THE TAX BURDEN AND
THE PROPENSITY OF SMALL-
BUSINESS ENTREPRENEURS
TO FILE FOR BANKRUPTCY

Rafael Efrat*

I. INTRODUCTION

Small-business owners in the United States make a significant
contribution to its economy. Small-business owners make up 6 percent of
the adults population and approximately 11 percent of working Americans.1
These small-business owners compose the vast majority of firms in the
United States.2 Indeed, small-business owners, rather than large companies,
have been the dominant source of innovation and net job growth in the

* Associate Professor, College of Business & Economics, California State University,
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1 See William J. Dennis, Jr., The Public Reviews Small-business 6 (2004), available at
http://www.nfib.com/object/IO_19303.html; Robert W. Fairlie, Kauffman Index of
Entrepreneurial Activity 13 (2005) (estimating the 6.3 percent of the adult population in the
United States are self-employed, including those who own incorporated or unincorporated business and
those who are employers and non-employers).

(stating that small-businesses represent 99 percent of businesses), available at
American economy. With a monthly average of over half a million newly created businesses, small-businesses employ more than half of the American labor force and generate two thirds of the net new jobs in America.

The widespread phenomenon of small-business ownership in the United States benefits not only the economy as a whole, but it also supplies important advantages to the small-business owners themselves. Studies have documented significantly higher income level for the self employed compared to the salaried workers. Furthermore, small-business owners have significantly higher net worth compared to non-small-business owners. Lastly, small-business ownership has provided members of disadvantaged groups, such as women, immigrants and minorities, access to critical career opportunities.

Small-business owners’ relative success is partly a product of their superior human capital, determination and resiliency. Self employed individuals appear to be much more educated than the general population. For example, whereas a quarter of the general population earned a bachelor’s degree or more, small-business owners are twice as likely to have earned the degrees. Along with being more educated, small-business owners are perceived to work harder and accept more risk as compared to their non business owner counterparts.

4. See ROBERT W. FAIRLIE, KAUFFMAN INDEX OF ENTREPRENEURIAL ACTIVITY 1996-2006 2 (2007), available at http://people.ucsc.edu/~rfairlie/kea/kauffmanreport19962006.pdf (“In 2006, an average of 0.29 percent of the adult population or 290 out of 100,000 adults created a new business each month. In other words, approximately 465,000 new businesses were created each month during the year.”).
5. See A REPORT OF THE PRESIDENT, supra note 2, at 17.
8. See A REPORT OF THE PRESIDENT, supra note 2, at 17 (“Small-business continued to be an important means by which women, minorities, and immigrants entered the American economic mainstream and managed to increase their share in the economy.”); Zoltan Acs, et al., The New American Evolution: The Role and Impact of Small Firms 4 (1998), available at www.sba.gov/ADVO/stats/evol_pap.html (“Small-businesses enables millions, including women, minorities, and immigrants, to access the American Dream.”).
9. WILLIAM J. DENNIS, JR., 2 NAT’L SMALL BUS. POLL, 2002, at 7 (see Issue 8); Haynes & Ou, supra note 7, at 8 (finding that business owning households have received more education with college education or higher as compared to non-business households).
This article first describes the vulnerabilities small-business owners confront and then identifies the tax burdens small-business owners face. In section four, the article summarizes the prior literature on small-business owners in bankruptcy. Section five of this article presents the empirical methodology used in this study followed by the results. Finally, this paper concludes with a discussion and policy implications.

II. SMALL-BUSINESS OWNER’S VULNERABILITIES

Despite the success of many entrepreneurs, small-business owners are a highly vulnerable group. As a result, many small-businesses fail every year. Indeed, over 30 percent of new businesses close within two years and over half close within four years.11 While we treasure the contribution of entrepreneurs to our economy, we have limited insight about why so many of them fail.12 Given the value of small-business ownership to the American economy, an understanding of the reasons for entrepreneurship failure is critical.13

Researchers have identified a number of factors contributing to the vulnerabilities and demise of small-business owners.14 Some researchers

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11. See, e.g., ARNOLD C. COOPER, ET AL., SURVIVAL & FAILURE: A LONGITUDINAL STUDY (1989) (suggesting that 67 percent of new businesses fail within four years); Glenn R. Carroll, Organizational Ecology, 10 ANN. REV. SOC 71, 75 (1984) (finding that in general within five years nearly half of new businesses disappear, go bankrupt, are taken over or stop for other reasons); Amy E. Knaup, Survival and Longevity in the Business Employment Dynamics Data, MONTHLY LAB. REV. (May 2005), at 50, 51, 52 chart 1, available at http://www.bls.gov/opub/mlr/2005/05/ressum.pdf; Bruce Phillips & Bruce A. Kirchhoff, Formation, Growth and Survival; Small Firm Dynamics in the U.S. Economy, 1 SMALL BUS. ECON. 65 (1989) (finding that about three quarters of all businesses surviving two years or more, about half surviving four years or more, and about 40 percent surviving six years or more).


14. The definition of business failure is not without controversy. Some assert that business failure arises upon the filing of bankruptcy, while others assert that business failure arises upon merger, acquisition or discontinuation. Some have observed that the lack of clear and uniform definition of business failure contributes to the unreliable statistics on small-business failure rates. See John Watson
have found that small-business owners are inherently more vulnerable as a result of their small size. Furthermore, some small-business owners face higher likelihood of failure by virtue of the type of industry they have entered. A number of studies have documented that small-businesses in the retail and service industries face a higher rate of turnover as compared to small-businesses in other industries. Aside from industry selection, small firms often fail due to inadequate financial resources as the liquidity constraints impede on growth and profitability. Furthermore, those entrepreneurs that manage to access and accumulate capital tend to tie up about half of their net worth in their business. Some other small-business owners fail after becoming highly leveraged and unable to repay the accumulated debts. Indeed, small-business owners hold significantly more debt than non-business-owning families.

Certain personal characteristics of the business owner also play a role...
in the likelihood of a small-business success. Studies have found that entrepreneurs with limited education are more vulnerable to failure.21 Other studies have shown that particularly younger business owners, as well as older business owners face higher risk of closure.22 Moreover, women entrepreneurs, as well as minority business owners are subjected to an increased likelihood of a business failure.23 Also, business owners that are married tend to perform better than non-married small-business owners.24 Lastly, business owners that own a home appear to experience less dissolution than non-home owner entrepreneurs.25

In addition to personal traits of the small-business owner, certain characteristics of the business affect its long-term durability. For example, studies have found that incorporated businesses tend to do better than sole proprietors.26 Lastly, prior business ownership and management experience play an important role in the business’ resilience.27

Finally, tax obligations have been found to be a small but an important contributor to business closure. In a number of studies of small-business owners outside of bankruptcy, taxes were cited as a serious problem by many small-business owners.28 Indeed, a number of studies have

21. See Bates, supra note 17, at 558 (“owners with four or more years of college are most likely to remain in business”); AKI KANGASHARJU & SARI PEKKALA, THE ROLE OF EDUCATION IN SELF EMPLOYMENT SUCCESS (2001), available at http://www.kent.ac.uk/economics/papers/papers-pdf/2001/0116.pdf (finding that firms run by more educated individuals have a higher probability of survival).

22. See Bates, supra note 17, at 558 (“owners 55 and over are least likely to remain in business, while those in the 45-54 grouping are most likely to endure.”); Brian Headd, Redefining Business Success: Distinguishing Between Closure and Failure, 21 SMALL BUS. ECON. 51, 55 (2003) (finding that relatively young business owners tend to have higher likelihood of closure).

23. See Cooper, et al., supra note 16, at 72 (reporting that, among other things, not being a minority or female contributes to both survival and growth of small-businesses); Raji Srinivasan, et al., Performance Determinants for Male and Female Entrepreneurs, in FRONTIERS OF ENTREPRENEURSHIP RESEARCH 43, 45 (W.D. Bygrave, et al., eds., 1994) (finding that businesses owned by women have a higher probability of closure and a lower probability of growth). But cf. Arne I. Katiebert & Kevin T. Leicht, Gender and Organizational Performance: Determinants of Small-business Survival and Success, 34 ACADEM. MGMT 136, 150 (1991) (reporting that gender is not a significant predictor in business performance).

24. See Arnold Cooper, et al., New Business in America: The Firms and Their Owners 2 (1990) (unpublished manuscript, on file with author) (asserting that new business owners, who are married, were more likely to avoid closure compared to non-married entrepreneurs); APARNA MATHUR, A SPATIAL MODEL OF THE IMPACT OF BANKRUPTCY EXEMPTIONS ON ENTREPRENEURSHIP 31 (2005), available at http://www.sba.gov/advo/research/rs261tot.pdf (finding, among other things, that the probability of small-business closure is significantly lower for individuals who are married).

25. See MATHUR, supra note 24, at 31 (finding, among other things, that the probability of small-business closure is significantly lower for individuals who own homes).

26. See Richard J. Boden & Brian Headd, Race and Gender Differences in Business Ownership and Business Turnover, 38 BUS. ECON. 61, 66 (2002) (finding that the likelihood of a firm dissolution is higher for unincorporated firms as compared to incorporated firms).

27. See Cooper, et al., supra note 16, at 72 (reporting that, among other things, starting a business similar to what one did before contributes to both survival and growth).

documented the adverse impact tax burden has on the closure of small-businesses. One study has found 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. Similarly, a recent study has concluded that lower taxes in neighboring states increase the probability of business closure in adjoining higher tax states.

III. THE TAX BURDEN AND ITS IMPEDIMENT ON GROWTH OF SMALL-BUSINESS OWNERS

The extent of the tax problems experienced by small-business owners is alarming but not surprising given the disproportionate tax burden small-business owners face in operating their businesses.

The federal tax code provides mixed treatment of small-business owners. Compared to large corporations, small-business owners enjoy some federal tax benefits by virtue of their pass-through nature, the progressive corporate tax rate structure, the expensing allowance for certain equipment under section 179, the cash basis accounting, and the exclusion from taxation of capital gains of certain small-business stock.

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. For example, some have contended that small

BUS. 1, 6 (1979) (“From these responses, then, the conclusion would be that competition and marketing are the first and most serious problems of small-business, financial and management problems rank second, with governmental taxes and regulations coming third.”). See also ROPER CENTER, LOS ANGELES TIMES POLL #427: LOS ANGELES COUNTY SMALL-BUSINESSES 12 (1999) (in the survey, 21 percent of the surveyed small-business owners indicated that federal taxes are “one of the most important problems facing their business” and an additional 29 percent of the respondents referred to federal taxes as an “important problem”); Marla Dickerson, Small-business Survey: Women Are Geared for Growth, L.A. TIMES, Oct. 7, 1998, at C1 (indicating that both men and women entrepreneurs in Los Angeles expressed frustration with the burden of taxes on their businesses); Marla Dickerson & Don Lee, Business is Robust for Small Los Angeles County Firm: But Sales Growth is Slower for Minority-Owned Companies, which are Less Optimistic than Others, L.A. TIMES, Sept. 15, 1999, at A1 (reporting that entrepreneurs from all ethnic groups identified federal taxes as one of the top three most important problems facing their businesses, with 47 percent of Asian, 59 percent of Blacks, 56 percent of Latino and 46 percent of White business owners referring to it as such).


30. See MATHUR, supra note 24, at 32.

31. See id. at 3-16.
firms pay corporate income taxes at a disproportionately higher rate than
the large firms pay. In one study, researchers demonstrated that on
average small-businesses pay effective corporate tax rates in the range of
25 percent to 30 percent, which is considerably higher (by as much as 6 to
8 percentage points) than large businesses’ effective corporate tax rates.

Also, adverse tax treatment toward small firms is 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
more difficult for small-businesses to take advantage of the benefits
provided by these provisions. For example, self-employed individuals and
partners in a partnership are prohibited from participating in a cafeteria
plan offered to their employees or receive the tax benefit from
transportation fringe benefits.

Also, 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 premises in order to be excluded from
the employee’s tax suggests that large businesses would primarily qualify
for this tax benefit as they are large enough to have their own cafeteria.
Similarly, the value of gym membership is excluded from gross income of
employees, but only for those who work for large enough establishments to

32. See ROBERT S. McINTYRE AND COO T. D. NGUYEN, INST. ON TAXATION AND ECON. POLICY,
itepnet.org/corp00an.pdf.
33. See id.; INNOVATION & INFORMATION CONSULTANTS, INC., THE IMPACT OF TAX
EXPENDITURE POLICIES ON INCORPORATED SMALL-BUSINESSES, Prepared for U.S. Small-business
34. See Internal Revenue Service, Pub. 15B: Employer’s Tax Guide to Fringe Benefits
benefits that are excluded from income recognition).
35. See, e.g., I.R.C. § 132(f) (2008); Treas. Reg. § 1.61-21(f) (2008); DAN R. MASTROMARCO &
DAVID R. BURTON, THE INTERNAL REVENUE CODE: UNEQUAL TREATMENT BETWEEN LARGE AND
36. See I.R.C. § 401(c) (cafeteria plan); id. § 132(f)(5)(E) (prohibiting the ability of partner, a two
percent S Corporation shareholder, or an independent contractor from excluding the value of qualified
transportation fringe benefits).
37. See id. § 119.
38. See MASTROMARCO & BURTON, supra note 35, at 41 ("Small 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.").
finance the expenditure of building an on-premise athletic facility.39

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 tax year.40 In contrast, C Corporations are given considerably more flexibility in establishing their taxable year, and may adopt any twelve-month fiscal year.41 Similarly, the tax code also vests large firms with more lenient requirements for extending filing deadlines.42

Aside from these adverse tax treatments towards small-business owners, 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.43 The cumulative effect of these costs is significant and can be overwhelming.44 In 2004, the estimated federal tax compliance costs of business filers was in excess of $100 billion,45 with an estimate of total hours spent on tax compliance of just under six billion hours.46 These compliance costs with the federal income tax had surged following the tax reform of 1997.47 The increasing prevalence of these compliance costs is largely due to the continuing complexity of the federal income tax code.48 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.49

This increase in compliance costs has largely had a regressive impact,

40. See id. § 441 (sole proprietors); id. §1378 (an S Corporation must have a “permitted year,” but this permitted year is generally a calendar year).
41. See MASTROMARCO & BURTON, supra note 35, at 43.
42. See Treas. Reg. §§ 1.6081(3)(d), 1.6081-2 (2008) (a corporation can get an automatic six-month extension from its original due date vs. an automatic three-month extension for sole proprietorship and a partnership).
47. See id. at 1.
48. See id. at 3.
49. See id. at 7.
disproportionately affecting small-business owners. Indeed, recent studies have found that the cost of tax compliance is 67 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 a 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 are not only burdening the small-business owners monetarily, but also impose substantial psychic costs.

Both federal and state tax regulatory agencies have recently become more cognizant of the adverse impact the tax burden has on the operation of small-business owners. Many state regulatory agencies reportedly continue to make changes in their tax schemes aimed at reducing the tax burden on small-businesses operating within their jurisdiction. Similarly, as part of its efforts to reduce taxpayer’s burden, the Internal Revenue Services recently formed the Office of Taxpayer Burden Reduction charged with developing burden reduction ideas to minimize the compliance costs associated with the federal tax code.

50. See Bickerdyke & Lattimore, supra note 43, at 63; Edmunds, supra note 28, at 13.
51. 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, 98-99 (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 34-35 (2001), available at http://www.sba.gov/advo/research/rs207tot.pdf (estimating that tax compliance costs per employee in small-businesses range from 26 percent higher than large firms in the service industry to 140 percent higher than large firms in the manufacturing industry).
52. See Moody, supra note 46, at 13 (finding that small-businesses spend significantly more as a percentage of assets to comply with federal income tax law).
53. See Bickerdyke & Lattimore, supra note 43, at 63-65; Thomas D. Hopkins, Profiles of Regulatory Costs 22 (1995), available at www.sba.gov/advo/research/rs1995hoptot.pdf (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 id. at 93-94.
57. See Jay Kayne, State Entrepreneurship Policies and Programs 18 (1999), available at www.publicforuminstitute.org/nde/sources/reports/ngastudy.pdf (concluding that “states continue to make changes in their respective tax policies that reduce the tax burden on firms operating within each jurisdiction”).
Nonetheless, the tax burden remains potent. Anecdotally, many small-business owners report overwhelming pressure to meet the tax obligations and comply with ubiquitous tax regulations. Studies have documented the magnitude of these burdens on the small-business owners. Some recent studies have found that progressive tax rate schedules serve as an inhibitor on success in self-employment and hence reduce self-employment rates. Aside from reducing entrepreneurial entry levels, other studies have demonstrated 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 slower rate of entrepreneurial growth, slower rate of capital acquisition and slower rate of hiring.

The tax burden on small-business owners is particularly prevalent in the Los Angeles region. According to a tax competitiveness ranking, Los Angeles ranked at the bottom tier relative to other comparable cities. Consistent with this ranking, a survey of small-business owners operating in Los Angeles has identified taxes as the second most important concern of the surveyed entrepreneurs. Moreover, half of the surveyed


61. See Donald Bruce & Mohammed Mohsin, Tax Policy and Entrepreneurship: New Time Series Evidence, Department of Economics, The University of Tennessee, 1 (Jan. 2003), available at www.be.wvu.edu/div/econ/bruce.pdf (“[T]ax 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.”).

62. See BRUCE & GURLEY, supra note 29, 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 17 percentage points for single filers and 7 percentage points for married filers); MATHUR, supra note 24, at 32 (finding that lower taxes in neighboring states increase the probability of business closure in adjoining higher tax states).

63. See Carroll, et al., supra note 59, at 21 (concluding that “[w]hen 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 (2000); DOUGLAS HOLTZ-EAKIN & HARVEY S. ROSEN, ECONOMIC POLICY AND THE START-UP, SURVIVAL, AND GROWTH OF ENTREPRENEURIAL VENTURES 43-44 (2001), available at http://www.sba.gov/advo/research/rs206tot.pdf (“As tax rates go up, entrepreneurial enterprises grow at a slower rate, they buy less capital, and they are less likely to hire workers.”).

64. See MICHAEL DARDIA & SHERMAN LUK, RETHINKING THE CALIFORNIA BUSINESS CLIMATE 19 (1999), available at http://www.ppic.org/content/pubs/report/R_899MDR.pdf (referring to a study showing that the ranking on tax competitiveness for Los Angeles ranged from 8th to 13th out of a list of 16 cities examined in that study).

65. See Vicki Torres, Small-business Strategies, L.A. TIMES, Sept. 15, 1999, at C2 (“Despite optimism about the future, many businesses expressed concern about a dearth of skilled labor. Next on the list of serious obstacles businesses said they faced were stiff federal and state taxes.”).
entrepreneurs in Los Angeles indicated that federal taxes are an important or one of the most important problems facing their business. The frustration with taxes among small-business owners in Los Angeles was shared among men and women alike, as well as among the various ethnic groups.

IV. BANKRUPTCY FILING BY SMALL-BUSINESS OWNERS: PRIOR RESEARCH

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 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.

Most of the prior research on small-businesses in bankruptcy has focused on corporations, rather than on individuals, filing for protection under Chapter 11 of the Bankruptcy Code. Those studies have found that

66. See ROPER CENTER, supra note 28, at 12 (in the survey, 19 percent of the surveyed small-business owners indicated that federal taxes are “one of the most important problems facing their business” and an additional twenty-six percent of the respondents referred to federal taxes as an “important problem”).
67. See Dickerson, supra note 28, at C1 (indicating that both men and women entrepreneurs in Los Angeles expressed frustration with the burden of taxes on their businesses); Dickerson & Lee, supra note 28, at A1 (reporting that entrepreneurs from all ethnic groups identified federal taxes as one of the top three most important problems facing their businesses, with 49 percent of Asian, 59 percent of Blacks, 56 percent of Latino and 46 percent of White business owners referring to it as such).
69. See Wei Fan & Michelle J. White, Personal Bankruptcy and the Level of Entrepreneurial Activity, 46 J. LAW & ECON. 543, 543 (2003) (“The U.S. personal bankruptcy system is primarily intended as a bankruptcy procedure for consumers, but it also is the de facto bankruptcy procedure for small firms.”).
71. See id.
most businesses filing for bankruptcy protection under Chapter 11 employ fewer than 100 people.73 The average business owner was 37 years old, tended to be well-educated and had a number of years of business ownership experience under his belt.74 Lastly, the majority of individual small-business owners that have filed for bankruptcy protection under Chapter 11 have entered bankruptcy with debts that have been personally guaranteed by the owner operator of the business.75

The problem with examining only Chapter 11 bankruptcy filings when studying small-business bankruptcy filings is that it does not capture most of the individual small-business owners that file for bankruptcy protection. While 30 percent of Chapter 11 debtors are individual small-business owners, studies of previous bankruptcy petitions found that between 13 percent and 17 percent of individual bankruptcy filings are former small-business owners and only a small percent of them file under Chapter 11.76

Some studies did, however, examine small-business entrepreneurs that have filed for bankruptcy protection in chapters other than Chapter 11. In one study that was conducted in the early 1980s and again in the mid 1990s, approximately 100 surveys were sent out to small-business owners that have filed for bankruptcy protection in the Little Rock District Court in Arkansas. The small-business owners in the sample were apparently selected based on the Administrative Office of the United States Courts’ identification system. However, reliance on their methodology of identifying small-business owners in the bankruptcy population has been roundly criticized for significantly underestimating the number of small-business owners in bankruptcy.77 Moreover, the Arkansas study had failed

73. See Lussier, supra note 72, at 13.
74. See id. (finding that the average business owner completed 3.3 years of college, had ten years of industry experience and nine years of management experience, was 37 years old, and operated the business for 5.5 years).
75. See Baird & Morrison, supra note 68, at 2356 (“The vast majority of small-businesses (85 percent . . .) will enter bankruptcy with debts that have been personally guaranteed by the owner-operator.”).
77. According to the Administrative Office of the U.S. Courts, for the years of 1986 through 2003, business filings average only 6.8 percent of all bankruptcy filings, leveling off to as low as 2.3 percent in 2003. Researchers have disputed these figures suggesting that they significantly underestimate the true number of business related bankruptcy filings. These researchers assert that the automated bankruptcy form software has introduced a systematic bias into the reported bankruptcy data. As the filed forms shifted from being filled out by hand to being filled out by computer programs that presumed that individuals were always consumers, the proportion of the reported consumer filings rose
to distinguish between individual and entity debtors in their sample. Such pooling of corporate and individual bankruptcy cases together has been criticized by some as masking the important differences between individual and entity bankruptcy filings.78

Aside from the Arkansas study, a pilot project examined business bankruptcies that were filed in the United States Bankruptcy Court for the District of Maryland, Rockville Division during the 1987 and 1993 period. The quantitative results from this study were based on information from the bankruptcy court records and from survey data compiled through telephone interviews of 101 former-business owners. The typical former-business owners taking part in the study were male, 46 years old, 75 percent were married and 71 percent had at least some college education.79 Most of the businesses were small in nature. Almost 18 percent of the bankruptcy petitioners had no employees and approximately 43 percent has between 1 and 4 employees.80 The average former small-business owner had accumulated over $170,000 in debts and had almost 15 years of previous work experience.81 Unfortunately, the study limited its examination to Chapter 7 bankruptcy filings and did not include in its sample bankruptcy filers under Chapter 11 or Chapter 13.

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 study collected detailed information from the bankruptcy schedules on the assets and liabilities of each bankruptcy firm in their sample. Furthermore, 834 debtors were interviewed by telephone a year after the firm’s petition was filed. The telephonic interview focused on the causes of the bankruptcy filings, the firm’s post-petition operations and plans for future activities. The study found that on average the firms filing for bankruptcy protection had assets worth $841,000 with median assets of $94,700. A significant majority of the firms had less than $500,000 in debts. Almost half of the companies in the sample had one or no employees at the time of filing. Among other reasons for filing bankruptcy protection, the firms most frequently identified outside business conditions (39 percent) as the reason for filing for relief, internal business conditions (27 percent) and financing problems (28 percent). Other causes for filing for relief included tax burden (20

while the proportion of business filings steadily declined. According to these researchers, the rise in the form software along with the common default setting in favor of consumer filings, provide the simplest and most plausible explanation for the dramatic decline in reported business filings. See id. at 768.

78. See Baird & Morrison, supra note 68, at 2319 n.39.
80. See id. at 14.
81. See id. at 15.
percent), dispute with a particular creditor (19 percent), personal problems (17 percent) and calamities (10 percent).82

That study is the most comprehensive national examination of firms in bankruptcy to date. However, prior research has suggested that regional studies are preferable to national data when studying causes for organizational mortality.83 Further, the study focused on bankruptcy filings by firms rather than by individuals.84

The research undertaken in this study aims to explore the extent to which individual small-business owners, who have filed for bankruptcy in Los Angeles, attribute their financial distress to tax problems. Further, this study intends to examine the demographic and financial characteristics of small-business owners that have pointed to the tax system as the cause of their financial demise.

V. METHODOLOGY

Data for this research study was based on information obtained from surveys completed by bankruptcy petitioners in the Central District of California-San Fernando Valley Division. The San Fernando Valley is a geographic area which includes several cities and a large portion of the City of Los Angeles. This Los Angeles suburb is the home of approximately 1.7 million residents, 40 percent of which are foreign born and under half are white, with hispanics making up almost 38 percent of the population, and Asians almost 10 percent.85

This study relied on information from surveys rather than bankruptcy schedules because vital data for this research project such as ethnicity, education, nativity, religion, cause of bankruptcy and various characteristics of petitioners’ business, were unavailable in the bankruptcy

82. See SULLIVAN, WARREN & WESTBROOK, supra note 70, at 4.
84. To identify small-business owners, the study’s authors relied on the official designation by the Clerk of the Bankruptcy Court or the information contained on the official coversheet for the bankruptcy filings. See SULLIVAN, WARREN & WESTBROOK, supra note 70, at 9. However, a recent study raised serious doubts relating to the reliability of that source in identifying small-business owners in the bankruptcy population. As a result, the methodology used in the Sullivan, Warren and Westbrook study on business bankruptcy may have yielded an under-representation of individuals who were former small-business owners. See Lawless & Warren, supra note 76, at 793 (“The evidence strongly supports the conclusion that the official government data on business bankruptcies have lost touch with the underlying reality they claim to measure. There are as many as nine times more bankruptcies involving a business than the current government data suggest.”).
schedules. The questionnaire was purposefully drafted to be only one-and-a-half-page-long to minimize the time necessary to complete the survey.

The questionnaire was composed of a list of twenty-one questions, with an additional supplement of ten questions for petitioners that have owned a business prior to their bankruptcy filing. Most of the questions in the survey solicited non-narrative answers and asked petitioners to check a box from among several options. However, questions concerning the cause of the bankruptcy filing or business distress were open ended. The questionnaire included questions concerning age, gender, educational background, marital status, country of origin, racial/ethnic background, religious affiliation, number of dependents, occupation, household income, home ownership, value of assets, amount and type of debts, and cause of bankruptcy. Former business owners were also asked a number of questions about their business operation. Among other things, they were asked to identify the problems, if any, their business faced, the number of years they engaged in the business, the type of business entity they owned, the type of business financing, the number of employees, the number of family members working in the business, the nature of the business industry, the number of business ventures owned beforehand, and their plans for future business ownership.

Before commencing with the collection of the questionnaires in the field, I submitted the questionnaire and procedures to the California State University, Northridge’s office charged with the protection of human subjects. As part of this procedure, I promised to maintain the respondent’s confidentiality. Similarly, in asking for cooperation from the U.S. Trustee to conduct the study, I also promised confidentiality for our respondents. All of the personnel engaged in the research in any capacity also pledged to protect the confidentiality of the respondents.

In 2004, the Executive Office of the United States Trustee granted permission to access and distribute the questionnaire at the mandatory creditors’ hearing in the Central District of California-San Fernando Valley Division. The Assistant U.S. Trustee in the Central District of California-San Fernando Valley Division cooperated in facilitating the distribution of

86. In January 2004, I contacted the Executive Office of the U.S. Trustee and requested permission to distribute surveys at the 341a hearing in the Central District of California. Later that year, the Executive Office of the U.S. Trustee rejected the request to grant access citing privacy concerns for the debtors. As a result, surveys were mailed to a randomized sample of bankruptcy petitioners in the Central District of California-San Fernando Valley Division. Unfortunately, the response rate for the mailed survey was unacceptably low. I subsequently submitted a request for reconsideration to the Executive Office of the U.S. Trustee. In December 2004, the Executive Office of the U.S. Trustee granted us permission to distribute surveys at the creditors’ meeting in the Central District of California-San Fernando Valley Division. Since the results of the small sample of the completed mailed surveys were not significantly different than the results of the completed surveys that were collected in person, the completed mailed surveys were included in the final sample.
the questionnaires at the site. There were a total of ten student assistants that attended the mandatory 341a hearings beginning in January 2005 and ending January 2006 for the purpose of distributing and collecting completed questionnaires from bankruptcy petitioners. While the vast majority of petitioners had filed during 2005, because the mandatory creditors’ hearings are often scheduled sometime after the initial filing, some of the questionnaires that were collected were for petitioners who had filed for bankruptcy in late 2004.

Each student assistant was assigned to cover different hearing dates either in the morning or in the afternoon. The student assistants were given a script to address bankruptcy petitioners while they were attending their mandatory creditors’ meeting. The student assistants would arrive to the creditors’ meeting approximately fifteen minutes before the beginning of each session and were instructed to approach petitioners as they entered the waiting area for the creditors’ meeting hearing room. Each student was asked to identify him or herself, briefly describe the purpose of the research project, and then ask the petitioner whether he/she would be willing to participate in the study by completing the survey.

The survey was available in English and in Spanish given the high Hispanic population in the local area. The English questionnaire was first translated by a research assistant who is fluent in Spanish and English. That translation was then validated by another bilingual research assistant. It is possible that some petitioners, who are immigrants that speak neither Spanish nor English, did not complete the survey. However, based on feedback from the research assistants, there were very few petitioners that appeared not to understand the questions in the questionnaire.

Respondents were not asked for their name or case number. The student assistants were asked to mention to the petitioners that participation in the study is completely voluntary and anonymous. In addition, a statement to that effect was included at the top of the survey instrument.

Debtors generally came to the creditors’ meeting with their attorneys, and there was often a lengthy wait in a waiting area for their hearing to begin, during which the debtors had the opportunity to consult with their legal counsel about completing the questionnaire. The debtors were asked to return their completed questionnaire to the research assistant attending the hearing that day. Most debtors, who completed the questionnaire, did so while waiting although some have asked to take the survey home and mail it back upon completion. Participants in this study did not receive any monetary value in exchange for their services.

I selected a bankruptcy court in California for the study since California has led the nation in the past in absolute numbers of
bankruptcies. I selected the Central District Court of California primarily because it holds courts in a number of locations in the Los Angeles County. The Los Angeles area has one of the greatest concentrations of small-businesses in the United States. Los Angeles County is both highly ethnically diverse and with over a third of its population composed of immigrants. Los Angeles County has the highest concentration of minority owned businesses in the country. According to the last census, more than 320,000 minority owned businesses operated in Southern California, with a significant portion of them in the Los Angeles area. This diversity makes the bankruptcy courts in the Central District an excellent setting to empirically investigate entrepreneurs in bankruptcy among ethnic minorities and immigrants. Lastly, previous studies and surveys have found that the Los Angeles County is ranked at the bottom tier relative to other comparable cities in terms of tax competitiveness.

Also, a survey of small-business owners operating in Los Angeles has identified taxes as the second most important concern of the surveyed entrepreneurs. Moreover, half of the surveyed entrepreneurs in Los Angeles indicated that federal taxes are an important or one of the most important problems facing their business.

We received 1,500 completed questionnaires. The average response yield rate was approximately 21 percent. The total number of surveys completed constitutes 12 percent of the total bankruptcy petitioners that were filed during the period of this study. The sample size reflected the

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87. See Ed Flynn & Gordon Bermant, Who is Number One? 1 (2003), available at www.usdoj.gov/ust/eo/public_affairs/articles/docs/abi_0304.html (reporting that California had the single largest number of bankruptcy filings for the year ended September 30, 2003, with over 146,000 filings).

88. See Pyong Gap Min & Mehdi Bozorgmehr, Immigrant Entrepreneurship and Business Patterns: A Comparison of Koreans and Iranians in Los Angeles, 34 Int’l Migration Rev. 707, 708 (2000) (indicating that Los Angeles is one of the top metropolitan areas in the United States in self-employment rate).

89. See Kotkin & Ozuna, supra note 85, at 3.


91. See Dardia & Luk, supra note 64, at 19 (referring to a study showing that the ranking on tax competitiveness for Los Angeles ranged from 8th to 13th out of a list of 16 cities examined in that study).

92. See Torres, supra note 65, at C2 (“Despite optimism about the future, many businesses expressed concern about a dearth of skilled labor. Next on the list of serious obstacles businesses said they faced were stiff federal and state taxes.”).

93. See Roper Center, supra note 28, at 12 (in the survey, 21 percent of the surveyed small-business owners indicated that federal taxes are “one of the most important problems facing their business” and an additional 29 percent of the respondents referred to federal taxes as an “important problem”).

94. The yield rate was calculated by dividing the number of surveys collected by the total number of petitioners present at the hearings which were attended by the research assistants in this study.

95. During the period of this study from January 2005 through January 2006, there were 12,049 bankruptcy filings. The 1,500 surveys collected represent a yield of 12.45 percent.
approximate composition of bankruptcy filings in the Central District of California under Chapter 7, Chapter 13 and Chapter 11. The original goal was to obtain at least 150 completed questionnaires from former small-business owners. The final number of small-business entrepreneurs in our sample was 208. This sample size is approximately the same as or larger than the sample sizes in similar studies of economic or financial issues.

The completed surveys that were collected during each session was sequentially numbered and tabulated into an Access database. Following the tabulation of the data, the ten student assistants participating in the data collection phase were paired and instructed to exchange the hard copies of the questionnaires they have collected. The paired students were then asked to validate the data tabulated by their counter-part and identify and correct any detected data entry error or missing values. Those surveys that were completed in Spanish were tabulated and validated by one of the four Spanish fluent research assistants.

For the questions asking about the cause of bankruptcy, the cause of the petitioner’s business financial distress, and the type of business owned by the petitioner, I developed content codes based on the answers included in a random sample from the completed questionnaires. Analysis in this study was done using R, and SPSS statistical packages. Analysis included frequencies of all variables. t tests were performed to investigate differences between entrepreneurs and wage earners in the sample. The statistical significance of the interaction variables was tested by the usual t test (p < .05).

One of the limitations in this study is its geographic coverage. Given the exclusive focus on bankruptcy petitioners in Los Angeles, the findings from this study may not necessarily be generalized to the entire small-business owners in the bankruptcy population.

VI. THE RESULTS

96. During the period of this study from January 2005 through January 2006, there were a total of 11,929 bankruptcy petitions that were filed in the San Fernando Valley Division of the United States Federal Bankruptcy Court for the Central District of California. Approximately, ninety-four percent of the filings were under Chapter 7 (N=11,162), approximately 5.5 percent were filed under Chapter 13 (N=696), and 0.5 percent were filed under Chapter 11 (N=71). See United States Bankruptcy Court, Central District of California, 2005 and 2006 Statistics, at http://www.caeb.uscourts.gov (click Information, then under the Court column, click Statistics, then click on the San Fernando Valley portion of the pie chart) (last visited on Apr. 24, 2008). In the bankruptcy sample a total of 1,500 surveys were completed. Similar to the chapter composition, over 97 percent of the surveys were under Chapter 7 (N=1,465), 0.5 percent were filed under Chapter 11 (N=8) and the balance under Chapter 13 (N=27).

A. THE GENERAL POPULATION IN BANKRUPTCY

Demographically, the bankruptcy petitioners in the sample were similar in many respects to the general population in Los Angeles. Similar to the population as a whole, male and female were evenly represented in the bankruptcy sample. The median age of the bankruptcy petitioner was 40, compared to a median of 38 in the San Fernando Valley. The education level of the bankruptcy petitioners also resemble the educational level in the general local population with 62 percent having at least some college education under their belt. Also, over 37 percent of the bankruptcy sample and the residents of the City of Los Angeles were identified as single. Lastly, the entrepreneurship rate in the bankruptcy population of 14 percent mirrors the self-employment rate in the local region.

While the bankruptcy population in our sample is demographically indistinguishable in many respects from the general population, it is financially remarkably different. Its earnings are considerably lower with a median annual household income of $33,600, compared to the median

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98. Since the bankruptcy court in this study is located in the San Fernando Valley, comparisons from the bankruptcy sample were made to the general population in the San Fernando Valley. However, where no recent comparable data from the San Fernando Valley is available, comparisons from the greater Los Angeles area have been used.

99. See San Fernando Valley Economic Research Center, San Fernando Valley Economic Report 69 (2003), available at http://www.csun.edu/sfverc/reports/pdfs/04/cover0-9.pdf (reporting that males made up 49.7 percent of the population in the San Fernando Valley in 2000). In the bankruptcy sample, 47 percent of the petitioners were identified as male.

100. See Economic Alliance, San Fernando Valley Almanac 59 (2000), available at http://www.valleyofthestars.net/ (scroll down to the Reports, Almanacs & Guides section) (reporting that the median age of residents in the San Fernando Valley was projected at 38 in 2004).

101. See id. (reporting that in 1999, 55.4 percent of the adult population in the San Fernando Valley had at least some college education). In the bankruptcy sample the distribution was as follows: No schooling: .7 percent; 6th grade or less: 1.2 percent; 7th to 12th grade with no diploma: 8.9 percent; High School graduate: 23.5 percent; some college: 31.3 percent; Associate Degree: 11.2; Bachelor’s Degree: 14.5 percent; Advanced degree: 5.9 percent.

102. See U.S. Bureau of the Census, Profile of Selected Economic Characteristics: Los Angeles City 2 (2000), available at http://www.calmis.ca.gov/file/Census2000/LosAngelesCityDP2000.pdf (reporting that in 2000, 37 percent of the 15 years old or older population in Los Angeles City was single, 45 percent was married, 11.9 percent was divorced or separated, and 5.4 percent was widowed). In the bankruptcy sample, 37.2 percent were identified as single; 32.2 percent were identified as married; 24.5 percent were identified as divorce or separated; and 3.5 percent as widow.

103. See San Fernando Valley Economic Research Center, supra note 99, at 66 (reporting that the self-employment rate for the San Fernando Valley was 14.5 percent of the working population). In the bankruptcy sample, 208 (13.8 percent) bankruptcy petitioners identified themselves as self-employed. Specifically, the survey asked the respondents the following question: “Within the last two years prior to filing for bankruptcy, have you earned any money from a business you owned or spent any time operating a business you owned?”
household income in the San Fernando Valley of $53,723. Reliance on public assistance is another important contrast between the general local population and the bankruptcy sample. Twelve percent of the bankruptcy petitioners that were surveyed reported receiving public assistance, while only 6.9 percent of the population in Los Angeles City received such benefits in 2000.

A more dramatic example of the differences between the two groups is reflected in homeownership rates. Outside of bankruptcy almost half of the population owns homes in Los Angeles County, compared to a mere eight percent in the bankruptcy sample. Similarly, the fair market value of the houses owned by the bankruptcy petitioners is remarkably low with a median of $290,000, compared to $600,000 median in the local housing market.

Moreover, the bankruptcy petitioners were deep in debt owing an average of over $86,000 and a median outstanding debt of $35,000. A significant portion of the total debts was made up of credit card obligations. On average, the bankruptcy petitioner had more than $30,000 worth of credit card debts. In fact over two-thirds of the petitioners reported more

104. The median monthly household income in the bankruptcy sample was $2,800, with a monthly mean of $3,710 ($3,070 without outliers), and a standard deviation of 5,631. See \textit{Economic Alliance}, supra note 100, at 62. The median household income reported in this bankruptcy sample was higher than the median household income of $20,172 found in a recent national bankruptcy study. See Teresa A. Sullivan, Elizabeth Warren & Jay L. Westbrook, \textit{Less Stigma or More Financial Distress: An Empirical Analysis of the Extraordinary Increase in Bankruptcy Filings}, 59 \textit{Stan. L. Rev.} 213, 223 (2006).

105. See \textit{U.S. Bureau of the Census}, supra note 102, at 3. In the bankruptcy sample, 178 of the bankruptcy petitioners reported receiving government assistance, or 11.9 percent.

106. See \textit{Los Angeles County QuickFacts}, U.S. Census Bureau 2 (2000), available at http://quickfacts.census.gov/qfd/states/06/06037.html (last visited on Apr. 24, 2008) (reporting a homeownership rate in Los Angeles County in 2000 at 47.9 percent). The homeownership rate reported in the bankruptcy sample was particularly low compared to findings in other studies. For example, in a study focusing exclusively on Chapter 7 petitioners, researchers have found a homeownership rate of about 30 percent among the bankruptcy petitioners. See Marianne B. Culhane & Michaela M. White, \textit{Taking the New Consumer Bankruptcy Model for a Test Drive: Means-Testing Real Chapter 7 Debtors}, 7 \textit{Am. Bankr. Inst. L. Rev.} 27 (1999).

107. See \textit{San Fernando Valley Economic Research Center, San Fernando Valley Economic Report} 36 (2005), available at http://www.csun.edu/sfverc/reports/pdfs/06/economicP138.pdf (reporting that the median value for a single family residence in the San Fernando Valley was $600,000 in August 2005). The average value of the house in the bankruptcy sample was $313,923 ($302,368 without outliers), with a median of $290,000 and a standard deviation of 201,245. While the homeowners in the bankruptcy sample owned homes with substantially lower values than homeowners in the general local population, the home value of the bankruptcy petitioners in this study was substantially higher than the median value of homes for families in bankruptcy in other national bankruptcy studies of merely $90,000. See Sullivan, Warren & Westbrook, supra note 104, at 226.

108. The mean was $86,246 ($48,389 without outliers). The standard deviation was 317,745. A recent national bankruptcy study has found a similar outstanding debt amount for the bankruptcy petitioners with an average of $90,894, and a median of $63,486. See Sullivan, Warren & Westbrook, supra note 104, at 255.

109. The average credit card debt of the bankruptcy petitioner in the sample was $30,471 ($25,229
than $10,000 in credit card debts. This heavy debt burden along with particularly low income levels have contributed to a large debt-to-income ratio for the households in the bankruptcy sample with a median of 1.2. Hence, at the median, a petitioner’s family owed debts greater than one year worth of income.

The heavy debt burden along with the low homeownership rate contributed to the large negative net worth in the bankruptcy sample. Debtors’ net worth is a vital indicator used to assess the debtor’s relative financial well being. The mean net worth of the bankruptcy petitioner in the sample was a negative $54,504, and their median net worth was a negative $29,840. An overwhelming 89.2 percent of the sampled population had a negative networth compared to only 12.6 percent in the general population outside of bankruptcy.

without outliers), with a median of $20,000, and a standard deviation of 44,467. Previous empirical studies found similar results. See TERESA A. SULLIVAN ET AL., THE FRAGILE MIDDLE CLASS: AMERICANS IN DEBT 121 (2000) (referring to two studies in 1997 in California and in Ohio finding that the average credit card debt among bankruptcy petitioners was between $14,260 and $28,955).

110. In the bankruptcy sample, 31.1 percent of the petitioners in the bankruptcy sample reported credit card debts of 10,000 or less. A recent national bankruptcy study has also found the growing prevalence of credit card debt. See Sullivan, Warren & Westbrook, supra note 104, at 233 (finding that 56.2 percent of all the bankruptcy petitioners owed more than $10,000 in credit card debt at the time of filing for bankruptcy protection).

111. The average debt-to-income ratio of the debtor’s household in the bankruptcy sample was 2.3 (1.7 without outliers), and a median of 1.2. 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 average 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 higher debt-to-income ratio with a median of 3.04, with an average ratio of 4.35. See Sullivan, Warren & Westbrook, supra note 104, at 230. The lower debt-to-income ratio reported in this study is plausibly due to the higher average household income reported by petitioners in this study.

112. See SULLIVAN, WARREN & WESTBROOK, supra note 97, at 70.

113. The average without the outliers was -$38,753. The standard deviation was 493,768. 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 average 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 SULLIVAN ET AL., supra note 109, at 72 (The mean net worth of the bankrupt debtors is -$16,819, and their median net worth is -$10,542). The higher negative worth reported in this study as compared to previous studies is plausibly due to the lower homeownership rate reported in this sample.

114. This finding is consistent with the findings from previous empirical studies in the United States. See id. (“Only 12.6 percent of the total United States population has a net worth of zero or negative value, compared with nearly all of the bankrupt debtors.”).
B. THE ENTREPRENEURS IN BANKRUPTCY

The 14 percent of the bankruptcy filers, who were identified as former small-business owners, were demographically dramatically different than the wage earners in the bankruptcy sample. Outside of bankruptcy entrepreneurs are also demographically distinguishable than their wage earner counterparts. Self-employed households in the United States tend to be male, older, white, and married as compared to non-business-owner households. Similarly, the entrepreneurs in the bankruptcy sample were five years older, and were more likely to be white, male, and married compared to the wage earners in the sample.

Also, just as small-business owners outside of bankruptcy are generally well educated and on average more educated than non-business-owners, the small-business owners in the bankruptcy sample were significantly more educated than the wage earners.

115. See Haynes & Ou, supra note 7, at 9.

116. The average age of the entrepreneurs in the bankruptcy sample was 45.88 (45.3 without outliers), with a median of 44, and a standard deviation of 13 (N=203). In contrast, the average age of the wage earner in the bankruptcy sample was 40.94 (40.22 without outliers), with a median of 39, and a standard deviation of 13.2 (n=1266). The difference between the two groups was deemed statistically significant at p=.000.

117. Among the self-employed in the bankruptcy sample, 67.3 percent were white (N=140), 2.9 percent were black=2.9 (N=6), 5.3 percent were Asians (N=11), 18.3 percent were hispanics (N=38), .5 percent were Native Americans (N=1); others were 4.3 percent (N=9) and 1.4 percent were not available (N=3). In contrast, among the wage earners in the bankruptcy sample there were 46.3 percent that were white (N=598), 9.1 percent were black (N=117), 6.8 percent were Asians (N=88); 33.6 percent were hispanics (N=434), others were 2.9 percent (N=37); and .9 percent were unavailable (N=12).

118. Among the self-employed in the bankruptcy sample, 65.9 percent were male (N=137).

119. Among the self-employed in the bankruptcy sample, 32.2 percent were single (N=67), 39.9 percent were married (N=83), 18.8 percent were divorced (N=39); 3.4 percent were widowed (N=7), and in 5.8 percent of the cases information was not available (N=12). In contrast, among the wage earners in the bankruptcy sample, 38.6 percent were single (N=499), 31 percent were married (N=400), 25.4 percent were divorced (N=328), 3.5 percent were widowed (N=15), and in 1.5 percent of the cases information was not available. (N= 20). These differences were deemed statistically significant at p=.000.

120. See Haynes & Ou, supra note 7, at 8 (finding that small-business owners received more education with college education or higher than non small-business owners); NFIB, NATIONAL SMALL-BUSINESS POLL: PRE-OWNERSHIP EXPERIENCE 7 (2002), available at www.nfib.com /object/3663050.html (finding that half of small-business owners had a bachelor degree or a more advanced degree).

121. On average, 49.2 percent of the entrepreneurs in the bankruptcy sample had earned at least an Associates of Arts degree (N=97), compared to only 29.9 percent among the wage earners in the bankruptcy sample (N=378). Nonetheless, small-business owners in the bankruptcy sample were somewhat less educated than small-business owners outside of bankruptcy. Among entrepreneurs in the bankruptcy sample, only 36 percent (N=75) had a bachelors’ degree or a higher degree. In contrast, almost half of entrepreneurs outside of bankruptcy have a bachelors’ degree or a higher degree. See NFIB, supra note 120, at 7.
Moreover, the entrepreneurs in the bankruptcy sample tended more often to be native born, compared to the wage earners in the bankruptcy sample.122 Lastly, the self-employed bankruptcy petitioners in the sample identified less often as Christians, compared to the wage earners in the bankruptcy sample.123

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.124 Similarly, the results from this study suggest that the bankrupt self-employed report a higher income level125 and a superior value of assets.126

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 more than double the amount of credit card debts compared to the wage earners in the sample.127 With an average credit card debt exceeding $55,000, this characteristic of the self-employed petitioners...
in the sample manifested a growing trend outside of bankruptcy of greater reliance by small-business owners on credit card debt to finance their business operations. Studies have indicated that since the early 1990s, credit card debt has become a growing credit source for small-business owners in the United States.128 Indeed, the self-employed petitioners in the bankruptcy sample recalled that credit card debt was the source of as much as a third of their business financing at the time of business formation.129 Nonetheless, the pervasiveness and the magnitude of credit card use among the bankruptcy entrepreneurs in the sample are striking. In 2004, more than 80 of small-business owners in the United States reported using credit card debt in the operation of their business.130 In comparison, in the bankruptcy sample, more than 93 percent of the small-business owners reported some credit card debts.131 Similarly, compared to the more than $55,000 of credit card debt reported by the self-employed in the bankruptcy sample, the average outstanding credit card balance among the self-employed outside of bankruptcy was only $17,000.132

While self-employed petitioners reported twice as much credit card debt compared to the wage earners in the sample, the total debt disparity between the two groups is crushingly overwhelming. On average, wage earners in the bankruptcy sample reported considerable outstanding debts of $58,250.133 In contrast to the wage earners, self-employed petitioners in the sample reported more than four times as much in total debts, with an average of $259,134.134 A similar disparity in outstanding debt level has been reported between entrepreneurs and wage earners outside of bankruptcy as well.135

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129. On average, 36 percent of the total financing at the time of business formation of the entrepreneurs in the bankruptcy sample was attributed to credit card debts (N=49).
130. See SCOTT, DUNKELBERG & DENNIS, JR., supra note 128, at 23 (82 percent of small-business owners in 2004 reported using credit cards).
131. Only 6.3 percent of the self-employed bankruptcy petitioners reported no credit card debts (N=13).
132. See SCOTT, DUNKELBERG & DENNIS, JR., supra note 128, at 27 (finding that the “average balance outstanding for those [business owners] carrying balances beyond the monthly billing cycle was almost $17,000 with a median balance of $4,000”).
133. Without outliers, the total debts reported by the wage earner petitioners in the bankruptcy sample was $40,794, with a median of $32,000 and a standard deviation of 120,677 (N=1056).
134. Without outliers, the total debts reported by the self-employed petitioners in the bankruptcy sample was $147,797, with a median of $75,000 and a standard deviation of 776,405 (N=171). Similar findings were reported in prior studies of small-business owners in bankruptcy. See Fullenbaum & McNell, supra note 79, at 15 (reporting that small-business owners in the bankruptcy sample had on average $170,000 in debts).
135. See George & Rosemary J. Avery, Family Businesses: Can the Family and Business Finances
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. 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.

Somewhat similar to small-business owners outside of bankruptcy, approximately half of the small-business owners in the bankruptcy sample were organized as sole proprietors. Also, the vast majority of the former small-business owners reported owning a business in the retail or service sectors.

Similar to small-business owners outside of bankruptcy, entrepreneurs in the bankruptcy sample were typically operating significantly smaller size enterprises. On average, business owners in the bankruptcy sample had six employees, compared to the average size of a small-business in Los Angeles of seventeen employees.

Most of the entrepreneurs in the bankruptcy sample had significant

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136. Among the self-employed in the bankruptcy sample, the average debt-to-income ratio was 4.64 (3.99 without outliers), with a median of 2.6 and a standard deviation of 5.3 (N=59). In contrast, among the wage earners in the bankruptcy sample, the average debt-to-income ratio was 1.8 (1.41 without outliers), with a median of 1.0, and a standard deviation of 3.86 (N= 270). The difference was deemed statistically significant at p=.000.

137. Among the self-employed in the bankruptcy sample, the average net worth was -$226,504, (-$121,153 without outliers), with a median of -$62,000 and a standard deviation of 823,111 (N=139). In contrast, among the wage earners in the bankruptcy sample, the average net worth was -$23,375 (-$31,610 without outliers), with a median of-$27,000, and a standard deviation of 399,700 (N=768). The difference was deemed statistically significant at p=.000.

138. Among the self-employed in the bankruptcy sample 56.6 percent were organized as sole proprietors (n=11), 15 percent were organized as Corporations (n=31), 9.7 percent were organized as Partnerships (n=20), 3.9 percent were organized as LLCs (n=8) and 5.8 percent were organized as other business forms (n=12). See Torres, supra note 65, at C2 (46 percent of small-business owners in Los Angeles are sole proprietors); ROPER CENTER, supra note 28, at 62 (finding that 44 percent of small-businesses in Los Angeles are organized as sole proprietorships).

139. Among the self-employed petitioners in the bankruptcy sample, 25.3 percent were from the retail industry (N=39); 2.6 percent were from the manufacturing sector (N=4); and 70.8 percent were from the service industry (N=109).

140. See Torres, supra note 65, at C2 (28 percent of small-business owners in Los Angeles had no employees in 1999, and 33 percent had between 1-4 employees). Similarly, in the bankruptcy sample, 42.1 percent of the small-business owners reported employing no employees, and 33.9 percent reported employing between 1 and 4 employees.

141. On average, the small-business owner in the sample has 6.02 employees (3.1 without outliers), with a median of 1 and a standard deviation of 18.78 (N=171). See Paul Ong & Tania Azores, Asian Immigrants in Los Angeles: Diversity and Divisions 100, 115, in THE NEW ASIAN IMMIGRATION IN LOS ANGELES AND GLOBAL RESTRUCTURING (Paul Ong, et al., eds., 1994) (finding that on average firms in Los Angeles employ 17 employees).
business ownership experience under their belts. The average level of previous work experience by the small-business owners in the bankruptcy sample was 10.5 years. Similarly, thirty six percent of the small-business owners in the bankruptcy sample reportedly owned a business venture prior to the one at hand.

Despite the serious challenges faced by the small-business owners in the bankruptcy sample, almost half of the petitioners have expressed a desire to remain entrepreneurs after bankruptcy.

Among consumer petitioners in the bankruptcy sample, loss of employment was the most frequently cited reason for filing for bankruptcy. Overwhelming credit card debts, medical condition of the petitioner, and personal or family problems followed closely as the reasons for bankruptcy filing. In contrast, among entrepreneurs, the most commonly identified cause of the bankruptcy filing was a business failure, followed by crushing credit card debts and health reasons.

C. TAXES AS A CAUSE OF FINANCIAL DISTRESS

Taxes do not seem to constitute an important factor in the decision to file for bankruptcy protection among the consumer bankruptcy petitioners. Out of 1,291 consumer bankruptcy petitioners in the sample, only twelve

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142. On average the small-business owner in the bankruptcy sample had 10.52 years of business ownership experience (9.65 without outliers), with a median of 7, and a standard deviation of 9.4 (N=175).

143. In the bankruptcy sample, 36 percent of the small-business owners in the bankruptcy sample reportedly owned a business prior to the one at hand (N=63), with a range of zero to ten prior business ventures. A similar figure has been reported outside of bankruptcy. See Baird & Morrison, supra note 68, at 2338 (finding that about 35 percent of business owners previously owned another business); Fullenbaum & McNeill, supra note 79, at 2 (More than 50 percent of the respondents had never owned a business before starting the bankrupt business; a significant minority of the respondents (37 percent) had been entrepreneurs before).

144. Among the small-business owners in the bankruptcy sample, 48.3 percent reportedly indicated their interest to remain business owners after the bankruptcy proceedings (N=99), while 35.1 percent indicated the opposite (N=72). Similar findings were reported in previous studies of small-business owners in bankruptcy. See Fullenbaum & McNeill, supra note 79, at 2 (When asked “Would you ever start your own business again?” 73.2 percent answered “Yes.”); SULLIVAN, WARREN & WESTBROOK, supra note 70, at 30 (concluding that “[b]ankruptcy does not appear to have quenched the entrepreneurial spirit of the petitioners”).

145. Among consumer petitioners in the bankruptcy sample who have answered the question, 26.3 percent reported loss of employment as a cause of their bankruptcy filing (N=169), followed by credit card debt at 24.9 percent (160), medical condition at 23.8 percent (N=153), personal and family reasons at 22.6 percent (N=145), and housing problems at 1.7 percent (N=11).

146. Among entrepreneur petitioners in the bankruptcy sample who have answered the question, 46.9 percent (N=67) identified a business collapse as the cause of their bankruptcy filing, followed by credit card debt at 17.5 percent (N=25), medical condition at 14 percent (N=20), loss of employment at 11.2 percent (N=16), and personal and family reasons at 10.5 percent (N=15).
petitioners identified tax problems as a cause of their bankruptcy filing. However, among entrepreneurs in the bankruptcy sample, tax related problems are 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. Tax problems were the third-most frequently cited problem by the small-business owners. 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 it as such, followed by internal business problems with just under 15 percent of the petitioners citing it as the cause of their business failure.

Given that most of the cases in the sample were Chapter 7 cases, it was not surprising to find that almost 80 percent of the petitioners that identified tax related trouble were Chapter 7 bankruptcy cases. However, while the sample size was too small to make any generalizations, among the Chapter 11 filers, tax problems were identified as the dominant reason for bankruptcy filing.

Petitioners that have cited tax difficulties as the cause of their business

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147. Among the self-employed bankruptcy petitioners, who have answered the question regarding the cause of their business demise, 12.9 percent attributed it to tax problems (N=19).
148. Among the 147 respondents, competition was cited by 45.6 percent of the respondents as the source of the business failure (N=67), 14.3 percent identified internal business problem (N=21), 12.9 percent mentioned tax as the cause of the business failure (N=19), and 10.9 percent attributed the business failure to personal problems (N=16).
149. Out of the total 19 entrepreneurs in the bankruptcy sample that have identified tax problem as the cause of their bankruptcy filing, 73.7 percent were Chapter 7 cases (N=14), 21.1 percent were Chapter 11 cases (N=4) and 5.3 percent were Chapter 13 cases (N=1).
150. Entrepreneurs filing under Chapter 11 overwhelmingly reported tax debt as the cause of bankruptcy filing at 100 percent (N=4), compared to only 9.9 percent in Chapter 7 (N=14).
failure were nine years older than the other entrepreneurs in the sample.\textsuperscript{151} Most of the entrepreneurs that identified tax problem as the cause of their financial demise were men. While male made up 67 percent of the entrepreneurs in the bankruptcy sample,\textsuperscript{152} almost 80 percent of the petitioners blaming their bankruptcy filing to tax related debts were male.\textsuperscript{155} Indeed, compared to female entrepreneurs, male entrepreneurs in the bankruptcy sample identified tax problems as the cause of their bankruptcy filing at almost twice the rate.\textsuperscript{154}

Also, most of the self-employed bankruptcy petitioners in the sample that attributed their bankruptcy filing to tax problems were white petitioners. While white petitioners made up 67 percent of the entrepreneurs in the bankruptcy sample,\textsuperscript{155} almost 75 percent of the petitioners faulting their financial demise to tax problems were white petitioners.\textsuperscript{156} Indeed, compared to minority entrepreneurs, white entrepreneurs were more than three times more likely to have identified tax problems as the cause of their bankruptcy filing compared to the minority counterparts.\textsuperscript{157}

In addition, native-born were the most of the self-employed bankruptcy petitioners that attributed their bankruptcy filing to tax problems. While native born petitioners made up 75 percent of the entrepreneurs in the bankruptcy sample, almost 90 percent of the petitioners that fix the fault for their bankruptcy filing to tax problems were American-born petitioners.\textsuperscript{158} Indeed, compared to immigrant entrepreneurs, non-immigrant entrepreneurs were more than three times more likely to have identified tax problem as the cause of their bankruptcy filing compared to their immigrant counterparts.\textsuperscript{159}

\begin{itemize}
\item \textsuperscript{151} The average age of entrepreneurs in the bankruptcy sample, that have attributed the business failure due to tax debts, was 54 (N=15). In contrast, 45 was the average age of the rest of the entrepreneurs in the bankruptcy sample (N=128).
\item \textsuperscript{152} Among entrepreneurs in the bankruptcy sample, Whites made up 67.3 percent (N=140).
\item \textsuperscript{153} In the bankruptcy sample, 78.9 percent of all the former entrepreneurs that identified tax problem as a cause of their bankruptcy filings were male (N=15).
\item \textsuperscript{154} Among male entrepreneurs in the bankruptcy sample, 15.5 percent (N=15) attributed their bankruptcy filing to tax problems compared to only 8 percent among their female counterparts (N=4).
\item \textsuperscript{155} Among entrepreneurs in the bankruptcy sample, whites made up 67.3 percent (N=140).
\item \textsuperscript{156} 73.7 percent of the entrepreneurs that identified tax problem as a cause of their bankruptcy filings were non-minority (N=14).
\item \textsuperscript{157} In the bankruptcy sample, 12.7 percent of the white entrepreneurs in the bankruptcy sample reported tax problem as the cause of their bankruptcy filing (N=14) compared to only 3.6 percent among the minority entrepreneurs (N=1).
\item \textsuperscript{158} Among the entrepreneurs in the bankruptcy sample, 74.9 percent were native born (N=152). Among the former entrepreneurs that identified tax problem as the cause of their bankruptcy filings, 93.3 percent were native born (N=14).
\item \textsuperscript{159} In the bankruptcy sample, 12 percent of the native born entrepreneurs in the bankruptcy sample reported tax problem as the cause of their bankruptcy filing (N=14) compared to only 3.8 percent among the immigrant entrepreneurs (N=1).
\end{itemize}
The entrepreneurs that were reporting tax related problems connected to their bankruptcy filing were mainly well educated. Over half of the entrepreneur petitioners that reported tax troubles had at least an Associates of Arts degree. Not only they were well educated, but they had substantial business experience under their belt. Entrepreneurs in the bankruptcy sample that claimed to have been a victim of the tax system had on average eighteen years of business ownership experience (compared to only ten years among all other entrepreneurs), with an average of thirteen years in the particular business venture that failed.

While the tax-burden casualties in the bankruptcy sample had superior human capital in terms of experience and education, they were financially inferior position compared to the rest of the entrepreneurs in the bankruptcy sample. The entrepreneurs in the bankruptcy sample that attribute much of their demise to tax related issues had somewhat better earnings and higher assets holdings. However, they also had significantly higher outstanding debts, including credit card debts. The enormously higher debt level reported by them manifested itself in a much-elevated debt-to-income ratio, as well as significantly lower net worth.

160. Among the entrepreneurs in the bankruptcy sample that identified tax trouble as the cause of their bankruptcy filing, 57.1 percent had at least an Associates of Arts degree (N=8).
161. The entrepreneurs in the bankruptcy sample, that identified tax trouble as the cause of their bankruptcy filing, had on average 17.95 years of business ownership experience (N= 16), compared to 10.66 years among the other entrepreneurs in the sample (N=114). Also, the entrepreneurs in the bankruptcy sample, that identified tax trouble as the cause of their bankruptcy filing, had on average and on average of 13.45 years in the business the last venture that failed (N=11), compared to 7.59 years among the other entrepreneurs in the sample (N=100). Both differences were deemed to be statistically significant at p=.05.
162. The average monthly income of the entrepreneur in the bankruptcy sample that attributed his business failure to tax problems was $3,174 ($2,972 without outliers, with a median of $2,250, and a standard deviation of 2,964, N=15) compared to monthly income of $2,530 reported by the rest of the entrepreneurs in the sample ($2,530 without outliers, with a median of $2,000 and a standard deviation of 4,470, N=111). Similarly, the average value of assets held by the self-employed in the bankruptcy sample that reported tax problems was $171,979 ($106,819 without outliers, with a median of $11,500, and a standard deviation of 402,686, N=16), compared to $62,696 among the rest of the entrepreneurs in the bankruptcy sample ($23,859 without outliers, with a median of $5,100, and a standard deviation of 230,142, N=96).
163. The average total outstanding debts held by the self-employed in the bankruptcy sample, who reported tax problems, was $1,084,735 ($703,316 without outliers, with a median of $250,000, and a standard deviation of 2,194,309, N=16), compared to $175,203 among the rest of the entrepreneurs in the bankruptcy sample ($113,797 without outliers, with a median of 65,750, and a standard deviation of 368,137, N=108). This difference was deemed to be statistically significant at p=.05. The tax victims also reported higher credit card debts with an average of $91,019 ($71,843 without outliers, with a median of $30,000, and a standard deviation of 55,679 among the remaining entrepreneurs in the bankruptcy sample ($46,991 without outliers, with a median of $35,000 and a standard deviation of 60,922, N=97).
164. The entrepreneurs in the bankruptcy sample, that identified tax trouble as the cause of their bankruptcy filing, had on average household debt-to-income ratio of 8.9 (8.4 without outliers, with a median of 5, and a standard deviation of 10.3, N= 7), compared to 4.2 among the other entrepreneurs in the sample (3.8 without outliers, with a median of 2.6, and a standard deviation of 4.5, N=33).
VII. DISCUSSION

This study has found that the self-employed in bankruptcy are similar in many respects to the self-employed outside of bankruptcy. The self-employed households in the United States tend to be male, native born, educated, older, white, and married as compared to the non-business-owner households. Similarly, the entrepreneurs in the bankruptcy sample were older, tended to be white, male, married, well educated, and native-born compared to the wage earners in the sample.165

While the self-employed were demographically similar to the self-employed outside of bankruptcy, they were financially dramatically different. Although the self-employed in the bankruptcy sample reported higher income level and a higher value of assets compared to the wage earners, the small-business owners in the bankruptcy sample were overall financially weaker compared to the wage earners as manifested by exceedingly high outstanding debts, debt-to-income ratio and inferior net worth.166

This study has found that filing for bankruptcy protection by small-business owners does not appear to be associated with some of the factors that contribute to higher closure rates among entrepreneurs outside of bankruptcy. For example, studies have shown that particularly younger business owners, as well as older business owners face higher risk of closure.167 Nonetheless, the typical entrepreneur in the bankruptcy sample was not particularly young or old, with an average age of 45. Also, previous studies have shown that business owners that are married tend to perform better than non-married small-business owners.168 However, the single largest group among the entrepreneurs in the bankruptcy sample was married petitioners making up almost 40 percent of the entrepreneurs in the sample.169

In addition, prior studies have correlated lack of business experience with higher business closure rates.170 However, the entrepreneurs in the

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165. See supra notes 116-22 and accompanying text.
166. See supra notes 127-37 and accompanying text.
167. See supra note 22 and accompanying text.
168. See supra note 24 and accompanying text
169. See supra note 119 and accompanying text.
170. See supra note 27 and accompanying text.
bankruptcy sample had significant business ownership experience, with an average of more than ten years.  

While young or old age, non-married marital status, and lack of experience as contributors to a firm’s closure seem to lack in association with the entrepreneurs in the bankruptcy sample, this study’s findings tend to suggest that other factors, which are associated with higher closure rates outside of bankruptcy, were reflected among the entrepreneurs in the bankruptcy sample. For example, studies have found that entrepreneurs with limited education are more vulnerable to business closure. Similarly, the data from this study indicates that while on average entrepreneurs in bankruptcy are well educated, entrepreneurs in the bankruptcy sample have inferior educational background compared to entrepreneurs outside of bankruptcy.

In addition, studies have found that sole proprietors tend to experience higher closure rates as compared to other entities. While only 46 percent of small-business owners in Los Angeles were sole proprietors, more than 56 percent of the entrepreneurs in the bankruptcy sample were sole proprietors.

Moreover, studies have shown that business owners that do not own a home appear to experience a higher dissolution than non-homeowner entrepreneurs. Indeed, among the bankruptcy entrepreneurs in the sample, only 8 percent owned a home compared to almost half of the entrepreneurs outside of bankruptcy.

Also, studies have shown that outside of bankruptcy, the retail and service industries have higher business turnover rates than businesses in other industries. This higher failure rate is reflected in the bankruptcy sample where the vast majority of the former small-business owners reported owning a business in the retail or service sectors.

Similarly, some researchers have found that small-business owners are inherently more vulnerable as a result of their small size. Indeed, entrepreneurs in the bankruptcy sample were typically operating significantly smaller size enterprises compared to entrepreneurs outside of

171. See supra notes 142-43 and accompanying text.
172. See supra note 21 and accompanying text.
173. See supra note 121 and accompanying text.
174. See supra note 26 and accompanying text.
175. See supra note 138 and accompanying text.
176. See supra note 25 and accompanying text.
177. See supra note 106 and accompanying text.
178. See supra note 16 and accompanying text.
179. Among the self-employed petitioners in the bankruptcy sample, 25.3 percent were from the retail industry (N=39); 2.6 percent were from the manufacturing sector (N=4); and 70.8 percent were from the service industry (N=109).
180. See supra note 15 and accompanying text.
bankruptcy.\textsuperscript{181}

Similarly, other studies have attributed small-business failure to highly leveraged enterprises.\textsuperscript{182} Consistent with those studies, the data from this study suggests that small-business owners in bankruptcy are overwhelmed with outstanding debts.\textsuperscript{183}

Lastly, researchers have been able to identify a link between high tax burden and business failure.\textsuperscript{184} Similarly, the data from this study suggests that tax related problem was an important contributor to the demise of a sizable number of the entrepreneurs in the bankruptcy sample. Indeed, almost 13 percent of the entrepreneurs in the bankruptcy sample identified tax problems as a cause of their business collapse.\textsuperscript{185} Tax problems were the third most frequently cited problem by the small-business owners.\textsuperscript{186}

The self-employed bankruptcy petitioners that have attributed their downfall to tax related problems tended to be men, white, older, native born, well-educated, and with significant business ownership experience as compared to the other entrepreneurs in the sample.\textsuperscript{187} Nonetheless, compared to the rest of the entrepreneurs in the bankruptcy sample, entrepreneurs that reported tax problem as the cause of their business failure were noticeably more financially fragile. While they reported higher earnings and asset holdings than the rest of the entrepreneurs, small-business owners that had cited tax problems as the cause of their bankruptcy filing had higher credit card debts, higher overall debts, higher debt-to-income ratio, and inferior net worth.\textsuperscript{188}

**VIII. CONCLUSION**

Consistent with the growing tax burden on small-business owners, as well as the growing body of evidence linking higher tax burden with limited entrepreneurial growth and higher closure rates, this study has found that tax problems constitute an important reason for bankruptcy filings for a sizable number of entrepreneurs. Interestingly, those entrepreneurs that attribute their business collapse to tax problems do not come from disadvantageous background. Instead, the average entrepreneur in the bankruptcy sample that has faulted tax problems for his financial

\begin{itemize}
\item \textsuperscript{181} See supra note 140-41 and accompanying text.
\item \textsuperscript{182} See supra note 16 and accompanying text.
\item \textsuperscript{183} See supra note 134 and accompanying text.
\item \textsuperscript{184} See supra notes 28-30, 50-51 and accompanying text.
\item \textsuperscript{185} See supra note 147 and accompanying text.
\item \textsuperscript{186} See supra note 148 and accompanying text.
\item \textsuperscript{187} See supra notes 151-64 and accompanying text.
\item \textsuperscript{188} See supra notes 162-64 and accompanying text.
\end{itemize}
woes was typically older male, white, native-born, well-educated and an experienced business owner. Nonetheless, the typical entrepreneur with tax problem in the bankruptcy sample was facing enormously higher debt burden with more than five times as much debts as other entrepreneurs in the bankruptcy sample.

While this study confirmed the prevalence of tax problems as a cause of business failure, it did not ascertain the exact nature of the tax problems faced by many of these entrepreneurs in bankruptcy. Future research might explore the pervasiveness and the nature of tax debts among bankruptcy petitioners; ascertain the amount of tax debt bankruptcy entrepreneurs typically report at the time of bankruptcy filing; identify the tax burden at the time of bankruptcy filing relative to outstanding debt and income of the petitioners; and determine the characteristics of bankruptcy petitioners that tend to report tax obligations.