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Bankruptcy and Small Business – Lessons from the U.S. and Recent Reforms

Michelle J. White*

Small business is an important part of the U.S. economy – about 11% of U.S. households include one or more self-employed workers.[1] Among the government policies that encourage small business and self-employment is bankruptcy law. U.S. bankruptcy law makes it more attractive for individuals to start and own small businesses by providing a soft landing if businesses fail: business owners can file for personal bankruptcy, their business and personal debts will be discharged, their future earnings will be exempt from the obligation to repay, and they may be able to keep their homes and other assets. The fact that about 17 percent of all personal bankruptcy filings in the U.S. include some business debt suggests the importance of bankruptcy policy for small business.[2]

In this article, I first describe small business bankruptcy law in the U.S. Then I discuss research on the effect of bankruptcy law on individuals' decisions to become self-employed and on business credit markets. Finally I discuss the effects of the bankruptcy reform legislation that went into effect in the U.S. at the end of 2005. The reform changed the treatment of small business owners in bankruptcy and may discourage self-employment.

U.S. bankruptcy law and small business

Because many small businesses are unincorporated, the business and its owner are legally the same. This means that debts of the business are personal liabilities of the business owner. Therefore when an unincorporated business fails, its owner is liable for a mixture of business and personal debts and the relevant bankruptcy law is personal bankruptcy law. Personal bankruptcy law is also important for many small corporations that fail. This is because lenders that make loans to small corporations often require the owner to personally guarantee the debt and/or allow the lender to take a lien on the owner's house. These guarantees and liens abolish the legal distinction between the corporation and its owner for purposes of the particular loan.

Chapter 7 of the U.S. Bankruptcy Code provides several important protections for small business owners. First, owners of failed businesses are allowed to file for personal bankruptcy under Chapter 7, where both their unsecured personal and business debts are discharged. Second, debtors' future earnings are completely exempt from the obligation to repay pre-bankruptcy debt, so that they can start new businesses or take jobs working for others without having their future earnings taxed to repay their old debts. The 100 percent exemption for future earnings applies all over the U.S. and is referred to as the "fresh start." Third, business owners (like other debtors in bankruptcy) must use all their wealth above an exemption level to repay pre-bankruptcy debt. Exemption levels are set by the 50 U.S. states and they vary widely. Higher exemptions encourage individuals – particularly those that are risk-averse – to become self-employed, since they will be allowed to keep more of their assets if the business fails. In high exemption states, owners of failed businesses may be able to keep their homes and other assets, while in low exemption states they keep little more than their clothes, furniture and cooking utensils.

Most states have several bankruptcy exemptions for different types of assets, but the most important is the exemption for equity in an owner-occupied home – the "homestead" exemption (see Table). As of 2006, six U.S. states – including Florida and Texas – have unlimited homestead exemptions. Unlimited exemptions allow individuals or couples who file for bankruptcy to shelter millions of dollars of assets from creditors, as long as the assets are converted in-

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[1] See Fan and White (2003).
[2] See Lawless and Warren (2005).

Chapter 7 U.S. Bankruptcy Code: Protection for failed small business owners

Exemptions from creditor's access to the debtor's		
Future earnings	Wealth	
	Owner occupied housing ("Homestead exemption")	Other
100% exemption in all U.S. states (allowing a "fresh start") Note: This provision was changed in the 2005 reform. See text.	• Exemption unlimited in 6 U.S. states (e.g. Florida, Texas) • Exemption up to $500,000 e.g. in Massachusetts and Minnesota • Exemptions up to $10,000 in 13 U.S. states • No exemption in two U.S. states	Most U.S. states exempt goods of daily necessity and some types of insurance and retirement accounts.

Source: Author.

to equity in an owner-occupied home before the bankruptcy filing occurs. Other states have exemptions that are high but not unlimited – for example, Massachusetts and Minnesota have homestead exemptions of $500,000. At the other end of the spectrum, four states have no homestead exemption at all and 13 other states have homestead exemptions of $10,000 or less. Besides the homestead exemption, most states exempt clothing, furniture, and cooking utensils, and some have small exemptions for equity in a motor vehicle, other types of personal property, and some types of insurance and retirement accounts.[3]

The effect of bankruptcy exemptions on small business

How does variation in bankruptcy exemption levels across U.S. states affect small business and entrepreneurial behavior? One hypothesis is that, in states with higher exemption levels, individuals are more likely to own businesses because generous exemptions cushion them against the consequences of business failure. Another hypothesis is that small business lenders are more likely to deny applications for credit from small businesses that are located in high exemption states, because entrepreneurs in those states are more likely to file for bankruptcy and less likely to repay.

To test these hypotheses, I and two co-authors examined entrepreneurship patterns and markets for business credit across states with different exemption levels. We used the homestead exemption as the basis for comparison, because it is both the largest exemption in nearly all U.S. states and the most variable. We took account of the fact that renters cannot make use of homestead exemptions and, therefore, they cannot shelter as many assets when they file for bankruptcy. Bankruptcy thus provides a much more generous "insurance policy" for homeowners who go into business than for renters.

Effects on entrepreneurship

Wei Fan and I used the *Survey of Income and Program Participation*, a large panel dataset of U.S. households, to examine how variations in bankruptcy exemptions across states affect individuals' decisions to choose self-employment versus working as an employee. Our data cover the years 1993-98. We estimated a model explaining whether households contain one or more workers who are self-employed as a function of the bankruptcy exemption level in the household's state of residence plus control variables. The homestead exemption was represented as a series of dummy variables representing quartiles of the exemption distribution, plus an additional dummy variable for unlimited homestead exemptions. To allow the effect of higher exemption levels to differ for homeowners versus renters, we interacted all the homestead exemption variables with a dummy for owners versus renters.

For households that are homeowners, we found that the probability of owning a business increased from 0.101 in the lowest quartile of the exemption distribution to 0.135 in unlimited exemption states – or an increase of 35 percent over the entire range. For renters, the increase over the same range was from 0.083 to 0.107 – or 29 percent. Both increases are statistically significant. These results imply that both homeowners and renters respond strongly to increases in the homestead exemption in making their decisions to be self-employed. For renters, the strong response probably reflects the fact that most renters expect to become homeowners in the future.

The average business owned by a self-employed person is small. We therefore re-estimated the model for large businesses, defined as having net business in-

[3] Other features of U.S. bankruptcy law are uniform all over the U.S. For a more detailed discussion of bankruptcy law and economics and additional references, see White (2005).

come greater than $2,000 per month. We found that the probability of homeowners owning big businesses was 28 percent higher in states with unlimited homestead exemptions as compared to states with exemptions in the lowest quartile. This increase was statistically significant. For renters, the relationship was also positive, but it was not statistically significant.

We also examined whether entrepreneurs behave differently depending on whether their businesses are incorporated or not. We predicted that owners of non-corporate businesses would respond more strongly to changes in homestead exemption levels than owners of corporate businesses, because owners of corporate businesses are less likely to be personally responsible for their businesses' debts. They therefore are less likely to be affected by whether the exemption levels in their states are high or low.

For homeowners, we found that the probability of owning a non-corporate business was 37 percent higher in states with unlimited exemptions than in states with exemptions in the lowest quartile, while homeowners' probability of owning a corporate business was 14 percent higher. Both increases were statistically significant. Finally, we examined whether homeowners are more likely to start (as opposed to own) businesses if they live in states with high homestead exemptions. We found that their probability of starting a business was 23 percent higher in states with unlimited exemptions than in states with low exemptions.

These figures, taken together, indicate that bankruptcy law has a strong effect on whether workers choose self-employment.

Effects on small business credit

In the second study, Jeremy Berkowitz and I examined how bankruptcy exemptions affect small business credit markets. We used data from the 1993 National Survey of Small Business Finance, which is produced by the Federal Reserve Board of Governors and the U.S. Small Business Administration. The survey covers businesses with up to 500 employees. It asks managers whether they applied for credit during the previous three years and, if so, whether they were turned down. It also asks managers whether they were discouraged from applying for loans during the previous three years because they anticipated being turned down. We defined small businesses as credit rationed if they were either turned down for credit or discouraged from applying. We ran a regression model that explains whether small businesses are credit rationed as a function of the homestead exemption level in the firm's state and control variables. We also included measures of whether the firm or its owner previously experienced financial distress or filed for bankruptcy. We ran separate regressions for non-corporate versus corporate firms.

One problem with these regressions is that higher exemptions affect both supply of and demand for business credit. Demand for business loans rises in high-exemption states because entrepreneurs are more willing to borrow and invest when they have additional wealth insurance. However the supply of business loans falls in these states, because entrepreneurs are more likely to default and file for bankruptcy and this makes lending less profitable. The overall effect of higher exemptions on the extent of credit rationing depends on whether lenders reduce the supply of credit by more or less than entrepreneurs increase demand.

Holding other factors constant, our results show that the probability of a non-corporate firm being turned down for credit rises from 0.122 at the 25th percentile of the exemption distribution to 0.196 at the 75th percentile – an increase of 32 percent. We also find that the probability of a corporate firm being turned down for credit rises from 0.196 at the 25th percentile to 0.255 in unlimited exemption states – an increase of 30 percent. Both increases are statistically significant.

These results imply that both types of firms are more likely to be credit-rationed if they are located in states with high rather than low exemptions. The results also imply that, holding other factors constant, corporate firms are more likely to be credit-rationed than non-corporate firms at all exemption levels. This makes sense because non-corporate firms have both the firm's and the owner's assets to back up their loans, while corporate firms have only the firm's assets. Finally we found that small businesses are three times as likely to be credit rationed if they or their owners have previously filed for bankruptcy and twice as likely to be credit rationed if they or their owners have previously experienced financial distress. Thus past financial difficulties are a heavy burden when small businesses attempt to obtain credit. The effect is similar for corporate versus non-corporate firms.

We also examined how high exemption levels affect the interest rates that firms paid on their most recent

loan. Here higher exemption levels are unambiguously predicted to cause interest rates to rise, since both the demand increase and the supply decrease point in the same direction. For non-corporate firms, we found that interest rates rise by more than 2 percentage points when firms are located in states with unlimited homestead exemptions rather than in states with exemptions at the 25th percentile of the distribution. For corporate firms, interest rates rise by 0.83 percentage points when firms are located in states with exemptions at the 75th percentile versus the 25th percentile. Since some corporations are credit-worthy enough to be able to borrow on their own, it is not surprising that interest rates paid by non-corporate firms are more sensitive to changes in exemption levels than interest rates paid by corporate firms. We also found that a past bankruptcy filing is associated with interest rates that are 5.4 percentage points higher for non-corporate firms and 2.1 percentage points higher for corporate firms.

A final result is that both corporate and non-corporate firms receive smaller loans if they are located in states with higher homestead exemptions. For both types of firms, loan size is $70,000 to $80,000 smaller if firms are located in states with homestead exemptions at the 75th percentile rather than the 25th percentile.

Overall, these results suggest that small businesses face more difficulty in raising capital if they are located in states with high exemption levels, but – despite this barrier – more individuals in these states choose to be self-employed.

Small business under the 2005 U.S. bankruptcy reform

The most significant change made to U.S. personal bankruptcy procedures under the 2005 reform is that debtors no longer have an automatic right to file for bankruptcy under Chapter 7. Instead they must undergo a new "means test," which compares their income to the median income level in their states. If debtors' income per month is more than $100 above the monthly median income in their states, then they may be forced to file under another personal bankruptcy procedure, Chapter 13, which has no "fresh start." Debtors in Chapter 13 must use part of their post-bankruptcy earnings for five years to repay their debt. The repayment requirement is based on a formula developed by the Internal Revenue Service for delinquent taxpayers. It sets a fixed dollar repayment requirement per month that in some cases could be more than the debtor actually earns.[4] However the new means test applies only to debtors who have "primarily consumer debts", so that small business owners are allowed to bypass it and file under Chapter 7 as long as most of their debt is business debt. For owners of failed businesses who file under Chapter 7, the bankruptcy reform also makes it more difficult to shelter financial assets using states' homestead exemptions, since it includes new restrictions on converting non-exempt assets into exempt home equity and on moving to Texas or Florida to take advantage of their unlimited homestead exemptions before filing. Finally the new law substantially increases the costs of filing for bankruptcy and imposes new paperwork and nuisance requirements.[5]

The research discussed here suggests that potential entrepreneurs are very responsive to the terms of the "bankruptcy insurance" policy. The new law reduces the amount of insurance that bankruptcy provides by requiring entrepreneurs to repay more from wealth or future earnings when their businesses fail. It therefore forces entrepreneurs to bear greater risk and provides a much harder landing for those whose businesses fail. As a result, many potential entrepreneurs will find it less appealing to go into business and fewer new firms are likely to be started each year in this U.S. This change will have both positive and negative effects. On the positive side, some entrepreneurial activity in the United States is essentially disguised unemployment and wiping it out will have little adverse effect. Also, business owners are likely to find it easier to obtain credit, because lenders will be more willing to extend business loans. But on the negative side, some of the businesses that never get started will inevitably involve innovative new ideas that would have generated jobs and economic growth. The result may be higher unemployment and lower economic growth in the U.S.

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[4] This differs from the pre-reform Chapter 13 bankruptcy procedure, which was voluntary rather than mandatory and allowed debtors to propose how much they would repay. These plans often involved only token repayment amounts.
[5] See White (2006) for discussion of the 2005 U.S. bankruptcy reform.

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