

1984

# Social Efficiency of the Bankruptcy Reform Act of 1978 With Regard to Personal Bankruptcy

A Charlene Sullivan

*Purdue University*

Debra Worden

*George Fox University, [dworden@georgefox.edu](mailto:dworden@georgefox.edu)*

Follow this and additional works at: <http://digitalcommons.georgefox.edu/gfsb>

 Part of the [Business Commons](#)

---

## Recommended Citation

Sullivan, A Charlene and Worden, Debra, "Social Efficiency of the Bankruptcy Reform Act of 1978 With Regard to Personal Bankruptcy" (1984). *Faculty Publications School of Business*. Paper 35.  
<http://digitalcommons.georgefox.edu/gfsb/35>

This Article is brought to you for free and open access by the School of Business at Digital Commons @ George Fox University. It has been accepted for inclusion in Faculty Publications School of Business by an authorized administrator of Digital Commons @ George Fox University. For more information, please contact [arolfe@georgefox.edu](mailto:arolfe@georgefox.edu).

## Social Efficiency of the Bankruptcy Reform Act of 1978 With Regard to Personal Bankruptcy

---

A socially efficient bankruptcy law is one that would have the effect of minimizing the present value of social costs stemming from bankruptcy while permitting debtors to make a "fresh start." Analysis of a sample of petitions for personal nonbusiness bankruptcy filed under the Bankruptcy Reform Act of 1978 shows that about 30 percent of petitions for Chapter 7 and about 25 percent of petitions for Chapter 13 were cases where social costs were not minimized as would be required under socially efficient bankruptcy legislation. The social costs of Chapter 7 may be reduced under proposed reform [S.445 and H.R. 1800] as the judge would be provided with information concerning estimates of debts repayable under both chapters and would disallow those Chapter 7 cases which represented a substantial abuse of bankruptcy law. The study data suggest that guidelines for acceptance of Chapter 13 cases should also be scrutinized. In particular, petitioners should be discouraged from providing "token" debt repayment plans while maintaining ownership of large accumulations of assets.

---

The Bankruptcy Reform Act of 1978 was the product of many years of debate among lawyers and lawmakers. Although economists contributed little to the debate, the incidence and social cost of bankruptcy have important economic implications, and socially efficient bankruptcy regulation is desirable. In this paper we evaluate the social efficiency of personal bankruptcy under the provisions of the Bankruptcy Code.

A "socially efficient" bankruptcy law is one that would provide that the present value of social costs stemming from bankruptcy be minimized while permitting debtors to make a "fresh start." The social costs of bankruptcy are the effects on the costs of credit for all

A. Charlene Sullivan is Associate Director, Credit Research Center, and Assistant Professor, Krannert Graduate School of Management, Purdue University. Debra A. Drecnik is Assistant Professor, Northern Arizona University.

The authors thank Claude Rice for providing the data for the Chapter 13 sample, R. W. Johnson for helpful comments and three anonymous referees for very helpful comments both on substance and form. All remaining errors are solely the responsibility of the authors.

credit users which can be attributed to the acts of debtors voluntarily electing to seek relief from debts in bankruptcy court. Data collected from a sample of petitions for Chapter 7 and Chapter 13 are used to assess 1) the social efficiency of the current law, and 2) whether suggested reform would increase the social efficiency (reduce the social costs) of personal bankruptcy.

#### THE SOCIAL COSTS OF BANKRUPTCY

Before examining the social costs of bankruptcy, it is necessary to describe the nature of lending as well as mortgage and consumer credit markets. A loan, or credit instrument, is created when a lender exchanges a sum of money for a promise that the sum plus interest will be repaid. In a competitive market, the interest rate will reflect the lender's costs of making loans, including a risk-adjusted opportunity cost.

In a world of uncertainty, there is a moral hazard risk of lending and unexpected events that may reduce the borrower's earnings stream and ability to repay the debt out of future earnings. The moral hazard risk is managed through such practices as analysis of an individual's credit-use history and lending to past borrowers, or deposit holders. The effect of unexpected events on the profitability of a loan can be reduced by 1) requiring the borrower to provide security, 2) using credit insurance, 3) requiring a compensating balance, and 4) lending only to consumers who have a low probability of experiencing sharp changes in income or living expenses—those with high savings balances, stable employment, or established residences.

Even with these risk-reducing management practices, there will be some amount of risk of bankruptcy lenders will be willing to incur at an interest rate that reflects that risk. The legal institution of bankruptcy serves to limit the risk to borrowers of events not controllable by debtors that may adversely affect the debtors' ability to repay as scheduled—in effect, part of the risk is transferred to lenders. Lenders gain compensation for providing the insurance by incorporating a "bankruptcy" premium in the loan rate of charge.<sup>1</sup> When the risk of losses due to bankruptcy changes, in the long run, lenders

<sup>1</sup>The authors thank Lawrence Shepard for comments related to this function of bankruptcy.

will adjust the price and nonprice terms of credit to reflect changes in risk or the cost of controlling the risk; yet another option is to transfer funds into an investment where an appropriate expected risk-adjusted return is available.<sup>2</sup>

The social costs of bankruptcy are determined by the extent to which increases in creditors' costs of controlling the risk of bankruptcy losses or higher expected bankruptcy losses are passed on to borrowers or potential borrowers in the form of higher credit costs or restrictions on the availability of credit. There is generally concern about the specific groups of consumers who may bear the social costs of a regulation. Since creditors often control expected losses of bankruptcy by taking security, those classes of consumers who have no household equity to offer as security and who are in need of a cash loan are the most likely groups to bear the social costs of the recent liberalization of bankruptcy.<sup>3</sup>

#### THE DEBTOR'S CHOICE

The purposes of bankruptcy are to provide a fresh start for debtors and to insure equity among creditors.<sup>4,5</sup> An eligible debtor will choose bankruptcy when the expected benefits exceed the costs.<sup>6</sup> The benefits of bankruptcy are the immediate cessation of collection activity, the value of assets exempted from creditors' claims, and liabilities discharged. The costs of bankruptcy include court costs, legal fees, social stigma of bankruptcy, and the loss of the expected value of benefits from future dealings with creditors.<sup>7</sup>

<sup>2</sup>Some economists argue that lenders do not behave in this manner. See Meckling [4] and Weston [1] for a summary of some of the arguments for and against this view of consumer financial markets.

<sup>3</sup>Secured debts as a percentage of total consumer receivables at consumer finance companies grew from 61.6 percent to 78.3 percent between year-end 1979 and year-end 1983. (See *Finance Facts*, October 1983.)

<sup>4</sup>Sommer states elsewhere [6, p. 6] that in cases involving consumer debtors, the fresh start is the more significant purpose since there are usually few assets to be distributed, equitably or otherwise, to the creditors involved.

<sup>5</sup>There is no legal definition of specific requirements for a fresh start. The Supreme Court described the fresh start as "a new opportunity in life, unhampered by the pressure and discouragement of pre-existing debt." (See *Local Loan Company v. Hunt*, 292 U.S. 234-244, 1934.)

<sup>6</sup>An eligible debtor is one who has not filed Chapter 7 for at least six years.

<sup>7</sup>See Umbeck and Chatfield [10] for a discussion of the role of the value of future dealing with creditors in optimal contracting.

An insolvent debtor has several alternatives to seeking relief from debts under the bankruptcy code.<sup>8</sup> The first is to procrastinate on the payment of debts until the creditor writes the loan off as a bad debt loss.<sup>9</sup> The debtor's action would likely trigger legal debt collection activity by the creditor or an agent for the creditor, such as garnishment, acceleration of debt payments, or assessment of attorneys' fees. These actions are taken at considerable cost to the debtor, and debtors seem to prefer bankruptcy to procrastination as a way to handle debt problems.<sup>10</sup>

The debtor could choose voluntary liquidation of assets to pay unsecured creditors. So long as the liquidated value of assets exceeds the total of all creditors' claims, there is no dispute among creditors. However, if the liquidated value of assets is less than the total of creditors' claims, there will be conflict among creditors regarding the distribution of proceeds and a creditor would have an incentive to force the debtor into bankruptcy. Given the current legal procedure for personal bankruptcy, a debtor with total assets less than or equal to the value of creditors' claims would *always* voluntarily file bankruptcy rather than voluntarily liquidate assets. In bankruptcy, the debtor does not forfeit all personal assets to repay debts but only assets net of personal and household exemptions. In addition, all unsecured debts not repayable with the proceeds of the asset sale are discharged.

An insolvent debtor could also seek the help of a credit counselor who would intervene for the debtor with creditors to have debts excused or rearrange debt payment schedules. A debt counselor was the least frequently mentioned alternative to bankruptcy tried by the

<sup>8</sup>In Sullivan [8, p. 59], alternatives to bankruptcy tried by a sample of petitioners for Chapter 7 were analyzed. Only eight percent of the sample had not tried one of the following alternatives: debt counseling [20 percent had tried], consolidating debts [34 percent], selling assets [21 percent], or arranging different payment schedules [54 percent].

<sup>9</sup>Mors [5] argued that limiting bankruptcy discharge would not generate any social gains because the incidence of procrastination would increase, offsetting gains achieved by refusing discharge.

<sup>10</sup>Apilado, et al. [1] showed that the incidence of bankruptcy was higher in states with liberal garnishment regulations. Data presented elsewhere [8, p. 37] show that an important factor leading to the decision to file bankruptcy by a small percentage of the sample of petitioners for Chapter 7 was collection activity initiated by creditors [suit (5 percent), garnishment (4 percent), repossession (1 percent)]. The low incidence of these actions suggests that the petitioners generally filed for bankruptcy before their debt problems became serious enough to trigger collection activity.

sample of Chapter 7 petitioners described in [8]. The most frequent reasons given for not trying a counselor were that the debtors believed their debt burdens were too high or their income too low.

Our debate for social efficiency does not include arguments for the elimination of the institution of bankruptcy. The question of the social efficiency of current bankruptcy procedures develops from the fact that debtors, once having made the decision to file for debt relief in the courts, are free to choose one of two avenues to debt relief. The debtor may continue making payments under the protection of the court, albeit at a level less than that specified in the original credit contract, keeping all assets intact (Chapter 13). Or, the debtor may have nonexempt assets liquidated by a trustee of the court to retire outstanding debts (Chapter 7). The rational debtor would choose that avenue with the higher valued fresh start (requiring the lowest debt repayment obligation). Socially efficient bankruptcy legislation would require the debtor to choose such that social costs were minimized.<sup>11</sup> The two objectives are in direct conflict. We turn now to a discussion of the specific provisions of the law regarding personal bankruptcy and an empirical analysis of the social efficiency of the bankruptcy choices of a sample of cases filed under the Bankruptcy Reform Act of 1978.

#### LEGAL ASPECTS OF FILING UNDER CHAPTER 13 OF THE BANKRUPTCY CODE IN LIEU OF CHAPTER 7

In liquidation (Chapter 7), all the debtor's nonexempt assets are converted to cash and distributed to creditors according to priority rules. At the conclusion of the proceedings, the debtor receives a discharge of any debts that remain unpaid after the distribution of the proceeds from the sale of assets.<sup>12</sup> Under Chapter 13 the debtor proposes a plan for payment of debts out of future income. The plan must be approved by the court and is carried out under court supervision; the debtor and usually all the debtor's property are protected from creditors by the court. At the conclusion of the case, the debtor receives a discharge from personal liability of most remaining unpaid debts. Currently, about 75 percent of all nonbusiness bankruptcies are filed under Chapter 7.

<sup>11</sup>See White [12] for a discussion of socially efficient corporate bankruptcy.

<sup>12</sup>Certain debts such as alimony, support to child or spouse, taxes, certain student loans, fines and penalties or debts for the willful injury of a third party are not dischargeable.

Any petitioner may file for debt relief under Chapter 13 if outstanding debts are under specified debt ceilings and there exists sufficient regular income in excess of necessary living expenses to make debt payments. Regular income is not limited to earned wages, but may include welfare payments or income derived from the property of the estate. To exclude large business concerns from gaining protection under Chapter 13, the outstanding debt of an individual, or couple if the petition is jointly filed, must be below \$100,000 for unsecured debt and \$350,000 for secured debt, including mortgage debt.<sup>13</sup>

To be approved, the proposed repayment plan must be 1) feasible, 2) made in good faith, and 3) in the best interest of the unsecured creditors as compared to a Chapter 7 liquidation. Feasibility refers to the debtor's ability to make the proposed payments after basic living expenses and a cushion for unexpected expenses are deducted from regular income. There is considerable uncertainty as to what the good faith requirement means. In prior bankruptcy cases, "good faith" was defined as not abusing the "provisions, purpose or spirit, of the law." The last requirement means that unsecured creditors are to receive at least as much in repayment as they would if a debtor's non-exempt assets were liquidated by the court.<sup>14</sup>

Once a petitioner has begun repayment under Chapter 13, two types of discharge are available. When all payments under the plan have been completed, a "full-payment" discharge releases the debtor from all remaining liabilities—even those debts that are nondischargeable under Chapter 7 (with the exception of alimony and support payments and certain education loans). If the debtor is not able to complete all the payments of the plan, a hardship discharge may be granted under three conditions:

1. if failing to complete the plan is due to circumstances beyond the debtor's control;
2. if modification of the plan is not possible; and
3. if the amount already repaid to unsecured creditors is not less than what they would have received under Chapter 7.

<sup>13</sup>Note that this does not preclude small businesses from filing under Chapter 13.

<sup>14</sup>In view of the last stipulation, the Chapter 13 petitioner will claim the highest amount of asset exemptions allowed by law and understate the value of assets. The plan would be confirmed more readily if it appears that most of the petitioner's assets would be exempt and thus not available for liquidation to repay debt had the petitioner filed under Chapter 7.

The payments proposed in the repayment plan must be such that "the value, as of the effective date of the plan, of property to be paid under the plan on account to each allowed unsecured claim is not less than the amount that would be paid on the claim in a Chapter 7 case."<sup>15</sup> One of the major sources of debate is whether unsecured creditors in a Chapter 13 case need ever receive *more* than they would receive if the debtor's estate were liquidated under Chapter 7. Evidence of this debate is that plans that provide one percent payouts to unsecured creditors are approved in some courts while others insist on a more "meaningful" percentage [6, p. 95]. In some courts, the "good faith" requirement is interpreted to require some kind of payment to unsecured creditors even though the petitioner may have been a "no asset" case under Chapter 7. In those courts where a "meaningful" payment to creditors is required in Chapter 13, debtors would likely find that Chapter 7 is the more attractive alternative.

The statute places a lower limit on the amount a debtor has to repay in Chapter 13, which is based on the value of the debtor's non-exempt assets rather than on ability to repay debts, "to insure that general unsecured creditors would not be harmed by the debtor's choice of Chapter 13 over Chapter 7" [6, p. 93]. In the case where the limit is interpreted as an upper boundary, the law severs the relationship between what a debtor repays in Chapter 13 and what he or she is "able" to repay out of expected income, given reasonable estimates of living expenses. Bankruptcy procedures to minimize the social cost of bankruptcy would require the debtor to propose a "best effort" repayment plan and would allow the debtor to choose liquidation over Chapter 13 only when the proceeds from liquidation are equal to or exceed the present value of payments specified in the plan. In the current debate for reform, creditors argue that existing regulation is socially inefficient because the petitioner is allowed to choose liquidation, paying  $L$ , even though the debtor has sufficient income to repay more than  $L$  in Chapter 13. As a consequence, consumers choose liquidation too frequently and thereby generate excessive social costs of bankruptcy.

In the following analysis the value of debts repaid under Chapter 7 ( $L$ ) and Chapter 13 ( $P$ ) are estimated for two groups of petitioners.

<sup>15</sup>11 USC 1325 (a) (4).



One group actually filed under Chapter 7 of the bankruptcy code; the other group filed under Chapter 13 of the code. These data are then used to estimate the social efficiency of the bankruptcy choices made and the improvement that could be expected if petitioners' choices were limited.

#### THE ANALYSIS

The sample of petitioners for Chapter 7 includes 1,139 households who had filed a personal, nonbusiness bankruptcy petition from May through August of 1981. The sample was drawn randomly from the population of petitioners in ten states at the time of their first court appearance and included approximately 120 respondents from each state.<sup>16</sup> The states included were California, New York, Ohio, Illinois, Georgia, Virginia, Pennsylvania, Louisiana, Wisconsin and Texas. Tests of nonresponse bias and comparisons with independently drawn samples of Chapter 7 petitioners were made to reach the conclusion that the sample is representative of the population of petitioners for Chapter 7.<sup>17</sup>

The sample of petitioners for Chapter 13 includes 5,047 households who had filed repayment plans in the mid-summer of 1982 and whose plan had subsequently been approved. The data were collected from documents filed with an agent appointed by the court who provides bookkeeping services to the trustees of the Chapter 13 petitioners. The sample included petitioners from the states of California, New York, Ohio, Illinois, Pennsylvania, Missouri, Tennessee, Arkansas and Mississippi.<sup>18</sup>

The data for both samples include information concerning total assets, total liabilities, exemptions, mortgage debt, and income (Table 1). Court-approved payment plans were available for the Chapter 13 sample; "best effort" repayment plans were estimated for the Chapter 7 sample using taxable income, actual housing expenses, taxes, and estimates of nonhousing living expenses based on dependents and including extraordinary medical and childcare expenses.

<sup>16</sup>The sample included 1,199 respondents, but 60 personal-business related cases were excluded from the analysis.

<sup>17</sup>See [3] and [9] for the evaluation of nonresponse bias and comparisons with other samples of petitioners for Chapter 7.

<sup>18</sup>No state-by-state breakdown was available for this sample.

**TABLE 1**  
*Mean Characteristics of Samples*

	Chapter 7	Chapter 13
Average total assets	\$13,944 (1,124)	\$38,247 (5,040)
Average exemptions	6,383 (1,112)	12,097 (4,982)
Average income in year before filing	12,993 (1,093)	16,342 (5,047)
Average total debt	25,942 (1,131) <sup>a</sup>	18,973 (5,047)
Average mortgage debt <sup>b</sup>	30,319 (332)	17,769 (2,190)

<sup>a</sup>Excludes one case with \$1.58 million in total debts.

<sup>b</sup>Includes first and second mortgages on primary family residence.

Note: Number of cases appear in parentheses.

### *Estimate of Repayment Schedule for Chapter 7 Sample*

To be acceptable, repayment plans in Chapter 13 must be feasible, in good faith, and provide unsecured creditors with an amount equal to the expected proceeds of liquidation. It was assumed that a "good faith" plan was one that reflected the maximum amount the debtor could repay, given reasonable estimates of future income and necessary living expenses. Estimating a repayment plan required specifications of future income and reasonable living expenses.

#### *Future income*

Almost 80 percent of the sample of petitioners for Chapter 7 listed at least one party who was employed full time when the petition was filed. To estimate future income, current taxable income was used unless it was significantly lower than annual income reported on the bankruptcy petition for the year before the petition was filed. If it was significantly lower, but the petitioner did not indicate that the bankruptcy was attributable to loss of employment, income for the previous year was used as an estimate of current income. Nontaxable income such as welfare and social security payments was not included in future income even though petitioners whose regular income

comes from such sources are eligible for a Chapter 13 discharge. It was assumed that income over the 36-month repayment period would remain constant.

### *Basic living expenses*

To estimate basic living expenses (BLE), it was assumed that petitioners for Chapter 7 would retain their current residence (whether owned or rented) and all related housing expenses, and meet key extraordinary expenses such as medical or childcare. Necessary non-housing living expenses were based on the living allowances defined by the Bureau of Census for families of different sizes living at the poverty level. (The estimate used here combined the base level plus a cushion of 10 percent of nonhousing expenses plus actual housing expenses in the final calculation of necessary living expenses.) Adjustments were made in the BLE estimates to reflect regional and community differences in the cost of living for low-income families. No adjustment for inflation was made in the estimates of future income or necessary living expenses although the estimated repayment plan extends over three years. This assumption of no inflation would understate "ability to repay" rather than overstate it if living expenses and income grew at the same rate of inflation over the repayment period. Tax liabilities were estimated based on the standard deduction and deductions for dependents.

### *Ability to repay debts*

Basic living expenses were deducted from estimated future income to determine the monthly amount available to repay nonmortgage debts.<sup>19</sup> A maximum repayment period of 36 months was used to estimate the percentage of nonmortgage debts repayable in the repayment period (Table 2).

Slightly more than half of the Chapter 7 sample who provided data necessary to make the calculations could repay *none* of their non-mortgage debts out of income after living expenses, because their

<sup>19</sup>Mortgage debts were excluded because the debtor-homeowner was assumed to maintain current housing arrangements. Debts related to business were also excluded but were generally secured debts that could be repaid from liquidation of collateral.

**TABLE 2**  
*Simulated Repayment Plan for Chapter 7 Petitioners*

Percentage of Debt Repayable Within 36 Months <sup>a</sup>	N	Percent
0%	526	52.0%
1-20%	72	7.1
21-40%	58	5.7
41-60%	56	5.5
61-80%	42	4.2
81-100%	48	4.7
Greater than 100%	210	20.8
Not ascertained	127	—
	<u>1,139</u>	<u>100.0%</u>

<sup>a</sup>Provides no cushion in nonhousing living expenses above the poverty level standards.

necessary annual living expenses equalled or exceeded the estimate of future annual income. The present value of debt payments out of income (P) is equal to zero for this group, and their choice of liquidation over Chapter 13 was socially efficient—the value of assets liquidated in Chapter 7 (L) had to be greater than or equal to zero. The present value of debt payments out of income after necessary living expenses was greater than zero for the rest of the Chapter 7 sample. In fact, almost 20 percent of the sample could have repaid 100 percent of their debts out of income after necessary expenses in less than 36 months.

One might argue that the estimates of living expenses made in the study were too restrictive, thus providing a spurious view of the ability of petitioners for Chapter 7, in general, to repay debts out of income. To evaluate the validity of this argument, the distributions of these estimates for living expenses and monthly debt payment as a percent of income were compared with those provided in the court-approved plans of the Chapter 13 sample.

*Comparison of Expenses and Repayment Schedules for Chapter 7 and Chapter 13 Samples*

*Proportion of nonmortgage debts repayable in three years*

Consumers admitted to Chapter 13 proposed repayment plans which provided for the repayment of approximately the same mean percentage of nonmortgage debts as was possible in the simulated

plans for the Chapter 7 sample (66 percent vs. 68 percent). However, the distributions of the ratio of percentage of debts repaid were significantly different for the two samples (Table 3). One would expect repayment plans proposed by consumers in Chapter 13 to be based on liberal estimates of necessary living expenses and the total amount paid to be the minimum allowed by law ( $P = L$ ).<sup>20</sup>

The fact that the distributions of the payout ratios are significantly different suggest that the "best effort" assumption was more onerous than standards typically applied to plans actually approved under Chapter 13. The Chapter 13 sample was more likely to fall in the 61-80 percent of debts repaid category than in the 81-100 percent category. The opposite was true for the Chapter 7 sample. It is not logical that a petitioner for Chapter 13 would incur the expenses of bankruptcy and propose a plan to repay 100 percent of outstanding debts, even though there may have been income sufficient to do so. However, the best effort plans showed that about 20 percent of petitioners for Chapter 7 could have proposed such a plan. Thus, the difference in the distributions of ability to repay does not necessarily

<sup>20</sup>Assuming all other things constant, the first  $n$  dollars recovered under Chapter 7 or Chapter 13 goes to secured creditors. Thus, unsecured creditors receive  $L-n$  or  $P-n$ . Consequently, the condition  $P > L$  satisfies the third requirement for an acceptable repayment plan.

TABLE 3  
*Payout Ratios for Chapter 7 and Chapter 13 Petitioners*

Percentage of Debt Repayable in Three Years	Chapter 7 <sup>a</sup> (Basic Living Expense + 10% of Nonhousing Expenses)	Chapter 13
1-20%	11.9%	13.0%
21-40%	15.7	12.9
41-60%	11.7	12.8
61-80%	10.9	17.2
81-100%	49.8	44.0
Missing	—	0.2
	100.0%	100.0%
Mean percentage of debts repayable in three years	68%	66%

$\chi^2 = 19.07, p < .01.$

<sup>a</sup>Includes only those petitioners for Chapter 7 whose "best effort" repayment plans provided some positive repayment to creditors.

**TABLE 4**  
*Living Expenses as a Percentage of Pretax Income*

Living Expenses as Percentage of Pretax Income	Chapter 7 Basic Living Expense + 10% Cushion	Chapter 13
0%	0	2.6%
1-20%	1.3%	0.5
21-40%	1.3	1.5
41-60%	12.9	7.9
61-80%	40.9	36.1
81-99%	43.7	51.4
	<u>100.0%</u>	<u>100.0%</u>
Mean	74.9%	75.6%

lead to the conclusion that the estimates of necessary living expenses for the Chapter 7 sample are unreasonably conservative. Rather, the difference reflects the fact that it is not logical for petitioners for Chapter 13 to propose to repay 100 percent of their debts. And this circumstance is reflected in the study's formula for estimating ability to repay in that the formula shows that some petitioners had the financial ability to repay all debts out of income but were using the flexibility of the Bankruptcy Code to avoid having to do so.

*Ratio of living expenses to pretax income*

For the Chapter 13 sample, necessary living expenses claimed by petitioners in their repayment plans were, on average, 75.6 percent of pretax income (Table 4). About five out of every ten petitioners for Chapter 13 claimed living expenses that were between 81 and 99 percent of before-tax income. The definition of basic living expenses (BLE) for the Chapter 7 sample (110 percent of nonhousing BLE plus actual housing expenses), resulted in a mean of the ratio of expenses to income of 74.9 percent with almost 4.5 out of ten petitioners having living expenses that absorbed between 80 and 99 percent of pretax income.

*Ratio of annual debt payment to pretax income*

For each petitioner in each sample, a three-year payout period was assumed. For those who could repay 100 percent of debts in less than

three years, given their reported or calculated annual debt payment (for Chapter 7, this was equal to annual after-tax income minus total living expenses), a simulated annual debt payment was calculated equal to total debt divided by three years.

The average simulated annual debt payment calculated for the Chapter 7 sample was 18.3 percent of pretax income relative to an average of 15.6 percent for the Chapter 13 sample (Table 5). Slightly more than three-fourths of the petitioners for Chapter 13 had debt payments representing one percent to 20 percent of the pretax income range relative to about 63 percent range of the Chapter 7 sample.

Approximately 35 percent of the Chapter 7 sample and about 25 percent of the Chapter 13 sample had planned debt repayment obligations that exceeded 20 percent of annual income. Credit counselors suggest that when debt payment obligations absorb more than 20 percent of income, the consumer has little cushion in the family budget for emergency expenses or for absorbing the shock of sudden fluctuations in income. Thus, one would expect that about a quarter of actual Chapter 13 payment plans would not be completed at all or would be completed with some hardship to the household.

#### SOCIAL EFFICIENCY OF THE BANKRUPTCY REFORM ACT OF 1978

A comparison of the liquidation value of the petitioners' estates and the present value of scheduled (or simulated) payments for the two groups of petitioners allows one to estimate the frequency of bankruptcy cases in the two samples (Chapter 7 and Chapter 13) for

TABLE 5  
*Annual Consumer Debt Payment to Income Ratio*

Annual Debt Payment to Pretax Income	Chapter 7 (Basic Living Expense + 10% of Nonhousing Expenses)	Chapter 13
1-20%	62.8%	76.0%
21-40%	32.3	20.7
41-60%	3.8	3.0
61-80%	0.3	0.3
81-100%	0.0	0.0
Missing	0.8	0.0
	<u>100.0%</u>	<u>100.0%</u>
Mean percentage of annual debt payments to pretax income	18.3%	15.6%

**TABLE 6**  
*Analysis of Creditors' Recovery Under Bankruptcy Alternatives*

	Present Value Payments > Liquidation Value	Present Value Payments = Liquidation Value <sup>a</sup>	Present Value Payments < Liquidation Value	Total
<i>Zero monthly discount rate for payments</i>				
Chapter 7	31.7%	9.2%	59.1%	100%
Chapter 13	73.3	0	26.6	100%
<i>Two percent monthly discount rate for payments</i>				
Chapter 7	27.2	9.2	63.6	100%
Chapter 13	62.0	0	38.0	100%
<i>Fifty percent discount on liquidation value with two percent monthly discount rate for payments<sup>b</sup></i>				
Chapter 7	34.1	9.2	56.8	100%
Chapter 13	69.5	0	30.4	100%

<sup>a</sup>For Chapter 7 sample, P was zero and L was negative.

<sup>b</sup>Stanley and Girth [3] indicated that in cases where assets were actually sold by the trustee the members of the petitioner's family would frequently buy the assets. In those cases the proceeds realized from the sale were very low.

which the bankruptcy option having the lowest social cost was chosen. The present value of the monthly debt payments (P) for each petitioner in both groups of petitioners was calculated using 0, 1, and 2 percent monthly discount rates. The net liquidation value (L) of the estate of petitioners in each group who provided sufficient information was calculated by subtracting mortgage debt plus asset exemptions from the market value of total assets.

Even at a zero discount rate, the present value of estimated monthly payments for the Chapter 7 sample was less than the net liquidation value of the petitioners' nonexempt estates for almost 60 percent of the petitioners under Chapter 7 (Table 6).<sup>21</sup> The choice made by those petitioners to liquidate was socially efficient, because the social costs arising from the liquidation were less than what would have been incurred had the petitioners filed under Chapter 13 and repaid

<sup>21</sup>All petitioners for Chapter 7, including those who could have repaid nothing out of income were included in this comparison. We found previously that 50 percent of the Chapter 7 sample had P = 0.



debts out of income. For about one-third of the petitioners for Chapter 7, the present value of payments,  $P$ , was greater than the liquidation value of the estate,  $L$ . By our definition, these bankruptcies, though legal, were not socially efficient because the petitioners were not required to choose the bankruptcy option that would have provided the lowest social cost.<sup>22</sup> For the balance of the sample the present value of monthly payments and the liquidation value of assets were equal to zero.<sup>23</sup>

About 75 percent of the petitioners for Chapter 13 were scheduled to repay more of their debts under the reorganization plans approved by the court (assuming zero discount rate) than they would have been able to pay from liquidation of assets under Chapter 7. (This provides an interesting datum concerning how "good faith" is being defined in the states represented by the Chapter 13 sample.) Thus, their choice of continuation over liquidation was socially efficient. The balance of the sample had court-approved plans that allowed them to pay less than they would have paid if they had filed under Chapter 7. These repayment plans did not satisfy the legal definition for a minimally acceptable plan.<sup>24</sup>

#### IMPACT OF REFORM

This analysis shows that about one-third of petitions filed by the sample of Chapter 7 petitioners did not represent socially efficient bankruptcy choices. A pending reform of the bankruptcy law would require a debtor to file conditionally under either Chapter 7 or Chapter 13. The debtor would then receive counseling from the bankruptcy trustee concerning his or her rights under both Chapter 7 and Chapter 13. If the bankruptcy judge determined that a discharge under Chapter 7 would constitute a "substantial abuse" of the bankruptcy system, the judge would be allowed to dismiss the case. With no definition of "substantial abuse," it is not clear whether the

<sup>22</sup>In Chapter 13, petitioners are not required to propose a "best effort" plan as we defined it in this analysis. Consequently, some of the cases in this group may represent socially efficient choices, given a more generous definition of necessary living expenses.

<sup>23</sup>In some cases the value of exemptions exceeded the value of total assets. The maximum value allowed exemptions were listed on the petition to reduce consequences of any challenges that might be made to the initial asset valuation by creditors.

<sup>24</sup>In the case that a proposed plan does not meet this standard, a creditor may challenge it and the court need not confirm the plan.

reform would reduce the incidence of socially inefficient bankruptcy. However, a case could be made for defining "substantial abuse" as a choice which provides a repayment of debts that is less than what the debtor could reasonably afford to pay out of income. Extrapolating the results of the study's sample to the population of debtors filing under Chapter 7 in 1981, that reform would have reduced losses to bankruptcy by \$600 to \$757 million in that year alone (see Appendix).

The results of the analysis of Chapter 13 cases showed that, in general, debtors were not proposing plans that just satisfied the "best interest of creditors" test but were evidently being held to a more onerous standard. However, the analysis also revealed that the stated minimal standard is being enforced with considerable laxity. In about 25 percent of the cases, the present value of the repayment plan (using a zero monthly discount rate) was less than the liquidation value of nonexempt assets. It was estimated that the annual reduction in bankruptcy losses from a sample of Chapter 13 petitions and repayment plans filed in 1981 would range between \$220 and \$270 million if those petitioners had been forced to abide by the wording of the law.

#### CONCLUSION

Earlier it was shown that about 20 percent of a sample of petitioners for personal bankruptcy under Chapter 7 of the Bankruptcy Reform Act could have repaid 100 percent of their nonmortgage debts out of income after living expenses within a three-year repayment period [3]. Another 28 percent of the sample could have repaid some portion of their nonmortgage debts out of income. If petitioners for Chapter 7 who could repay a reasonable portion of their debts out of income were required to do so, it was estimated that annual bankruptcy losses would be reduced by \$800 million to \$1.1 billion. These data were presented in testimony in support of legislative reform which would have required petitioners for personal bankruptcy to file under Chapter 13 if it was determined that they could repay a "reasonable portion of debts."

The goal of those arguing for reform in bankruptcy legislation was to reduce "abuse" of bankruptcy while maintaining provisions that provided a fresh start for debtors who had lost control of their financial affairs. In this paper we define socially efficient bankruptcy legislation as that which would *minimize* the present value of the social

cost of bankruptcy while allowing debtors to have a fresh start. To minimize social costs a petitioner would be required to choose the route to debt relief (Chapter 7 or Chapter 13) that would provide the highest value of debts repaid.

To evaluate the incidence of socially inefficient bankruptcy choice under the Bankruptcy Reform Act of 1978, we estimated the amount of debts repaid for samples of petitioners who filed in 1981-1982 under Chapter 7 and Chapter 13. For both samples, we estimated the present value of debts repaid if assets were liquidated and if a "best effort" repayment plan was effectuated.

About 30 percent of petitioners who filed under Chapter 7 could have repaid a higher percentage of their debts if they had filed under Chapter 13 while still earning the benefits of bankruptcy—a fresh start. This would have provided a reduction in total bankruptcy costs in 1981 of between \$600 million and \$757 million per year. For the rest of the Chapter 7 sample, debts written off would be the same or greater if petitioners had filed under Chapter 13. Debt discharges for about 25 percent of the sample of Chapter 13 petitions would have been lower if those petitioners had filed under Chapter 7. These savings were estimated at about \$250 million per year.

The wording of bankruptcy reform which is being considered [S.445] would require that the judge be given sufficient information to reject petitioners for liquidation that represent a "substantial abuse" of the bankruptcy system. The results of this study show that if "substantial abuse" were defined to eliminate those cases where the proceeds from the liquidation of assets was less than the present value of payments out of income after necessary living expenses, the social costs of bankruptcy would be reduced. However, the study results suggest that all petitions, not just those for Chapter 7, should be evaluated. Many petitioners for Chapter 13 could have repaid a greater percentage of their debts if they had been required to liquidate their estate rather than repay debts out of future income.

## APPENDIX

### *Estimate of Reduction of Bankruptcy Losses from Change in Bankruptcy Guidelines*

#### *Chapter 7*

To calculate the reduction in bankruptcy losses which might be expected if consumers were required to choose that chapter which provided the lowest social cost of bankruptcy, the dollar savings were specified as: annual number of filings under chapter nationally  $\times$  percent of petitioners under chapter that would have repaid higher dollar value of debts under alternative chapter  $\times$  dollar excess that would have been paid on debts under alternative chapter. The dollar value of savings was calculated using both a 0 percent and 2 percent monthly discount rate to calculate the present value of payments under the "best effort" plan (P) and a 0 percent and a 50 percent discount on the liquidated value of assets sold to retire debts (L).

#### *Zero monthly discount rate for payments under plan*

Present value of payments was greater than liquidation value of assets for 31.7 percent of the Chapter 7 sample (Table 6). The present value of payments (P) exceeded liquidation value of assets (L) by an average of \$10,494.96 for that group. The steady state estimate for total non-business bankruptcy cases filed in 1981 was 315,000 with 72.2 percent filed under Chapter 7. The estimated dollar savings of requiring those Chapter 7 petitioners for whom  $P > L$  to file under Chapter 13, assuming 0 percent monthly discount rate is:

Estimated number of Chapter 7 cases in 1981	=	227,540*
Percent of Chapter 7 sample with $P > L$	=	31.7%
Average dollar value of savings per petition in group with $P > L$ :	$P - L =$	\$10,495
Expected savings if those petitioners for Chapter 7 with $P > L$ were required to pay P rather than L:		
$227,540 \times .317 \times \$10,495 =$		\$757.06 million

#### *Two percent monthly discount rate, 50 percent discount of liquidation value*

Dollar value of savings per Chapter 7 petitioner with $P > L$ :	$P - L =$	\$7,743
Percent of Chapter 7 sample with $P > L$ :	=	34.1%
Expected savings if those Chapter 7 petitioners with $P > L$ were required to pay P rather than L:		
$227,540 \times .341 \times \$7,743 =$		\$600.78 million

#### *Chapter 13*

#### *Zero monthly discount rate for payments under plan*

Estimated number of Chapter 13 cases in 1981:	=	87,460*
Average dollar value of savings per petition in group with $L > P$ :	$L - P =$	\$11,654.78
Percent of Chapter 13 sample with $L > P$ (Table 6):	=	26.6%
Estimate of savings: $87,460 \times .266 \times \$11,655 =$		\$271 million

*Two percent monthly discount rate, 50 percent discount of liquidation value*

Average dollar value of savings per petition in group with L > P: L-P = \$8,302  
Percent of Chapter 13 sample with L > P (Table 6): = 30.4%  
Estimate of savings:  $87,460 \times .304 \times \$8,302 = 220.73$  million

*Total Savings from Chapter 7 and Chapter 13*

*Zero discount rate, liquidation value equal to 100% of market value*

\$757.04m + \$271m = \$1.028 billion

*Two percent monthly discount rate, liquidation value equal to 50 percent of market value*

\$600.78m + \$220.73m = \$821.51 million

\*For comparison purposes we used the estimate of number of bankruptcy cases that was used in [3]. The actual total number of cases filed from July 1, 1980 to June 30, 1981 was 312,914 with 86,778 Chapter 13 cases (72.3%).

REFERENCES

1. Apilado, V. P.; J. J. Dauten; and D. E. Smith, "Personal Bankruptcies," *Journal of Legal Studies*, 1978, 7(2), pp. 371-392.
2. *Bankruptcy Reform Act of 1978—A Before and After Look*, U.S. General Accounting Office (Washington, D.C.: Government Printing Office, July 20, 1983).
3. Johnson, R. W.; R. L. Peterson; and B. Schick, *Consumers' Right to Bankruptcy: Origins and Effects*, Monograph No. 23, Credit Research Center, Purdue University, 1983.
4. Meckling, W. H., "Financial Markets, Default and Bankruptcy: The Role of the State," *Law and Contemporary Problems*, 1977, 41(4), pp. 13-38.
5. Mors, W. P., "An Argument Against Abridging Consumer Right of Bankruptcy," *Journal of Consumer Affairs*, 1971, 6(2), pp. 120-136.
6. Sommer, H. J., Esq., *Consumer Bankruptcy and Practice*, Boston: National Consumer Law Center, 1982.
7. Stanley, D. T. and M. Girth, *Bankruptcy: Problem, Process and Reform* (Washington, D.C.: Brookings Institution, 1971).
8. Sullivan, A. C., *Personal Bankruptcy: Causes, Costs and Benefits*, Monograph No. 24, Credit Research Center, Purdue University, 1982.
9. Sullivan, A. C., "Reply to: A Defense of Limiting Access to Bankruptcy Discharge," *Wisconsin Law Review*, forthcoming.
10. Umbeck, J. and R. Chatfield, "The Structure of Contracts and Transaction Costs," *Journal of Money, Credit and Banking*, 1982, 14(4), pp. 511-516.
11. Weston, Fred, "Some Economic Fundamentals for an Analysis of Bankruptcy," *Law and Contemporary Problems*, 1977, 41(4), pp. 47-65.
12. White, M. J., "Public Policy Toward Bankruptcy: Me-First and Other Priority Rules," *Bell Journal of Economics*, 1980, 11(2), pp. 550-564.