THE EFFECT OF EXEMPTION REGULATIONS
ON PERSONAL BANKRUPTCIES

Ardis M. Wilcheson, Iowa State University
Tahira Hira, Iowa State University

Abstract

A dramatic increase in the number of bankruptcies occurred after the Federal Bankruptcy Act of 1978 became effective. Several states, responding to the increased filings and to creditor pressure, passed state legislation overriding the federal exemptions. The purpose of this study was to compare selected socio-economic characteristics of bankruptcy petitioners who filed under different exemption regulations. Two subsamples were compared using t-tests of statistical significance and discriminant analysis. The selected characteristics used to compare these groups were: type of petition filed (individual or joint), employment status and occupation of the petitioner, total exemptions, assets, consumer debt and 1980 income, debt-to-income and asset ratios. Although there was a reduction in the number filings after the change in exemption specifications, there was no significant difference between the two groups in the type of person filing.

A dramatic increase in the number of personal bankruptcies occurred after the new Federal Bankruptcy Act of 1978 became effective on October 1, 1979. Nationally, the total number of bankruptcies in 1980 was up 59 percent over 1979 (1, p. 8). This trend has continued with a 44 percent increase in 1981 over 1980. Many experts speculate that the increase in filings was related to the more liberal regulations and specifically to the generous exemptions provided by the new federal law (2,11,13). In addition to the increased filings, it has been suggested that a different type of person is choosing bankruptcy, one with a higher income and higher valued assets (2,9,11). As a result, considerable controversy has developed since the passage of the New Code. Although the New Code was intended to provide uniform regulations and exemption provisions throughout the country, states may override the exemption specifications of the federal law. As of December, 1981, 32 states had passed legislation prohibiting their residents from using the federal exemptions and requiring them to use state exemptions. Legislators in these states felt that stricter state exemptions would reduce the number of filings and discourage unnecessary bankruptcy.

This study compares selected socio-economic characteristics of bankruptcy petitioners who filed under different exemption regulations. There has been speculation that a different type of person files for bankruptcy under the more liberal federal regulations. Information on the impact of bankruptcy legislation could contribute to methods for reducing the number and costs of bankruptcies. Such information could be valuable to legislators in assessing the current federal regulations, especially since further changes in the bankruptcy laws are being considered. In addition, state legislators considering stricter state exemption provisions should be interested in the results of this study. Consumers, as well, would be interested in the effect of exemption regulations since the cost of bankruptcy is eventually passed on to the consumer in the form of higher prices, higher credit costs, and increased taxes. Creditors, too, should be interested in the results of this study since the credit market has been influenced by the increased filings: creditors have reduced the amount of unsecured cash credit available to consumers, more creditors are challenging bankruptcies and exercising their rights in bankruptcy courts, and creditors are developing models to predict potential bankruptcy cases (11, p.140). It appears that the economic well-being of many families is influenced by changes in bankruptcy procedures.

Impact of Exception Regulations

Although many studies have been done on bankruptcy in the last two decades and authorities acknowledge the importance of exemption provisions, little research has been done on the effect of exemption regulations on the bankruptcy rate or on the profile of the bankrupt even though the exemption levels of the states varied considerably under the Bankruptcy Act of 1988 (5,6,10). One of the objectives of the New Code is to bring uniformity to the bankruptcy procedure through the federal exemptions. The New Code provides generous exemptions: large amounts of property are removed from use for debt repayment; the unused portion of the federal homestead exemption can be applied to any property; an unlimited number of household furnishings and personal property are removed from debt repayment and no aggregate amount are set on the categories. Under the current federal law, the petitioner can choose either the exemptions provided by the Federal Code or the exemptions provided by state law. Husbands and wives can file jointly and double the dollar limits of the federal exemptions or one spouse can take the federal exemptions while the other takes the state exemptions (12).

However, as mentioned earlier, many states have passed legislation overriding the exemption provisions of the federal law and requiring their residents to use state exemptions; thus, one objective of the New Law, uniformity, has not been realized.

Although there has been considerable speculation on the effect of the New Code and its liberal exemption
provisions, there is little empirical evidence to support this speculation. Studies which have examined the impact of the New Code on the number of bankruptcy filings and on the profile of the bankrupts come to conflicting conclusions. Brimmer (2) concludes that the New Code has had an important impact on the volume of bankruptcies and that it has encouraged people with higher incomes and higher valued assets to file. When an adjustment is made for joint filings under the Old Code, Brimmer estimates that "personal bankruptcies" jumped by 75 percent during the first twelve months the new act was in force (2, p. 1). After accounting for the increase in filings occurring because of historical trends and the 1980 recession, he estimated that approximately 136,000 "excess" bankruptcies were recorded during the first year the New Law was in effect. In addition, Brimmer concluded that not only are "more persons filing for bankruptcy, but more persons and families with somewhat higher incomes and assets must also be filing more readily" (2, p. 49).

Shuchman and Rhorer (9) conclude that the New Law has had little impact on Connecticut bankruptcies. They compared "new" debtors (those who used the federal exemptions to protect non-exempt assets which could not have been protected under the state exemption statutes) with the "average" debtor in Connecticut, (those who had nothing to gain from the federal exemption provisions). Only 6 percent of the bankrupts fell in the "new" classification, and they were primarily homeowners. The "new" debtor had higher incomes and consumer debt burdens than the "average" debtor, but the authors attributed this to the larger proportion of joint petitioners among the "new" debtors. Thus, Shuchman and Rhorer concluded that the two groups were very similar and that the new law had little impact on the bankruptcy rate.

The consumer bankruptcy study conducted by the Credit Research Center, Purdue University (11), concluded that the new bankruptcy law reduces the cost of bankruptcy, especially for middle and upper income families and thus encourages personal bankruptcy; the liberal exemptions provided by the federal law serve as an admission threshold. This study analyzed the effect of exemption levels by comparing specific characteristics of bankruptcies in five low exemption states with five high exemption states. Sullivan (11) concluded that there were significantly more high income petitioners in high exemption states than in low. However, it was suggested that cost of living differences between the states may have caused the significant difference since there was no difference between petitioners using state exemptions and those using the federal exemptions within a low exemption state. In addition, the Purdue study reported petitioners in high exemption states had higher assets. But this difference may be explained by the fact that more petitioners in the high exemption states owned their homes than in the low exemption states, and thus home ownership may have contributed to the significant difference in assets. When the ratio of non-mortgage debt-to-pre-tax income was compared, there was no significant difference between high and low exemption states.

In all of these studies, the methods used to distinguish groups for comparison made it difficult to analyze the effect of exemption regulations. Shuchman and Rhorer had to estimate the groups they studied and then limited their study to a simple descriptive statistical investigation; they did not compare the two groups for statistical differences. A limitation of the Purdue Study, acknowledged by the author, is the fact that 22 percent of the petitioners in the low exemption states filed under the federal exemption definition and this may have reduced the researchers' ability to identify the effect of exemption regulations.

Iowa offered a good opportunity to study this problem since two groups were available for comparison. In Iowa, there was a 58 percent increase in bankruptcies in 1980 over 1979. However, during the first two months of 1981, Iowa bankruptcies increased at a rate nearly twice the national rate, a 45 percent increase in Iowa as compared to 23 percent nationally. The Iowa legislature, responding to this increase and to creditor pressure, passed legislation which became effective July 1, 1981, prohibiting Iowa residents from using the federal exemptions and providing stricter state exemptions. As a result, two distinct groups were available from which the effect of exemption regulations on the profile of Iowa bankrupts could be examined without interference from geographical differences.

During the period from October 1, 1979 to July 1, 1981, both federal and state regulations were available to Iowa residents. Although the state regulations in effect during this period were quite liberal (9), certain groups benefited more from the federal regulations. For the individual petitioner who owned his own home or had a high equity value in his home, little was gained with the new federal exemptions since the old Iowa statute exempted the entire homestead while the New Federal Code only allowed up to $7,500 equity exemption on the home. The new federal exemptions and legal situation prior to July 1, 1981, however, benefited the couple who owned their home and filed jointly. One spouse could take the old state exemptions, protecting the homestead property through exemptions specified under the state law; the other spouse could take the federal exemptions. The couple filing jointly who rented their home could take double federal exemptions. During this period, the individual petitioner who was a...
renter benefited from the federal exemptions which allowed generous cash exemptions, placed no aggregate value on household goods, and included the "spillover" provision which allowed the renter to apply the unused portion of the $7,900 cash allowance to any property (12).

The situation is quite different in Iowa with the passage of the amended state exemptions on July 1, 1981. Not only the revised state exemptions can be taken, aggregate amounts are placed on most exemption categories, and there are no cash allowances. However, the entire homestead can still be exempted (4).

The Sample

Data for this study were obtained from the bankruptcy petitions of the Iowa Southern District of the United States Court which are on file in the Clerk of the Court's Office in Des Moines. The systematic random sample of 199 cases selected from these files was limited to nonbusiness Chapter 7 bankruptcies filed during the six month period from April 1 through September 30 of 1981. Since this study focused on the effect of bankruptcy exemption legislation, one hundred cases were drawn from April, May, and June when the federal and old state exemption regulations were in effect and 99 cases were taken from July, August, and September when petitioners were required to take the state exemptions. In this study, Group 1 refers to those debtors filing before July 1, 1981, and Group 2 refers to those filing after July 1, 1981.

Methodology

Two subsamples were compared. A t-test of statistical significance was used to compare selected characteristics of Group 1 and 2 debtors. The variables used to compare the two groups were type of petition filed, employment status of the petitioner, occupation of the petitioner, total 1980 income, total assets, total consumer debts, debt-to-income ratio, debt-to-asset ratio, and total exemptions.

Discriminant analysis was also used to compare the two groups of debtors. The same selected characteristics used in the t-tests, except for the ratio variables, were used in the discriminant analysis procedure.

Results and Discussion

In examining the effect of exemption legislation on Iowa bankruptcies, it was expected that the change in the exemption provisions would influence the number filing for bankruptcy and the type of individual filing. Although many factors such as unemployment, inflation, and divorce contribute to bankruptcy, it was expected that the liberal exemption regulations also encouraged bankruptcy.

One of the objectives of the state legislature in passing the new state statute controlling exemptions was to reduce the number of filings. A substantial decrease, 35 percent, in the number of 1981 filings occurred after July 1, 1981 (Table 1). The total number of filings for 1981 is less than the total for either 1980 or 1980 (Table 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>January-June</th>
<th>July-December</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>773</td>
<td>794</td>
<td>1,567</td>
</tr>
<tr>
<td>1980</td>
<td>1,538</td>
<td>1,760</td>
<td>3,398</td>
</tr>
<tr>
<td>1981</td>
<td>2,264</td>
<td>1,470</td>
<td>3,734</td>
</tr>
<tr>
<td>1982</td>
<td>1,563</td>
<td>859</td>
<td>2,422</td>
</tr>
</tbody>
</table>

* Includes Chapter 7 business bankruptcies.

Prior to 1981, the number of filings had steadily increased each month and the last six months of each year had more filings than the first six-month period. These trends reversed in 1981, however, when the more restrictive state law became effective on July 1. In fact, the number of filings in the second half of 1981 was less than the number of filings during the first half of 1980. Furthermore, this reduction in filings continued in 1982.

Characteristics of the Bankrupts Filing Before and After the State Law Change.

Selected characteristics examined were type of petitioner (individual or joint), occupation, employment status, 1980 income, assets, consumer debts, debt-to-income ratio and debt-to-asset ratio. It was expected that there would be more joint petitioners, more white collar workers and more employed petitioners among the bankrupts in Group 1 than in Group 2. The bankrupts in Group 1 were expected to have higher incomes and higher valued assets since more property could be protected before July 1. The bankrupts in Group 1 were also expected to have lower consumer debts, debt-to-income ratios and debt-to-asset ratios since they would be filing to take advantage of the liberal exemptions.

Table 2 presents the results of the t-tests between the two groups. Z-values were calculated for the dichotomous variables, type of bankruptcy, occupation, and employment status; t-values were calculated for the continuous variables, 1980 income, assets, consumer debt, debt-to-income ratio, and debt-to-asset ratio. Although the mean values of the variables were different, the differences were not statistically significant. The only significant difference between the two groups was the number of unemployed. However, more of the bankrupts were unemployed in Group 1 which is contrary to expectations. The higher unemployment rate before the state law change would have increased the number of bankruptcies (2, 6, 7, 10), but it is doubtful if the exemption regulations would have had any influence on the unemployed person's decision to file for bankruptcy.

For several variables the expected trends occurred, but the differences were not statistically significant. For example, there were more joint petitioners filing in Group 1 (58 percent) than in Group 2 (44 percent). More white collar workers filed in Group 1 (30 percent) than in Group 2 (24 percent). Group 1 had higher consumer debts as predicted ($13,762 compared to $13,320 for Group 2).

It was expected that the incomes of Group 1 petitioners would be higher than Group 2 incomes, but this was not the case. The mean incomes for Group 1 was $14,146 compared to $15,104 for Group 2. These results agree with the findings of the Purdue Study: within "low" exemption states, there was no significant difference in incomes when petitioners using the
TABLE 2. Descriptive Statistics and T-Values for Selected Variables for Petitioners Filing Before July 1, 1981 (Group 1, N=92 to 100) and Petitioners Filing After July 1, 1981 (Group 2, N=92 to 99)

<table>
<thead>
<tr>
<th>Variables (^a)</th>
<th>Proportion or Mean</th>
<th>Standard Deviation</th>
<th>Proportion or Mean</th>
<th>Standard Deviation</th>
<th>Z-Value (^b) or T-Value</th>
<th>Degrees of Freedom</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (individual or Joint)</td>
<td>0.5200</td>
<td>0.030</td>
<td>0.444</td>
<td>0.049</td>
<td>1.07</td>
<td>---</td>
<td>0.285</td>
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<tr>
<td>(fraction joint)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation of Head</td>
<td>0.3043</td>
<td>0.048</td>
<td>0.2391</td>
<td>0.049</td>
<td>0.99</td>
<td>---</td>
<td>0.322</td>
</tr>
<tr>
<td>(fraction white collar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td>0.2525</td>
<td>0.044</td>
<td>0.1629</td>
<td>0.042</td>
<td>1.93</td>
<td>---</td>
<td>0.054</td>
</tr>
<tr>
<td>(fraction unemployed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980 Income</td>
<td>14,145.9</td>
<td>7,939.5</td>
<td>15,104.2</td>
<td>8,768.5</td>
<td>-0.80</td>
<td>190</td>
<td>0.428</td>
</tr>
<tr>
<td>Assets</td>
<td>13,910.9</td>
<td>18,028.8</td>
<td>14,432.6</td>
<td>19,337.1</td>
<td>-0.20</td>
<td>196</td>
<td>0.864</td>
</tr>
<tr>
<td>Consumer Debts</td>
<td>13,761.5</td>
<td>10,877.7</td>
<td>13,319.9</td>
<td>8,292.3</td>
<td>0.32</td>
<td>185</td>
<td>0.748</td>
</tr>
<tr>
<td>Debt-to-income ratio (^d)</td>
<td>1.3</td>
<td>1.7</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt-to-asset ratio</td>
<td>6.9</td>
<td>118.2</td>
<td>7.3</td>
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</tr>
</tbody>
</table>

\(^a\)Significant at .05 level
\(^b\)The first three variables are dichotomous and all other are continuous
\(^c\)Proportion used for dichotomous variables and mean for others
\(^d\)Z-value used to test dichotomous variables and t-value for other variables

"Low" state exemption regulations were compared with petitioners using the "high" federal exemptions (11). Although Shuchman and Rhorer (9) found slightly higher incomes for the "new" debtors taking advantage of the federal exemptions, they did not test for statistically significant differences. They did suggest, however, that the higher incomes could be attributed to the higher proportion of joint filings among the "new" debtors.

It was expected that the mean value of assets (excluding real property) for Group 1 would be higher than for Group 2, however, the mean value of assets, $13,910.9 for Group 1, was lower than the mean of $14,433 for Group 2. The difference was not statistically significant. Shuchman and Rhorer's findings (9) agree with the Iowa Study. When the equity in real property was removed from total assets, there was no difference between "new" and "average" debtors.

The t-test for the consumer debt-to-income ratio showed no significant difference between the two groups (Table 2). This agrees with the Purdue Study which found that the nonmortgage debt-to-income ratios between "high" and "low" exemptions states were not statistically different.

Of the bankrupts in Group 1, 67 percent took the federal exemptions, 11 percent took the old state exemptions, and 22 percent took either double federal or federal and state exemptions. Of the 52 joint petitioners in Group 1, 17 percent took double federal exemptions, 25 percent took both the federal and state exemptions, and 58 percent took either the federal or the old state exemptions. All the petitioners in Group 2 took the new state exemptions. The mean value of selected categories was considerably higher for exemptions taken when both the federal law and old state law were in effect (Group 1) than under the new state exemption regulations after July 1 (Group 2) (Table 3).

The information on exemptions reported on the petitions was examined separately. The summary information in Table 4 indicates the value of property exempted by Group 1 was higher than that exempted by Group 2. However, the results of the t-tests indicate no significant differences between the two groups (Table 5).

Discriminant analysis was an additional procedure used to distinguish the two groups. In this study, the discriminant function was applied to all the cases and 99 percent were classified correctly. The discriminating variables used for the t-tests other than the computed variables measuring the ratios were entered into the analysis concurrently.6

Table 6 gives the results of the discriminant analysis when type of petitioner, occupation of the head, employment status, 1980 income, assets, and consumer debt were entered concurrently. The sum of the

\(^6\)It was assumed that the discriminating variables had a multivariate normal distribution and that they had equal variance-covariance matrices within each group.
eigenvalues is a measure of the total variance existing in the discriminating variables and thus is an indicator of the relative importance of the function.

<table>
<thead>
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<tbody>
<tr>
<td>Canonical</td>
</tr>
<tr>
<td>Group 1 Value</td>
</tr>
<tr>
<td>Group 2 Value</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>88</td>
</tr>
</tbody>
</table>

As the eigenvalues suggest, little variation between the two groups is explained by those variables. The canonical correlation which reveals how closely the function and group variables are related is low at 0.242. The high Wilks' Lambda, 0.941, at a significance level of 0.114, indicates these variables do not distinguish between the two groups.

Conclusions

An important finding in this study was the fact there was no significant difference in the characteristics of the petitioners between the two groups. It appears that the exemption regulations do not change the characteristics of the individual filing for bankruptcy. Even under the stricter state exemptions most bankruptcies were no asset cases; the value of the assets held by the petitioner were well within the allowances of the new state statute. If the exemption regulations were attracting a different type of person into bankruptcy, it seems logical that the difference would have appeared in this study which drew part of the sample from the petitioners filing during the period just prior to the law change. Since the differences did not occur in this study, one could conclude that bankruptcy exemption regulations do not influence the type of individual filing. These findings are similar to Shuchman and Rhor's results (9).

Since there was no change in the type of person filing for bankruptcy based on the exemption level, what caused the reduction in filings? One might assume that the lower exemptions prevented those with the ability to repay their debts from filing. However, using a consumer debt-to-income ratio of .5 or less as the guide for determining those who could repay, the difference between the two groups is slight; 30 percent in Group 1 had debt-to-income ratios of .5 or less while 28 percent in Group 2 fell in this category. The reduced filings cannot be attributed to an improved economy. Economic conditions as measured by the unemployment rate and Consumer Price Index did not improve in the last half of 1981. Even after the low state exemption specifications became effective, few bankrupts had many assets to lose and most were no asset cases. Most bankrupts have lower than average incomes and have few assets, but they do have high consumer debt-to-income ratios. One possible explanation is that the publicity about the liberal provisions of the federal law encouraged people to file for bankruptcy. In addition, attorneys may have encouraged clients to file while the liberal exemptions were available. Anticipation of the stricter state exemptions, as well, may have encouraged those only considering bankruptcy to file before the change in exemption provisions. Actions of creditors such as wage garnishment, threatened repossession, or harassment often trigger the actual bankruptcy filing. These factors were not examined in this study.

Although this study indicates that the number of bankruptcy filings decreased after the stricter exemption regulations became effective, further research is needed in this area. A replication of this study in two or three years is recommended to find out if the trend identified in this study has continued. Research is needed to examine the impact of other liberal aspects of the Federal Bankruptcy Act such as the repossession and reaffirmation provisions. In addition, a study to determine if there has been a change of attitude toward bankruptcy is indicated. If the bankrupt feels less social stigma today, then perhaps procedures to prevent unnecessary bankruptcy should be included in the Federal Bankruptcy Act.

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