of the federal system. In states that opt out, debtors must use local exemption laws. About two-thirds of the states had opted out by the early 1980s.

B. How Exemptions Operate

To understand how exemption laws work, imagine that a creditor lends \$1,000 to a debtor and that the debtor defaults on the loan. Under ordinary contract principles, the creditor could sue the debtor for breach of contract, obtain a judgment, and then have a local official seize assets of the debtor, which would be sold, with the proceeds going to the creditor to the extent of its claim. Suppose that the debtor's only valuable asset is an automobile worth \$2,000, and the relevant property exemption law says that a debtor's automobile is an exempt asset up to a value of \$2,500. Then the local official would refuse to liquidate the creditor's claim by seizing the automobile. The creditor's claim would continue to be valid, and the creditor could enforce it against any nonexempt assets that the debtor might subsequently obtain. The creditor would in most states be able to garnish a portion of the debtor's wages. But the automobile would be safe.

A debtor cannot agree to waive exemption laws in return for a lower interest rate: like usury laws, exemption laws supply mandatory, rather than default, rules. However, exemption laws can sometimes be circumvented, albeit imperfectly, through security interests and other arrangements. If, in our example, the creditor had obtained a security interest in the automobile when it lent the \$1,000 to the debtor, default would give the creditor the right to seize the automobile and sell it in satisfaction of its claim.

Exemption laws operate the same way in bankruptcy (under Chapter 7 of the Bankruptcy Code, the dominant form of bankruptcy for consumers) as they do outside of bankruptcy. If the debtor in our first example files for bankruptcy, then his nonexempt assets would be liquidated, with the proceeds divided among all of his unsecured creditors. The debtor remains roughly as vulnerable to secured creditors in bankruptcy as outside bankruptcy; if a creditor has a security interest in the car, the debtor could retain the automobile only if the creditor were repaid in full. The main difference between the nonbankruptcy and bankruptcy contexts is that in bankruptcy, the debtor can discharge the unsatisfied portion of the creditor's claim, so the creditor would not be able to seize nonexempt assets that the debtor subsequently obtains.

¹⁴ See Eric A. Posner, *The Political Economy of the Bankruptcy Reform Act of 1978*, 96 *Mich. L. Rev.* 47, 94–108 (1997).

C. A First Look at Exemptions

In this section, we examine the exemptions of each of the 50 states¹⁵ for the years 1975–96. Because prior studies code exemption levels in different ways, many of them quite crude, we have started from scratch.¹⁶ We assume that all debtors are married, have two children, and do not qualify for an increased exemption as a result of age, disability, or veteran's status. We further assume that all exemptions may be doubled (because the Bankruptcy Code and most states permit each spouse separately to claim an exemption) unless a statute or a specific case explicitly provides otherwise. We look at both homestead and personal property exemptions but exclude exemptions of burial funds, legal claims, fraternal benefit society annuities, insurance benefits, pensions, unemployment, veteran's benefits, and public assistance.¹⁷

Table 1 presents nominal personal property and homestead exemptions for all states in 1975 and 1996, the growth rate of homestead exemptions during this period, the states that allowed a particularly strong form of the TBE doctrine in 1975 (only Ohio and Massachusetts dropped it before 1996), and the dates that states opted out of federal exemptions.

Consider a married couple that has \$30,000 equity in their house and a \$2,000 art collection. Assume further that they have no joint creditors. The couple can protect their home equity using the state's homestead exemption and the doctrine of TBE. The couple can retain the art collection if their state has a generous personal property exemption that is not restricted to, say, cars, furniture, and clothes.

Table 1 shows that in 1975 the couple could have kept from creditors \$19,000 of equity (with \$11,000 to the unsecured creditors) if they lived in Alaska, the entire house if they live in Hawaii, the entire house if they lived in Indiana (although only \$1,400 if they jointly owed their obligations), \$0 of equity in New Jersey, and so forth. In 1996, the couple could have kept the whole house in Alaska, Hawaii, and Indiana (\$15,000 if the obligations

¹⁵ The District of Columbia is excluded because its exemptions are set by Congress; it does not have an independent legislature, unlike the states.

¹⁶ Some empirical work on exemptions focuses on homestead exemptions alone. There are two problems with this approach. First, it leaves unclear how to treat states, such as Maryland and Virginia, with large "wildcard" exemptions that can be applied toward real or personal property. More seriously, this approach can give a misleading impression as to which states are more generous. To see this, imagine that an individual has \$50,000 of home equity and \$50,000 in personal property, and imagine that state X has a homestead exemption of \$30,000 and a personal property exemption of \$20,000 and that state Y has a homestead exemption of \$20,000 and a personal property exemption of \$30,000. If one counted only homestead exemptions, state X would appear more generous than state Y, but it is not clear which state our individual would prefer.

¹⁷ Although important to some debtors, we exclude these exemptions from our analysis because of the difficulty of quantification, the illiquidity of many of them, the existence in many states of low dollar ceilings for them, and their usually small value compared to homestead and personal property exemptions.

TABLE 1
 NOMINAL HOMESTEAD AND PERSONAL PROPERTY EXEMPTIONS FOR A HOUSEHOLD

STATE	HOMESTEAD EXEMPTIONS			PERSONAL PROPERTY EXEMPTIONS		TBE	OPT OUT
	1975	1996	Average Annual Growth (%)	1975	1996		
Alabama	4,000	10,000	7	2,000	6,000		1980
Alaska	19,000	62,100	11	5,000	6,900		1982
Arizona	15,000	100,000	27	0	3,000		1980
Arkansas	U	U		500	500		1981
California	20,000	75,000	13	1,000	3,800		1984
Colorado	15,000	60,000	14	1,000	2,000		1981
Connecticut	0	150,000		0	5,000		
Delaware	0	0	0	500	10,500	Yes	1981
Florida	U	U		2,000	4,000	Yes	1979
Georgia	1,000	10,000	43	0	2,800		1980
Hawaii	50,000	50,000	0	2,000	2,000	Yes	
Idaho	14,000	100,000	29	1,000	3,000		1981
Illinois	10,000	15,000	2	1,300	6,400		1981
Indiana	1,400	15,000	46	1,200	8,000	Yes	1980
Iowa	U	U		0	2,400		1981
Kansas	U	U		U	40,000		1980
Kentucky	2,000	10,000	19	4,000	7,000		1980
Louisiana	15,000	15,000	0	U	U		1979
Maine	6,000	25,000	15	2,000	5,800		1981
Maryland	0	0	0	1,000	11,000	Yes	1981
Massachusetts	24,000	100,000	15	1,400	1,400	Yes	
Michigan	7,000	7,000	0	0	0	Yes	
Minnesota	U	200,000		4,000	6,800		
Mississippi	30,000	150,000	19	0	20,000		1987
Missouri	2,000	8,000	14	1,300	4,150	Yes	1982
Montana	40,000	80,000	5	0	2,400		1981
North Carolina	2,000	20,000	43	1,000	3,000	Yes	1981
North Dakota	80,000	160,000	5	5,000	7,400		1981
Nebraska	8,000	20,000	7	0	0		1980
Nevada	25,000	125,000	19	2,000	2,000		1981
New Hampshire	5,000	60,000	52	0	10,000		1981
New Jersey	0	0	0	2,000	2,000		
New Mexico	20,000	60,000	10	U	9,000		
New York	4,000	20,000	19	0	4,800		1982
Ohio	0	10,000		0	2,800	Yes	1979
Oklahoma	U	U		3,000	6,000		1980
Oregon	12,000	33,000	8	1,600	4,200		1981
Pennsylvania	0	0	0	0	300	Yes	
Rhode Island	0	0	0	0	0	Yes	
South Carolina	2,000	10,000	19	1,000	2,400		1981
South Dakota	U	U		2,000	4,000		1980
Tennessee	7,500	7,500	0	0	8,000		1980
Texas	U	U		20,000	30,000		
Utah	11,000	11,000	0	0	3,000		1981
Vermont	10,000	150,000	67	0	14,800	Yes	
Virginia	10,000	11,000	<1	0	4,000	Yes	1979
Washington	20,000	60,000	10	0	5,000		
West Virginia	0	30,000		0	6,400		1981

TABLE 1 (Continued)

STATE	HOMESTEAD EXEMPTIONS			PERSONAL PROPERTY EXEMPTIONS		TBE	OPT OUT
	1975	1996	Average Annual Growth (%)	1975	1996		
Wisconsin	25,000	40,000	3	4,000	4,400		
Wyoming	20,000	20,000	0	0	4,800	Yes	1980
Mean	12,788	48,595	13	1,549	6,187		
Federal	15,000 ^a	30,000	5	3,200 ^a	6,400		

NOTE.—All amounts are nominal and for a married household with two children. U indicates no dollar limit. Personal property values consider only wildcard and automobile exemptions. TBE = tenancy by the entirety.

^a Because the Bankruptcy Reform Act of 1978 did not exist in 1975, values for the federal exemption are given for the year 1979 instead of 1975.

were jointly owed) and the whole house in New Jersey because they could now claim the federal exemption.

Homestead exemptions usually specify a dollar amount of home equity that the debtor is entitled to protect, but some states instead specify an acreage limit, so in principle a house of unlimited value may be exempted. Personal property exemptions also usually specify a dollar amount, but often they are divided into categories (for example, home furnishings or tools of the trade) with or without individual or aggregate limits. These inconsistencies create coding problems, which we address by testing narrower (excluding the non-monetary exemptions) and broader (estimating the monetary value of these exemptions) specifications. Unless otherwise noted, we present the results for our broadly defined exemptions.¹⁸

¹⁸ The “unlimited” exemptions pose significant problems in our study for both homestead and personal property exemptions. Clearly the home can be quite valuable, but many items of relatively low value, such as wedding rings and furniture, often have no dollar limit either. One cannot simply ignore personal property exemptions without dollar limitations, as this erroneously treats them as less valuable than similar exemptions that do have a specific limit, however large. On the other hand, one cannot treat the “unlimited” wedding ring as if it were potentially as valuable as a mansion, both as a matter of common sense and as a result of judicial hostility toward aggressive exemption planning. See, for example, *Norwest Bank Nebraska, N.A. v. Tveten*, 848 F.2d 871, 878 (8th Cir. 1988); *In re Krantz*, 97 B.R. 514 (Bankr. N.D. Iowa 1989). Our approach to this problem is to replace unlimited exemptions for a given category of property with the average of the two highest monetary limits for that property among other states. Choosing the appropriate cap was difficult, as often one state exemption was significantly greater than the others. For example, Louisiana allows the exemption of wedding and engagement rings up to \$5,000 (a significant sum in 1975), while the next highest observed limit was \$1,000. We converted all exemptions into real values and then capped the real values of all exemptions at the average of the two highest observed exemptions from different states, regardless of the time period. In the case of the homestead exemption, for example, this was an average of North Dakota’s 1979 homestead exemption (\$345,833 in 1996 dollars) and Minnesota’s 1993 homestead exemption (\$217,194 in 1996 dollars). We then converted the values back into nominal terms. As an alternative, we tried narrowing the set of exemptions that we considered (excluding clothes, furnishings, and so on) in order to minimize the number of unlimited exemptions that we needed to address. This alternative

Further examination of Table 1 reveals three other features worth noting about exemption levels. First, nominal exemptions rose between 1975 and 1996 (although much of this growth was eroded by inflation in most states). Second, the federal homestead exemption was roughly equal to the median state homestead exemption in 1978, and the federal personal property exemption was greater than most state personal property exemptions (especially if one includes the ability of nonhomeowners to use the federal homestead exemption, discussed below). Third, there is considerable variation in nominal exemption levels across states: in some states, a couple can exempt virtually nothing, in others, tens or hundreds of thousands of dollars worth of property. This last observation alerts us that subtle variations across states—in risk preferences, for example, or income per capita—are unlikely to explain much variation in exemption levels.

Figure 1 provides a geographic perspective on nominal homestead exemptions. The states marked with “pins” have unlimited exemptions; the darker states have higher nominal exemptions than the lighter states. One perceives a regional pattern. The unlimited states form a belt up the middle of the country, and Midwestern and western states have more generous homestead exemptions than southern and eastern states. This pattern, which holds up over time, does not as strongly characterize personal property exemptions.

One of the major differences between the federal exemptions created by the Bankruptcy Reform Act of 1978 and most of the then-existing state exemption systems was that the entire value of the federal homestead exemption could be used toward personal property of the debtor’s choosing. Although this was changed in 1984, today a debtor may still use up to one-half of the federal homestead exemption toward other property. While some states now follow the federal lead and offer “spillover” provisions that allow a debtor to apply some portion of the homestead exemption to personal property, many do not. Because these spillover provisions represent a potentially valuable benefit for nonhomeowners,¹⁹ we consider separately the aggregate exemptions that could be claimed by a homeowner and those by a nonhomeowner.

Tables 2 and 3 define and provide summary statistics for the different specifications of exemptions levels utilized in this paper. It also presents other variables relevant to the analysis. It should be noted that we exclude the

specification did not materially affect our results. To test the robustness of our results, we also use a more narrowly defined set of personal property exemptions that includes only wildcard and motor vehicle exemptions in order to minimize the number of unlimited exemptions.

¹⁹ The generosity of homeowner exemptions relative to nonhomeowner exemptions continues to be an important issue, with the National Bankruptcy Review Commission calling for much greater use of “spillover” provisions than are typically found in state exemptions today. Report of the National Bankruptcy Review Commission, *Bankruptcy: The Next Twenty Years* (1997).

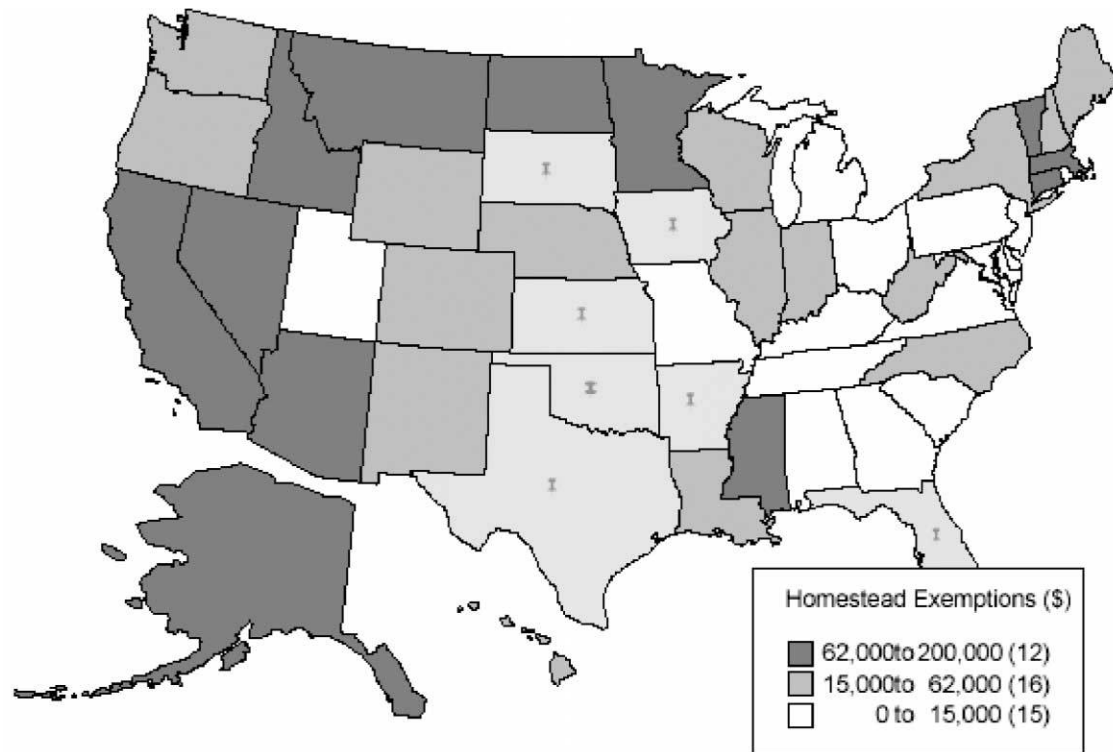


FIGURE 1.—Homestead exemptions for a married couple, 1996. States with unlimited exemptions are marked with “pins.”

TABLE 2
VARIABLE DEFINITIONS AND SOURCES

Variable	Definition	Source
Homestead	Homestead exemption (1996 dollars, thousands)	State statutes
Homeowners	Aggregate of homestead and personal property exemption (1996 dollars, thousands)	State statutes
Nonhomeowners	Personal property exemption plus any spillover for those who do not claim the homestead exemption (1996 dollars, thousands)	State statutes
Bankruptcy rate	Individual bankruptcies (per 1,000 population)	Administrative Office of the U.S. Courts
Banks	Banks (per 100,000 population)	Federal Deposit Insurance Corporation, History of the Eighties: Lessons for the Future (1997) (http://www.fdic.gov/bank/historical/index.html)
Cost of living	Geographical cost of living index (by state, average is 100)	Walter McMahon, Geographical Cost of Living Differences: An Update, 19 AREUEA J. 426 (1991)
Divorce rate	Divorces (per 100,000 population)	National Center for Health Statistics
Doctors	Doctors (per 100,000 population)	American Medical Association, Physician Characteristics and Distribution in the U.S. (various years)
Farmers	Farm proprietors (per 100,000 population)	U.S. Department of Commerce, Bureau of Economic Analysis, Local Area Personal Income (http://www.bea.doc.gov/bea/regional/reis)
Government transfers	Government transfers (1996 dollars per capita)	U.S. Department of Commerce, Bureau of Economic Analysis, Local Area Personal Income (http://www.bea.doc.gov/bea/regional/reis)
History	Homestead exemption in 1920 (1920 dollars, thousands)	Paul Goodman, The Emergence of Homestead Exemptions in the United States: Accommodation and Resistance to the Market Revolution, 1840–1880, 80 J. Am. Hist. 470 (1993)
Income	Income (1996 dollars per capita)	U.S. Department of Commerce, Bureau of Economic Analysis, Local Area Personal Income (http://www.bea.doc.gov/bea/regional/reis)
Lawyers	Lawyers in private practice (per 100,000 population)	American Bar Foundation, Lawyer Statistical Report (various years)
Population density	Population (per square mile)	Statistical Abstract of the United States (various years)

TABLE 3
SUMMARY STATISTICS FOR VARIABLES

Variable	<i>N</i>	Mean	SD	Minimum	Maximum
Homestead	1,100	79.36949	97.59423	0	281.5135
Homeowner	1,100	104.5011	106.9408	0	393.1735
Nonhomeowner	1,100	27.02727	25.06747	0	111.66
Bankruptcy rate	1,100	1.920439	1.371076	.108726	8.980781
Banks	1,100	7.910449	7.062247	.656168	30.42929
Cost of living	1,100	108.4597	13.98484	88.21	164.68
Divorce rate	1,045	5.181795	1.789499	2.030086	17.8
Doctors	850	181.2447	49.65062	96	387
Farmers	1,100	1,428.093	1,331.565	63.1909	6,929.702
Government transfers	1,100	2,613.312	590.3291	1,320.204	5,263.153
History	1,056	2.360417	1.844866	0	5
Income	1,100	20.63301	3.64912	12.25763	33.472
Lawyers	250	184.1749	55.28794	89.0472	409.8361
Population density	1,100	160.9788	227.4877	.648697	1,070.939

NOTE.—SD = standard deviation.

doctrine of TBE from our calculation of exemptions.²⁰ Because there is no clearly correct method of defining exemption levels, we considered alternative specifications in each of our analyses. Unless otherwise noted, they did not materially affect our results.

Our initial hypothesis was that exemption levels would reflect the policy preferences of citizens of the various states or the influence of interest groups in each state. To test this hypothesis, we conducted simple state-level panel and cross-sectional regressions of exemption levels on proxies for various theories for exemptions,²¹ a variable for historic (1920) levels of real property exemptions in each state, and, where appropriate, year fixed effects. Our data spanned the years 1975–96. We tested a large number of specifications of variables and of empirical models. The only robust predictor of exemption levels during the period of our sample was historic levels of exemptions.²²

²⁰ Because the doctrine of tenancy by the entirety can serve as a substitute for the homestead exemption, we tried treating those states that allow the use of this doctrine as if they had an unlimited homestead exemption, but we did not reach results that were qualitatively different from those presented below. The application of the doctrine of tenancy by the entirety is not uniform across states where it remains in use. We restricted our attention to those states that retain a fairly strong version of this doctrine. A good description of the various incarnations of this doctrine can be found in *Sawada v. Endo*, 561 P.2d 1291, 1294–95 (Haw. 1977).

²¹ We proxy demand for insurance with the divorce rate and per capita income, altruism with government transfers per capita, existing debtors with farmers per capita, debtors' lawyers with lawyers per capita, tort defendants with doctors per capita, and secured creditors with banks per capita. In addition, we considered a cost-of-living index to test whether cost of living matters and population density to see if the reason why Texas adopted the first American exemption law—competition for migrants—still matters. We acknowledge the ambiguity of direction of causation for many of these variables and the probability that relevant variables were omitted.

²² Tables of results are available on request from the authors.

One possible interpretation of this result is that exemptions are archaic: they mattered in the nineteenth century perhaps, but they stopped mattering by our period of study. However, between 1976 and 1996, there were almost 3.5 statutory²³ increases per year to the state homestead exemptions alone, and at least one state changed its homestead exemption in every year of our study except 1994. In addition, recent efforts to establish greater federal control of bankruptcy exemptions have provoked controversy in Congress and public debate.²⁴ Finally, we have found some evidence of regression to the mean, which suggests that the explanatory variables—whatever they are—are converging.²⁵

Most likely, exemption levels matter, but there is a great deal of inertia, and this makes it difficult to identify the variables that influence them. However, in 1978 the federal government forced states to overcome their inertia and act. This provides us with an opportunity to study the determinants of exemptions.

II. FEDERALISM AND OPT OUT

A. *The 1978 Bankruptcy Reform Act*

The 1978 Bankruptcy Reform Act confronted many states with a stark choice: accept dramatically higher federal exemptions or enact legislation to opt out of the federal scheme. It might seem odd that the federal government would pass a law on a topic that the states have already considered and then allow each state to revert to its own judgment. However, this approach has been employed in other areas, such as usury law and banking regulation.

²³ States with exemptions for specific types of property (such as a ring or tools of trade) rather than dollar amounts of property experience annual changes in the nominal value of their exemptions without statutory action because such exemptions naturally keep up with inflation. Conversely, states without such exemptions or statutory increases in the nominal value of exemptions experience a decline in the real value of their exemptions.

²⁴ See note 2 *supra* and accompanying text.

²⁵ We regressed the growth of exemptions in each state on that state's homestead exemption in 1920. Although we found no evidence of regression to the mean when we use a broad definition of personal property exemptions to calculate homeowner and nonhomeowner exemptions, we found significant evidence of regression when we use a narrow definition of personal property exemptions. In particular, we find that a 1 percent higher 1920 exemption level reduces the growth rate of exemptions by roughly 6 percent between 1975 and 1996. We ran separate regressions for homeowner and nonhomeowner regressions. We omitted from these regressions changes for states with exemption levels below those in the 1978 Bankruptcy Reform Act for those years in which such states had not opted out of that act. For reasons that we explain in Section IIA, residents of these states during those years could choose the more generous federal exemption over their state exemptions. Therefore, the states had no reason to modify their exemptions. Each regression also included variables that measure banks per capita, cost of living, income per capita, population density, divorce rate, and transfers per capita. This analysis drops two outlier states, Georgia and Delaware, which have very high average homeowner exemption growth rates. The finding of a regression to the mean in our regression analysis is robust to the exclusion of these two states.

The primary innovation in this paper is to use the external shock to state exemptions from the 1978 act to shed light on why states have different exemption laws.

We assume that, prior to 1978, exemption laws in each state reflected a political equilibrium among interests that sought high exemptions and interests that sought low exemptions. The Bankruptcy Act adopted generous federal exemptions, but these exemptions were optional in two senses. First, individuals in bankruptcy had a choice between their state exemption and the federal exemption. Second, states could opt out of the federal exemption, leaving residents with only the state exemption. Without knowing anything about how states arrived at their pre-1978 exemption levels, we can predict three things about how states would have exercised their option to opt out given those exemption levels. If states simply follow these predictions, we learn about the effect of an opt-out provision in a federal act, but we do not learn the motivations behind state exemption levels. To the extent that states take additional actions, however, we may learn something about these motivations.

Our three simple predictions are, first, that only states with homeowner or nonhomeowner exemptions below analogous federal exemptions will have opted out of the federal exemption system. The reason is that individuals in states with more-generous-than-federal exemptions could choose their state exemptions even if their states did not opt out. Second, to the extent that a state has decided to opt out, it will opt out immediately. A state would wait only if interests on one or the other side of that state's exemptions debate thought that time would furnish more information on the value of exemptions. This is a standard prediction of bargaining models. However, we are skeptical that groups concerned with exemptions would benefit by waiting for more information. There was a great deal of debate at both the state and federal level that preceded reform of the Bankruptcy Code in 1978. Third, because the federal law shifts bargaining power toward supporters of more liberal exemptions in states with below-federal exemptions, we expect that such states would raise exemptions as they opt out of the federal law in order to "buy" the consent of these supporters.

We expect two more informative responses by states. States with lower-than-federal-exemption levels might not opt out if legislatures do not care about exemptions—if exemptions are archaic laws left on the books and not seen to reflect important policies. According to anecdotal evidence and prior studies, however, many states were concerned that high exemption levels would increase the cost to credit markets of existing bankruptcies and perhaps even increase the rate of bankruptcies. Therefore, we predict that a state with low exemptions was more likely to opt out if it already had a high bankruptcy filing rate. On the basis of literature exploring the effect of political ideology

on bankruptcy policy,²⁶ we also suspected that traditionally conservative states were also more likely to opt out of the federal act. We assume that conservative states are those that were reluctant to transfer wealth to the poor or the unlucky and therefore predict that a state with lower-than-federal exemptions is more likely to opt out if it has lower levels of government transfers to the poor.²⁷

B. Empirical Tests

1. The Decision to Opt Out

Thirty-seven states have opted out.²⁸ Figure 2 presents a map of the United States and marks the states (*shaded*) that have opted out, the states (*large dots*) whose homeowner exemptions, broadly defined, exceeded the federal homeowner exemption at the time of the passage of the Bankruptcy Reform Act of 1978, and the states (*small dots*) whose nonhomeowner exemptions, broadly defined, exceed the federal nonhomeowner exemption at the time of the passage of the Bankruptcy Reform Act of 1978. Correlations (not reported) confirm the visual impression that there is a small relationship between states that opt out and states that have exemptions lower than the federal level;²⁹ this remains true when states with TBE are treated as though they had unlimited homestead exemptions.³⁰

To investigate more rigorously our hypotheses regarding the decision to opt out, we ran logit regressions with the dependent variable a dummy equal to one if the state has ever opted out and zero if not. The first independent variable is a dummy equal to one if the state's homeowner exemptions are

²⁶ See Erik Berglöf & Howard Rosenthal, *The Political Economy of American Bankruptcy: The Evidence from Roll Call Voting, 1800–1978* (unpublished manuscript, Princeton Univ. 1999).

²⁷ An alternative definition identifies as conservative those states that strongly defend states' rights against federal encroachment. These states tend to be located in the South and can therefore be proxied by an appropriate region variable. However, there is much overlap between opponents of government transfers and defenders of states' rights. Indeed, our government transfers variable is strongly correlated with a South-region variable (or more direct proxies of ideology), producing near multicollinearity in regressions with both variables. Therefore, we report the results of an analysis with only a government transfers variable.

²⁸ One state, Arkansas, opted back in, in order to evade a state constitutional limit on its personal property exemption. See *In re Holt*, 894 F.2d 1005 (1990). We treat Arkansas as an opt-out state. Another state, New Hampshire, opted back in after our period in 1997. N.H. Rev. Stat. Ann. § 511:2 (1996).

²⁹ Of the 13 states that did not opt out, six (46 percent) had below-federal (broadly defined) homeowner exemptions, and 11 (85 percent) had below-federal (broadly defined) nonhomeowner exemptions. Of the 37 states that did opt out, 22 (59 percent) had below-federal (broadly defined) homeowner exemptions, and 35 (95 percent) had below-federal (broadly defined) nonhomeowner exemptions.

³⁰ The correlation for opt out and real federal minus state homeowner is .007, and for opt out and real federal minus state nonhomeowner it is .218; there is much variation in between. No correlation is significant at the 10 percent level.

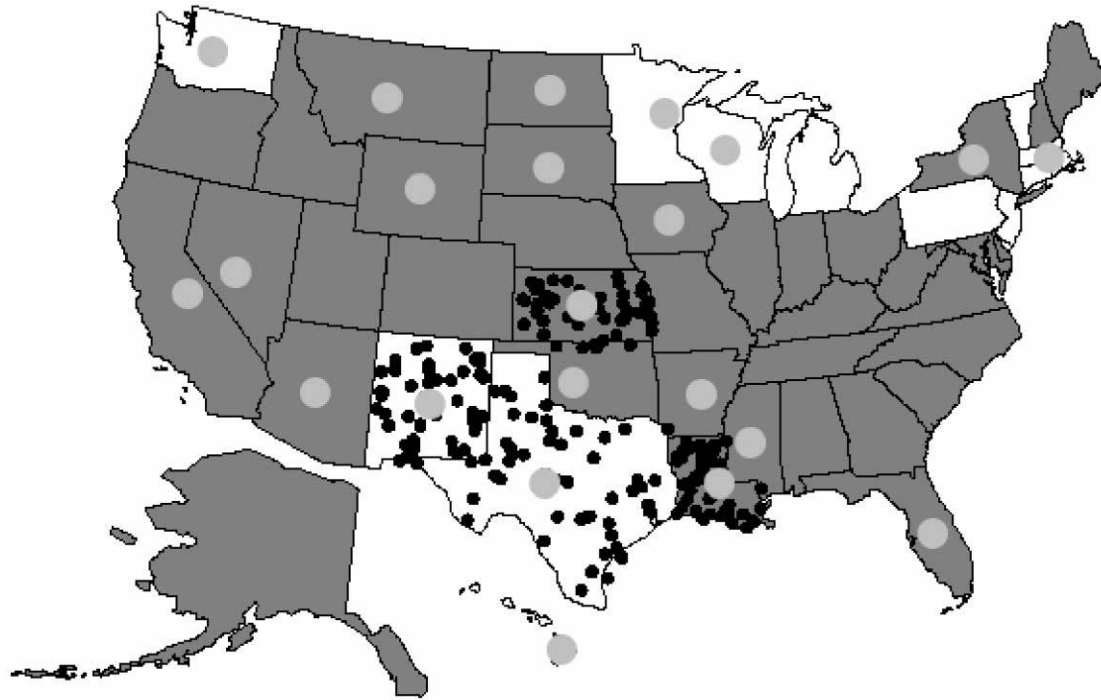


FIGURE 2.—Exemptions (1978) and decisions to opt out. Shaded states are those that have opted out, large dots designate states with homeowner exemptions above the federal level in 1978, and small dots designate states with nonhomeowner exemptions above the federal level in 1978.

less than the federal homeowner exemptions (so the effective exemption is changed by the federal law) and zero otherwise (so the effective exemption is unchanged by the federal law).³¹ One would expect that states would opt out only if a higher federal exemption changed the effective exemption level. The other independent variables are the state's bankruptcy filing rate (per 1,000 individuals) and government transfers (real dollars per capita).³² We also interacted each of these with the dummy for whether a state's exemptions fell below the federal level. All the independent variables were drawn from the year 1978. The results with and without interactions are presented in the first and second columns, respectively, of Table 4.³³

In the absence of interactions, the best predictor of whether a state opted out is its bankruptcy rate. However, once interactions are added, the most important predictor changes to whether a state's exemption is lower than the federal exemption. The state continues to be more likely to opt out if it has a high bankruptcy filing rate, but the bankruptcy filing rate has a greater impact on the probability that a state will opt out if the state has low exemptions as well.³⁴ States with lower transfers are no more or less likely to opt out, but if these states also have exemptions that are lower than the federal exemptions, then they are more likely to opt out. However, this effect is small relative to the effect of bankruptcy filings on such states. The basic point is that states with generous exemptions are unaffected by the new federal law and so do not bother to opt out. If their exemptions are lower than the federal exemptions, however, then the states are more concerned about the effect of the federal law and more likely to opt out—and their concern increases with the bankruptcy filing rate and the stinginess of their transfers (that is, their conservativeness).³⁵

³¹ We cannot perform the analysis on nonhomeowner exemptions because all but four states have nonhomeowner exemptions (broadly defined) below federal levels.

³² We separately tested a variable for conservative ideology, which was significant when used without the transfer variable, but the two variables are collinear, and so they both are insignificant when both are used. We report the transfer variable because it seems to us more objective and precise.

³³ We exclude nonhomeowner exemptions because there is not enough variation in the data. Only four states had nonhomeowner exemptions (broadly defined) that were above the federal level, and zero states had nonhomeowner exemptions (narrowly defined) that were above the federal level. Although in both cases a substantial majority of states opted out, there are not enough observations to confirm that a substantial majority would not have opted out if they had had exemptions above the federal level.

³⁴ This is consistent with the previous literature, which found that states with higher bankruptcy filing rates in 1978 were more likely to have opted out of the federal exemptions and chosen a homestead exemption less than the federal homestead exemption. See Alden F. Shiers & Daniel P. Williamson, *Nonbusiness Bankruptcies and the Law: Some Empirical Results*, 21 *J. Consumer Aff.* 277, 290 (1987).

³⁵ This analysis is subject to the warning that we are using six variables to explain the decision of 13 states not to opt out.

TABLE 4
THE DECISION TO OPT OUT

Independent Variables	Decision to Opt Out	Decision to Opt Out	Decision to Opt Out within 2 Years
Dummy	.84 (.81)	9,877.65* (4,098.74) ^a	-10.68 (6.16)
Bankruptcy rate	4.06** (1.17)	3.74* (1.68)	.0177 (1.82)
Dummy × bankruptcy rate		8,543.16** (7.74)	6.83* (3.00)
Government transfers	-.0016 (.0013)	.00095 (.00120)	-.0025 (.0018)
Dummy × government transfers		-6.20** (.0013)	.0014 (.0030)
Constant	1.43 (2.81)	-3.98 (3.05)	5.19 (4.00)
Observations	50	50	37
Log likelihood	-20.51	-11.47	-17.44
Hypothesis tests:			
Bankruptcy rate + bankruptcy interaction		8,546.90** (7.23)	6.84** (2.38)
Government transfers + government transfers interaction		-6.20** (.0021)	-.0011 (.0024)
Dummy + interactions (at mean value of covariates for states with above-federal exemptions)		9,655.29** (10.94)	4.50** (2.28)

NOTE.—The dependent variable is a dummy equal to one if a state ever opted out of the federal exemptions scheme. The dummy for exemptions equals one if the state's homeowner exemption, broadly defined, as of 1978 is lower than the federal homeowner exemption, broadly defined. Coefficients reported are from a logit regression of the decision to opt out on the listed independent variables. Standard errors are in parentheses. The last three rows show point estimates for the sum of certain coefficients. They are intended to test the hypotheses that below-federal homeowner exemptions, bankruptcies, and transfers increased the probability of a state opting out.

^a The standard error was computed via a bootstrap estimate with 1,000 repetitions.

* Significant at the 5% level.

** Significant at the 1% level.

2. The Timing of the Decision to Opt Out

The last column of Table 1 reveals that all but two of the 37 states that opted out of the federal scheme did so by 1982. This clustering of opt-outs immediately after the 1978 act supports our prediction that states that want to opt out do so immediately.

A more interesting hypothesis is that the variables that cause states to opt out also influence the timing of the opt out. States that have lower exemptions, less generous transfer systems, and higher bankruptcy rates might opt out more quickly than other states. To test this hypothesis, we estimated a logit regression on the subsample of states that opted out of the 1978 act. The

dependent variable takes a value of one if a state opted out within the first 2 years of the passage of the Bankruptcy Reform Act of 1978.³⁶ (Fifteen of 37 states that opted out did so by 1980.) The independent variables include a dummy for whether a state's homeowner exemption is below the federal homeowner exemption, individual bankruptcies per thousand population, and real per capita government transfers, all for the year 1978. We also interacted the dummy for lower-than-federal state exemptions with each of the other regressors.³⁷ The results of the logit analysis, which are presented in the third column of Table 4, suggest that, conditional on having a lower-than-federal homeowner exemption, an increase in a state's bankruptcy rate raises the probability of early opt out. Moreover, having a lower-than-federal exemption itself is associated with a higher likelihood of early opt out. There is no significant effect on the probability of early opt out from having a less generous transfer system.³⁸

3. Exemption Changes When States Opt Out

Finally, we argue that the Bankruptcy Code served in 1978 as a shock to each within-state political equilibrium. We predict that states with below-federal exemptions, in order to opt out, would have to buy off supporters of generous exemptions by raising their exemption levels somewhat. We do not predict the same effect among opt-out states with above-federal exemptions.

As an initial test, Table 5 compares the increase in exemptions in states that should have experienced this bargaining pressure—those that had below-federal exemptions and cared about the issue—with the increase in states that did not. We compare both the percentage and absolute increase in homeowner and nonhomeowner exemptions during the period of significant opt-out activity, 1978–82, in Table 6. As predicted, states that experienced bargaining pressure increased their exemptions by more than states that did not. In fact, many states that did not feel this pressure saw the real value of their exemptions decline owing to inflation.

³⁶ We do not estimate the logit on a panel data set with a variable for whether a state opted out in each year because an opt out is virtually always permanent. We omit state-year observations for the 13 states that never opt out of the federal scheme because we do not think that these states will one day opt out and that a sample of all states is simply "censored." To include them when estimating our hazard model would only cloud the answer to the question, when do states that want to opt out do so?

³⁷ We supplemented this analysis by estimating a Cox proportional hazard model using a panel data set with a variable for whether a state opted out in a given year. The independent variables were the same as in the logit analysis except that we added the difference between the federal and state homeowner exemption, real income per capita, interactions of the last two variables with the dummy for lower-than-federal state exemptions, and an indicator for whether the state legislature was in session that year.

³⁸ We obtain the same results with the hazard model as with the logit model. The hazard model also reveals that the fact that a state's legislature is in session has a statistically significant and the largest positive effect on the probability of opting out. This supports the earliest possible opt-out prediction.

TABLE 5
EFFECT OF OPTING OUT ON THE LEVEL OF EXEMPTIONS (Broadly Measured), FOR STATES
WITH STATE EXEMPTIONS LESS THAN AND GREATER THAN FEDERAL EXEMPTIONS

	Homeowner (State < Federal)	Nonhomeowner (State < Federal)	Homeowner (State > Federal)	Nonhomeowner (State > Federal)
$t - 3$	-.404 ⁺ (.231)	-.02 (.319)	-.076* (.033)	
$t - 2$	-.548* (.196)	-.079 (.507)	-.111 (.088)	
$t - 1$	-.542** (.167)	-.204 (.348)	-.112 (.088)	.14 (.110)
t	-.058 (.099)	.283 (.204)	-.019 (.068)	.08 (.114)
$t + 1$	-.045 (.068)	.214 ⁺ (.120)	-.036 (.059)	.056 (.076)
$t + 2$	-.024 (.055)	.13* (.053)	-.034 (.057)	.039 (.049)
$t + 3$.005 (.034)	.051 (.046)	-.045 (.055)	.022 (.032)
N	432	630	234	36
R^2	.93	.88	.99	.99
F -test, $t - 1 = t$	10.99	5.8	1.87	205.93
Prob. > F	0	.02	.2	.04

NOTE.—Standard errors are in parentheses.

⁺ Significant at the 10% level.

* Significant at the 5% level.

** Significant at the 1% level.

We checked our assumption that states increased their exemptions at the same time that they opted out, rather than in separate statutes over time. The latter behavior would suggest that there was no deal making of the sort we envision. We found that whether a state increased its exemptions in a given year is correlated (not reported) with whether it opted out that year at a 1 percent significance level for all kinds of exemptions.³⁹

Table 5 provides a more rigorous test of our bargaining hypothesis. There we report the results from a regression of log exemption levels (defined broadly) on state fixed effects, a state quadratic time trend, dummies for each of the 3 years before and after the date at which a state opts out, and a dummy for the year the state opts out. The state dummies control for omitted state-level variables. The presence of the time trends ensures that the coefficients on the dummies for dates surrounding the opt-out decision measure deviations from state trends during those years.⁴⁰ We included in our analysis only the 37 states that opted out. We divided these into two groups for each

³⁹ It is true for all years and each individual year except 1979, when only four states opted out.

⁴⁰ We conducted the same analysis permitting different state trends before and after the date of opt out. We drew the same conclusions.

TABLE 6
CHANGE IN THE REAL VALUE OF EXEMPTIONS, 1978 TO 1982

	PERCENT INCREASE (%)		ABSOLUTE INCREASE (\$)	
	Homeowner Exemptions	Nonhomeowner Exemptions	Homeowner Exemptions	Nonhomeowner Exemptions
States that opted out and had below-federal homeowner exemptions in 1978	74	150	7,854	6,475
States that did not opt out or had above-federal homeowner exemptions in 1978	-1.2	0	-2,657	-3,467
Difference	75* (30.4)	140* (58.2)	10,511.36+ (6,154)	9,942** (3,611)

NOTE.—The table presents the change in real value of exemptions specified in each column among the category of states specified in each row. The dependent variables are exemptions (as indicated) divided into subsamples where states have exemptions that are lower than the federal level as of 1978 and where states have exemptions that are greater than the federal level. The independent variables are years before and after opt out, with state and year fixed effects. All values are logged and real. Robust standard errors are in parentheses.

+ Significant at the 10% level.

* Significant at the 5% level.

** Significant at the 1% level.

type of exemption: states with exemptions that were less generous and states that were more generous than the federal government as of 1978.⁴¹ We predict that only states with less generous exemptions would increase them when they opted out, for only in those states did the Bankruptcy Code act as a shock to the equilibrium exemption level.

The critical statistic in Table 5 is the F -statistic for the hypothesis test that states increased their exemptions in the year they opted out (t) more than they increased their exemptions the previous year ($t - 1$). Among states that had exemptions below the federal level, the answer is clearly yes. Among states with more generous exemptions, one finds that exemptions did not rise as fast the year of opt out (nonhomeowner exemptions) or that the change in exemptions is not statistically significant (homeowner exemptions).⁴²

III. CONCLUSION

We have not fully explained exemption laws, but we have fitted together a few pieces of the puzzle. Historical evidence suggests that exemptions were initially popular as a way to protect existing debtors against creditors and, thus, of attracting migrants to sparsely populated states. The best predictor of current levels of exemptions is historical levels of exemptions. This is not surprising. Existing law always supplies the starting point from which leg-

⁴¹ We also ran regressions grouping all states but interacting each independent variable with a dummy for whether the state had below-federal exemptions. The results were virtually identical to those presented in Tables 5 and 6.

⁴² These results held up well for alternative specifications of exemptions.

islators bargain over reform, and so very old laws exert influence over the present and recent past. Although we do not have enough observations for our initial regressions to pick out the determinants of recent variation in exemption levels, regression of exemption levels to the mean suggests that these determinants are converging.

In 1978, state legislatures were confronted with federal exemptions that were often more generous than state homeowner exemptions and nearly always greater than state nonhomeowner exemptions. States with below-federal exemptions opted out. Although expected, this validates other evidence, such as the frequency with which states modify their exemptions, that exemptions are still important to most states. Also as expected, states that ultimately opted out did so almost immediately after the passage of the 1978 act. Finally, the 1978 act shifted bargaining power in favor of state legislators who preferred generous exemptions. As a consequence, legislators who preferred less generous exemptions had to agree to moderate levels in order to obtain the political support for opt out.

Our main finding with respect to the question of why states care about exemptions is that states with high bankruptcy rates were more likely to opt out; the effect was larger for states with lower-than-federal homeowner exemptions. The latter group also opted out more quickly. Moreover, states that were conservative, at least in terms of their attitude toward government transfers of wealth to the poor, were more likely to opt out of the more generous federal exemptions. But this effect was relatively small. It appears, therefore, that the perception that generous exemptions increase the costs of existing bankruptcies or raise the rate of future bankruptcies explains why low-exemption states care about exemptions.⁴³

The findings in this paper also give us some clues about the political history of the Bankruptcy Reform Act. The battle between the House and the Senate over exemptions was, it turns out, really a battle over whether nonhomeowners ought to enjoy more generous exemptions (the original House bill) or be stuck with the original ungenerous state exemptions (the original Senate bill).⁴⁴ The compromise was the opt-out system, and it really was a compromise in the sense that the effective exemptions for nonhomeowners in nearly all ungenerous states rose—either because federal exemptions became available to debtors or states increased their exemptions as they opted out. At the same time, the law permitted the states more local control and resulted in more variation than would have been the case if the Senate

⁴³ An important implication for academic analysis of the effect of exemption levels on bankruptcy rates is that the former ought not to be treated as exogenous variables.

⁴⁴ What did the Senate get in return for giving up incorporation of state exemptions, the status quo? The most likely answer is new patronage opportunities resulting from the elevation of bankruptcy judges. See Posner, *supra* note 14.

and House had merely agreed on uniform federal exemptions that were somewhat lower than those in the House bill.

BIBLIOGRAPHY

- Apilado, Vincent P.; Dauten, Joel J.; and Smith, Douglas E. "Personal Bankruptcies." *Journal of Legal Studies* 7 (1978): 371–92.
- Berglöf, Erik, and Rosenthal, Howard. "The Political Economy of American Bankruptcy: The Evidence from Roll Call Voting, 1800–1978." Unpublished manuscript. Princeton, N.J.: Princeton University, 1999.
- Berkowitz, Jeremy, and Hynes, Richard. "Bankruptcy Exemptions and the Market for Mortgage Loans." *Journal of Law and Economics* 42 (1999): 809–30.
- Berkowitz, Jeremy, and White, Michelle J. "Bankruptcy and Small Firms' Access to Credit." *Rand Journal of Economics* 35 (2004): 69–84.
- Braucher, Jean. "Increasing Uniformity in Consumer Bankruptcy: Means Testing as a Distraction and the National Bankruptcy Review Commission's Proposals as a Starting Point." *American Bankruptcy Institute Law Review* 6 (1998): 1–24.
- Brown, William Houston. "Exemption Limitations: Political and Ethical Considerations." In *70th Annual Meeting of the National Conference of Bankruptcy Judges* 7-5 (1996).
- Buckley, F. H., and Brinig, Margaret F. "The Market for Deadbeats." *Journal of Legal Studies* 25 (1996): 201–32.
- Cole, G. Marcus. "The Federalist Cost of Bankruptcy Exemption Reform." *American Bankruptcy Law Journal* 74 (2000): 227–74.
- Dawsey, Amanda E., and Ausubel, Lawrence. "Informal Bankruptcy." Working paper. College Park: University of Maryland, 2001.
- Fay, Scott; Hurst, Erik; and White, Michelle J. "The Household Bankruptcy Decision." *American Economic Review* 92 (2002): 706–18.
- Goodman, Paul. "The Emergence of Homestead Exemptions in the United States: Accommodation and Resistance to the Market Revolution, 1840–1880." *Journal of American History* 80 (1993): 470–98.
- Gropp, Reint; Scholz, John Karl; and White, Michelle J. "Personal Bankruptcy and Credit Supply and Demand." *Quarterly Journal of Economics* 112 (1997): 217–51.
- Hynes, Richard, and Posner, Eric A. "The Law and Economics of Consumer Finance." *American Law and Economics Review* 4 (2002): 168–207.
- Lin, Emily Y., and White, Michelle J. "Bankruptcy and the Market for Mortgage and Home Improvement Loans." *Journal of Urban Economics* 50 (2001): 138–62.
- Peterson, Richard L., and Aoki, Kyomi. "Bankruptcy Filings before and after Implementation of the Bankruptcy Reform Act." *Journal of Economics and Business* 36 (1984): 95–105.

- Posner, Eric A. "The Political Economy of the Bankruptcy Reform Act of 1978." *Michigan Law Review* 96 (1997): 47–126.
- Report of the National Bankruptcy Review Commission. *Bankruptcy: The Next Twenty Years*. Washington, D.C.: U.S. Government Printing Office, 1997.
- Shiers, Alden F., and Williamson, Daniel P. "Nonbusiness Bankruptcies and the Law: Some Empirical Results." *Journal of Consumer Affairs* 21 (1987): 277–92.
- Sullivan, T. A. E. Warren, and Westbrook, J. L. *As We Forgive Our Debtors: Bankruptcy and Consumer Credit in America*. New York: Oxford University Press, 1989.
- Weiss, Laurence A.; Bhandari, J. S.; and Robins, Russel P. 1996. "An Analysis of State-wide Variation in Bankruptcy Rates in the United States." Working Paper No. 96/56/AC. Fontainebleau, France: INSEAD.
- White, Michelle J. "Personal Bankruptcy under the 1978 Bankruptcy Code: An Economic Analysis." *Indiana Law Journal* 63 (1987): 1–53.