# The Tax Debts of Small Business Owners in Bankruptcy

by

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for



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# Small Business Research Summary

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### The Tax Debts of Small Business Owners in Bankruptcy

By Rafael Efrat, 2008. 36 pages.

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#### **Purpose**

The objective of this study is to investigate the burden tax obligations impose on small business owners (both individuals and entities) at the time of their bankruptcy filing. This is an important area to study given the existing documentation on the adverse impact tax debts have on the financial viability of petitioners both before and after bankruptcy filing.

#### **Overall Findings**

This study documents the pervasiveness and the magnitude of the tax burden among small business owners in bankruptcy. The data suggest that the tax burden is more pervasive among small business owners in bankruptcy than among consumer petitioners. While fewer than one-quarter of all consumers in the bankruptcy sample reported tax debts, more than half of individual small business owners reported owing some tax debts. Individual small business owners in bankruptcy proceedings who are encumbered with high tax debts are generally in a precarious financial condition and are worse off financially than small business owners who have low or no tax debt.

#### **Highlights**

• Men, who constituted 57.1 percent of the sample, were significantly more likely to be in the bankruptcy sample compared with the general U.S. population, where men constitute 49 percent (U.S. Census Bureau, 2005). Women petitioners were more likely to file under Chapter 7 and Chapter 13 of the Bankruptcy Code rather than Chapter 11, where they made up only 19.1 percent

- of petitioners. Most individual petitioners were married, one-third were single, and one-fifth were divorced or separated.
- Differences between the two groups are also reflected in homeownership rates. Almost two-thirds of the population own homes nationwide, compared with 47 percent of individuals in the bankruptcy sample. Similarly, the median fair market value of the houses owned by individual bankruptcy petitioners was \$107,200, compared with a median value of \$217,000 across the nation in 2006.
- The heavy debt burden, along with the lower homeownership rate, contributes to the negative net worth in the bankruptcy sample. The mean net worth of the individual bankruptcy petitioner was –\$28,299, and their median net worth was –\$19,110. More than 77.5 percent of the individual petitioners in the bankruptcy sample had a negative net worth compared with 12.6 percent in the general population outside of bankruptcy
- Overall, the data show that almost 30 percent of all petitioners in the bankruptcy sample reported owing some kind of tax debts. The data further indicate that individual entrepreneurs reportedly owed tax debts more often than small business entities. The table also suggests that individual small business owners from California and Texas most often reported tax debts, while individual small business owners from Tennessee reported tax debts least often.

#### **Scope and Methodology**

The database for this project is a nationally representative sample of 1,903 bankruptcy schedules filed by petitioners (both individuals and entities)

in five federal judicial districts between October 17, 2005, and October 16, 2006 (California, Tennessee, Pennsylvania, Illinois, Texas). The time period was selected to coincide with the new federal bankruptcy legislation that became effective on October 17, 2005 (Bankruptcy Code, 11 U.S.C. §§ 523(a), 1322(a)(2), 1141(d) (1978), as amended by Bankruptcy Abuse Prevention and Consumer Protection Act of 2005). The bankruptcy schedules were accessed through the PACER system. Access to this database was granted by the clerks of the courts of the various judicial districts. The sample included consumers, individual business owners (i.e., sole proprietors), and business entities (i.e., corporations, LLCs, etc).

This report was peer reviewed consistent with the Office of Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research at advocacy@sba.gov or (202) 205-6533.

#### **Comments from Advocacy**

This study is an important addition to small business research, analyzing the link between bankruptcy petitioners and taxes.

#### **Ordering Information**

The full text of this report and summaries of other studies performed under contract with the U.S. Small Business Administration's Office of Advocacy are available on the Internet at <a href="https://www.sba.gov/advo/research">www.sba.gov/advo/research</a>. Copies are available for purchase from:

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#### **EXECUTIVE SUMMARY**

Bankruptcy protection in the United States is available to individuals, self-employed individuals, and entities. Business entities have the option of commencing bankruptcy protection under either Chapter 7 liquidation or Chapter 11 reorganization. Individuals and the self-employed may pursue bankruptcy filing under Chapter 7, 13 (individual debt adjustment), or 11 of the bankruptcy code. In filing for bankruptcy protection, the primary goal of the small business entrepreneur is to obtain a financial "fresh start" through the discharge provision. Under the discharge provision in bankruptcy, an individual may obtain debt forgiveness from most of his debts in exchange for giving up either his existing non-exempt assets or a portion of his future earnings. In a Chapter 7 case, the court generally grants the discharge upon expiration of the time to file a complaint objecting to discharge and the time fixed for filing a motion to dismiss the case for substantial abuse. In individual Chapter 11 and 13 cases, the court generally grants the discharge after the debtor completes all payments under the plan of reorganization. (11 U.S.C. §§ 701-766, 1141(d), 1228 & 1301-1330).

Because of the tax code, many small business owners report significant challenges in fulfilling their tax obligations and in complying with the extensive tax regulations. Some studies have linked the tax burden on small business owners to lower profitability, lower rates of entrepreneurial growth, and higher rates of business closures. The tax burden causes some small business owners to resort to bankruptcy protection.

This study is based on data covering a period reflecting the new federal bankruptcy legislation that became effective on October 17, 2005. The overall objective of the study is to analyze, based on the data selected, the burden imposed by tax obligations on bankruptcy petitioners.

This study documents the magnitude of the tax burden among small business owners in bankruptcy. The data suggest that the magnitude of the tax burden is higher for small business owners in bankruptcy than among individual petitioners. While fewer than a quarter of all individuals in the bankruptcy sample reported tax debt, more than half of individual small business owners reported owing some tax debts. Individual small business owners in bankruptcy proceedings who are encumbered with high tax debt are in a precarious financial condition and are worse off financially compared with small business owners who have low or no tax debt. There is also some evidence that a heavy tax burden is symptomatic of higher overall indebtedness of the business. Indeed, this study provides data showing that individual small business owners with high tax debt have also accumulated higher overall debt and debt-to-income ratios compared with individual entrepreneurs with low tax debt.

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<sup>&</sup>lt;sup>1</sup> For small businesses, a fresh start is equated with the discharge of personal indebtedness (Baird & Morrison, 2005).

#### I. INTRODUCTION:

The federal tax code, while beneficial in its provisions to small business, is also burdensome. While many provisions encourage individuals to become entrepreneurs and cushion the financial blow when a business fails, the code is replete with provisions that have a disproportionately large negative impact on a small business (Crain, 2005). Also, the tax treatment of the self-employed imposes a rate higher than that faced by wage earners.

Because of the tax code, many small business owners report significant challenges in fulfilling their tax obligations and in complying with the extensive tax regulations (Carroll, Holtz-Eakin & Rider, 2000). Some studies have linked the tax burden on small business owners to lower profitability, lower rates of entrepreneurial growth, and higher rates of business closures (Bruce & Mohsin, 2003; Bruce & Gurley-Calvez, 2006; Mathur, 2005; Holtz-Eakin & Rosen, 2001; Kreft & Sobel, 2003). The tax burden causes some small business owners to resort to bankruptcy protection (Efrat, 2007; Sprayregen, 1990; Sullivan, Warren & Westbrook, 1998).

Bankruptcy protection in the United States is available to individuals, self-employed individuals and entities (Fan & White, 2003). Business entities have the option of commencing bankruptcy protection under either Chapter 7 liquidation or Chapter 11 reorganization (Sullivan, Warren & Westbrook, 1998). Individuals and the self-employed may pursue bankruptcy filing under Chapter 7, 13 (individual debt adjustment), or 11 of the bankruptcy code. In filing for bankruptcy protection, the primary goal of small business entrepreneurs is to obtain a financial "fresh start" through the discharge

provision (Baird & Morrison, 2005).<sup>2</sup> Under the discharge provision in bankruptcy, an individual may obtain debt forgiveness from most of his debts in exchange for giving up either his existing non-exempt assets or a portion of his future earnings. In a Chapter 7 case, the court generally grants the discharge upon expiration of the time to file a complaint objecting to discharge and the time fixed for filing a motion to dismiss the case for substantial abuse. In individual Chapter 11 and 13 cases, the court generally grants the discharge after the debtor completes all payments under the plan of reorganization. (11 U.S.C. §§ 701-766, 1141(d), 1228 & 1301-1330).

Tax problems not only prompt a sizeable number of small business owners to file for bankruptcy protection, but they also appear to impair the ability of some small business owners to obtain a financial fresh start even after bankruptcy protection has been granted. Tax debts appear to remain a post-bankruptcy cause of financial distress for a sizeable number of entrepreneurs because of the non-dischargeability of tax debts.

The objective of this study is to investigate the burden tax obligations impose on small business owners (both individuals and entities) at the time of their bankruptcy filing.

The relevant literature is in section two. Section three contains the data description. The fourth section presents the empirical methodology, followed by the results. Finally, the paper concludes with a discussion of the results and policy implications.

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<sup>&</sup>lt;sup>2</sup> For small businesses, a fresh start is equated with the discharge of personal indebtedness (Baird & Morrison, 2005).

#### II. LITERATURE REVIEW:

Tax compliance expenditures can be a significant component of the costs faced by businesses, particularly for small businesses. Some studies have found that small businesses face a higher tax compliance burden compared with large firms because of the reduced economies of scale inherent in small firms (Crain, 2005). Some have contended that small firms pay corporate income taxes at a disproportionately higher rate than large firms (McIntyre & Nguyen, 2000). Furthermore, researchers demonstrated that, on average, small businesses pay effective corporate tax rates in the range of 25 to 30 percent, which is higher (by as much as 6 to 8 percentage points) than the rates paid by large businesses (Innovation and Information Consultants, Inc., 2004).

Anecdotally, many small business owners report overwhelming pressure to meet tax obligations and comply with ubiquitous tax regulations (Carroll, Holtz-Eakin & Rider, 2000). Some studies have documented the magnitude of these burdens on small business owners. They demonstrate how tax burdens seriously impair the profitability of small business owners (Bruce & Mohsin, 2003), and even cause some to close down (Bruce & Gurley-Calvez, 2006; Mathur, 2005). Many studies have linked higher tax rates with slower rates of entrepreneurial growth, capital acquisition, and hiring (Holtz-Eakin & Rosen, 2001; Kreft & Sobel, 2003).

The tax compliance burden on small businesses, along with other constraints and challenges, inevitably prompts some owners to consider bankruptcy protection (Sullivan, Warren & Westbrook, 1998). Prior research on small businesses in bankruptcy found that the tax burden is a small but significant contributor to small business bankruptcy filings.

The first national longitudinal study of entrepreneurs in bankruptcy was done in 1994

(Sullivan, Warren & Westbrook, 1998); it followed the bankruptcy experience of 3,377 non-farm companies that first filed for bankruptcy in 1994—tracing their experiences to the end of 1997. The most common reasons given by firms filing for bankruptcy included outside business conditions (39 percent), internal business conditions (27 percent), and financing problems (28 percent). The tax burden was the fourth most frequently cited cause for filing for relief at 20 percent. Other causes for filing for relief included dispute with a particular creditor (19 percent), personal problems (17 percent), and calamities (10 percent).

The most recent study on the impact of the tax burden on the propensity of small business owners to file for bankruptcy was based on information obtained from surveys completed by bankruptcy petitioners in the Central District of California- San Fernando Valley Division (Efrat, 2007). Among entrepreneurs in this bankruptcy sample, a tax-related problem was reported to be a serious predicament facing a number of them. Indeed, almost 13 percent of the entrepreneurs in the bankruptcy sample identified tax problems as a cause of their business collapse. Tax problems were the third most cited problem by the small business owners (competition was first, followed by internal business problems) (Efrat, 2007).

Not only do a sizeable number of small business owners in bankruptcy attribute their filing to tax-related problems, tax debts appear to impair the ability of some small business owners to obtain a financial fresh start (Porter & Thorne, 2006; Fullenbaum & McNeill, 1994). The discharge in bankruptcy is designed to provide petitioners, whether individuals or entrepreneurs, the opportunity to begin a financial fresh start (Jackson,

1985). The debt forgiveness provides the debtor with an opportunity for a productive life after bankruptcy that could be free of financial hardship (Whitford, 1979).

A recent study explored the hypothesis that personal bankruptcy actually provides individuals with an improved financial future (Porter & Thorne, 2006). Relying on phone interviews with 359 Chapter 7 bankruptcy petitioners, the researchers examined how the petitioners fared in the year after their bankruptcies. The findings of that study suggest that, for a sizeable number of Chapter 7 debtors, the bankruptcy discharge has not improved their financial condition. More than a third of the Chapter 7 debtors who were interviewed reported that their financial situation was actually the same as or worse than at the time of their bankruptcy. More specifically, a full quarter of the Chapter 7 debtors reported that they were struggling to pay some debts a year after bankruptcy. Former small business owners who remain business owners following bankruptcy filings seem to be experiencing the most challenges in their financial recovery (Fullenbaum & McNeill, 1994). The debtors who reported having difficulties paying their bills were asked to identify the source of their hardship. Interestingly, the fourth most frequently cited source of post-bankruptcy distress was tax debt. Almost a quarter of the bankruptcy petitioners who reported financial distress a year after their bankruptcy filing identified tax debt as the cause of their post-bankruptcy financial problems (Porter & Thorne, 2006). Tax debts appear to remain an important cause of post-bankruptcy financial distress for many entrepreneurs because of the non-dischargeability provisions of many tax debts under the bankruptcy code (Bankruptcy Code, 11 U.S.C. §§ 523(a), 1322(a)(2), 1141(d) (1978), as amended by the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005).

Examination of the pervasiveness of tax debts among small business owners remains under-studied. A recent study explored the pervasiveness of tax debts in corporate Chapter 11 bankruptcy cases filed in and near Chicago (Baird & Morrison, 2005). It found that 61 percent of the corporate Chapter 11 bankruptcy cases filed in 1998 reported having federal tax debt. It also found that among the corporate debtors with federal tax debt, unpaid taxes accounted for 12 percent of total debt. The study provided valuable insight regarding the pervasiveness of tax debts among corporate businesses in Chapter 11 bankruptcy. However, it did not explore the pervasiveness of tax debts among the broader population of small business owners in bankruptcy, namely sole proprietors that have filed under Chapter 7, 11 or 13, as well as corporate small business owners in Chapter 7 proceedings. Moreover, the data set underlying the study was regional and focused only on federal tax debts; it did not examine other sources of tax debts (such as state taxes) or other facets of tax debts (such as whether the debt was secured, or its age).

Most of the tax debt owed by the bankruptcy petitioners in our sample is non-dischargeable in bankruptcy. Bankruptcy petitioners may list three types of tax claims in their bankruptcy schedules: secured, priority unsecured, and non-priority unsecured claims. Holders of secured tax claims are generally entitled to the collateral or the value of the collateral securing their tax claims. Federal tax liens are secured claims to the extent of the value of the collateral and are unsecured for the debt exceeding the collateral value (Williams, 1995). By placing a tax lien before commencing a bankruptcy protection, the government generally becomes a secured creditor, thus preserving its tax lien even where the taxes are dischargeable (Sprayregen, 1990). Many state and local taxes enjoy secured status so that, generally, if the debtor does not pay, the taxing

authority can foreclose its lien and be paid out of the proceeds (Barsalou, Litwin & Sather, 1996).

Aside from secured tax debt, a bankruptcy petitioner may also report unsecured tax debt. Not all unsecured debts are on an equal footing. Distributions to unsecured creditors in a Chapter 7 case are made in accordance with priorities established by the bankruptcy code. The claims described in section 507(a) of the bankruptcy code are afforded priority status over other unsecured claims (Bankruptcy Code, 11 U.S.C. § 507(a) (2006)). Section 507(a) of the bankruptcy code lists a number of tax claims to receive an unsecured priority status, which must be repaid by the debtor before any general unsecured creditors receive any distribution. Moreover, unsecured priority claims are non-dischargeable under Chapter 7, and must be fully paid under a Chapter 11 reorganization plan or a Chapter 13 repayment plan (Bankruptcy Code, 11 U.S.C. § 1322(a)(2) (2006)).

Chart 1a, b, and c below summarize selected characteristics of bankruptcy Chapters 7, 11, and 13 in terms of general approach, tax debt, asset control, and dischargeable debt.

Chart 1.a Selected characteristics of bankruptcy, Chapter 7					
Approach	Tax debt <sup>a</sup>	Asset control	Dischargeable debt <sup>b</sup>		
Debtor may be an individual, a partnership, or a corporation or other business entity     Bankruptcy trustee gathers and sells the debtor's nonexempt assets and uses the proceeds of such assets to pay holders of claims (creditors) in accordance with the provisions of the Bankruptcy Code.     Eliminates all debtors' non-dischargeable obligations and results in the loss of all debtors' nonexempt assets.	Most tax debts owed are non-dischargeable in bankruptcy.     Generally, claims for federal taxes predating the bankruptcy petition by more than 3 years may be discharged.     If the IRS has a lien on the debtor's property, this property may be seized to collect discharged taxes.     With few exceptions, rules that apply to the IRS also apply to the state.	Bankruptcy Code allows an individual debtor to protect some property from the claims of creditors because it is exempt under federal bankruptcy law or under the laws of the debtor's home state.	Nineteen categories of debt excepted from discharge under Chapter 7. A discharge is available only to individual debtors, not to partnerships or corporations.  Most common nondischargeable debts include certain types of tax claims, spousal or child support, or alimony, debts for injuries, debts to governments for fines/penalties, and debts owed to certain tax advantaged retirement plans. Secured creditors may retain some rights to seize property securing underlying debt even after discharge is granted. If such a debtor's income is in excess of certain thresholds, the debtor may not be eligible for Chapter 7 relief.		

Chart 1.b Selected characteristics of bankruptcy, Chapter 11 <sup>c</sup>						
Approach	Tax debt <sup>a</sup>	Asset control	Dischargeable debt <sup>b</sup>			
<ul> <li>Chapter 11 is typically used to reorganize a business, which may be a corporation, sole proprietorship, or partnership.</li> <li>Debtor usually proposes a plan of reorganization to keep its business alive and pay creditors over time. People in business or individuals can also seek relief in chapter 11.</li> <li>Debtor proposes a plan to repay the creditors in whole or in part, retains control of the business and at the end of the plan term re-emerges as financially sound.</li> </ul>	Under this chapter, the debtor must generally pay all tax obligations.	Unless the court rules otherwise, the debtor remains in control of the business and its operations.	<ul> <li>Nineteen categories of debt excepted from discharge under Chapter 7.</li> <li>Most common nondischargeable debts include certain types of tax claims, spousal or child support, or alimony, debts for injuries, debts to governments for fines/penalties, and debts owed to certain tax-advantaged retirement plans.</li> <li>Generally provides that confirmation of a plan discharges a debtor from any debt that arose before the date of confirmation.</li> <li>After the plan is confirmed, the debtor is required to make payments and is bound by the provisions of the plan of reorganization.</li> <li>Under the confirmed plan, the debtor can reduce its debts by repaying a portion of its obligations and discharging others.</li> </ul>			

C	Chart 1.c Selected characteristics of bankruptcy, Chapter 13 <sup>d</sup>					
Approach	Tax debt <sup>a</sup>	Asset control	Dischargeable debt <sup>b</sup>			
<ul> <li>Any individual, even if self-employed or operating an unincorporated business, is eligible for chapter 13 relief as long as the individual's unsecured debts fall within a specified range</li> <li>Designed for an individual debtor who has a regular source of income.</li> <li>Chapter 13 is often preferable to chapter 7 because it enables the debtor to keep a valuable asset, e.g., a house.</li> <li>Allows the debtor to propose "plan" to repay creditors over time – usually 3 to 5 years.</li> </ul>	Most tax debts owed are non-dischargeable in bankruptcy.     If the debtor completes all payments under the debt adjustment plan for an individual with regular income, the court may grant a discharge of debts, including tax debts.     With few exceptions, rules that apply to the IRS also apply to the state.	Debtor is able to retain the use of and title to all of his or her assets.	<ul> <li>A slightly broader discharge of debts is available to a debtor in a chapter 13 case than in a chapter 7 case.</li> <li>Debts dischargeable in chapter 13, but not in chapter 7, include debts for willful and malicious injury to property, debts incurred to pay non-dischargeable tax obligations, and debts arising from property settlements in divorce or separation proceedings.</li> <li>A chapter 13 debtor generally receives a discharge only after completing all payments required by the courtapproved (i.e., "confirmed") repayment plan.</li> </ul>			

Source for Chart 1(a, b, c): <a href="http://www.uscourts.gov/bankruptcycourts/bankruptcybasics/process.html">http://www.uscourts.gov/bankruptcycourts/bankruptcybasics/process.html</a>

- a. Source for tax debt is the IRS, Bankruptcy Tax Guide, Publication 908 (Rev. July 1996).
- b. Debtors can claim either the federal exemption amounts or the usually more favorable state exemption amounts.
- c. Chapter 11 is more expensive than Chapter 13, but not everybody qualifies for Chapter 13 bankruptcy. It is the most complex of all bankruptcy cases and generally the most expensive.
- d. This type of bankruptcy is most commonly used by individuals who are facing, or in, foreclosure proceedings for their homes.

#### III. METHODOLOGY:

The data set for this project is a nationally representative sample of 1,903 bankruptcy schedules filed by petitioners (both individuals and entities) in five federal judicial districts between October 17, 2005, and October 16, 2006. This time period was selected to coincide with the new federal bankruptcy legislation that became effective on October 17, 2005.<sup>3</sup> The sample was composed of bankruptcy schedules from five federal

<sup>&</sup>lt;sup>3</sup> The most important change under the 2005 bankruptcy reform is that individual petitioners must meet the requirements of a new "means test" in order to file under Chapter 7 liquidation. The new law also increased the costs of filing, limited the relief available in bankruptcy by expanding the categories of debts that are not dischargeable, and adopted administrative hurdles related to credit counseling, and attorney certifications.

judicial districts. The bankruptcy schedules were accessed through the PACER system.<sup>4</sup> The clerks of the courts of the various judicial districts have granted access to this database.

The districts were chosen from five different states and include five major metropolitan areas to provide geographic diversity and to take into account different legal cultures. The judicial districts include the Eastern District of Pennsylvania (Philadelphia), the Northern District of Illinois (Chicago), the Middle District of Tennessee (Nashville), the Northern District of Texas (Dallas), and the Central District of California (Los Angeles). The distribution of cases in the five districts is as follows: California: 311; Tennessee: 653; Pennsylvania: 218; Illinois: 472; and Texas: 249 (Table 1). In each district, we randomly selected Chapter 7, Chapter 11, and Chapter 13 filers. With the exception of Chapter 11 cases, the number of cases selected in each of the districts approximates the proportion to the bankruptcy petitions actually filed in that district during that period. The random selection was done by selecting every third case listed in the court docket based on chronological order. To reach a sufficiently large number of Chapter 11 bankruptcy petitions, every other case was selected from the Chapter 11 court docket. More than half of the petitions in the sample are from Chapter 7 petitions, 15 percent are from Chapter 11, and almost a third are from Chapter 13 filers. The full data set thus consisted of 993 Chapter 7 petitions, 293 Chapter 11 petitions, and 617 Chapter 13 cases.

<sup>&</sup>lt;sup>4</sup> The PACER Service provides electronic access to U.S. District, Bankruptcy, and Appellate court records. See <a href="http://pacer.psc.uscourts.gov">http://pacer.psc.uscourts.gov</a>

Location	Number	Percent
California (CA)	311	16.3
Tennessee (TN)	653	34.3
Pennsylvania (PA)	218	11.4
Illinois (IL)	472	24.8
Texas (TX)	249	13.1
Total	1,903	100.0
Filing type	Number	Percent
Chapter 7	993	52.2
Chapter 11	293	15.4
Chapter 13	617	32.4
Total	1903	100.0

The sample included individuals, individual business owners (i.e., sole proprietors), and business entities (i.e., corporations, LLC, etc). Sole proprietors were identified by searching for self-employment data in the bankruptcy petition. Entities were designated as small businesses to the extent they met the definition of a small business under SBA's Small Business Size Regulations (13 CFR §121 (2006)). This sample size is approximately the same as or larger than the sample size in similar studies of economic or financial issues (Sullivan, Warren & Westbrook, 1989).

<sup>&</sup>lt;sup>5</sup> Bankruptcy data is broken down along personal/non business and business. We are further dividing business cases into self-employed businesses (referred to as individual businesses), and other small business entities. For simplicity, the non-business debt holders are referred to hereafter as "Individuals," often also referred to as "Consumers" in the literature.

<sup>&</sup>lt;sup>6</sup> Such as in the Statement of Financial Affairs, name and nature of debt identification in the Voluntary Petition face page, assets listing under Schedule B, and the business income report in Schedule I.

<sup>&</sup>lt;sup>7</sup> This definition of small business was selected because it provided a clear an objective standard for identifying small businesses.

Data from the bankruptcy schedules (which are filed under penalty of perjury) include demographic information (gender and marital status) and financial data (tax debts, assets, liabilities, income, expenses, and business operations).

#### IV. RESULTS:

#### A. General Characteristics of the Bankruptcy Sample:

Table 2 shows that men, who constituted 57.1 percent of the sample, were significantly more likely to be in the bankruptcy sample compared with the general population in the United States, where men make up 49 percent of the population (U.S. Census Bureau, 2005). It shows that women petitioners were more likely to file under Chapter 7 and Chapter 13 of the Bankruptcy Code rather than Chapter 11, where they made up only 19.1 percent of petitioners. Most of the individual petitioners were married, a third of them were single, and one-fifth were divorced or separated.

Table 3 depicts the financial characteristics of the sampled population. Earnings are considerably lower (with a median annual household income of \$25,584), compared with the median household income in the country of \$46,242 (U.S. Census Bureau, 2005; Sullivan, Warren & Westbrook, 2006).

Differences between the two groups are also reflected in homeownership rates. As Table 3 suggests, outside of bankruptcy almost two-thirds of the population own homes nationwide, compared with 47 percent of individuals in the bankruptcy sample (Sullivan, Warren & Westbrook, 2006; U.S. Census Bureau, 2005). Similarly, Table 3 indicates that the median fair market value of the houses owned by the individual bankruptcy

Table 2: Demographic characteristics of the general bankruptcy sample						
	Men		Woi	men	Total	
	Number	Percent	Number	Percent	Number	Percent
Chapter						
7	463	54.0	394	46.0	857	100.0
11	38	80.9	9	19.1	47	100.0
13	349	59.8	235	40.2	584	100.0
Total	850		638		1,488	
State						
CA	129	54.8	92	41.6	221	100.0
TN	370	59.2	255	40.8	625	100.0
PA	94	53.4	82	46.6	176	100.0
IL	171	52.0	158	48.0	329	100.0
TX	86	62.8	51	37.2	137	100.0
Total	850		638		1,488	

Category	Number	Mean	Mean W/O Outliers*	Median
Asset (\$)	1761	636,981	112,183	46,375
Debts (\$)		177,873	101,010	70,260
Monthly income (\$)	1604	2,776	2,312	2,132
Debt to income ratio	1604	4.4	3.3	2.8
Net worth (\$)	1604	-28,299	-\$41,279	-19,110
Home ownership (%)	781	47.7		
Fair market value of real property (\$)	781	232,444	141,788	107,200

<sup>\*</sup> Mean without outliers was determined by excluding from calculation those observations that were at the top and the bottom five percent of all values in a given population.

petitioners was \$107,200, compared with the \$217,000 median price across the nation in 2006 (Wheelock, 2007).

Moreover, Table 3 also shows that the individual bankruptcy petitioners carried an average debt of over \$177,873 and a median of \$70,260. This debt burden, combined with lower than average income levels, has led to large debt-to-income ratios for the households in the bankruptcy sample (with a median of 2.8). Hence, at the median, a petitioner's family owed debts of almost three years' worth of income.

The debt burden, along with the lower homeownership rate, contributes to the negative net worth in the bankruptcy sample. Debtors' net worth is an indicator used to assess the debtor's relative financial well-being (Sullivan, Warren & Westbrook, 1989). The mean net worth of the individual bankruptcy petitioner was –\$28,299, and their median net worth was –\$19,110. More than 77.5 percent of the individual petitioners in the bankruptcy sample had a negative net worth compared with 12.6 percent in the general population outside of bankruptcy. This finding is consistent with the findings from previous empirical studies in the United States (Sullivan, Warren & Westbrook, 2001).

#### B. Characteristics of the Small Business Owners in the Sample:

Table 4 shows that almost a quarter of the bankruptcy sample was composed of small business owners. It shows that approximately a third of the small business owners in the sample were individual small business owners (i.e., sole proprietors) and the rest were various business entities (i.e., corporations, LLC, etc.). Individual small business owners constituted 8 percent of the total individual petitioners in the sample.

Table 5A indicates the filing categories and location of the businesses and owners filing for bankruptcy in the sample. Table 5B shows the characteristics of the small business owners demographically. The composition of the sample exhibits distinct

Table 4: Demographic characteristics of individuals and business petitioners in the bankruptcy sample Individual **Individuals Total Business entities business owners** Number Percent Number Percent Number Percent **Total** 1440 76.8 128 6.9 305 16.3 1873 100 Chapter 7 866 60.1 47 36.7 75 24.6 993 52.7 11 14 1.0 38 29.7 75.4 230 293 15.1 13 560 38.9 43 33.6 0 0 617 32.2 **Total** 1440 100.0 128 100.0 305 100.0 1903 100.0 State 209 14.5 13 10.2 88 28.9 311 16.3  $\mathsf{C}\mathsf{A}$ TN 579 40.2 59 46.1 13 4.3 653 34.3 PA 189 13.1 9 7.0 20 6.6 218 11.4 IL25.1 10 7.8 93 30.5 472 24.8 362 TX7.0 37 28.1 91 29.8 249 101 13.1 1440 100.0 100.0 100.0 **Total** 128 305 100.0 1903

Table 5A: Characteristics of the small business/owner filing bankruptcy in the sample				
	Number	Percent		
Category				
Businesses	433	23.1		
Individuals	1440	76.9		
Total	1873	100.0		
Chapter Filing				
7	122	28.2		
11	268	61.9		
13	43	9.9		
Total	433	100.0		
State				
CA	101	23.3		
TN	72	16.6		
PA	29	6.7		
IL	103	23.8		
TX	128	29.6		
Total	433	100.0		

Table 5B: Demograph	ic characteristic	s of the small	business owne	er in the
	samp	ole		
	Business	ses	Indivi	duals
Marital status	Number	Percent	Number	Percent
Single	22	19.1	499	36.3
Married	69	60.0	519	37.7
Div/Sep	20	17.4	304	22.1
Widow	4	3.5	54	3.9
Total	115	100.0	1376	100.0
Gender				
Men	88	75.9	750	55.5
Women	28	24.1	601	44.5
Total	116	100.0	1351	100.0

characteristics that differentiate small business owners from individuals. The selfemployed in the United States are more likely to be male and married than non-business owners (Haynes & Ou, 2002). The data uphold this conclusion.

The self-employed in the bankruptcy sample were not only demographically different from the individuals; they were also financially distinguishable. Outside of bankruptcy, the self-employed/individual business owners report higher earnings and capital wealth compared with individuals (Borjas, 1986; Haynes & Ou, 2002). Tables 6 and 7 also show that the results from this study suggest that the bankrupt self-employed reports a higher income level and a higher value of assets compared with individuals.

Small business owners in the bankruptcy sample were in a more precarious financial position when compared with individual petitioners. For example, Table 8 shows that small business owners reported more debt than individuals did. On average, individuals in the bankruptcy sample reported outstanding debt of \$115,318. In contrast, self-employed petitioners in the sample reported more than seven times the total debt, with an average of \$824,253. A similar disparity in outstanding debt level has been reported in the literature between entrepreneurs and individuals outside of bankruptcy

Table 6: Monthly income					
	Individual Individuals business owners Business entities				
Number	1432	116	56		
Mean (\$)	2,431	6,204	4,507		
Mean without outliers (\$)	2,266	5,007	279		
Median (\$)	2,099	3,645	0		

Table 7: Assets					
	Individuals	Individual business owners	Business entities		
Number	1,436	118	207		
Mean (\$)	100,321	599,555	4,381,229		
Mean without outliers (\$)	64,565	356,277	1,448,424		
Median (\$)	27,426	161,830	407,912		

Table 8: Debts					
	Individuals	Individual business owners	Business entities		
Number	1,436	117	206		
Mean (\$)	115,318	824,253	10,528,174		
Mean without outliers (\$)	89,172	435,425	5,377,976		
Median (\$)	65,197	217,972	1,127,929		

(Haynes & Avery, 1996; Haynes & Ou, 2002). Table 9 shows that these high outstanding debts reported by the small business owners in the bankruptcy sample led to the high debt-to-income ratio. Similarly, Table 10 shows that the high debt levels of the small business owners produced an average net worth almost 20 times lower than that of individuals in the bankruptcy sample.

Table 9: Debt to income ratio				
	Individuals	Individual business owners		
Number	1,432	108		
Mean (\$)	4.04	8.60		
Mean without outliers (\$)	3.20	5.50		
Median (\$)	2.79	3.70		

Table 10: Net worth					
Individual business Individuals owners					
Number	1,434	117			
Mean (\$)	-13,777	-245,466			
<b>Mean Without Outliers (\$)</b>	-20,798	-38,144			
Median (\$)	-18,784	-24,180			

In comparison with individual small business owners, small business entities in the bankruptcy sample reported more debt (Table 8) and, as Table 11 shows, higher value for their real estate holdings.

#### C. Tax Debts of Small Businesses in Bankruptcy:

Tax debts appear to have a pervasive presence in bankruptcy among small business owners. Table 12 shows that almost 30 percent of all petitioners in the bankruptcy sample reported owing some kind of tax debt. However, the table also shows that tax debts appear to affect mainly the individual small business owners. Fewer than a quarter of all individuals in the bankruptcy sample reported tax debts. In contrast, Table 12 shows that more than half of individual small business owners reported owing some tax debt. Table 12 indicates that individual entrepreneurs owed tax debt more often than small business entities. The table also suggests that individual small business owners

Table 11: Real estate holdings					
		Individual			
	Individuals business owners Business entities				
Number	669	85	49		
Percent	49.0	72.0	23.0		
Mean (\$)	166,809	635,065	2,572,083		
Mean without outliers (\$)	126,128	412,743	1,828,724		
Median (\$)	100,000	165,716	1,511,280		

	Table 12: Petitioners with tax debts							
				l business			_	_
	Indiv	iduals	owi	iers	Business	entities	To	tal
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	336	23.3	66	51.6	135	44.3	537	29.2
State								
CA	39	18.6	9	69.2	54	61.1	102	32.9
TN	99	17.1	21	35.6	11	84.6	131	20.1
PA	64	33.8	5	55.5	13	65	82	37.6
IL	68	18.7	7	70	38	40.8	113	24.3
TX	66	65.3	24	64.8	19	20.8	109	47.5
Total	336		66		135		537	
Chapter								
Chapter 7	134	15.5	15	31.9	35	46	184	18.6
Chapter 11	7	50.0	25	65.8	100	43.5	132	46.8
Chapter 13	195	34.8	26	60.4	0	0	221	36.5
Total	336		66		135		537	
Marital status								
Single	106	32.8	13	21.6			119	23.8
Married	139	43.1	38	63.4			177	30.1
Divorced/								
separated	67	20.7	7	11.7			74	22.8
Widow	11	3.4	2	3.3			13	22.8
Total								
Gender								
Male	198	26.4	47	75.8			245	29.2
Female	120	19.9	15	24.2			135	21.4
Total								

from California and Texas most often reported tax debt, while individual small business owners from Tennessee reported tax debt least often.

Table 12 shows that petitioners who report tax debts typically file under either Chapter 11 or Chapter 13. Seventy-five percent of the small business owners in the sample who owed taxes filed under Chapter 11 or Chapter 13. This pattern persisted for both individual small business owners and individual petitioners.

The typical small business owner who reported tax debt was a married man; more than 75 percent of small business owners who reported tax debts were men.

Tables 13, 14, and 15 show that individual small business owners in the bankruptcy sample who reported owing high levels of tax debt<sup>8</sup> also reported higher values of assets, higher real property ownership rates, and higher income levels than their counterparts who owed little or no tax debt.

<sup>&</sup>lt;sup>8</sup> A high level of tax debt is defined here as tax debt in excess of \$10,000.

Table 13: Tax debts and asset holdings by petitioner type					
		Asset holdings			
	Number	Mean (\$)	Median (\$)		
Individuals					
With tax debts	334	113,937	74,421		
With high tax debts	39	175,005	92,850		
With low tax debts	246	103,109	69,179		
With no tax debts	1,102	96,195	19,667		
Individual business owners					
With tax debts	63	898,278	186,517		
With high tax debts	16	1,052,526	375,885		
With low tax debts	25	242,581	124,726		
With no tax debts	55	360,473	102,229		
Business entities					
With tax debts	114	5,726,651	682,825		
With high tax debts	35	1,862,123	735,110		
With low tax debts	26	1,119,944	157,129		
With no tax debts	95	2,698,090	172,294		

Table 14: Tax debts and income by petitioner type						
		Income				
	Number	Mean (\$)	Median (\$)			
Individuals						
With tax debts	333	3,022	2,573			
With high tax debts	37	4,446	2,986			
With low tax debts	247	2,813	2,561			
With no tax debts	1,099	2,252	1,968			
Individual business owners						
With tax debts	62	7,775	4,402			
With high tax debts	15	12,570	6,551			
With low tax debts	25	4,410	3,636			
With no tax debts	54	4,399	3,000			
<b>Business entities</b>						
With tax debts	24	567				
With high tax debts	4					
With low tax debts	6					
With no tax debts	33	7,537				

Table 15: Tax debts and real property holdings by petitioner type						
	Individual business					
	Indiv	iduals	owr	ners	Business	s entities
	Number	Percent	Number	Percent	Number	Percent
Petitioners with tax debts	220	65.9	51	81.0	28	25.0
Petitioners with no tax debts	114	34.1	34	61.8	21	21.9

Table 16: Tax debts and total debts by petitioner type					
	Number	Mean (\$)	Median (\$)		
Individuals					
With tax debts	333	137,781	90,822		
With high tax debts	38	243,031	121,298		
With low tax debts	246	118,051	85,391		
With no tax debts	1,103	108,536	56,654		
Individual business owners					
With tax debts	62	1,217,868	353,623		
With high tax debts	16	972,866	707,874		
With low tax debts	25	248,210	144,686		
With no tax debts	55	380,543	141,155		
<b>Business entities</b>					
With tax debts	112	9,877,991	1,350,273		
With no tax debts	94	11,302,860	658,199		

As shown in Table 16, individual small business owners who reported high tax debts have higher overall debt compared with small business owners who have little or no tax debts. Because of their higher debt levels, individual entrepreneurs with high tax debts have reported a higher debt-to-income ratio and lower net worth (Tables 17 and 18).

Table 17: Debt-to-income ratio by petitioner type				
	Number	Mean	Median	
Individuals				
With tax debts	324	4.2	3.2	
With high tax debts	34	9.8	3.3	
With low tax debts	242	3.5	3.1	
With no tax debts	1,385	4	2.6	
Individual business owners				
With tax debts	56	10.2	4.1	
With high tax debts	13	7.6	3.4	
With low tax debts	24	4.5	3.4	
With no tax debts	52	6.9	3.5	

Table 18: Net worth by petitioner type					
	Number	Mean (\$)	Median (\$)		
Individuals					
With tax debts	333	-23,817	-19,161		
With high tax debts	38	-66,183	-35,334		
With low tax debts	246	-14,942	-17,276		
With no tax debts	1,101	-12,386	-18,997		
Individual business owners					
With tax debts	62	-397,124	-25,561		
With high tax debts	16	79,659	-81,309		
With low tax debts	25	-5,629	-13,347		
With no tax debts	55	-20,070	-26,640		

Table 19 shows that petitioners in the bankruptcy sample who reported tax debts had outstanding tax debt with a median of just under \$4,000. However, small businesses reported higher outstanding tax debts. Individual small business owners reported tax debt averaging over \$120,000, compared with an average of under \$11,000 among individual petitioners.

Similarly, Table 20 shows that small business owners reported higher tax debt-to-income ratios compared with individual petitioners. On average, it would take 15 months of gross earnings for individual small business owners to pay off their outstanding tax debt. In contrast, individual petitioners would need four months.

Table 21 shows that male petitioners who reported owing taxes had higher tax debt levels compared with female petitioners. Male entrepreneurs who reported owing taxes had more than four times more tax debt than did female entrepreneurs. In addition, individual entrepreneurs who owed tax debt and who were single reported higher tax debt compared with petitioners from other marital status categories.

Table 19: Amount of tax debts by petitioner type					
	General population	O 1101 W1			
Number	454	292	56	98	
Mean (\$)	83,131	10,845	121,452	255,403	
Mean without outlier (\$)	23,875	4,565	70,180	112,916	
Median (\$)	3,909	2,000	13,159	43,888	

Table 20: Tax debt to income ratio by petitioner type					
	Individual business				
	Individuals	owners			
Number	284	49			
Mean	0.35	1.29			
Mean without outlier	0.14	0.64			
Median	0.05	0.15			

Table 21: Amount of tax debts among petitioners-by gender and									
petitioner type									
	Number	Mean (\$)	Mean w/o outliers (\$)	Median (\$)					
All Petitioners	All Petitioners								
Male	214	38,344	12,089	2,972					
Female	122	9,330	5,383	2,595					
Individuals									
Male	170	14,256	5,502	2,000					
Female	107	6,567	3,791	2,000					
<b>Business owners</b>	Business owners								
Male	40	141,710	87,969	16,316					
Female	13	32,656	30,233	4,890					

Table 22: Amount of tax debts among petitioners-by marital status and petitioner							
type							
			Mean w/o				
	Number	Mean (\$)	outliers (\$)	Median (\$)			
All Petitioners							
Single	108	20,506	6,466	2,933			
Married	153	29,883	12,427	2,511			
Divorced/separated	66	7,709	4,479	2,257			
Widow	13	133,844	73,918	1,700			
Individuals							
Single	99	6,820	4,184	2,072			
Married	117	14,336	4,974	1,853			
Divorced/separated	59	6,215	3,637	2,000			
Widow	13	35,495	28,305	1,300			
<b>Business owners</b>							
Single	9	162,432	116,273	17,000			
Married	36	81,394	51,246	14,318			
Divorced/separated	7	20,297	18,546	3,000			
Widow	-	-	-	-			

Table 23: Amount of tax debts by bankruptcy chapter and petitioner type						
		Mean w/o				
<u> </u>	Number	Mean (\$)	outliers (\$)	Median (\$)		
All Petitioners						
Chapter 7	163	36,175	13,823	2,966		
Chapter 11	103	294,622	136,555	51,328		
Chapter 13	191	9,153	4,455	2,000		
Individuals						
Chapter 7	119	10,760	4,741	2,110		
Chapter 11	6	117,296	98,383	22,233		
Chapter 13	137	7,080	3,968	1,914		
Individual business owners						
Chapter 7	14	86,070	42,656	6,525		
Chapter 11	22	233,768	185,784	83,330		
Chapter 13	20	22,672	11,435	3,866		
<b>Business entities</b>						
Chapter 7	30	113,701	90,205	37,888		
Chapter 11	68	317,918	126,826	50,236		

Table 23 shows that petitioners with tax debts tended to report higher outstanding tax debts in Chapter 11 cases compared with Chapter 7 and Chapter 13 cases. In addition, Table 24 indicates that petitioners with tax debts tended to report higher outstanding tax

Table 24: Amount of tax debts by judicial district and petitioner type						
	Mean w/o					
	Number	Mean (\$)	outliers (\$)	Median (\$)		
All petitioners						
CA	73	257,633	69,243	11,681		
TN	130	17,337	7,530	1,876		
PA	79	36,619	14,948	3,759		
IL	110	52,436	25,943	3,913		
TX	65	127,214	60,076	9,432		
Individuals						
CA	37	18,671	10,245	4,403		
TN	98	10,807	3,207	1,214		
PA	64	8,671	5,285	2,755		
IL	67	9,740	3,793	2,110		
TX	26	8,047	4,130	1,354		
Individual business owners						
CA	7	507,778	488,255	145,000		
TN	20	22,519	18,762	3,547		
PA	4	6,589	6,346	4,403		
IL	7	69,227	63,998	16,700		
TX	18	126,976	88,110	10,716		
<b>Business entities</b>						
CA	29	502,136	113,550	49,000		
TN	11	59,460	43,833	24,702		
PA	11	210,147	172,026	125,512		
IL	33	139,624	106,649	47,000		
TX	14	206,732	173,397	33,500		

debts in California than other districts in the sample. Similarly, among the small business owners in the bankruptcy sample, Californians reported more than twice as much tax debt as small business owners in the other four districts in the sample.

Table 25 shows that the vast majority of tax debt reported by petitioners was either secured or unsecured priority tax debt. In fact, less than 15 percent of all tax debts were designated by the individual business owners as unsecured non-priority claims, and hence eligible for discharge under the bankruptcy code.

Table 26 shows that petitioners in the bankruptcy sample who owed tax debts primarily owed the tax obligations to the federal government. More than 60 percent of individual entrepreneurs who owed tax debts reported owing them to the federal government. The predominance of federal tax debts was also present among business owners in all three bankruptcy chapters, as well as in most judicial districts.

Table 25: Secured vs. unsecured tax debts and petitioner type						
	Number	Percent		Number	Percent	
All petitioners			Individual business owners			
Secured	109	12.6	Secured	25	21.9	
Unsecured priority	635	73.5	Unsecured priority	73	64.0	
Unsecured non-priority	120	13.9	Unsecured non-priority	16	14.0	
Total	864	100.0	Total	114	100.0	
Individuals			<b>Business entities</b>			
Secured	59	13.2	Secured	15	5.5	
Unsecured priority	314	70.1	Unsecured priority	234	86.0	
Unsecured non- priority	75	16.7	Unsecured non- priority	23	8.5	
Total	448	100.0	Total	272	100.0	

Table 26: Taxing authority						
	Federal		State		Municipal	
	Number	Percent	Number	Percent	Number	Percent
All petitioners	429	49.6	176	20.4	259	30.0
Individuals	240	53.6	54	12.0	154	34.4
<b>Individual business</b>						
owners	71	62.3	17	14.9	26	22.8
<b>Business entities</b>	100	36.8	104	38.2	68	25.0
Chapter						
Chapter 7	42	46.7	30	33.3	18	20.0
Chapter 11	104	40.4	87	33.9	66	25.7
Chapter 13	25	64.1	4	10.3	10	25.6
State						
CA	58	39.7	59	40.4	29	19.9
TN	29	58.0	9	18.0	12	24.0
PA	11	36.7	10	33.3	9	30.0
IL	31	38.3	39	48.1	11	13.6
TX	42	53.2	4	5.0	33	41.8

Table 27: Type of tax debts							
	Number	Percent		Number	Percent		
All petitioners			Individuals				
Income tax	249	47.5	Income tax	162	54.2		
Property tax	168	32.0	Property tax	113	37.8		
Payroll tax	29	5.5	Payroll tax	-			
Sales tax	23	4.5	Sales tax	-			
Other	55	10.5	Other	24	8.0		
Individual business owners			<b>Business entities</b>				
Income tax	53	61.6	Income tax	28	22.2		
Property tax	22	25.6	Property tax	53	24.6		
Payroll tax	5	5.8	Payroll tax	22	17.5		
Sales tax	3	3.5	Sales tax	20	15.9		
Other	3	3.5	Other	25	19.8		

Table 28: The age of the tax debts in years						
	Mean without					
	Number	Mean	outliers	Median		
All petitioners	412	3.18	2.77	2		
Individuals	278	3.49	3.05	2		
Individual business owners	54	2.96	2.66	2		
<b>Business entities</b>	68	2.21	1.99	2		
Chapter						
Chapter 7	160	3.52	3.10	2		
Chapter 11	73	2.52	2.32	2		
Chapter 13	179	3.16	2.72	2		

Table 27 shows that petitioners who owed tax debts attributed a large portion of their tax debts to income tax obligations. Likewise, individual small businesses with tax debts primarily owed income tax debts. The second most frequent type of outstanding tax debt was property tax debt.<sup>9</sup>

Table 28 shows that, on average, tax debts owed by bankruptcy petitioners (both businesses and individuals) were outstanding for approximately three years at the time of the commencement of the bankruptcy petition. In comparison with businesses in the

<sup>&</sup>lt;sup>9</sup> Property taxes among businesses in the United States are similarly pervasive outside of bankruptcy (Cline, Fox, Neubig & Phillips, 2004).

bankruptcy sample, individuals tended to report older tax debts, and individual business owners tended to report older tax debts compared with business entities.

#### V. DISCUSSION

This study provides descriptive empirical data relating to the tax burden carried by small business owners who have sought protection under the bankruptcy system. Previous studies have suggested that the tax burden facing small business owners inevitably prompts some to consider resorting to bankruptcy protection; this study has documented the pervasiveness and magnitude of the tax burden among small business owners in bankruptcy. The data suggest that the tax burden presents more of a hurdle for small business owners in bankruptcy than for individual petitioners. While fewer than a quarter of all individuals in the bankruptcy sample reported tax debts, more than half of individual small business owners reported owing some tax debt.

Individual small business owners in bankruptcy proceedings who are encumbered with high tax debt are generally in a precarious financial condition and are worse off financially than the small business owners who have low or no tax debts. There is also some evidence that a heavy tax burden is also symptomatic of excessive overall indebtedness of the business. Indeed, this study has provided data showing that individual small business owners with high tax debt have also accumulated higher overall debt and debt-to-income ratios compared with the individual entrepreneurs with low tax debt.

Not only is the tax burden pervasive and usually associated with a worsening financial outlook, it is substantial. Individual small business owners who have listed taxes in their bankruptcy schedules reported outstanding tax debt averaging more than \$120,000. These outstanding tax obligations would require the average individual small

business owner to dedicate more than a year of total gross earnings to pay off the tax debt.

With an average age of the typical tax debt of three years, small business owners in the sample may have struggled with their tax obligations for an extended period of time before commencing bankruptcy protection.

Most business owners with tax debt (75 percent) appear to utilize bankruptcy to maintain viability through reorganization under Chapter 11 or 13. The propensity of small business owners with tax debts to file under Chapter 11 or Chapter 13 can also be due to their goal of avoiding liquidation of some key assets under Chapter 7 proceedings.

Such efforts, however, seem to be hindered by the non-dischargeability of the vast majority of outstanding debts in bankruptcy. Only 14 percent of the tax debts reported by the individual small business owners in the bankruptcy sample were designated as unsecured non-priority tax debts; 86 percent of the individual small business owners' tax debts would either have to be paid in full or be non-dischargeable. The non-dischargeability of tax debts, or the bankruptcy code's insistence that they be fully repaid, suggest that many of the entrepreneurs in bankruptcy may be forestalled from obtaining a fresh start. This finding is consistent with a recent study that found that a sizeable number of bankruptcy debtors reported that their financial situation a year after bankruptcy was actually the same as or worse than at the time of their bankruptcy.

Finally, more research is needed to uncover the relationship between tax debt and bankruptcy, and we would be remiss not to recognize the contribution made by Lawless and Warren (2005) in helping understand the strength and weakness of the Administrative Office Data.

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