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THE TAX DEBTS OF SMALL BUSINESS OWNERS IN BANKRUPTCY

Rafael Efrat*

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Tax burden on small business owners in the United States is significant and regressive in nature. Some studies have linked the tax burden on small business owners to lower profitability, lower rate of entrepreneurial growth, and business closures. The tax burden also appears to cause some small business owners to resort to bankruptcy protection. The objective of this study is to investigate the burden tax obligations impose on small business owners at the time of their bankruptcy filing. Specifically, using a national sample, this study ascertains the pervasiveness of tax debts among small business owner bankruptcy petitioners.

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The findings from this study suggest that the tax burden is pervasive to a much greater extent among small business owners in bankruptcy as compared to consumer petitioners. This study also suggests that individual small business owners, who are encumbered with high tax debts, are significantly worse off financially as compared to the small business owners who have low tax debts or no tax debts. This study indicates that the tax burden is also significant in total amount outstanding. Not only did a sizeable number of small business owners in bankruptcy sample report significant tax debts as part of their bankruptcy schedules, tax debts appear to impair the ability of some small business owners from obtaining a financial fresh start.

I. INTRODUCTION

The federal tax code provides a bifurcated treatment towards small business owners. On the one hand, the legislators have incorporated into the tax law a number of provisions that aim to provide incentives for individuals to become entrepreneurs. It also rewards successful operations of a business venture, as well as attempts to cushion the blow when a small business fails.

On the other hand, the tax code is replete with provisions that have the effect of disfavoring small business compared to their large firm counterparts. These unfavorable tax treatments towards small business owners have resulted in small businesses bearing a disproportionately higher tax burden compared to large businesses. Also, the unfavorable tax treatment towards small business owners has created an inhospitable tax environment relative to wage earners. Aside from the increased tax burden on small business owners, the self-employed also experience disproportionately higher tax compliance costs.

As a result, 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 rate of entrepreneurial growth, and business closures. The tax burden also appears to cause some small business owners to resort to bankruptcy protection.¹ Recent studies have found that tax-related problems were

¹ See James H. M. Sprayregen, Dischargeability of Personal Income Taxes in Bankruptcy, 64 AM. BANKR. L.J. 209, 209 (1990) (stating that “[w]ith the disallowance of so many tax shelters by the Internal Revenue Service over the last several years, many persons have found themselves faced with a tremendous tax liability, composed of principal and a huge amount of penalties and interest. Many of those persons have looked to the bankruptcy courts for refuge from these
cited by a sizeable number of small business owners as the reason for their bankruptcy filing. Furthermore, tax problems appear to impair the ability of some small business owners to obtain a financial fresh start. Tax debts appear to remain a post-bankruptcy cause of financial distress of a sizeable number of entrepreneurs because of the nondischargeability of many tax debts.

Given the adverse impact tax related problems have on the financial viability of entrepreneurs both before and after bankruptcy filing, this study investigates the extent and the nature of tax debts among small business owners in bankruptcy. An understanding of the extent and nature of tax debts in bankruptcy would provide policy makers a deeper appreciation of the tax system’s impact on the “fresh start” policy in bankruptcy.

II. THE TAX CODE AND ITS MIXED TREATMENT OF SMALL BUSINESS OWNERS

Recognizing the special economic role played by small businesses in the United States, the federal government has over the years adopted a number of provisions aimed at reducing the tax burden faced by small business owners. Some have estimated the revenue cost of existing favorable small business tax provisions to exceed $6.6 billion. The favorable tax provisions for small businesses include: taxation of small business as pass through entities; expensing allowance for certain business depreciable business assets; graduated tax rate structure for corporate income tax; cash basis accounting; treatment of losses from sales of small business corporation stock as ordinary income; liabilities.

3. See id. at 3 (stating that the Joint Committee on Taxation and the Treasury Dep’t estimated that the small business tax subsidies lowered federal revenues by more than $6.6 billion in fiscal year 2003).
4. See id. at 4.
6. See id. § 11(b).
7. See id. § 446; Rev. Proc. 2001-10, 2001-1 C.B. 272 (concluding that cash method of accounting may be used by most sole proprietorships, S corporations, and partnerships with average annual gross receipts of $1 million or less in the three previous tax years); Rev. Proc. 2002-28, 2002-1 C.B. 815 (concluding that firms with average annual gross receipts of $10 million or less whose main business activity is providing services or fabricating products according to customer designs or specifications).
amortization of business start-up costs;⁹ tax credit for new retirement plan expenses of small firms;¹⁰ exclusion of certain small corporations from the corporate alternative minimum tax;¹¹ uniform capitalization of inventory costs;¹² and the exclusion from taxation of gains on disposition of certain small business stock.¹³

While Congress has adopted a number of favorable tax provisions to help small business owners, the Internal Revenue Code is replete with tax provisions that either expressly single out or have the effect of unfavorably treating small businesses.¹⁴ This adverse treatment includes the nondiscrimination rules governing the distribution of various employee benefit plans.¹⁵ Aside from being unduly complex and expensive to administer, the nondiscrimination rules pertaining to these provisions make the benefits of such plans worth less to the owners of a small company since the provisions sometimes prevent owners or top managers from enjoying the benefits they are being encouraged to extend to their employees.¹⁶

In addition, the tax system's non-favorable treatment of small business owners also results from provisions that favor the corporate form of entity.¹⁷ Since large firms generally incorporate and since most small businesses operate as sole proprietors,¹⁸ small business owners

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9. See id. § 195.
10. See id. § 45E (providing that certain small firms may claim a non-refundable tax credit for a portion of the start up costs in setting up new retirement plans for employees).
11. See id. § 55(e).
13. See I.R.C. § 1202 (2006) (providing that non-corporate taxpayers may exclude fifty percent of any gain from the sale or exchange of qualified small business stock that has been held for more than five years).
15. See I.R.C. § 401 (2006) (qualified pension plans); id. § 79 (group life insurance plans); id. § 422 (employee stock option); id. § 125 (cafeteria plans).
16. See Mastromarco & Burton, supra note 14, at 17-18 (stating that "[t]here are several problems with the nondiscrimination rules. One problem is that the nondiscrimination rules are so complex that small firms end up paying considerably more per employee to establish, administer, and monitor such plans than large firms due to economies of scale. Second, a breach of the complex rules is so costly that those who wish to offer them expose themselves to considerable risks . . . . Third, the nondiscrimination rules make the benefits of such plans worth less to the owners of the company because the benefits must be more skewed towards employees the smaller the firm becomes.").
17. See id. at 5.
18. See id. at 5 (noting that approximately seventy percent of U.S. businesses operate as sole
tend to receive less favorable tax treatment compared to their large firm counterparts. For example, compared to sole proprietors, corporations are entitled to a larger deduction for charitable contributions of inventory property. Also, until recently, the tax code has limited the ability of sole proprietors to deduct health insurance costs, whereas no such limitations have been imposed on corporate taxpayers.

Third, adverse tax treatment towards small firms is also exhibited in the way certain fringe benefit provisions have been crafted. These provisions can provide considerable advantage to a firm in recruiting employees since they allow deductions to the business and exclusions from the taxable compensation of the employee. Nonetheless, the eligibility rules make it less attractive for small businesses to take advantage of the benefits provided by the fringe benefit provisions. For example, self-employed individuals and partners in a partnership are prohibited from participating in a cafeteria plan offered to their employees or receiving the tax benefit from transportation fringe benefits.

Fourth, the tax code effectively disfavors small businesses by offering certain tax benefits that benefit only businesses that are sufficiently large to incur a significant initial capital expenditure. For example, the fair market value of meals provided by an employer to an employee is generally taxable to the employee, unless the employer furnishes meals to the employees at the employer’s cafeteria. The requirement that the meals be provided on the employer’s business

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*proprieto*
premises, in order to be excluded from the employee’s taxable income, suggests that large businesses would primarily qualify for this tax benefit as they are large enough to have their own cafeteria.\textsuperscript{28} Similarly, the value of gym membership is excluded from gross income of employees, but only for those who work for establishments large enough to finance the expenditure of building an on-premise athletic facility.\textsuperscript{29}

Lastly, the tax code places small businesses at a competitive disadvantage compared to large businesses by limiting the control small business owners have in selecting a taxable year.\textsuperscript{30} In contrast, C Corporations are given considerably more flexibility in establishing their taxable year, and may adopt any twelve month fiscal year.\textsuperscript{31}

III. THE TAX BURDEN ON SMALL BUSINESS OWNERS

These unfavorable income tax treatments towards small businesses impose a heavy toll on small business owners.\textsuperscript{32} Tax expenditures can be a significant component of an organization’s operating costs and particularly so for small businesses.\textsuperscript{33} Some studies have found that small businesses are facing a higher tax burden compared to large firms because of the small firms’ inability to take advantage of various tax relief provisions.\textsuperscript{34} Some have contended that small firms pay corporate income taxes at a disproportionately higher rate than the large firms pay.\textsuperscript{35} In one study, researchers demonstrated that on average small businesses pay effective corporate tax rates in the range of twenty-five to thirty percent, which is considerably higher (by as much as six to eight percentage points) than large businesses’ effective corporate tax rates.\textsuperscript{36}

\textsuperscript{28} See Mastromarco & Burton, supra note 14, at 41 (stating that “[s]mall restaurants, for example, might take advantage of this rule because they have built-in food service facilities. However, the requirement that the meals be provided on the employer’s business premises means that the only non-food service firms that could qualify are those large enough to have their own cafeteria.”).

\textsuperscript{29} See id. at 5; I.R.C. § 132(j)(4)(A) (2006).

\textsuperscript{30} See I.R.C. § 441 (2006) (sole proprietors); id. § 1378; Mastromarco & Burton, supra note 14, at 43 (stating that “an S Corporation must have a ‘permitted year,’ but this permitted year is generally a calendar year.”).

\textsuperscript{31} See Mastromarco & Burton, supra note 14, at 43.


\textsuperscript{33} See id.

\textsuperscript{34} See supra notes 14-31 and accompanying text.


\textsuperscript{36} See Innovation & Information Consultants, Inc., supra note 32, at 1, 33.

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Small businesses not only face a higher corporate income tax burden compared to the larger firms, but they also appear to confront an inhospitable tax treatment relative to wage earners. Since the 1980s, self-employment payroll tax rates have increased relative to tax rates of wage workers. In the 1980s, Congress passed a number of limitations on the deductibility of certain business expenses thereby adversely affecting the calculation of net self-employment incomes. Similarly, beginning in 1984, the self-employment payroll tax was increased to equal twice the wage and salary rate. In sum, the income tax and the payroll tax changes in the 1980s significantly reduced the relative tax benefits of being self-employed.

Aside from the increased tax burdens on small business owners arising out of income and payroll tax laws, the tax burden on small business owners had recently experienced a spike due to the rising costs of tax compliance. Tax compliance costs include the costs of meeting the substantive requirements of the tax code; administration and paperwork costs involved in complying with the regulatory framework; the costs arising from the disincentives and duplications attributable to the regulatory framework; and the psychological stress associated with compliance. The cumulative effect of these costs is significant and can be overwhelming. In 2004, the estimated federal tax compliance costs of business filers was in excess of $100 billion, with an estimate of total hours spent on tax compliance of just under six billion hours.

38. See Bruce & Gurley, supra note 37, at 4-5.
39. Id.
40. Id.
41. See id. at 5 (stating that “[d]espite some small gains, it is apparent that the payroll and income tax changes during the 1980s rendered entrepreneurship significantly less tax-advantaged relative to wage-and-salary employment.”).
45. See W. Mark Crain, The Impact of Regulatory Costs on Small Firms 28, 50 (Sept. 2005) (unpublished manuscript, on file with the Small Business Administration.).
46. See Moody, supra note 42, at 10.
These compliance costs with the federal income tax have surged following the tax reform of 1997. The increasing prevalence of these compliance costs is largely due to the continuing complexity of the federal income tax code. In 1955, the federal income tax law was comprised of 103 code sections. By 2002, there were 725 income tax code sections, a 604 percent increase.

This increase in compliance costs has largely had a regressive impact, disproportionately affecting small business owners. Indeed, recent studies have found that the cost of tax compliance is sixty-seven percent higher in small firms than in large firms. Relative to large firms, small firms spend significantly more as a percentage of assets to comply with federal income tax law, and face significantly higher compliance costs as a percentage of sales and per unit of turnover.

Furthermore, tax compliance comprises the largest single element of the compliance burden reported by small business owners. Small businesses are more severely affected by regulations in general, and tax regulations in particular, than large firms because small firms are not as proficient in dealing with the complexities of tax regulation and are unable to sustain the costs of compliance across large scale operations. The significant compliance costs not only burden the small business owners monetarily, but also impose substantial psychic costs.

47. See id. at 1.
48. See id. at 3.
49. See id. at 7.
50. See id.
52. See Crain, supra note 45, at 6. See also Francis Chittenden, et al, Tax Regulation and Small Business in the USA, UK, Australia and New Zealand, 21 INT’L SMALL BUS. J. 93, 97-98 (2003) (finding that small firms face much higher costs per employee compared to large firms); W. Mark Crain & Thomas D. Hopkins, The Impact of Regulatory Costs on Small Firms 31 (2001) (unpublished manuscript, on file with the Small Business Administration) (estimating that tax compliance costs per employee in small businesses range from 1.8 times greater than large firms in the service industry to 4.5 times greater than large firms in the manufacturing industry).
53. See Moody, supra note 42, at 13 (finding that small businesses spend significantly more as a percentage of assets to comply with federal income tax law).
54. See Bickerdyke & Lattimore, supra note 43 at 63-65; Thomas D. Hopkins, Regulatory Costs in Profile 15 (Aug. 1996) (unpublished manuscript, on file with the Center for the Study of American Business) (finding that compliance costs are “0.50 percent of sales for firms with less than $50 million in annual sales to 0.13 percent for firms with $500 million in sales”).
55. See Chittenden, et al, supra note 52, at 93.
56. See id. at 94.
Anecdotally, many small business owners report overwhelming pressure to meet the tax obligations and comply with ubiquitous tax regulations. Some studies have documented the magnitude of these burdens on the small business owners. These studies demonstrate how the tax burdens seriously impair the profitability of small business owners, and cause some to close down. Series of studies have linked higher tax rates with a slower rate of entrepreneurial growth, a slower rate of capital acquisition, and a slower rate of hiring.

IV. THE TAX BURDEN AND BANKRUPTCY FILINGS OF SMALL BUSINESSES

These tax burdens on small businesses, along with other constraints and challenges facing small business owners, inevitably prompt some to consider resorting to bankruptcy protection. In filing for bankruptcy protection, the primary goal of these small business individual entrepreneurs is to obtain a financial fresh start through the discharge provision. Bankruptcy protection in the United States is available to

59. See infra notes 60-62 and accompanying text.
60. See Donald Bruce & Mohammed Mohsin, Tax Policy and Entrepreneurship: New Time Series Evidence 1 (Jan. 2003) (unpublished manuscript, on file with author), available at http://www.be.wvu.edu/div/econ/bruce.pdf (stating that “tax policy influences not only the choice of whether or not to create a new business, but also how the new firm should be organized, and how profitable it can be.”).
61. See Bruce & Gurley, supra note 37, at 20, 24 (finding that a reduction in entrepreneurship marginal tax rate are associated with a decrease in the probability of closure, and specifically that a one percent reduction in marginal tax rate for entrepreneurs would reduce the likelihood of the entrepreneur’s closure by seventeen percentage points for single filers and seven percentage points for married filers); Aparna Mathur, A Spatial Model of the Impact of State Bankruptcy Exemptions on Entrepreneurship 32-33 (July 2005) (unpublished manuscript, on file with the Small Business Administration) (finding that lower taxes in neighboring states increase the probability of business closure in adjoining higher tax states).
62. See, e.g., Carroll et al., supra note 58, at 21 (stating that “[w]e find that when a sole proprietor’s marginal tax rate goes up, the rate of growth of his enterprise goes down.”); Robert Carroll, et al., Income Taxes and Entrepreneurs’ Use of Labor, 18 J. LABOR ECON. 324, 349 (2000); Douglas Holtz-Eakin & Harvey S. Rosen, Economic Policy and the Start-up, Survival, and Growth of Entrepreneurial Ventures 43-44 (May 2001) (unpublished manuscript, on file with the Small Business Administration) (stating that “[a]s tax rates go up, entrepreneurial enterprises grow at a slower rate, they buy less capital, and they are less likely to hire workers.”). See also Steven F. Kreft & Russell S. Sobel, Public Policy, Entrepreneurship and Economic Growth 17 (2003) (W. Va. Univ. Dep’t of Econ. Working Paper No. 03-02) (finding that the existence of state inheritance taxes above the federal level was associated with lower rates of growth in the number of sole proprietors between 1996 and 2000).
63. Id. See also Douglas G. Baird & Edward R. Morrison, Serial Entrepreneurs and Small
both individuals and non-individuals. Non-individual business entities have the option of commencing bankruptcy protection either under Chapter 7 liquidation or under Chapter 11 reorganization. Individuals, who are small business owners, may pursue bankruptcy filing under Chapter 7, 13, or 11 of the bankruptcy code.

Prior research on small businesses in bankruptcy has found that the tax burden is a small but significant contributor to the bankruptcy filing by the small business. The first national and longitudinal study of entrepreneurs in bankruptcy was done in 1994. It followed the bankruptcy experience of 3,377 non-farm companies that first filed for bankruptcy in 1994 and traced their experiences to the end of 1997. The firms most frequently identified outside business conditions (thirty-nine percent), internal business conditions (twenty-seven percent) and financing problems (twenty-eight percent) as the reason for filing for relief. The tax burden was the fourth most frequently cited cause for filing for relief at twenty percent. Other causes for filing for relief included dispute with a particular creditor (nineteen percent), personal problems (seventeen percent) and calamities (ten 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. Among entrepreneurs in the bankruptcy sample, tax related problems were reportedly a serious predicament facing many of them. Indeed,
almost thirteen percent of the entrepreneurs in the bankruptcy sample identified tax problems as a cause of their business collapse.\textsuperscript{76} Tax problems were the third most frequently cited problem by the small business owners.\textsuperscript{77} Among the small business owners in the bankruptcy sample, competition was the most frequently cited cause of the business failure, with almost half of the petitioners identifying competition as such, followed by internal business problems, with just under fifteen percent of the petitioners citing internal problems as the cause of their business failure.\textsuperscript{78}

Not only do a sizeable number of small business owners in bankruptcy attribute their filing to tax related problems, but tax debts appear to impair the ability of some small business owners from obtaining a financial fresh start.\textsuperscript{79} The discharge in bankruptcy is designed to provide individuals, whether consumers or entrepreneurs, the opportunity to begin a financial fresh start.\textsuperscript{80} The debt forgiveness is calculated to provide the debtor with an opportunity for a productive life after bankruptcy that will be free of financial hardship.\textsuperscript{81} A recent study has explored the assumption that personal bankruptcy actually offers individuals a better financial future.\textsuperscript{82} Relying on phone interviews with 359 Chapter 7 bankruptcy petitioners, the researchers examined how the petitioners fared in the year after their bankruptcies.\textsuperscript{83} The findings of that study suggest that for a sizeable number of Chapter 7 debtors, the bankruptcy discharge has not improved their financial condition.\textsuperscript{84} 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 the bankruptcy filings, seem to be experiencing the most challenge in their financial recovery. The debtors, who were reported as 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 have reported financial distress a year after their bankruptcy filing, have identified tax debt as the cause of their post-bankruptcy financial problems. Tax debts appear to remain a cause of post-bankruptcy financial distress of many entrepreneurs because of the nondischargeability provisions of many tax debts under the bankruptcy code.

Examination of the pervasiveness of tax debts among small business owners remains understudied. A recent study has explored the pervasiveness of tax debts in corporate Chapter 11 bankruptcy cases filed in and near Chicago. It found that sixty-one percent of the corporate Chapter 11 bankruptcy cases filed in 1998 reported federal tax debts. It also found that among those corporate debtors with federal tax debt, unpaid taxes accounted for twelve percent of total debt. The study provided valuable insight regarding the pervasiveness of tax debts among corporate businesses in Chapter 11 bankruptcy. However, the study did not explore the pervasiveness of the tax debts among the broader population of small business owners in bankruptcy, namely sole proprietors who have filed under Chapter 7, 11, or 13 as well as corporate small business owners in Chapter 7. Moreover, the study

85. See id. at 87.
86. See id. at 83-84.
87. See Richard F. Fullenbaum and Mariana A. McNeill, The Function of Failure 22 (1994) (unpublished manuscript, on file with the U.S. Dep't of Commerce) (finding that bankruptcy petitioners, who were former small business owners and remained so after bankruptcy filings, were experiencing much slower financial recovery than wage and salary workers).
88. See Porter & Thorne, supra note 82, at 84-85.
89. Id.
90. Id.
92. See Efrat, supra note 42, at 207.
93. Baird & Morrison, supra note 64, at 2319.
94. See id. at 2346.
95. See id.
96. See id.
97. See id. at 2319.
focused on a regional sample, rather than a national sample. 98 Lastly, it appears to have focused entirely on federal tax debts and ignored examination of other sources of tax debts (such as state taxes) or other facets of tax debts (such as whether the debt is secured or the debt’s age). 99

Given the documented adverse impact tax debts have on the financial viability of petitioners both before and after bankruptcy filing, this study investigates the burden tax obligations impose on small business owners (both individuals and entities) at the time of their bankruptcy filing. Specifically, using a national sample, this study ascertains the pervasiveness of tax debts among small business owner bankruptcy petitioners. Also, this study reports the amount of tax debt small business owners typically report at the time of their bankruptcy filing. Similarly, this study scrutinizes the tax burden at the time of bankruptcy filing relative to outstanding debt and income of the small business owners in bankruptcy. Furthermore, this study analyzes the nature of tax debt reported by small business owner bankruptcy petitioners. Also, this paper examines the characteristics of the small business owners in bankruptcy who tend to report tax obligations and contrast those characteristics with the ones of consumer petitioners who have reported tax debts. In addition, this study examines the extent to which there are disparities in the amount and the type of tax debt reported by small business owners in the various bankruptcy Chapters. Lastly, this study attempts to document the extent to which tax debts reported by small business owners at the time of their bankruptcy filings are nondischargeable.

V. METHODOLOGY

The data for this project was based on a nationally representative sample of 1,903 bankruptcy schedules filed by petitioners (both individuals and entities) between October 17, 2005 and October 16, 2006. This period of time was selected to coincide with the new bankruptcy legislation that became effective on October 17, 2005. 100 The sample was composed of an examination of bankruptcy schedules from five different judicial districts. The bankruptcy schedules were
accessed through the PACER system. Access to this database has been
granted by the Clerks of the Courts of the various judicial districts.

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
districts were chosen from five different states and included five major
metropolitan areas to provide geographic diversity and to take into
account different legal cultures.101

In each district, I 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.102 Over half of the petitions in the sample were from Chapter 7
petitions, fifteen percent were from Chapter 11, and almost a third were
from Chapter 13 of the Bankruptcy Code.103

The sample included individuals (consumers and sole proprietors)
and entities. Sole proprietors were identified by searching for self-
employment data in the bankruptcy petition, 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. Entities were automatically
designated as small businesses to the extent they met the definition of
small business under SBA’s Small Business Size Regulations.104 This
sample size is approximately the same as or larger than the sample sizes
in similar studies of economic or financial issues.105

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

Data from the bankruptcy schedules was coded and tabulated by
trained student assistants into a specially designed Microsoft Access
database. To ensure accuracy, the work of each student assistant was
reviewed by another student in order to detect errors. For analysis, the

101. The composition of cases from the five districts was as follows: California: 311;
Tennessee: 653; Pennsylvania: 218; Illinois: 472; and Texas: 249.

102. The random selection was done by selecting every third case listed in the court docket
based on chronological order. In order to obtain a sufficiently large number of Chapter 11
bankruptcy petitions, every other case was selected from the Chapter 11 court docket.

103. There were 993 Chapter 7 petitions, 293 Chapter 11 petitions, and 617 Chapter 13 cases.


105. See TERESA A. SULLIVAN ET AL., AS WE FORGIVE OUR DEBTORS: BANKRUPTCY AND
data was exported into SPSS, a statistical software package. Analyses included frequencies of all variables. *t* tests were performed to investigate differences in the population. The statistical significance of the interaction variables was tested by the usual *t* test (*p < .05*).

VI. THE RESULTS

A. General Characteristics of the Bankruptcy Sample:

Individual petitioners made up the majority of the bankruptcy sample of almost eighty-two percent. 106 Males, who constituted fifty-seven percent of the sample, were somewhat more represented in the bankruptcy sample compared to the general population in the United States. 107 Women were similarly represented in both Chapter 7 and Chapter 13 of the Bankruptcy Code, but were under-represented in Chapter 11 of the Bankruptcy Code, where they only made up nineteen percent of individual petitioners. 108 Most of the individual petitioners were married, but a third of them were single. 109

While the bankruptcy population in the sample is demographically similar in some respects to the general population, it is financially remarkably different. Its earnings are considerably lower, with a median annual household income of $25,584, compared to the median household income in the country of $46,242. 110

106. Out of 1,903 petitioners in the bankruptcy sample, 1,568 were individuals, including consumers and sole proprietors.

107. In the bankruptcy sample, males made up 57.1 percent of the sample (n=850), while females made up 42.9 percent of the sample (n=638). In contrast, according to the 2005 American Community Survey, men were 49 percent of the general population. See American Community Survey, available at http://factfinder.census.gov/servlet/STTable?_bm=y&-geo_id=01000US&-qr_name=ACS_2005_EST_G00_S0101&-ds_name=ACS_2005_EST_G00_. The gender balance in the bankruptcy sample was similar in all five districts. In California, 41.6 percent of the individual petitioners were female (n=92). In Tennessee, women made up 40.8 percent of the individual petitioners (n=255). In Pennsylvania, women constituted 46.6 percent of the individual petitioners (n=82). In Illinois, females accounted for 48 percent of the bankruptcy petitioners (n=158). Lastly, in Texas, women represented 37.2 percent of the sample (n=51).

108. In Chapter 7, women made up 46 percent (n=394) of the individual petitioners. Similarly, in Chapter 13, women made up 40.2 percent (n=235) of the individual petitioners. In contrast, in Chapter 11, women made up only 19.1 percent (n=9) of the individual petitioners.

109. In the bankruptcy sample, 34 percent were single (n=499); 40 percent were married (n=588); 22.1 percent were divorced or separated (n=324) and 3.9 percent were widowed (n=58).

110. The median monthly household income in the bankruptcy sample was $2,132, with a monthly mean of $2,776 ($2,312 without outliers), and a standard deviation of 5,865. See 2005 American Community Survey, available at http://factfinder.census.gov/servlet/STTable?_bm=y&-geo_id=01000US&-qr_name=ACS_2005_EST_G00_S1901&-ds_name=ACS_2005_EST_G00_&
Differences between the two groups are also reflected in homeownership rates. Outside of bankruptcy almost two-thirds of the population owns homes nationwide, compared to forty-seven percent of individuals in the bankruptcy sample. Similarly, the median fair market value of the houses owned by the individual bankruptcy petitioners was $107,200 compared to a $217,000 median price across the nation in 2006.

Moreover, the individual bankruptcy petitioners were deep in debt with an average of over $177,873 and a median outstanding debt of $70,260. This heavy debt burden, along with low income levels, has contributed to a large debt-to-income ratio for the households in the bankruptcy sample with a median of 2.8. Hence, at the median, a petitioner’s family-owned debts almost three years’ worth of income.

The heavy debt burden along with the lower homeownership rate contributed to the large negative net worth in the bankruptcy sample. Debtor’s net worth is a vital indicator used to assess the debtor’s relative

 redoLog=false. The median household income reported in this bankruptcy sample is similar to the median household income of $20,172 found in a recent national bankruptcy study. Teresa A. Sullivan et al., Less Stigma or More Financial Distress: An Empirical Analysis of the Extraordinary Increase in Bankruptcy Filings, 59 STAN. L. REV. 213, 222-223 (2006).

111. See U.S. Census Bureau, 2005 American Community Survey, http://factfinder.census.gov/servlet/GCTTable?_bm=y&-_geo_id=01000US&_box_head_nbr=GCT2512&-ds_name=ACS_2005_EST_G00&_lang=en&_mt_name=ACS_2005_EST_G00_GCT2512_US9&-format=US-9 http://quickfacts.census.gov/qfd/states/06/06037.html (last visited June 18, 2007) (reporting a homeownership rate nationwide in 2005 at 66.9 percent). The homeownership rate among individual petitioners reported in this bankruptcy sample, 47.7 percent (n=781), is consistent with previous empirical findings on homeownership in bankruptcy. Sullivan et al., supra note 110, at 224 (reporting that half of the individual petitioners in the national bankruptcy sample owned a home at the time of their bankruptcy filing).


113. The mean was $177,873 ($101,010 without outliers). The standard deviation was 924,271. A recent national bankruptcy study has found a somewhat lower outstanding debt amount for the bankruptcy petitioners with an average of $90,894 and a median of $63,486. See Sullivan et al., supra note 110, at 224.

114. The average debt-to-income ratio of the debtor’s household in the bankruptcy sample was 4.4 (3.3 without outliers), and a median of 2.8. To make the debt-to-income ratio a useful account of the financial condition of the petitioner, I did not measure total debt of all petitioners against total income of all petitioners. Instead, I measured the debt-to-income ratio on a debtor-by-debtor basis and then averaged the ratios. Also, I omitted from the sample petitioners reporting no income since arithmetically I would not be able to divide total debt by zero. Hence, the debt-to-income ratio reported here understates the true debt-to-income ratio of the sample. A recent empirical bankruptcy study across a number of districts has found a somewhat higher debt-to-income ratio with a median of 3.04, with an average ratio of 4.35. See Sullivan et al., supra note 110, at 230-31.
financial well being. The mean net worth of the individual bankruptcy petitioner in the sample was a negative $28,299, and their median net worth was a negative $19,110. An overwhelming 77.5 percent of the individual petitioners in the bankruptcy sample had a negative net worth compared to only 12.6 percent in the general population outside of bankruptcy.

B. Characteristics of the Small Business Owners in the Sample

Almost a quarter of the bankruptcy sample was composed of small business owners. Approximately a third of the small business owners in the sample were individual small business owners and the rest were various business entities. Individual small business owners constituted eight percent of the total individual petitioners in the sample.

The small business owners were demographically dramatically different than the wage earners in the bankruptcy sample. Self-employed households in the United States tend to be male and married as compared to non-business owner households. Similarly, the

115. SULLIVAN ET AL., supra note 105, at 70.

116. The average without the outliers was negative $28,299. The standard deviation was 856,996. In order to make the net worth calculation a useful account of the financial condition of the petitioner, I did not measure total assets of all petitioners against total liabilities of all petitioners. Instead, I measured the net worth on a debtor-by-debtor basis and then averaged the results. Similar general findings were reported in previous studies of bankruptcy petitioners, although the extent of negative net worth was measurably higher in this study. See TERESA A. SULLIVAN ET AL., THE FRAGILE MIDDLE CLASS 72 (Yale Univ. Press 2000) (stating that “[t]he mean net worth of the bankrupt debtors is negative $16,819, and their median net worth is negative $10,542.”).

117. This finding is consistent with the findings from previous empirical studies in the United States. See, e.g., SULLIVAN ET AL., supra note 116, at 72 (stating that “[o]nly 12.6 percent of the total United States population had a net worth of zero or negative value, compared with nearly all of the bankrupt debtors.”).

118. There were 433 small business owners in the sample making up 23.1 percent of the total sample.

119. There were 128 sole proprietors and 305 entities in the sample. In Chapter 7, 28.2 percent of the petitioners were small business owners (n=122). In Chapter 11, 61.9 percent were small business owners (n=268). In Chapter 13, 9.9 percent were small business owners (n=43).

120. There were 1,440 consumers and 128 sole proprietors in the sample. This rate of sole proprietors is within range with other studies that have examined sole proprietors in bankruptcy.

entrepreneurs in the bankruptcy sample were more likely to be male and married compared to the wage earners in the sample.\textsuperscript{122}

The self-employed in the bankruptcy sample were not only demographically different than the wage earners, but they were also financially distinguishable. Outside of bankruptcy, the self-employed report higher earnings and capital wealth compared to the wage earners.\textsuperscript{123} Similarly, the results from this study suggest that the bankrupt self-employed report a higher income level\textsuperscript{124} and a superior value of assets.\textsuperscript{125}

Despite higher earnings and asset accumulation, the small business owners in the bankruptcy sample were noticeably more financially fragile compared to the wage earners. For example, small business owners in the sample reported significantly more debts compared to the wage earners in the sample. On average, wage earners in the bankruptcy sample reported outstanding debts of $115,318.\textsuperscript{126} In contrast to the

\textsuperscript{122} Among the self-employed in the bankruptcy sample, 75.9 percent were male (n=88) and 24.2 percent were female (n=28). In contrast, among the wage earners in the bankruptcy sample, only 55.5 percent were male (n=750) and 44.5 percent were female (n=601). Among the self-employed in the bankruptcy sample, 19.1 percent were single (n=22), 60 percent were married (n=69), 17.4 percent were divorced or separated (n=20), 3.5 percent were widowed (n=4). In contrast, among the wage earners in the bankruptcy sample, 35.2 percent were single (n=499), 38.3 percent were married (n=519), 22.5 percent were divorced or separated (n=304), 4 percent were widowed (n=54). These differences were deemed statistically significant at p=0.000.

\textsuperscript{123} See George J. Borjas, The Self Employment Experience of Immigrants, 21 J. HUM. RESOURCES 485, 487 (1986) (finding that self employed workers have higher income than salaried workers). See also Haynes & Ou, supra note 121, at 8 (finding that business owners have higher income and higher net worth compared to non-business owners).

\textsuperscript{124} In the bankruptcy sample, self-employed petitioners reported an average monthly income of $6,204 ($5,007 without outliers), with a median of $3,645 and a standard deviation of 8,041 (n=116). In contrast, wage earners reported monthly average income of $2,431 ($2,266 without outliers), and a median of $2,099 with a standard deviation of 2,032 (n=1,432). The difference between the two groups was deemed statistically significant at p=0.000.

\textsuperscript{125} In the bankruptcy sample, self employed petitioners reported on average assets worth $599,555 ($356,277 without outliers), with a median of $161,830 and a standard deviation of 1,310,786 (n=118). In contrast, wage earners reported average asset holdings of $100,321 ($64,565 without outliers), and a median of $27,426 with a standard deviation of 375,478 (n=1,436). The difference between the two groups was deemed statistically significant at p=0.000. The higher value of assets held by the small business owners in the sample could be attributed to the higher homeownership rate of the business owners. While 72 percent (n=85) of the small business owners owned a house, only 46.5 percent (n=669) of the wage earners owned one. Also, the average fair market value of the houses reported by the small business owners in the sample was $635,065 ($412,743 without outliers), with a median of $165,716 and a standard deviation of 1,215,568 (n=81), compared to an average among the wage earners of $166,809 ($126,128 without outliers), with a median of $100,000 and a standard deviation of 407,447 (n=669). These differences between the two groups were deemed statistically significant at p=0.000.

\textsuperscript{126} Without outliers, the total debts reported by the wage earner petitioners in the bankruptcy sample was $89,174, with a median of $65,197 and a standard deviation of 289,283 (n=1436).
wage earners, self-employed petitioners in the sample reported more than seven times as much in total debts, with an average of $824,253. 127 A similar disparity in outstanding debt level has been reported between entrepreneurs and wage earners outside of bankruptcy as well. 128

These devastatingly high outstanding debts reported by the small business owners in the bankruptcy sample resulted in their exceedingly high debt-to-income ratio compared to the ratio among the wage earners. 129 Similarly, the soaring debt levels of the small business owners produced a net worth inferior by as much as ten fold compared to the wage earners in the bankruptcy sample. 130

In comparison to individual small business owners, small business entities in the bankruptcy sample reported significantly more debts 131 and significantly higher value for their real properties. 132 Entities also reported higher assets and lower incomes, but those differences were not statistically significant. 133

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127. Without outliers, the total debts reported by the self-employed petitioners in the bankruptcy sample was $435,425, with a median of $217,972 and a standard deviation of 3,116,386 (n=117).

128. See George W. Haynes & Rosemary J. Avery, Family Businesses: Can the Family and Business Finances be Separated? Preliminary Results, 5 J. ENTREPRENEURIAL & SMALL BUS. FIN. 61, 71-73 (1996) (finding that small business owners hold more debt than non-business owning families). See also Haynes & Ou, supra note 121, at 5 (suggesting that small business owners hold more debt than non-business-owning families).

129. Among the self-employed individuals in the bankruptcy sample, the average debt-to-income ratio was 8.6 (5.5 without outliers), with a median of 3.7 and a standard deviation of 21.7 (n=108). In contrast, among the wage earners in the bankruptcy sample, the average debt-to-income ratio was 4.04 (3.2 without outliers), with a median of 2.79 and a standard deviation of 6.2 (n=1383). The difference was deemed statistically significant at p=0.000.

130. Among the self-employed in the bankruptcy sample, the average net worth was negative $245,466 (negative $38,144 without outliers), with a median of negative $24,180 and a standard deviation of 314,500 (n=117). In contrast, among the wage earners in the bankruptcy sample, the average net worth was negative $13,777 (negative $20,798 without outliers), with a median of negative $18,784 and a standard deviation of 215,100 (n=1,434). The difference was deemed statistically significant at p=0.013.

131. Individual small business owners reported average total debt of $824,253 ($435,425 without outliers), with a median of $217,972 and a standard deviation of 3,116,386 (n=117). In contrast, entities reported average total debt of $10,528,174 ($5,377,976 without outliers), with a median of $1,127,929 and a standard deviation of 28,262,658. The difference was deemed statistically significant at p=0.000.

132. The average fair market value of the real property reported by the small business owners in the sample was $635,065 ($412,743 without outliers), with a median of $165,716 and a standard deviation of 1,215,568 (n=81), compared to an average among the small business entities of $2,572,083 ($1,828,724 without outliers), with a median of $1,511,280 and a standard deviation of 4,113,720 (n=46). The difference was deemed statistically significant at p=.0000.

133. In the bankruptcy sample, self employed petitioners reported average assets worth $599,555 ($356,277 without outliers), with a median of $161,830 and a standard deviation of 1,310,786 (n=118). In contrast, among the small business entities the average value of their assets...
C. Tax Debts of Small Businesses in Bankruptcy

Tax debts appear to have a pervasive presence in bankruptcy. Almost thirty percent of all petitioners in the bankruptcy sample reported owing some kind of tax debts. However, tax debts appear to predominantly affect the individual small business owners. Less than a quarter of all wage-earners in the bankruptcy sample reported tax debts. In contrast, more than half of individual small business owners reported owing some tax debts. Individual entrepreneurs reportedly owed tax debts more often than small business entities. Small business owners from California reported tax debts most often, while small businesses from Texas reported tax debts least often.

Petitioners who report tax debts typically file either under Chapter 11 or under Chapter 13. In Chapter 7, less than a fifth of the petitioners reported owing any tax debts compared to more than a third in Chapter

was $4,381,229 ($1,448,424 without outliers), with a median of $407,912. Also, self employed petitioners reported on average monthly income of $6,204 ($5,007 without outliers), with a median of $3,645 and a standard deviation of 8,041 (n=116). In contrast, the small business entities reported monthly average earnings of $4,507 ($279 without outliers), with a median of $0.00 and a standard deviation of 26,908. These differences were not deemed statistically significant.

Specifically, 28.7 percent (n=537) of the bankruptcy petitioners in the sample reported owing some tax debts.

Specifically, 23.3 percent (n=336) of the consumer petitioners in the sample reported owing some tax debts. In contrast, 51.6 percent (n=66) of the individual small business owner petitioners in the sample reported owing some tax debts. This difference was deemed statistically significant at p=0.000.

Specifically, 51.6 percent (n=66) of the individual small business owner petitioners in the sample reported owing some tax debts. In contrast, 44.3 percent of small business entities in the sample reported owing some tax debts. This difference was deemed statistically significant at p=0.000.

Among small business owners in the bankruptcy sample, tax debts were reported in the following frequencies: California: 62.4 percent (n=63); Tennessee: 44.4 percent (n=32); Pennsylvania: 62.1 percent (n=18); Illinois: 43.7 percent (n=45); and Texas: 33.6 percent (n=43). These differences were deemed statistically significant at p=0.000. Among individual small businesses in the sample, tax debts were reported in the following frequencies: California: 69.2 percent (n=9); Tennessee: 35.6 percent (n=21); Pennsylvania: 55.6 percent (n=5); Illinois: 70 percent (n=7); and Texas: 64.9 percent (n=24). These differences were deemed statistically significant at p=0.020. Among entities in the bankruptcy sample, tax debts were reported in the following frequencies: California: 61.4 percent (n=54); Tennessee: 84.6 percent (n=11); Pennsylvania: 65 percent (n=13); Illinois: 40.9 percent (n=38); and Texas: 20.9 percent (n=19). These differences were deemed statistically significant at p=0.000. Among consumers in the bankruptcy sample, tax debts were reported in the following frequencies: California: 18.7 percent (n=39); Tennessee: 17.1 percent (n=9921); Pennsylvania: 33.9 percent (n=64); Illinois: 18.8 percent (n=68); and Texas: 65.3 percent (n=66). These differences were deemed statistically significant at p=0.000.
13 and almost half of petitioners in Chapter 11. This pattern persisted for both businesses and consumer petitioners. The typical small business owner who reported tax debts was a married man. Almost two-thirds of the small business petitioners were married and only a fifth were single. Also, more than seventy-five percent of small business owners who reported tax debts were men.

Compared to small business individuals who owed no tax debts, small business owners in the bankruptcy sample, who reported owing tax debts, appear to have higher value of held assets, higher real property ownership rates, and higher income levels. Nonetheless, individual entrepreneurs with tax debts reported total assets with a mean value of $808,278 (n=63), with a median of $186,517 and a standard deviation of 1,561,540. In contrast, individual entrepreneurs with no tax debts reported total assets with a mean value of $360,473 (n=55), with a median of $102,229 and a standard deviation of 902,208. This difference was not deemed statistically significant at p=0.064. Similarly, entities with tax debts reported total assets with a mean value of $5,757,499 (n=113), with a median of $654,650 and a standard deviation of 7,355,150. In contrast, entities without tax debts reported total assets with a mean value of $2,726,778 (n=94), with a median of $174,887 and a standard deviation of 7,355,150. This difference was not deemed statistically significant.

Efrat: The Tax Debts of Small Business Owners in Bankruptcy
individual small business owners, who are encumbered with tax debts, seem to be in an overall worse financial shape as compared to the small business owners who do not have tax debts. This appears to be due to the exceedingly higher debt levels individual small business owners with tax debts seem to have accumulated compared to the individual entrepreneurs without any tax debts. As a result of their higher debt levels, entrepreneurs with tax debts have reported a somewhat higher debt-to-income ratio and somewhat lower net worth.

This pattern is much more robust when comparing individual entrepreneurs with high tax debts vs. individual entrepreneurs with low tax debts. Compared to individual small business owners with low tax debts, individual small business owners in the bankruptcy sample, who reported owing high tax debts, have significantly higher value of assets holding and significantly higher income levels. Nonetheless,

individual entrepreneurs with no tax debts reported a total monthly income with a mean value of $4,399 (n=54), with a median of $3,000 and a standard deviation of 6,675. This difference was deemed statistically significant at p=0.023. Unlike individual entrepreneurs, entities with tax debts reported a total monthly income with a mean value of $160 (n=23), with a median of $0.00 and a standard deviation of 770. In contrast, entities without tax debts reported a total monthly income with a mean value of $7,537 (n=33), with a median of $0.00 and a standard deviation of 34,943. This difference was not deemed statistically significant.

Individual entrepreneurs with tax debts reported total debts with a mean value of $1,217,868 (n=62), with a median of $353,623 and a standard deviation of 4,206,497. In contrast, individual entrepreneurs with no tax debts reported total debts with a mean value of $380,543 (n=55), with a median of $141,155 and a standard deviation of 704,080. This difference was not deemed statistically significant. Unlike individual entrepreneurs, entities with tax debts reported total debts with a mean value of $9,877,991 (n=112), with a median of $1,332,302 and a standard deviation of 26,610,761. In contrast, entities without tax debts reported total debts with a mean value of $11,302,860 (n=94), with a median of $11,302,860 and a standard deviation of 30,239,719. This difference was not deemed statistically significant.

Individual entrepreneurs with tax debts reported total debt-to-income ratio with a mean value of 10.2 (n=56), with a median of 4.08 and a standard deviation of 28.4. In contrast, individual entrepreneurs with no tax debts reported total debt-to-income ratio with a mean value of 6.9 (n=52), with a median of 3.5 and a standard deviation of 10.6. This difference was not deemed statistically significant. Also, individual entrepreneurs with tax debts reported a total net worth with a mean value of -$397,124 (n=62), with a median of -$25,561 and a standard deviation of 4,157,678. In contrast, individual entrepreneurs with no tax debts reported a total net worth with a mean value of -$20,070 (n=55), with a median of -$26,640 and a standard deviation of 434,605. This difference was not deemed statistically significant.

High tax debt is defined for our purposes as those debtors with total tax debts exceeding $10,000.

Individual entrepreneurs with high tax debts reported total assets with a mean value of $1,052,526 (n=16), with a median of $375,885 and a standard deviation of 1,694,204. In contrast, individual entrepreneurs with low tax debts reported total assets with a mean value of $242,581 (n=25), with a median of $124,726 and a standard deviation of 550,696. This difference was deemed statistically significant at p=0.032. Similarly, entities with tax debts reported total assets with a mean value of $5,757,499 (n=113), with a median of $654,650 and a standard deviation of 434,605.
individual small business owners, who are encumbered with high tax debts, are in a significantly worse overall financial condition as compared to the small business owners who have low tax debts. This is due to the significantly higher debt levels individual small business owners with high tax debts have accumulated compared to the individual entrepreneurs with low tax debts. As a result of their higher debt levels, entrepreneurs with high tax debts have reported a significantly higher debt-to-income ratio.

Petitioners in the bankruptcy sample who reported tax debts had outstanding tax debts with a median of just under $4,000. However, small businesses in the sample reported significantly higher outstanding tax debt and a significantly higher tax burden as compared to consumer petitioners. Small business owners in the bankruptcy sample reported outstanding tax debts with a median of over $27,000, compared to a

7,355,150. In contrast, entities without tax debts reported total assets with a mean value of $2,726,778 (n=94), with a median of $174,887 and a standard deviation of 7,355,150. This difference was not deemed statistically significant.

149. Individual entrepreneurs with high tax debts reported a total monthly income with a mean value of $12,570 (n=15), with a median of $6,551 and a standard deviation of 13,155. In contrast, individual entrepreneurs with low tax debts reported a total monthly income with a mean value of $4,410 (n=25), with a median of $3,636 and a standard deviation of 3,088. This difference was deemed statistically significant at p=0.005. Similarly, small business owners in the sample (individuals and entities) with high tax debts reported a total monthly income with a mean value of $9,923 (n=19), with a median of $5,237 and a standard deviation of 12,741. In contrast, small business owners in the sample (individuals and entities) with low tax debts reported a total monthly income with a mean value of $3,556 (n=31), with a median of $3,201 and a standard deviation of 3,281. This difference was deemed statistically significant a p=0.011.

150. Individual entrepreneurs with low tax debts reported total debts with a mean value of $972,866 (n=16), with a median of $707,874 and a standard deviation of 804,779. In contrast, individual entrepreneurs with low tax debts reported total debts with a mean value of $248,210 (n=25), with a median of $144,686 and a standard deviation of 347,516. This difference was deemed statistically significant at p=0.000. A somewhat similar pattern was detected in the entire small business sample. Small business owners in the sample (individuals and entities) with high tax debts reported total debts with a mean value of $1,963,426 ($1,280,974 without outliers)(n=50), with a median of $921,745 and a standard deviation of 3,849,200. In contrast, small business owners in the bankruptcy sample (individuals and entities) with low tax debts reported total debts with a mean value of $5,748,637 ($564,956 without outliers) (n=50), with a median of $235,045 and a standard deviation of 26,217,894. This difference was not deemed statistically significant.

151. Individual entrepreneurs with high tax debts reported total debt-to-income ratio with a mean value of 7.6 (7.7 without outliers) (n=13), with a median of 3.4 and a standard deviation of 3.9. In contrast, individual entrepreneurs with low tax debts reported total debt-to-income ratio with a mean value of 4.5 (3.7 without outliers) (n=24), with a median of 3.4 and a standard deviation of 4.4. This difference was deemed statistically significant at p=0.040. The same debt-to-income ratio differences appear among all small business owners in the sample (individuals and entities).

152. Petitioners in the bankruptcy sample who reported tax debts had on average $83,131 in outstanding tax debts ($23,875 without outliers) (n=454), with a median of $3,909 and a standard deviation of 933,495.
reported median of only $2,000 among consumer petitioners. Similarly, small business owners in the bankruptcy sample reported significantly higher tax debts-to-income ratio when compared to consumer petitioners. On average, it would take fifteen months of gross earnings of individual small business owners to pay off their outstanding tax debts. In contrast, it would take only four months of gross income of consumers to pay off their outstanding tax debts.

Petitioners with tax debts tended to report significantly higher outstanding tax debts in Chapter 11 cases compared to Chapter 7 and Chapter 13 cases. Also, petitioners with tax debts tended to report significantly higher outstanding tax debts in California as compared to the other districts in the sample. Similarly, among the small business

153. Consumer petitioners, who reported tax debts in their bankruptcy schedules, had on average $10,845 outstanding tax debts ($4,565 without outliers) (n=292), with a median of $2,000 and a standard deviation of 42,644. In contrast, small businesses in the bankruptcy sample (both individuals and entities), who reported tax debts in their bankruptcy schedules, had on average $206,693 outstanding tax debts ($96,867 without outliers) (n=154), with a median of $27,561 and a standard deviation of 933,495. This difference between small business owners and consumers in the bankruptcy sample was deemed statistically significant at p=0.000. While small business entities in the bankruptcy sample, who reported tax debts, had higher tax debts than individual small business owners in the sample, the difference was not deemed statistically significant. Small business entities, with tax debts, reported an outstanding tax debt with an average of $255,403 ($112,916 without outliers) (n=98), with a median of $43,888 and a standard deviation of 11,507. Individual small business owners, who reported tax debts, had an outstanding tax debts with an average of $121,452 ($70,180 without outliers) (n=56), with a median of $13,159 and a standard deviation of 27,762.

154. The tax debt to income ratio was calculated by dividing the petitioners' total tax debts by their annual gross income. The average tax debt to income ratio for small business owners in the sample was 1.3 (.67 without outliers) (n=50), with a median of 0.15 and a standard deviation of 3.6.

155. The average tax debt to income ratio for consumers in the sample was 0.35 (0.14 without outliers) (n=284), with a median of 0.05 and a standard deviation of 1.2.

156. Petitioners filing under Chapter 7 in the bankruptcy sample reported tax debts with an average of $36,175 ($13,823 without outliers) (n=163), with a median of $2,966 and a standard deviation of 116,884. Petitioners filing under Chapter 11 in the bankruptcy sample reported tax debts with an average of $294,622 ($136,555 without outliers) (n=103), with a median of $51,328 and a standard deviation of 1,154,048. Petitioners filing under Chapter 13 in the bankruptcy sample reported tax debts with an average of $9,153 ($4,455 without outliers) (n=191), with a median of $2,000 and a standard deviation of 26,493. The differences between the three Chapters were deemed statistically significant at p=0.000. A similar pattern exists within the various chapters among small business owners in the bankruptcy sample. However, the differences were not deemed statistically significant. Business owners filing under Chapter 7 in the bankruptcy sample reported tax debts with an average of $104,910 ($72,690 without outliers) (n=44), with a median of $19,348 and a standard deviation of 203,650. Business owners filing under Chapter 11 in the bankruptcy sample reported tax debts with an average of $297,348 ($139,848 without outliers) (n=90), with a median of $54,487 and a standard deviation of 1,206,750. Business owners filing under Chapter 13 in the bankruptcy sample reported tax debts with an average of $22,678 ($11,435 without outliers) (n=20), with a median of $3,866 and a standard deviation of 58,195.

157. In California, petitioners, who reported tax debts, had on average $257,633 of tax debts...
owners in the bankruptcy sample, Californians have reported more than twice as much tax debt compared to small business owners in the other districts in the sample.158

Male petitioners, who reported owing taxes, had significantly higher tax debts compared to female petitioners in the sample.159 Also, married petitioners who reported owing taxes had significantly more outstanding tax debts compared to petitioners from other marital status categories.160 However, among individual entrepreneurs in the sample

($69,243 without outliers) (n=73), with a median of $11,681 and a standard deviation of 1,332,273. In Tennessee, petitioners, who reported tax debts, had on average $17,337 of tax debts ($7,530 without outliers) (n=130), with a median of $1,876 and a standard deviation of 63,314. In Pennsylvania, petitioners, who reported tax debts, had on average $36,619 of tax debts ($14,948 without outliers) (n=79), with a median of $3,759 and a standard deviation of 133,002. In Illinois, petitioners, who reported tax debts, had on average $52,436 of tax debts ($25,943 without outliers) (n=110), with a median of $3,913 and a standard deviation of 142,776. In Texas, petitioners, who reported tax debts, had on average $127,214 of tax debts ($60,076 without outliers) (n=65), with a median of $9,432 and a standard deviation of 377,134. These differences in the five districts were deemed statistically significant at p=0.038.

158. In California, small business owners (both individuals and entities), who reported tax debts, had on average $503,233 of tax debts ($177,031 without outliers) (n=36), with a median of $50,839 and a standard deviation of 1,878,044. In contrast, small business owners in all other districts (both individuals and entities) who reported tax debts had outstanding tax debts with an average of $116,224 ($78,619 without outliers) (n=118), with a median of $23,260 and standard deviation of 221,649. These differences between California and the other four districts were deemed statistically significant at p=0.029.

159. Male petitioners, who reported tax debts, had on average $38,343 of tax debts ($12,089 without outliers) (n=214), with a median of $2,972 and a standard deviation of 149,640. In contrast, female petitioners, who reported tax debts, had on average $9,330 of tax debts ($5,383 without outliers) (n=122), with a median of $2,595 and a standard deviation of 20,762. This difference between men and women in the sample was deemed statistically significant at p=0.034. A similar difference was also reported among men and women entrepreneurs in the bankruptcy sample. Male entrepreneurs, who reported tax debts, had on average $141,710 of tax debts ($87,969 without outliers) (n=40), with a median of $16,316 and a standard deviation of 309,629. In contrast, female entrepreneurs, who reported tax debts, had on average $32,656 of tax debts ($30,233 without outliers) (n=13), with a median of $4,890 and a standard deviation of 39,991. This difference between men and women entrepreneurs in the sample was not deemed statistically significant.

160. Among the petitioners in the bankruptcy sample who reported tax debts, singles had average tax debts of $20,506 ($6,466 without outliers) (n=108), with a median of $2,933 and a standard deviation of 112,186. Among the petitioners in the bankruptcy sample who reported tax debts, married petitioners had average tax debts of $29,883 ($12,427 without outliers) (n=153), with a median of $2,511 and a standard deviation of 100,816. Among the petitioners in the bankruptcy sample who reported tax debts, divorced/separated had average tax debts of $7,709 ($4,479 without outliers) (n=66), with a median of $2,257 and a standard deviation of 17,025. Among the petitioners in the bankruptcy sample who reported tax debts, widows had average tax debts of $133,844 ($73,918 without outliers) (n=13), with a median of $1,700 and a standard deviation of 370,745. These differences were deemed statistically significant at p=0.005.
who owed tax debts, singles reported significantly higher tax debts compared to petitioners from other marital status categories.\(^\text{161}\)

There are three types of tax claims the bankruptcy petitioners may list in their bankruptcy schedules: secured, priority unsecured claims, and non-priority unsecured claims.\(^\text{162}\) Holders of secured tax claims are generally entitled to the collateral or the value of the collateral securing their tax claims.\(^\text{163}\) Like all liens in bankruptcy, the federal tax lien is a secured claim to the extent of the value of the collateral and is unsecured for the debt exceeding the collateral value.\(^\text{164}\) By perfecting the tax lien before commencing a bankruptcy protection, the taxing authority becomes a secured creditor.\(^\text{165}\) In such a case, even where the taxes are dischargeable, the taxing authority will preserve its tax lien.\(^\text{166}\) “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.”\(^\text{167}\)

Aside from secured tax debts, a bankruptcy petitioner may also report unsecured tax debt.\(^\text{168}\) However, not all unsecured debts are of an equal footing.\(^\text{169}\) Distribution to unsecured creditors in a Chapter 7 case is made in accordance with priorities established by the bankruptcy code.\(^\text{170}\) The claims described in section 507(a) of the bankruptcy code are afforded priority status over other unsecured claims.\(^\text{171}\) 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

\(^\text{161.}\) Among the entrepreneurs in the bankruptcy sample who reported tax debts, singles had average tax debts of $162,432 ($116,273 without outliers) \((n=9)\), with a median of $17,000 and a standard deviation of 374,764. Among the entrepreneurs in the bankruptcy sample who reported tax debts, married petitioners had average tax debts of $81,394 ($51,246 without outliers) \((n=36)\), with a median of $14,318 and a standard deviation of 175,859. Among the entrepreneurs in the bankruptcy sample who reported tax debts, divorced or separated had average tax debts of $20,297 ($18,546 without outliers) \((n=7)\), with a median of $3,000 and a standard deviation of 31,253. These differences were deemed statistically significant at \(p=0.015\).


\(^\text{163.}\) Id. at 191.

\(^\text{164.}\) Id.

\(^\text{165.}\) See Sprayregen, \textit{supra} note 1, at 222

\(^\text{166.}\) See id.

\(^\text{167.}\) See Stephen W. Sather, et al., \textit{Borrowing from the Taxpayer: State and Local Tax Claims in Bankruptcy}, 4 \textit{AM. BANKR. INST. L. REV.} 201, 207 (1996) (stating that “[a]s a general proposition, prepetition tax liens which are perfected and which are protected against bona fide purchasers for value under state law will also be protected in the bankruptcy.”).


\(^\text{169.}\) See id.

\(^\text{170.}\) See id.

\(^\text{171.}\) See id.
general unsecured creditors receive any distribution. Moreover, unsecured priority claims are nondischargeable under Chapter 7 and must be fully paid under Chapter 11 reorganization plan or under Chapter 13 repayment plan.

In the bankruptcy sample, the vast majority of tax debts reported by petitioners were either secured or unsecured priority tax debts. Similarly, small businesses in the bankruptcy sample (both individuals and entities) identified substantially all of their tax debts as secured or unsecured priority tax claims. In fact, only about fourteen percent of all tax debts were designated by the business owners as unsecured non-priority claims, and hence eligible for discharge under the bankruptcy code. This pattern among small businesses in the bankruptcy sample surfaced in all three of the bankruptcy chapters.

172. See id.

173. See 11 U.S.C. § 523 (2006) (exceptions to discharge); id. § 1322(a)(2) (providing that a plan must provide for full payment in deferred cash payments of all priority claims under section 507, including tax priority claims); id. § 1141 (providing that individuals filing under Chapter 11 of the bankruptcy code may not obtain a discharge of the priority tax claims).

174. Among petitioners in the bankruptcy sample who reported owing tax debts, 12.6 percent of the debts (n=109) were secured tax debts; 73.5 percent (n=635) were unsecured priority tax claims; and 13.9 percent (n=120) were unsecured non-priority tax claims.

175. Among small business owners in the bankruptcy sample who reported owing tax debts, 10.4 percent of the debts (n=40) were secured tax debts; 79.5 percent (N=307) were unsecured priority tax claims; and 10.1 percent (n=39) were unsecured non-priority tax claims. In contrast, among consumer petitioners in the bankruptcy sample who reported owing tax debts, 13.2 percent (n=59) were secured tax debts; 70.1 percent (n=314) were unsecured priority tax claims; and 16.7 percent (n=75) were unsecured non-priority tax claims. These differences between small business owners and consumers were deemed to be statistically significant at p=0.005.

176. This is the case for both individual small business owners and entities. Among individual small business owners in the bankruptcy sample who reported owing tax debts, 21.9 percent of the debts (n=25) were secured tax debts; 64 percent (n=73) were unsecured priority tax claims; and 14 percent (n=16) were unsecured non-priority tax claims. In contrast, among small business entities in the bankruptcy sample that reported owing tax debts, 5.5 percent of the debts (n=15) were secured tax debts; 86 percent (n=234) were unsecured priority tax claims; and 8.5 percent (n=23) were unsecured non-priority tax claims. These differences between individual small business owners and entity small businesses were deemed to be statistically significant at p=0.000.

177. Among small business owners filing under Chapter 7, who have reported tax debts, the distribution was as follows: 10 percent of the debts (n=9) were secured tax debts; 80 percent (n=72) were unsecured priority tax claims; and 10 percent (n=9) were unsecured non-priority tax claims. In Chapter 11 the distribution was as follows: 10.1 percent of the debts (n=26) were secured tax debts; 81.7 percent (n=210) were unsecured priority tax claims; and 8.2 percent (n=21) were unsecured non-priority tax claims. In Chapter 13, the distribution was as follows: 12.8 percent of the debts (n=5) were secured tax debts; 64.1 percent (n=25) were unsecured priority tax claims; and 23.1 percent (n=9) were unsecured non-priority tax claims. These differences among the various Chapters were not deemed statistically significant.
Petitioners in the bankruptcy sample, who owed tax debts, primarily owed the tax obligations to the federal government. More than sixty 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 the three bankruptcy chapters, as well as in most judicial districts.

Petitioners in the bankruptcy sample who owed tax debts attributed a large portion of their tax debts to income tax obligations. Likewise,

178. Among petitioners in the bankruptcy sample, who owed tax debts, 49.7 percent of the debts were owed to the federal government (n=429); 20.4 percent of the debts were owed to the state government (n=176); and 30 percent were owed to the municipal government (n=259).

179. Among individual entrepreneurs in the bankruptcy sample, who owed tax debts, 62.3 percent of the debts were owed to the federal government (n=71); 14.9 percent of the debts were owed to the state government (n=17); and 22.8 percent were owed to the municipal government (n=26). Among entities in the bankruptcy sample, who owed tax debts, 36.8 percent of the debts were owed to the federal government (n=100); 38.2 percent of the debts were owed to the state government (n=104); and 25.6 percent were owed to the municipal government (n=68). Similarly, among consumers in the bankruptcy sample, who owed tax debts, 53.6 percent of the debts were owed to the federal government (n=240); 12.1 percent of the debts were owed to the state government (n=54); and 34.4 percent were owed to the municipal government (n=154). The differences between the individual entrepreneurs and the entities, as well as between businesses and consumers in the bankruptcy sample were deemed statistically significant at p=0.000.

180. Among businesses filing under Chapter 7 of the bankruptcy code, who owed tax debts, 46.7 percent of the debts were owed to the federal government (n=42); 33.3 percent of the debts were owed to the state government (n=30); and 20 percent were owed to the municipal government (n=18). Among businesses filing under Chapter 11 of the bankruptcy code, who owed tax debts, 40.5 percent of the debts were owed to the federal government (n=104); 33.9 percent of the debts were owed to the state government (n=87); and 25.7 percent were owed to the municipal government (n=66). Among businesses filing under Chapter 13 of the bankruptcy code, who owed tax debts, 64.1 percent of the debts were owed to the federal government (n=25); 10.3 percent of the debts were owed to the state government (n=4); and 25.6 percent were owed to the municipal government (n=10). The differences between the three chapters were deemed statistically significant at p=0.022.

181. Among businesses filing in California, who owed tax debts, 39.7 percent of the debts were owed to the federal government (n=58); 40.4 percent of the debts were owed to the state government (n=59); and 19.9 percent were owed to the municipal government (n=29). Among businesses filing in Tennessee, who owed tax debts, 58 percent of the debts were owed to the federal government (n=29); 18 percent of the debts were owed to the state government (n=9); and 24 percent were owed to the municipal government (n=12). Among businesses filing in Pennsylvania, who owed tax debts, 36.7 percent of the debts were owed to the federal government (n=11); 33.3 percent of the debts were owed to the state government (n=10); and 30 percent were owed to the municipal government (n=9). Among businesses filing in Illinois, who owed tax debts, 38.3 percent of the debts were owed to the federal government (n=31); 48.1 percent of the debts were owed to the state government (n=39); and 13.6 percent were owed to the municipal government (n=11). Among businesses filing in Texas, who owed tax debts, 53.2 percent of the debts were owed to the federal government (n=42); 5.1 percent of the debts were owed to the state government (n=4); and 41.8 percent were owed to the municipal government (n=33). The differences between the five districts were deemed statistically significant at p=0.000.

182. Among petitioners in the bankruptcy sample, who owed tax debts, 46.8 percent of the
small businesses (both entities and individual-owned) who owed tax debts primarily owed income tax debts.\textsuperscript{183} Aside from significant income tax debts, the second most frequent type of outstanding tax debt was property taxes.\textsuperscript{184} Furthermore, on average, tax debts owed by the bankruptcy petitioners (both businesses and consumers) were outstanding for approximately three years at the time of the commencement of the bankruptcy petition.\textsuperscript{185} Compared to businesses in the bankruptcy sample, consumers have tended to report older tax debts, while individual business owners tended to report older tax debts compared to entities.\textsuperscript{186}

debts were attributed to income tax obligations (n=249); 31.6 percent were attributed to property tax (n=168); 6.8 percent were attributed to payroll tax (n=36); and 4.5 percent were attributed to sales tax (n=24).

183. Among businesses filing for bankruptcy protection, who owed tax debts, 38.2 percent of the debts were attributed to income tax obligations (n=81); 25 percent were attributed to property tax (n=53); 12.7 percent were attributed to payroll tax (n=27); 10.8 percent were attributed to sales tax (n=23); and 10.8 percent (n=28) were attributed to other type of taxes. Among individual small business owners filing for bankruptcy protection, who owed tax debts, 61.6 percent of the debts were attributed to income tax obligations (n=53); 25.6 percent were attributed to property tax (n=22); 5.8 percent were attributed to payroll tax (n=5); 3.5 percent were attributed to sales tax (n=3); and 3.5 percent (n=3) were attributed to other types of taxes. Among consumers filing for bankruptcy protection, who owed tax debts, 52.8 percent of the debts were attributed to income tax obligations (n=162); 36.8 percent were attributed to property tax (n=113); 2.3 percent were attributed to payroll tax (n=7); 0.3 percent were attributed to sales tax (n=1); and 7.8 percent (n=24) were attributed to other types of taxes. These differences between businesses and consumers were deemed statistically significant at p=0.000.


185. Among all petitioners in the bankruptcy sample, who reported owing some tax debts, the tax debts were outstanding for 3.18 years (n=412) (2.77 without outliers), with a median of 2.00 years and a standard deviation of 2.00.

186. Among business owners (both individuals and entities) in the bankruptcy sample, who reported owing some tax debts, the tax debts were outstanding for 2.54 years (n=122) (2.28 without outliers), with a median of 2.00 years and a standard deviation of 2.10. Among consumers in the bankruptcy sample, who reported owing some tax debts, the tax debts were outstanding for 3.49 years (n=278) (3.05 without outliers), with a median of 2.00 years and a standard deviation of 3.30. The difference between businesses and consumers were deemed statistically significant at p=0.004. Among individual business owners in the bankruptcy sample, who reported owing some tax debts, the tax debts were outstanding for 2.96 years (n=54) (2.66 without outliers), with a median of 2.00 years and a standard deviation of 2.20. In contrast, among entities in the bankruptcy sample, who reported owing some tax debts, the tax debts were outstanding for 2.21 years (n=68) (1.99 without outliers), with a median of 1.90 years and a standard deviation of 1.90. The differences between individual business owners and entities were deemed statistically significant at p=0.05.
VII. 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 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 (seventy-five 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 nondischargeability of the vast majority of outstanding tax debts in bankruptcy. Only fourteen percent of the tax debts reported by the
individual small business owners in the bankruptcy sample were designated as unsecured non-priority tax debts; eighty-six percent of the individual small business owners' tax debts would either have to be paid in full or be nondischargeable.\textsuperscript{187} The nondischargeability of tax debts, or the bankruptcy code's insistence that they be fully repaid, suggests 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.\textsuperscript{188}

\textsuperscript{187} See supra note 176 and accompanying text.
\textsuperscript{188} See supra notes 89-90 and accompanying text.