SENIOR ENTREPRENEURS IN BANKRUPTCY

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I. INTRODUCTION

During the last century, the number and the proportion of seniors in the United States have increased considerably.¹ The U.S. population which would be considered senior is expected to continue to grow at a brisk rate throughout this century.² The rapid growth of the senior population is a product of a number of factors including a declining death rate, increasing life expectancy, and the aging of the baby boomers.³ These changes are likewise reflected in the age of the U.S. workforce, with both employees and small business owners becoming older overall.⁴

As the proportion of seniors rises in the United States, there is an increased burden upon younger, working age individuals who have to support seniors through social welfare entitlements paid for in the form of taxes.⁵ For example, researchers have concluded that, partly

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1. See Dorothy P. Rice & Norman Fineman, Economic Implications of Increased Longevity in the United States, 25 ANN. REV. PUB. HEALTH 457, 458 (2004) (“In 1900, less than 125,000 persons were 85 years and over, comprising 4% of the elderly; by 2000, there were 4.2 million persons in this age group, or 12% of the elderly.”).”

2. Id. (projecting that by 2030, persons aged 85 and over will double to just under 9 million people).

3. See id. at 459-60 (reporting that mortality rates from all causes have declined rapidly over the last century, and that more than 27 years have been added to life expectancy of Americans over that same period).

4. See STACY FOULOS & DEMETRIA S. NIGHTINGALE, U.S. DEP’T OF LABOR, AGING BABY BOOMERS IN A NEW WORKFORCE DEVELOPMENT SYSTEM 4 (2004), http://www.doleta.gov/Seniors/other_docs/AgingBoomers.pdf (reporting that in 1985 the median age of workers in the United States was 35 and in 2005 the median age is projected to be nearly 41).

5. See James R. Knickman & Emily K. Snell, The 2030 Problem: Caring for Aging Boomers, 37 HEALTH SERV. RES. 849, 857 (2002) (asserting that the dependency ratio of workers aged 20-64 to the seniors aged 65 years and over has declined since 1960, thus placing a very large burden on the working population in the United States).
as a result of the dramatic growth of the senior population in the United States, health care costs, as a percentage of gross domestic product, have increased by more than three times over the past fifty years from a low of 4.4% of GDP in 1950 to over 14% in 2001. Similarly, as individuals reach eligibility age for Social Security benefits, some scholars have raised concerns about the viability of the Social Security fund to provide for younger individuals upon their retirement. To address the increased burden on younger, working age individuals, some scholars have advocated adopting policies to encourage individuals to work beyond age sixty-five. These proponents have argued that having individuals work beyond the age of sixty-five would be justified because members of the baby-boom generation report overall good health, increased life expectancy, high degrees of independence, extensive work experience, and high levels of education. The proponents contend that by extending the term of employment beyond age sixty-five, it will become significantly more feasible to pay for increased social welfare entitlement expenditures associated with the seniors. Essentially, as individuals live longer in an overall healthy state, they can work longer and thereby raise their incomes.

6. See Rice & Fineman, supra note 1, at 464 (reporting that in 1950, medical care costs were $12.7 billion and accounted for 4.4% of GDP whereas in 2001 medical care costs reached $1.4 trillion and represented 14.1% of the GDP).

7. See Kevin M. Murphy & Finis Welch, Perspectives on the Social Security Crisis and Proposed Solutions, 88 AM. ECON. REV. 142, 142 (1998) ("Current estimates are that the Social Security system will run out of funds around 2030.").

8. See infra notes 9-11 and accompanying text.

9. See AARP PUB. POLICY INST., UPDATE ON THE AGED 55+ WORKER 2007-1 (2008), http://assets.aarp.org/rgcenter/econ/06142_worker.pdf (hereinafter Update on Aged 55+ Workers) (reporting that in 2007 labor force participation rate for workers age 55 or older has reached a level not seen before and predicting that workers age 55 or older will constitute more than 90% of projected labor force growth over the next decade); FED. INTERAGENCY FORUM ON AGING-RELATED STATISTICS, SELECTED INDICATORS OF RETIREMENT RESOURCES AMONG PEOPLE AGED 55-64: 1984, 1994, & 2004, at 3 (2008), http://agingstats.gov/AgingStatsDotNet/Main_Site/Data/2008_Retirement/RetirementResources.pdf (reporting that older Americans are much more educated that in years past); Ctrs. For Health COMM., ET AL., REINVENTING AGING: BABYBOOMERS & CIVIC ENGAGEMENT $ (2004), http://www.hsph.harvard.edu/chc/reinventingaging/Report.pdf (reporting that older Americans today are healthier and live longer); NAACP COMM. ON SOC. SEC. REFORM, REPORT OF THE NATIONAL COMMISSION ON SOCIAL SECURITY REFORM (1983), http://www.ssa.gov/history/reports/gspan.html (suggesting that as the life expectancy of Americans increases, more of them are able to work for longer).

be self-sufficient, and pay more taxes to support various social welfare entitlements, such as Social Security and Medicare. As this article proceeds, the term "senior" will mean any individual in the United States who is at least fifty-five years old.

According to one study, the labor participation of seniors in 2007 reached a "level not seen for decades." Additionally, the senior labor force is projected to account for more than 90% of labor force growth in the United States during the next decade. Furthermore, among developing nations, the United States "has one of the highest labor force participation" rates among individuals who are sixty-five years old or older.

The large majority of senior workers in the United States are wage earners, but a sizeable percentage of senior workers are entrepreneurs. Specifically, senior workers now constitute a growing part of the small business owners in the United States. Recent data suggests that the number of entrepreneurs in the United States who are over the age of forty-five is growing, while the rate is increasing at an even higher rate for senior entrepreneurs. Indeed, since 2000, the number of senior entrepreneurs has increased by more than 20%. Senior entrepreneurs now make up one of the largest self-employed groups classified by age and represent nearly 31% of all self-employed workers in the United States. A similar trend has been detected in other countries as well.

11. See Rice & Fineman, supra note 1, at 467.
12. As this article proceeds, the term "senior" will mean any individual in the United States who is at least fifty-five years old.
13. See Update on Aged 65+ Workers, supra note 9, at 1.
14. Id.
16. Id. at 18 (stating 87% of those aged 65 or older participating in the labor market were wage and salary workers).
17. Anita Campbell, Older Entrepreneurs a Growing Segment, Small Bus. Trends, Aug. 29, 2006, http://www.smallbiztrends.com/2005/08/older-entrepreneurs-growing-segment-html. As this article proceeds, the phrase "senior entrepreneur" will mean any individual in the United States who is at least fifty-five years old who is also self-employed.
18. Id. (stating unpublished government figures show that between 2000 and 2005 the number of self-employed individuals age 55 and older rose from 2,136,000 to 2,598,000).
19. See U.S. Census, Bur., 2002 Economic Census: Characteristics of Business Owners 28 tbl. 5 (2006), http://www.census.gov/prod/ec02/sb0200cocbo.pdf (reporting that in 2002, there were 17,598,942 small businesses (with employees and without employees) in the United States owned by individuals 55 years or older out of a total number of firms of 20,528,795).
Senior entrepreneurs do not only constitute a sizeable number of small business owners in the United States, but they also report a higher self-employment rate as compared to their younger counterparts. For example, one study found that almost 25% of all employed men in the United States aged sixty-five and older and 13% of those aged fifty-five to sixty-four are self-employed, compared to only 8% of those aged twenty-five to fifty-four. For women, the propensity to become self-employed is lower than men, however, a greater proportion of women still opt to become self-employed at an older age. Whereas 14% of all employed women age sixty-five or older are self-employed and 9% of all employed women aged fifty-five to sixty-four are self-employed, only 6% of employed women are self-employed among those aged twenty-five to fifty-four.

workingpaper_18.pdf (reporting that senior entrepreneurs account for approximately 10% of all business start-ups in England and Wales, compared to 10% a decade ago; Paull Weber & Michael Schaper, Understanding the Grey Entrepreneur, 12 J. ENTERPRISE CULTURE 147, 149 (2004) (reporting that according to the Australian Bureau of Statistics from 2001, 11% of small business owners in Australia were over 50 years old and reporting that according to the census data in New Zealand, over 40% of all small businesses with no employees were owned by individuals aged 50 or older).


23. Id.; see also LYNN A. KAROLY & JULIE ZISSIMOPOULOS, AARP PUB. POL'Y INST., SELF-EMPLOYMENT AND THE 50+ POPULATION, at i (2004), http://assets.aarp.org/recenter/comm/2004_00_self_employ.pdf [hereinafter SELF-EMPLOYMENT AND THE 50+ POPULATION] (“In 2002, for example, CPS data indicate that 15.4% of workers aged 50-66, but only 10.2% of the total workforce, were self-employed in incorporated or unincorporated businesses. Although those aged 50 and above made up 25% of the workforce in 2002, they comprised 40 percent of the self-employed in the same year.”); Bruce et al., supra note 22, at 7 (“At ages 45 to 64, 8.9 per cent of all workers were self-employed compared with 12 percent for those ages 55 to 64 and 20.5 per cent for those age 65 and above. These age patterns hold for both men and women. As a result, for example, in 2001, although workers age 45 and above made up 38% of the workforce, they represented 54% of those who were self-employed.”); David S. Evans & Linda S. Leighton, Some Empirical Aspects of Entrepreneurship, 79 AM. ECON. REV. 520, 521 (1989) (“The fraction of the labor force that is self-employed increases with age until the early 40s and then remains constant until the retirement years.”); Victor P. Fuchs, Self Employment and Labor Force Participation of Older Males, 17 J. HUM. RESOURCES 339, 340-41 (1982) (“[I]n cross-sectional data the proportion self-employed among white urban male workers rise from about 15 in the late fifties to more than 25 percent by the late sixties.”). Studies found a similar pattern in other countries as well. See, e.g., Doreen Duchen, More Seniors at Work, PERSPECTIVES ON LABOUR AND INCOME, Feb. 2004, at 5, 8, available at http://www.statcan.ca/english/freepub/75-001-XIE/1020475-001-XIE.pdf (“[W]orkers 65 and over were almost four times more likely than those 15 to 64 to be their own boss. 45% compared with 12%.”); Weber & Schaper, supra note 20, at 149 (reporting that 31% of Australians over 50 years old are self-employed, compared to only 11% among Australians under the age of 30).
Some scholars have contended that these figures have seriously under-stated the disproportionate share of the self-employed among middle aged individuals. These scholars point out that previous studies examining the self-employment rate among seniors only studied unincorporated, self-employed individuals. According to such studies, incorporated individuals who work for themselves were not classified as self-employed but were rather classified as wage and salary workers because they are technically paid employees of a business entity, regardless of whether the worker is the only employee of the business.

Recent data has allowed researchers to estimate the number and proportion of senior entrepreneurs under the expansive definition, accounting for both the incorporated and the unincorporated self-employed. Under this revised analysis, the disproportionate share of the senior entrepreneurs is considerably more pronounced.

The increasing number of small businesses owned by older individuals is anticipated to rise as the overall number of older individuals is expected to grow at a dramatic rate within the next few years. Over the next several years, a record number of individuals are expected to reach retirement age, “including seventy-seven million baby boomers, the oldest of whom are now fifty-nine years old.” According to recent surveys by the AARP, 80% of the baby boomers plan to work past the age of sixty-five. Additionally, surveys of baby boomers have found that they are keenly interested in starting their own businesses as they approach retirement age.

24. Bruce et al., supra note 22, at 18.
25. Id.
26. See id. (“Among men, these numbers are about 50 percent higher than the unincorporated counts: about 21 percent of men 55 to 64, rising to 30, 34 and 39 percent for men aged 65-69, 70 to 74, and 75 or older. For women, the two series differ less. About 12 percent of those 55 to 64 are self-employed, as are 16, 19, and 23 percent of those in the three oldest categories.”).
27. See id. at 2 (“We would expect the importance of self-employment [among older Americans] to rise as the number of older Americans increases.”); Sharon A. Devaney & Haesong Kim, Older Self Employed Workers and Planning for the Future, 37 J. Consumer Age 123, 124 (2003) (“About 10% of American workers were self-employed in 1997, but the numbers are expected to increase, especially among older workers.”).
29. Id.
30. See id. (referring to a Merrill Lynch survey of older Americans indicating that 13% of them plan to start a business in their golden years); Self-Employment and the 60+ Population, supra note 23, at i (“Two recent AARP public opinion polls found that baby boomers are very interested in starting their own business or becoming self-employed.”); Gangaram Singh, Work after Early Retirement (1988) (Ph.D. Dissertation, School of Graduate Studies, University of Toronto) (reporting that 32 percent of early retirees who return to work after retirement become self-employed). See generally Scott H. Beck, Mobility from Preretirement to Postretirement Job, 27 Soc. Quarterly 516
Researchers have identified a number of explanations for the growing number of older entrepreneurs and the higher rate of self-employment among older individuals. First, as the life expectancy rises in the United States, there are more younger small business owners that are now classified as senior entrepreneurs. Others have contended that older individuals may be pushed to some extent to pursue small business ownership because of lack of alternative career opportunities or dissatisfaction with a current job. For instance, age discrimination and inadequate access to training opportunities in the labor market may be experienced more frequently at an older age. Similar to the lack of meaningful job alternatives, which induces some older individuals to pursue entrepreneurship, other older individuals may be forced to consider self-employment to supplement inadequate Social Security entitlements or pension benefits. While challenges may force some older individuals to pursue entrepreneurship, other older individuals are enticed, or pulled, into a business ownership venture as a result of the increased ease and low cost of starting a home-based business.

Some scholars have postulated that the higher prevalence of self-employment among seniors is simply a product of a propensity among salary and wage earners to retire younger as compared to self-employed individuals. Other scholars state that the higher rate of self-employment among older individuals is a manifestation of a workforce

(1986) (estimating that in the United States 33 percent of those who retire subsequently return to work).

31. See Rice & Fineman, supra note 1, at 460 (reporting that over the past 100 years, 27.7 years have been added to life expectancy at birth).

32. See Barclays Economic Reports, Third Age Entrepreneurs: Profiting from Experience 2 (2001) (identifying job retrenchment as the single most common reason for starting a business by older people in the United Kingdom); Weber & Schaper, supra note 20, at 151 (reporting evidence that suggests that extended unemployment of many Australians over the age of 55 may push many of them to become business owners).

33. See Gengaram Singh & Alex DeNoble, Early Retirees as the Next Generation of Entrepreneurs, 23 Entrepreneurship Theory & Practice 207, 219 (2000) (hypothesizing that lack of access to employment as a result of discrimination may prompt some seniors to pursue self-employment); Weber & Schaper, supra note 20, at 150 (identifying the decline in traditional corporate career opportunities as a "push" factor forcing older persons to pursue small business ownership).

34. See Weber & Schaper, supra note 20, at 150 (identifying "insufficient retirement funds, or inadequacies in current pension entitlements" as a "push" factor forcing older persons to pursue small business ownership).

35. Weber & Schaper, supra note 20, at 150.

36. Self-Employment and the 60+ Population, supra note 23, at 13; see also Fuchs, supra note 23, at 355 (finding that the self-employed are much more likely to remain in the labor force compared to wage-salary workers and that the disparity in the propensity to retire increases with age); Joseph F. Quinn, Labor-Force Participation Patterns of Older Self-Employed Workers, 43 Soc. Sec. Bull. 17, 27 (1980) ("The self-employed sector in the United States economy is disproportionately populated by older
life cycle. That is, some older individuals view self-employment as an effective mechanism to transition slowly out of the labor force.\textsuperscript{37} While some older individuals may shift to part-time employment as they approach retirement age, many older individuals find the flexibility and independence of self-employment particularly appealing as they transition out of the full-time labor force.\textsuperscript{38} For example, one study found that approximately a third of the self-employed workers who are over the age of fifty made the transition to self-employment at or after age fifty. Thus, a sizeable fraction of older entrepreneurs moved into self-employment during the later stages of their careers, possibly as part of a planned process of retirement.\textsuperscript{39}

Yet other scholars suggest that the higher propensity among older individuals to become self-employed is due to a number of recent regulatory changes that encourage seniors to remain active in the workforce and, in many cases, to pursue entrepreneurship.\textsuperscript{40} For example, work disincentives under Social Security, in the form of earning limits, have been eliminated.\textsuperscript{41} Hence, now individuals who are eligible for Social Security benefits no longer risk losing their Social Security benefits to the extent they earn income from the operation of a business or otherwise.

Also, the normal retirement age for Social Security benefits has been on the rise and is now scheduled to rise to age sixty-seven.\textsuperscript{42} By postponing the eligibility age for Social Security benefits, the federal government has encouraged individuals to remain in the labor force longer. In contrast, a number of employers in the private sector that offer defined benefit pension plans discourage individuals from working beyond a particular age through benefit calculation rules under which the amount of expected pension benefits declines with additional years of service on that job.\textsuperscript{43} Reacting to the federal government’s changes, some older individuals have responded by locating an

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\item workers because . . . the self-employed are less likely than wage-and-salary workers to withdraw completely from the labor force . . . .
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\textsuperscript{37} Bruce et al., supra note 22, at 17.

\textsuperscript{38} Self-Employment and the 50+ Population, supra note 23, at 13; see also Quinn, supra note 36, at 27 ("The self-employed sector in the United States economy is disproportionately populated by older workers because . . . some workers shift into self-employment in their later years.").

\textsuperscript{39} Id. (describing the process engaged by some older wage earners of transitioning into self-employment).

\textsuperscript{40} See Bruce et al., supra note 22, at 2-3 (referring to studies that examine the impact of recent federal legislations in encouraging older Americans to remain longer in the workforce).

\textsuperscript{41} Id. at 2.

\textsuperscript{42} Id. at 2-3.

\textsuperscript{43} Id. at 3.
alternative place to continue working.\textsuperscript{44} Such alternatives have included self-employment for many older individuals.\textsuperscript{45} Finally, some scholars have suggested that individuals are more inclined to pursue self-employment at an older age as they accumulate more financial resources or are simply exposed to a greater number of business opportunities.\textsuperscript{46}

In spite of the high propensity among older individuals to become entrepreneurs, researchers have given little attention to this rapidly growing labor force phenomenon.\textsuperscript{47} Indeed, researchers' understanding of entrepreneurship has been largely limited to analysis of the entire self-employed population or focused at the younger groups of entrepreneurs.\textsuperscript{48} As previously mentioned, it is important to study senior entrepreneurs not only because of their growing prevalence, but also because of the wide ranging ramifications this phenomenon has on the working life of the ageing population, on health care costs, and on the public welfare.\textsuperscript{49}

The few studies that have examined the demographics and other characteristics of older entrepreneurs have found that the typical older entrepreneur is fifty-eight years old, white, married, and male with twelve to thirteen years of education.\textsuperscript{50} Among the entrepreneurs fifty years old or older, less than 10\% had a pension and just

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\item \textsuperscript{44} See id. (suggesting that some older Americans transition into self-employment in response to various incentives in the marketplace).
\item \textsuperscript{45} Id. at 3.
\item \textsuperscript{46} Evans & Leighton, supra note 23.
\item \textsuperscript{47} See Marc J. Dollinger et al., The Older Entrepreneur: An Exploratory Study, in PROCEEDINGS OF THE SMALL BUSINESS INSTITUTE DIRECTORS ASSOCIATION 124, 134 (D. Johnson ed., 1998) ("[T]here has been almost no serious work investigating the older entrepreneur, his or her characteristics, the nature of their business, the efficacy and performance of their ventures."); SELF-EMPLOYMENT AND THE 50+ POPULATION, supra note 23, at 12 ("Although the phenomenon of self-employment in general has received some academic attention, relatively little research has been devoted to studying self-employment among those in middle and late life.").
\item \textsuperscript{48} SELF-EMPLOYMENT AND THE 50+ POPULATION, supra note 23, at 93.
\item \textsuperscript{49} See Org. for Econ. Co-operation and Dev., Ageing Societies and the Looming Pension Crisis, http://www.oecd.org/document/59/0,3343,en_2649_37419_2512699_1_1_1_1,00.html (last visited Jan. 13, 2009) (advocating for extending the working life of older workers to counter the looming pension crisis); Weber & Schaper, supra note 20, at 150 ("Governments are becoming increasingly aware of the potential costs which an ageing population pose . . . and so are beginning to restructure work arrangements to increase the involvement of older persons in small firms.").
\item \textsuperscript{50} Devaney & Kim, supra note 27, at 131; see also SELF-EMPLOYMENT AND THE 50+ POPULATION, supra note 23, at 55 (finding that depending on the self-employment definition used, females constituted between 32\% and 40\% of the self-employed individuals over the age of 50 and that both self-employed Hispanics and Blacks, who were over 50 years old, were underrepresented in the entrepreneurial sector, constituting between 3\% and 5\% depending on the definition used for self-employment); Weber & Schaper, supra note 20, at 153 (finding that older entrepreneurs in Australia are predominately male).
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over 25% had health insurance. The great majority of the older respondents were reportedly in good or excellent physical and mental health. Additionally, 82% of the older respondents in were in good or excellent emotional health.61

According to another study’s findings, in 1994, the average amount of business income of older entrepreneurs was similar to those of all small businesses in the United States, with an annual average income of $38,636 and a median income of $6,000.62 Similar to the general entrepreneurial sector, senior entrepreneurs tend to overwhelmingly operate their businesses as sole proprietorships and are dramatically less inclined to operate their businesses as partnerships or corporations.53 Nonetheless, the incomes generated by corporations owned by senior entrepreneurs tend to produce a disproportionately higher portion of the total earnings of the businesses owned by senior entrepreneurs taken as a whole.64

The typical older entrepreneur has a relatively stable business with an average and median length of business tenure of fourteen years, a similar tenure to that in the general self-employed sector.55 However, approximately a third of entrepreneurs over the age of fifty made the transition to self-employment at or after age fifty. Compared to those individuals who become self-employed prior to age fifty, wage earners who became self-employed at age fifty or older are more likely to be female, to have lower income and wealth, to have a work limiting health condition, to work part time, and to have left their prior job involuntarily.56

Compared with older wage and salary workers, older entrepreneurs are more likely to be a college graduate, male, white, married,

51. See Devancy & Kim, supra note 27, at 131 (finding that in 1994 only 7% of the self-employed in the sample of self-employed individuals between the ages of 50 and 65 years old had a pension and 27% had health insurance. Furthermore, the study found that 75% of the respondents were in good or excellent physical health, while 82% were reportedly in good or excellent emotional health).

52. Id. at 131.

53. See id. (finding that 73% of the self-employed seniors operated as sole proprietorships, 7% operated as partnerships and 11% operated as corporations); Ying Lowrey, SMALL BUS. ADMIN., U.S. SOLE PROPRIETORSHIPS: A GENDER COMPARISON, 1985-2000, at 2 (2005), http://www.sba.gov/advo/research/rs365tot.pdf (finding that 72.6% of firms in the United States in 1997 were operated as sole proprietorships).

54. See Devancy & Kim, supra note 27, at 131 ("Of all businesses, 73% were sole proprietorships that produced 17% of all business income, 7% were partnerships that produced 11% of income, and 20% were corporations that produced 72% of income.").

55. See id. at 131 (finding that the average length of business tenure among older Americans was 14.5 years with a median of 14); Brown Ctr., LOS ANGELES TIMES POLL #427: LOS ANGELES COUNTY SMALL BUSINESSES 12 (1999) (finding that small business owners in Los Angeles had an average of 18.5 years of business ownership experience).

older, and healthier. Furthermore, older entrepreneurs tend to be financially much better off than their wage earner counterparts as measured by household income and wealth. However, senior entrepreneurs tend to report debt more frequently and also report significantly higher debt levels compared to the general senior population. According to the Employee Benefit Research Institute, 74% of senior entrepreneurs had debts, as compared to 60% of seniors in general. Similarly, senior entrepreneurs report a median debt of $71,000 and an average debt of $122,872 as compared to the general senior population of $32,000 and $51,791 respectively. While senior entrepreneurs tend to have a higher propensity to accumulate debt and higher debt levels, the total debt as a percent of assets among senior entrepreneurs is lower than the general senior population.

Among the senior entrepreneurs, men and women differ in several ways. As compared to their female counterparts, senior male entrepreneurs tend to be older and less ethnically diverse. However, these men are more likely to be married, healthier, and more educated than their female counterparts. Senior male entrepreneurs also tend to be more financially well off as measured by household income and wealth as compared to their female counterparts. The senior female entrepreneurs' lower financial condition may reflect their tendency to over-concentrate in low growth and low earning industries.

While empirical studies of senior entrepreneurs are small but growing, the lack of scholarly attention to seniors in bankruptcy in general, and senior entrepreneurs in bankruptcy in particular, is especially pronounced. The number of bankruptcy filings in the United States has dramatically increased since the 1970s, exceeding, for the first time, one million bankruptcy filings in 1996. One group that has witnessed a particularly steep rise in the number of bankruptcy

67. Id. at 36, 48-50.
68. Id. at xi.
60. Id. at 4.
61. See id. at 10 (reporting that the self-employed individuals, who were 55 or older, had a debt as a percent of assets of 6.2% and a median debt-to-asset ratio of 12.9% in 2004. In contrast, the debt as a percentage of assets and median debt-to-asset ratio among the general 55 or older population was 6.8% and 14.2%, respectively).
63. Id.
64. Id.
filings over the recent past has been the seniors.66 According to a recent study of bankruptcy petitioners in the United States, individuals "age [fifty-five] or older have experienced the sharpest increase in bankruptcy filings."67 The study found that the rate of filing for bankruptcy protection among senior individuals has gone up significantly. For example, the study found that seniors comprised only 8.2% of all petitioners in 1991, but composed 22.3% of all petitioners in 2007.68

The dramatic increase in filing rates was even more pronounced among those that are sixty-five years old or older. In 1991, individuals aged sixty-five years old or older represented 2.1% of all petitioners in the United States, but by 2007 this age group constituted 7% of all the bankruptcy petitioners.69 This striking change represents a 150% increase in the filing rates of individuals sixty-five years old or older.70 The increase in the population size of seniors could not single-handedly account for the significant rise in the number of bankruptcy filings among those individuals.

Despite the increasing number of seniors filing for bankruptcy protection, seniors remain an underrepresented group in the bankruptcy population. One study has found that while individuals aged fifty and older constitute almost 36% of the total U.S. population, they make up less than 15% of individuals who filed bankruptcy in 1997.71 While seniors have a lower propensity to file for bankruptcy protection, the study found that seniors tend to file for protection based upon the same reasons as the general bankruptcy population. The study also found that similar to the general bankruptcy population, the leading causes of bankruptcy filing by seniors were job losses or job interruptions, difficulty paying creditors, and family problems such as having to support a child in financial trouble or marital dissolution.72

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68. Id. at 7.
69. Id.
70. Id.
71. Id. Teresa A. Sullivan et al., From Golden Years to Bankruptcy Years, 7 notions Bankr. L. Adviser 1 (July 1998) (hereinafter From Golden Years) (finding that Americans age 50 years and older accounted for approximately 35.8% of the adult general population in the U.S., but only 14.4% of petitioners in bankruptcy).
72. See id. at 4-7 (finding that loss of employment was the most frequent explanation for their bankruptcy filing of older Americans, followed by medical problems, creditors' collection action and family related problems). Other studies have similarly found these reasons to be the primary cause of bankruptcy filings in the general personal bankruptcy population. See, e.g., Tehira K. Hira & Kyle L. Kostelecky, Pilot Study of Consumer Debtors Provides New Insights—What Influences Debtors' Attitudes?, 14 Am. Bankr. Inst. J. 1, 31 (1995) (finding that marital problems, employment issues, and
Another prominent cause of seniors filing for bankruptcy was health problems that gave rise to significant medical debts and prevented them from working.72 While these previous studies have shed important light on the propensity and vulnerabilities of seniors in bankruptcy, no study has ever examined the bankruptcy experience for the growing number of senior entrepreneurs.

An individual may hypothesize that senior entrepreneurs would be underrepresented in the bankruptcy population as senior entrepreneurs are more likely to enjoy superior skills, experience, and networks as compared to their younger counterparts.74 Moreover, senior entrepreneurs often have the advantage over their younger counterparts of having a higher accumulation of capital.75 Similarly, senior entrepreneurs report greater financial liquidity because they typically have fewer dependents to support.76 Furthermore, senior entrepreneurs may be underrepresented in the bankruptcy population because, compared to their younger counterparts, businesses owned by senior entrepreneurs typically tend to be bigger in terms of the volume of sales, number of employees, and net income.77 Lastly, while not conclusive, a number of studies have suggested that the survival rate of businesses owned and operated by senior entrepreneurs is higher than the survival rates of businesses owned and operated by their younger counterparts.78

overspending were identified by debtors as major factors in decision to file for bankruptcy.

72. See From Golden Years, supra note 71, at 4 (finding that among petitioners aged 65 or older, almost 90% identified medical problem as the cause of their bankruptcy filing).

74. See Teresa A. Sullivan & Stephen D. McSweeney, Black Entrepreneurs: Patterns and Rates of Return to Self-Employment, 2 N. Y. J. Soc. 167, 173 (1988) ("Older workers are more likely to have the skills, experience, and capital to operate a business, and they are more likely to have business and credit contacts."); see also Weber & Schaper, supra note 26, at 155 (reporting that older entrepreneurs have the advantages of broader experience, and superior networks).

75. See Weber & Schaper, supra note 20, at 156 (suggesting that the reason for the higher wealth accumulation reported by older entrepreneurs in Australia as compared to their younger counterparts is due to higher home ownership rates).

76. See Dollinger et al., supra note 47, at 13-14 ("[T]he older entrepreneur is more financially secure than younger entrepreneurs, has a larger portion of his or her income from sources outside the firm, and has fewer expenses in terms of dependents."); Weber & Schaper, supra note 26, at 187-88 (contending that older entrepreneurs have higher financial liquidity compared to their younger counterparts since they have fewer dependent children to support).

77. See Dollinger et al., supra note 47, at 13 ("[T]he business of the older entrepreneur is bigger than his younger counterpart in terms of sales, number of employees and net income, with the difference in sales being statistically significant.").

78. See Patel & Gray, supra note 20, at 5 (referring to a study that found that the survival rate of new British small businesses started by individuals aged between 50 and 55 years old was more than double of those begun by 30-35 year olds); Brian Hendy, Redefining Business Success: Distinguishing Between Closure and Failure, 21 SMALL.
On the other hand, an alternative hypothesis may be that senior entrepreneurs would be overrepresented in the bankruptcy population. Such an alternative hypothesis is premised on the low education level reported by senior entrepreneurs compared to their younger counterparts. Furthermore, senior entrepreneurs are typically more likely to develop health conditions that may impair their ability to dedicate as much energy towards their business's development. Finally, senior entrepreneurs may be overrepresented in the bankruptcy population partly because they face obstacles in growing their businesses such as those obstacles arising out of ageism from prospective customers as well as lenders.

II. METHODOLOGY

Data for this research study was based on information obtained from questionnaires completed by bankruptcy petitioners ("petitioners") in the Central District of California-San Fernando Valley Division. The Central District Court of California-San Fernando Valley

BUS. ECON. 51, 55 (2003) (finding that relatively young business owners tend to have higher likelihood of closure); Robert Cressy & David Storkey, New Firms and their Banks 11 (1995) (unpublished manuscript, on file with author) (finding that individuals starting their business between the ages of 50 and 65 years old have a 70% chance of survival three and half years, compared to only a 50% chance of survival during that period for businesses established by individuals between 20 and 25 years old); Arnold Cooper et al., New Business in America: The Firms and Their Owners 2 (1990) (unpublished manuscript, on file with author) (“Those forming businesses later in life were more likely to see their businesses survive three years than were those who started earlier...”). But see Aparna Mathur, SMALL BUS. ADMIN., A SPATIAL MODEL OF THE IMPACT OF BANKRUPTCY EXEMPTIONS ON ENTREPRENEURSHIP 31 (2006), http://www.sba.gov/dow/research/ts261tot.pdf (finding, among other things, that the probability of small business closure is significantly lower for individuals in the younger age group); Timothy Bates, Entrepreneur Human Capital Inputs and Small Business Longevity, 122 REV. ECON. & STAT. 552, 558 (1990) (“Owners 55 and over are least likely to remain in business, while those in the 45-54 grouping are most likely to endure.”). See Patel & Gray, supra note 20, at 13 (finding that older British entrepreneurs have less education than younger entrepreneurs); Weber & Schaper, supra note 20, at 167 (“Generally speaking, older entrepreneurs also possess lower levels of formal post-secondary education than other population groups.”).

80. See Weber & Schaper, supra note 20, at 156 (“A legitimate concern often expressed about grey entrepreneurs is the potential for lost productivity and lower energy levels which may be associated with growing old.”); James Corran & Robert A. Blackburn, Older People and the Enterprise Society: Age and Self-Employment Propensities, 15 WORK EMER. & SOC'Y 889, 895 tbl. 2 (2001) (finding that personal health is reported as the most common reason cited for many people who choose to retire from working life).

81. See Weber & Schaper, supra note 20, at 157 (suggesting that ageism, which is discrimination against older individuals, poses an obstacle to the business growth of older self-employed individuals).

82. Since the data for this study was collected in the San Fernando Valley Division of the Central District Court of California, the results are contrasted with relevant characteristics of the general population or the small business owner population of the San Fernando Valley. However, when the relevant data from the San Fernando Valley was
Division was selected primarily because it holds court in a number of locations in Los Angeles County, California. Additionally, the San Fernando Valley is a geographic area which includes several cities and a large portion of the City of Los Angeles, California ("Los Angeles"). This geographic area is the home of approximately 1.7 million residents, 40% of which are foreign born and under half are white, with Hispanics making up almost 38% of the population, and Asians making up almost 10% of the population.83 This geographic area also has the greatest concentration of small businesses in the United States.84

This research study relied on information from questionnaires rather than bankruptcy schedules because vital data for this research project, such as ethnicity, education, cause of bankruptcy, and various characteristics of petitioners' businesses, would not be available in the bankruptcy schedules. The questionnaire was purposefully drafted to be only one and a half pages long to minimize the time necessary for a petitioner to complete it.

The questionnaire was composed of a list of twenty-one questions, with an additional supplement of ten questions for petitioners who owned a business prior to their bankruptcy filing. Most of the questions in the questionnaire 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, cause of bankruptcy, and entrepreneurship background. Petitioners who owned a business prior to their bankruptcy filing were also asked a number of questions about their former business operations. Among other things, these petitioners 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

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type of business financing they utilized, the number of employees their business had, the number of family members they had working in the business, the nature of the business industry in which they operated, the number of business ventures they had previously owned, and their plans for future business ownership.

However, before questionnaires were distributed into the field, we 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, we promised to maintain the respondent petitioners’ confidentiality. Similarly, in asking for cooperation from the United States Trustee ("U.S. Trustee") to conduct the research study, we also promised to maintain the respondent petitioners’ confidentiality. All of the personnel engaged in the research study, in any capacity, also pledged to maintain the respondent petitioners’ confidentiality.

In 2004, the Executive Office of the U.S. Trustee granted us permission to access and to distribute the questionnaire to petitioners at the mandatory creditors’ meetings. The Assistant U.S. Trustee in the Central District of California-San Fernando Valley Division cooperated in facilitating the distribution of the questionnaires at that site. There were a total of ten research assistants that attended the mandatory creditors’ meetings, beginning in January 2005 and ending January 2006, for the purpose of distributing and collecting completed questionnaires from the petitioners. While the vast majority of petitioners had filed during 2005, some of the questionnaires that were collected were from petitioners who had filed for bankruptcy in late 2004 because the mandatory creditors’ meetings are often scheduled after the initial filing.

Each research assistant was assigned to cover different meeting dates either in the morning or in the afternoon. Specifically, the research assistants would arrive at the location of the creditors’ meeting approximately fifteen minutes before the beginning of each session and were instructed to approach the petitioners as they entered the

85. In January 2004, we 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 random 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. We subsequently submitted a request for re-consideration 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.
waiting area for the creditors’ meeting room. The research assistants were given a script to follow when addressing the petitioners. Furthermore, each research assistant was asked to identify himself or herself, briefly describe the purpose of the research project, and then ask the petitioner whether he or she would be willing to participate in the research study by completing the questionnaire.

The questionnaire was available in English and Spanish due to the high Hispanic population in the local area. To provide the questionnaire in Spanish, the English questionnaire was first translated by a research assistant who was fluent in Spanish and English. The research assistant’s translation was then validated by another bilingual research assistant. Based on feedback from the research assistants, there were very few petitioners that appeared not to understand the questionnaire’s questions.

Furthermore, the questionnaire did not ask for the petitioners’ names or case numbers. In fact, the research assistants were asked to mention to the petitioners that participation in the study was completely voluntary and anonymous. In addition, a statement to that effect was included at the top of the questionnaire.

Some petitioners came to the creditors’ meeting with their attorneys and had the opportunity to consult with their attorneys about completing the questionnaire during the often lengthy wait in the waiting area before their creditors’ meeting began. The petitioners who volunteered to complete the questionnaire were asked to return their completed questionnaire to the research assistant attending the hearing that day. While most of the petitioners who completed the questionnaire did so while waiting for their hearing to begin, some petitioners took the questionnaire home and mailed it back upon completion. Petitioners in this study did not receive any monetary value in exchange for their services.

In total, 1,500 completed questionnaires were received. The average response yield rate was approximately 21%. Furthermore, the total number of questionnaires completed and returned constitutes 12% of the total population of petitioners who filed in the Central District Court of California-San Fernando Valley Division during the period of this study. The sample size reflected the approximate composition of bankruptcy filings in the Central District of California.

86. 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.
87. During the period of this research study from January 2005 through January 2006, there were 12,049 bankruptcy filings. The 1,500 surveys collected represent a yield of 12.45%.
under chapter 7, chapter 11, and chapter 13 of the Bankruptcy Code. While the original goal was to obtain at least 150 completed questionnaires from former small business owners for our sample, the number of small business owners ultimately included in our sample was 208.

The completed questionnaires that were collected during each session were sequentially numbered and tabulated into a Microsoft Access database. Following the tabulation of the data, the ten research assistants participating in the data collection phase were paired and instructed to exchange the hard copies of the questionnaires they had 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. The questionnaires that were completed in Spanish were tabulated and validated by one of the four research assistants who were fluent in Spanish.

For the questions that addressed the cause of the petitioner’s bankruptcy, the cause of the petitioner’s business financial distress, and the type of business owned by the petitioner prior to bankruptcy, content codes were developed 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. The statistical significance of the interaction variables was tested by the usual t-test (p < .05).

Our definition of senior entrepreneurs was individuals who are fifty-five years old or older and are self-employed. While there are different definitions of what constitutes an older entrepreneur, our choice was based on the wealth of demographic and financial data that is available about individuals who are fifty-five years old or older outside of bankruptcy. The findings from those reports enabled us to compare similarly situated individuals outside of bankruptcy to older individuals in our bankruptcy sample.

88. During the period of this research 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, 94% of the filings were under Chapter 7 (N=11,612), approximately 5.5% were filed under Chapter 13 (N=696), and 0.5% were filed under Chapter 11 (N=71). United States Bankruptcy Courts Central District of California, 2006 and 2006 Statistics, http://www.caeb.uscourts.gov (lasted visited on Feb. 2, 2007). In the bankruptcy sample a total of 1,500 surveys were completed. Similar to the chapter composition, over 97% of the surveys were under Chapter 7 (N=1,465), .5% were filed under Chapter 11 (N=8) and the balance under Chapter 13 (N=27).

89. See Paul Weber & Michael Schaper, Understanding the Grey Entrepreneur, 12 J. Entrepreneur Culture 147, 151-52 (2004) (referring to a number of different definitions of older entrepreneurs used by prior researchers).

90. The characteristics of the general population in our bankruptcy sample were reported elsewhere. Rafael Efraim, Minority Entrepreneurs in Bankruptcy, 16 Geo. J. on Poverty L. & Pol'y 95, 106-98 (2008).
III. RESULTS

A. SENIORS IN BANKRUPTCY

The petitioners in the bankruptcy sample were older than the general population of the City of Los Angeles, California ("Los Angeles"). Specifically, the median age of petitioners in the sample was forty, compared to a median age of thirty-three for individuals generally living in Los Angeles.91

While the number of seniors has grown significantly in the bankruptcy population over the past twenty-five years,92 seniors remain a minority in the bankruptcy population. In 2004, senior residents of Los Angeles made up only 18% of the bankruptcy population in the sample.93

As Figure 1 depicts, most of the bankruptcy filers in the sample were between the age of twenty-five and forty-four. After peaking in the age group category of forty to forty-four, the number of bankruptcy filings continuously declines in each of the older age categories.

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91. See U.S. CENSUS BUREAU, 2006 AMERICAN COMMUNITY SURVEY (2006), available at http://www.census.gov/acs/www/index.html (reporting that the median age of residents in Los Angeles City in 2006 was estimated at 33.4 years old, and in the San Fernando Valley the median was estimated at 36 years old). Since the bankruptcy population is composed of adults only, a comparison of the average and median age of the adult local population would have been ideal. However, that data was not available. Hence, the average and median age of the population in Los Angeles reported here understates the average and median age of the adult population in Los Angeles. Among the bankruptcy petitioners in our sample, the average age was 41.6 years old, with a median of 40 years old, and a standard deviation of 13.39 (N=1469). Other researchers have found that the median age of bankruptcy petitioners is higher than the median age of the general population. See Deborah Thorne et al., AARP PUB. POLICY INST. GENERATIONS OF STRUGGLE 1, 3 (2008), http://assets.aarp.org/rgcenter/consume2008_11_debt.pdf (reporting that in 2007, the median age of all petitioners in the United States was 43, compared to a median age of 36.1 for the general population in the United States).

92. See Thorne et al., supra note 91, at 4 ("In 1991 only 8.2 percent of debtors were age 55 or older. By 2007, the proportion of the bankrupt debtors age 55 or older had nearly tripled to 22.3 percent.").

93. There were 1205 petitioners in the sample under the age of 65 and 264 petitioners age 65 or older.
Indeed, compared to their proportion in the general population of Los Angeles, senior petitioners were underrepresented in the sample in most of the older age categories while younger petitioners were overrepresented in the sample in most of the younger age categories.\textsuperscript{94} As Figure 2 suggests, petitioners in each age category over sixty were underrepresented in the sample compared to their proportion in the general population of Los Angeles. In contrast, petitioners in each age category under fifty were overrepresented in the sample compared to their proportion in the general population of Los Angeles.

Overall, the underrepresentation of senior petitioners in the bankruptcy sample was statistically robust. As of 2005, Los Angeles had an estimated population of 3,781,437. Among those individuals, the population of individuals who were twenty years old or older was estimated to be 2,626,939.\textsuperscript{95} Among the individuals who were twenty years old or older, 1,947,817 of those individuals were under fifty-five years old (74.15%) while an estimated 679,122 were fifty-five years old or older (25.85%).\textsuperscript{96} As indicated below, senior peti-

\textsuperscript{94} The definition of the phrase "senior entrepreneur" in this Article shall be construed to mean any individual who is fifty-five years old or older and who is also self-employed.

\textsuperscript{95} U.S. Census Bureau, 2005 American Community Survey: Los Angeles City, California - Age and Sex (2005), http://factfinder.census.gov.

\textsuperscript{96} Id. Since the bankruptcy population is composed only of adults, we compared the bankruptcy petitioners to the adults in the general population (20 years old or older). In 2005, there were 399,276 adults aged 50 or older in Los Angeles, 495,087 adults aged 60 or older and 347,024 adults aged 85 or older. Id. Prior studies also found older Americans to be underrepresented in bankruptcy. In one study of Chapter 7 petitioners aged 70 or older, the researchers found that petitioners aged 70 or older constituted 12.4% of the general population, but only 4.4% of the bankruptcy population. Edward Flynn et al., Bankruptcy by the Numbers, ABI J., Mar. 2002, at 1, http://www.usdoj.gov/ust/es/public_affairs/articles/docs/abi_042302.pdf.
tioners comprised only 18% of the bankruptcy population in the sample.97

FIGURE 2. REPRESENTATION OF BANKRUPTCY PETITIONERS IN DIFFERENT AGE GROUPS COMPARED TO GENERAL POPULATION

![Bar chart showing representation of bankruptcy petitioners in different age groups compared to general population.](chart.png)

As shown below, Table 1 contains the actual and the expected representation of petitioners in the sample corresponding to their age category. We implemented the chi-square test of independence to test the hypothesis that filing for bankruptcy was independent of age. We first computed the observed frequencies and expected frequencies of petitioners filing for bankruptcy in the sample that were under fifty-five years old and petitioners that were fifty-five years old or older. We found that the test statistics for our observed and expected frequencies was 47.7, while the critical value for a 95% confidence level at the right hand tail of chi-square distribution with one degree of freedom is 3.841. Thus, because the test statistics were greater than the critical value, the null hypothesis was rejected. Hence, we concluded that filing for bankruptcy was not independent of age.

To determine whether the senior petitioners (i.e., individuals who were fifty-five years old or older) in the bankruptcy sample were over or under represented, the following one tail test of proportion was conducted:

H0: Proportion of senior petitioners filing for bankruptcy = Proportion of senior petitioners in the general population
H1: Proportion of senior petitioners filing for bankruptcy < Proportion of senior petitioners in the general population

Using the table of areas for the standard normal distribution, this study found that the Z value for a 95% confidence level is 1.64. The test statistic was 6.89. Thus, because the test statistic was greater than the critical value of 1.64, the null hypothesis was rejected. That

97. As this article proceeds, the term “senior” will mean any individual in the United States who is at least fifty-five years old.
is, senior petitioners were not equally or overrepresented in the bankruptcy sample. Instead, the alternative hypothesis may be adopted. That is, senior petitioners were underrepresented in the bankruptcy sample at a 95% confidence level.

We also compared the older petitioners in the sample to the younger petitioners in the sample at three different age cut offs, including fifty and older, sixty and older, and sixty-five and older. As Table 1 and Figure 3 indicate, petitioners in all the age categories were significantly underrepresented in the sample compared to their younger counterparts.

TABLE 1: AGE OF PETITIONERS IN THE BANKRUPTCY SAMPLE

<table>
<thead>
<tr>
<th>Actual Data from Bankruptcy Sample</th>
<th>Expected Data from the General Population</th>
<th>Chi-square/Z Value/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 50</td>
<td>1,081</td>
<td>966</td>
</tr>
<tr>
<td>50 and Older</td>
<td>388</td>
<td>503</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 55</td>
<td>1,265</td>
<td>1,089</td>
</tr>
<tr>
<td>55 and Older</td>
<td>264</td>
<td>380</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 60</td>
<td>1,324</td>
<td>1,198</td>
</tr>
<tr>
<td>60 and Older</td>
<td>145</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>1,378</td>
<td>1,275</td>
</tr>
<tr>
<td>65 and Older</td>
<td>91</td>
<td>194</td>
</tr>
</tbody>
</table>

FIGURE 3. OLDER AMERICANS UNDERREPRESENTATION IN BANKRUPTCY

However, the senior petitioners and the younger petitioners in the sample were demographically similar in a number of ways. Somewhat
more than half of both the senior and the younger petitioners were women.\textsuperscript{98} Also, both the senior and the younger petitioners in the sample were primarily born in the United States and had similar religious affiliation.\textsuperscript{99} In addition, petitioners from both groups were equally educated. Sixty-three percent of the petitioners in the senior and the younger age groups had at least some college education.\textsuperscript{100} Finally, the vast majority of the senior and the younger petitioners in

\begin{quote}
98. Among petitioners under 55 years old, 52.6\% were female (N=634). Similarly, 54.0\% of petitioners aged 55 or older were female (N=144). The difference was not statistically significant. The gender distribution was similar in 2005 outside of bankruptcy. In 2005, 54.9\% of people in the United States aged 55 or higher were female (N=35,647,000), while 49.8\% of people under the age of 55 were female (N=112,862,000). U.S. CENSUS BUREAU, 2005 CURRENT POPULATION SURVEY, ANNUAL SOCIAL AND ECONOMIC SUPPLEMENT (2007) [hereinafter 2005 CURRENT POPULATION SURVEY].

99. Among the petitioners who were under 55 years old, 68\% were native born (N=513), while 70.2\% of petitioners aged 55 and older were native born (N=144). The difference was not statistically significant. The proportion of native born in the United States in 2005 among people 55 years old or older was much higher at 82.3\%. 2005 CURRENT POPULATION SURVEY, supra note 98. The proportion of native born in the United States for people under 55 years old was similar at 88.27\%. NEW STRATEGIST EDITORS, OLDER AMERICANS: A CHANGING MARKET 242 (4th ed. 2004). The religious affiliation of petitioners under 55 years old was as follows: Christian: 83.1\% (N=582); Muslim: 3\% (N=4); Jewish: 5.6\% (N=39); Others: 10.7\% (N=76). The religious affiliation of petitioners 55 years old or higher was as follows: Christian: 78.7\% (N=138); Muslim: 1.1\% (N=2); Jewish: 8.9\% (N=16); Others: 13.5\% (N=24). The differences were not statistically significant.

100. The education background of petitioners in our bankruptcy sample that were younger than 55 years old was as follows: No schooling: 8\% (N=7); 6th Grade or Less: 8\% (N=10); 7th Grade to 12th Grade with No Diploma: 9\% (N=108); High School Graduate: 24.5\% (N=299); Some College: 32.6\% (N=390); Associate Degree: 11\% (N=133); Bachelor's Degree: 14.5\% (N=176); Advanced Degree: 4.9\% (N=59); Not Available: 2.1\% (N=26). The education background of petitioners in our bankruptcy sample that were 55 years old or older was as follows: No schooling: 11.5\% (N=4); 6th Grade or Less: 9\% (N=8); 7th Grade to 12th Grade with No Diploma: 9.6\% (N=26); High School Graduate: 26.5\% (N=54); Some College: 36.1\% (N=69); Associate Degree: 11.7\% (N=31); Bachelor's Degree: 14.8\% (N=39); Advanced Degree: 10.3\% (N=27); Not Available: 1.9\% (N=5). These differences were statistically significant at p=.000. In contrast, outside of bankruptcy, older individuals are overall less educated than their younger cohort. Fifty eight percent of people in the United States under 55 years old report at least some college education compared to only 41\% among people age 55 year old or older. The education background of people in the United States that were younger than 55 years old was as follows in 2002: No High School Diploma: 11.36\% (N=14,524,000); High School Graduate: 30.8\% (N=37,728,000); Some College: 18.17\% (N=22,260,000); Associate Degree: 9.52\% (N=11,656,000); Bachelor's Degree: 20.36\% (N=24,930,000); Advanced Degree: 9.3\% (N=11,359,000). The education background of people in the United States that were 55 years old or older was as follows in 2002: No High School Diploma: 24.12\% (N=14,425,000); High School Graduate: 34.75\% (N=20,728,000); Some College: 14.63\% (N=9,731,000); Associate Degree: 5.68\% (N=3,386,000); Bachelor's Degree: 12.32\% (N=7,822,000); Advanced Degree: 8.42\% (N=5,023,000). U.S. CENSUS BUREAU, EDUCATIONAL ATTAINMENT IN THE UNITED STATES: MARCH 2002 (2002), http://www.census.gov/population/www/socdemo/education/ppl-193.html.
\end{quote}
the sample pursued protection under Chapter 7 of the Bankruptcy Code and approximately half of them were represented by counsel.\textsuperscript{101}

Nonetheless, senior petitioners were different than their younger counterparts in a number of important ways. Senior petitioners were primarily white, while the younger petitioners were more ethnically diverse. Less than half of the petitioners in the sample under the age of fifty-five were white compared to almost two-thirds of the petitioners in the fifty-five years old and older group.\textsuperscript{102} In addition, as anticipated, the marital status of senior petitioners was different than their younger counterparts. Senior petitioners were more likely to be divorced or widowed, while the younger petitioners were more likely to be single.\textsuperscript{103}

However, in comparison to the general population outside of bankruptcy in the United States, both the senior and the younger petitioners were much less likely to be married and more likely to be separated or divorced.\textsuperscript{104} Specifically, senior petitioners in the sample were almost three times more likely to be either divorced or separated compared to seniors outside of bankruptcy.\textsuperscript{105}

Lastly, senior petitioners in the sample identified medical related problems or debts as the most prevalent cause of their bankruptcy fil-

\textsuperscript{101} Among petitioners younger than 55 years old, 98.9% commenced protection under Chapter 7 (N=1158) and 47.1% were represented by an attorney (N=567). Similarly, 96.6% of petitioners 55 years old or older pursued bankruptcy under Chapter 7 (N=255) and 51.9% were represented by counsel (N=137). These differences were not statistically significant.

\textsuperscript{102} Among petitioners younger than 55 years old, 47.1% (N=568) were White, 8.8% (N=104) were Black, 6.6% (N=80) were Asian Pacific, 33.5% were Hispanic (N=404), 4% were Native Americans (N=5) and 3.2% identified other racial background (N=39). In contrast, among petitioner 55 years old or older, 61.4% (N=162) were White, 5.3% (N=14) were Black, 6.1% (N=16) were Asian Pacific, 23.5% were Hispanic (N=82), 8% were Native Americans (N=2) and 2.7% identified other racial background (N=7). These differences were statistically significant at p=0.003. A similar racial disparity is reported in the general population in the United States. See U.S. Census Bureau, Census 2000 Summary File: Population by Age, and Hispanic Origin, 2000 Census (2000), available at http://factfinder.census.gov/home/saff/main.html?_lang=EN (reporting that 86% of Americans age 55 or older were white and 74% were of Americans under age 55 were white).

\textsuperscript{103} The marital status among petitioner younger than 55 years old was as follows: Single: 42.2% (N=508); Married: 32.4% (N=399); Divorced or Separated: 22.7% (N=273); Widowed: 9% (N=11); Not Available: 1.9% (N=23). In contrast, the marital status of among petitioner age 55 years old and older was as follows: Single: 17.8% (N=47); Married: 32.5% (N=80); Divorced or Separated: 32.6% (N=85); Widowed: 15.6% (N=41); Not Available: 1.8% (N=27). The differences were statistically significant at p=0.000.

\textsuperscript{104} The marital status in 2002 of Americans in the general population younger than 55 years old was as follows: Single: 37.28%; Married: 50.53%; Divorced or Separated: 11.3%; Widow: 8.9%. The marital status in 2002 of Americans in the general population age 55 or older was as follows: Single: 4.63%; Married: 62%; Divorced or Separated: 12.22%; Widow: 21.15%. See supra note 99, at 223.

\textsuperscript{105} See supra notes 103-04 and accompanying text.
ing, followed by excessive credit card debt and loss of employment.\textsuperscript{106} Specifically, almost a third of the senior petitioners reported medical related problems or debts as the reason for filing for bankruptcy, while loss of employment and excessive credit card debts were both cited by a fifth of senior petitioners.\textsuperscript{107} Among the younger petitioners in the sample, credit card debt, loss of employment, and personal or family related problems dominated the reasons cited for resorting to bankruptcy.\textsuperscript{108}

\textbf{FIGURE 4. CAUSES OF BANKRUPTCY FILINGS}

Aside from the demographic differences between the senior and the younger petitioners in the sample, this study found that the senior petitioners were financially much worse off than their younger counterparts. The senior petitioners' overall worse financial conditions were largely due to lower incomes and higher debt levels. Specifically, the median household incomes of the younger petitioners were almost 50\% more than the median household incomes reported by the senior petitioners.\textsuperscript{109} Also, the senior petitioners were three times more

\textsuperscript{106} Among the bankruptcy petitioners aged 55 and over the cited causes for filing for bankruptcy protection were as follows: Failed Business: 12.2\% (N=18); Personal/Family Reasons: 14.2\% (N=21); Medical Condition: 31.8\% (N=47); Loss of Employment: 19.6\% (N=29); Excessive Credit Card Debts: 20.3\% (N=30); Housing: 2\% (N=3).

\textsuperscript{107} See supra note 106 and accompanying text.

\textsuperscript{108} Among the bankruptcy petitioners under the age of 55 the cited causes for filing for bankruptcy protection were as follows: Failed Business: 8.6\% (N=33); Personal/Family Reasons: 22\% (N=136); Medical Condition: 19.8\% (N=122); Loss of Employment: 24.5\% (N=151); Excessive Credit Card Debts: 23.8\% (N=147); Housing: 1.3\% (N=8). The differences between the older and the younger petitioners were statistically significant at p=.009.

\textsuperscript{109} The average monthly household income for petitioners under the age of 55 was $3,850 (N=311), with a median of $2,900 and a standard deviation of 5,883. In contrast, the average monthly household income for petitioners age 55 or older was $3,188 (N=65), with a median of $2,000 and a standard deviation of 4,500. The median income of the older petitioners in our sample was substantially lower than the median income reported in the general population for 50 or older. See AARP, Top Scores or 50+
likely to rely on government assistance than the younger petitioners.\textsuperscript{110}

The situation for the senior petitioners was similarly grim in terms of indebtedness. Outside of bankruptcy, only 60% of households headed by a senior have debt outstanding.\textsuperscript{111} In contrast, virtually all of the senior petitioners reported outstanding debt.\textsuperscript{112} More importantly, the senior petitioners in the sample reported having more than 250% of the average total debt that seniors have outside of bankruptcy.\textsuperscript{113} The ratio of debt as a percentage of assets provides another view of the financial fragility of the senior petitioners in the sample. Outside of bankruptcy, the debts of seniors constituted approximately 6.8% of their total assets.\textsuperscript{114} In contrast, the average ratio of debt as a percentage of assets of the senior petitioners in the sample was 68, with a median of 5.4.\textsuperscript{115}

Furthermore, compared to seniors outside of bankruptcy, the senior petitioners in the sample reported not only higher debt, but also higher credit card debt. Outside of bankruptcy, a third of families with a senior as the head of the household reported owing credit card debt.\textsuperscript{116} In contrast, over 90% of the senior petitioners in the sample reported owing credit card debt.\textsuperscript{117} Additionally, senior heads of households outside of bankruptcy reported a median of $2000 in total credit card debt as compared to a median of $25,000 of the senior petitioners in the sample.\textsuperscript{118} Also, the senior petitioners in the sample

\textsuperscript{110} Eight percent of petitioners in our sample under the age of 55 received government assistance (N=97). In contrast, 29.9% of petitioners age 55 or older reported receiving the same (N=79). The difference was statistically significant at p=.000.


\textsuperscript{112} Among petitioners aged 55 and older, 98.6% reported owing debts (N=210). Three petitioners reported no debts.

\textsuperscript{113} See Copeland, supra note 111, at 4 (reporting that the average total debt level reached $51,791 in 2004 for families with a head of household age 55 or older, with a median of $32,000). In our bankruptcy sample, among petitioners age 55 or older the total debt reportedly owed was $135,695 (N=213), with a median of $40,000 and a standard deviation of 646,788.

\textsuperscript{114} Copeland, supra note 111, at 10.

\textsuperscript{115} In our bankruptcy sample, among petitioners age 55 or older the average debt to asset ratio was 68.26 (N=132), with a median of 5.45 and a standard deviation of 28.8.

\textsuperscript{116} See Copeland, supra note 111, at 8 ("[R]eporting that 34% of families with a head age 55 or older reported credit card debt in 2004").

\textsuperscript{117} Among petitioners aged 55 and older, 91.16% reported owing credit card debts (N=196).

\textsuperscript{118} See Copeland, supra note 111, at 8 (reporting that families with a head age 55 or older reported credit card debt in 2004 with a median of $2,000). In our bankruptcy
reported a much worse financial net worth compared to seniors in the general population. Outside of bankruptcy, seniors reported a median net worth of $145,000 compared to the senior petitioners in the sample who reported a median net worth of a negative $29,000.\textsuperscript{119}

The senior petitioners were also much worse off financially compared to the younger petitioners in the sample. The senior petitioners had on average twice as much debt compared to the younger petitioners.\textsuperscript{120} Moreover, on average, the senior petitioners reported $10,000 more in credit card debt than the younger petitioners in the sample.\textsuperscript{121} As a result of lower income and a higher debt load, the senior petitioners in the sample reported a significantly higher debt-to-income ratio as compared to their younger counterparts in the sample.\textsuperscript{122} Were the average younger petitioner in the sample to use all of their income towards completely paying off their total debt obligations, they would need two years to do so, compared to almost four years for the senior petitioners to accomplish the same goal.\textsuperscript{123} Aside from an inferior debt-to-income ratio, the high debt accumulated by the senior petitioners also contributed to the senior petitioners' lower net worth as compared to the net worth of their younger counterparts in the sample.\textsuperscript{124} While both the senior and younger petitioners in the sample reported a negative net worth, the senior petitioners reported a negative net worth that was twice as large as the younger petitioners on average.\textsuperscript{125}

\begin{footnotesize}

\textsuperscript{120} Among petitioners under the age of 55 in our sample, the average total debt reported was $67,788 (N=993), with a median of $35,000 and a standard deviation of 149,211. In contrast, among petitioners age 55 or older the total debt reported was $135,695 (N=213), with a median of $40,000 and a standard deviation of 646,788. The difference was statistically significant at p=.003.

\textsuperscript{121} Among petitioners under the age of 55 in our sample, the average total credit card debt reported was $38,155 (N=836), with a median of $20,000 and a standard deviation of 32,013. In contrast, among petitioners age 55 or older the total credit card debt reported was $38,469 (N=196), with a median of $25,000 and a standard deviation of 73,539. The difference was statistically significant at p=.003.

\textsuperscript{122} Among petitioners under the age of 55 in our sample, the average household debt to income ratio was 2.0 (N=280), with a median of 1.17 and a standard deviation of 2.4. In contrast, among petitioners age 55 or older the debt to income ratio was 3.7 (N=59), with a median of 1.38 and a standard deviation of 7.8. The difference was statistically significant at p=.003.

\textsuperscript{123} See supra note 122 and accompanying text.

\textsuperscript{124} Among petitioners under the age of 55 in our sample, the average net worth was $55,669 (N=736), with a median of $29,920 and a standard deviation of 106,701. In contrast, among petitioners age 55 or older the average net worth was $119,787 (N=154), with a median of $29,000 and a standard deviation of 756,483. The difference was statistically significant at p=.003.

\textsuperscript{125} See supra note 124 and accompanying text.
\end{footnotesize}
titioners in the sample starkly contrasts with the superior net worth of seniors outside of bankruptcy compared to younger households.\textsuperscript{126}

B. \textbf{Senior Entrepreneurs in Bankruptcy}

The self-employed petitioners in the bankruptcy sample were somewhat older than the self-employed outside of bankruptcy. On average, the self-employed petitioners in the sample were forty-six years old, compared to an estimated age of forty-four for self-employed individuals in the United States.\textsuperscript{127}

As Figure 5 depicts, most of the self-employed petitioners in the sample were between the age of thirty-five and forty-four. After peaking in the age group category of forty to forty-four, the number of bankruptcy filings continuously declines in each of the older age categories.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image}
\caption{Age of Entrepreneurs in Bankruptcy}
\end{figure}

Indeed, compared to their proportion in the United States self-employed population, senior entrepreneurs were underrepresented in the sample in most of the senior age categories, while younger entrepreneurs were overrepresented in the sample in most of the younger age categories.\textsuperscript{128} As Figure 6 suggests below, the self-employed in each age category over forty-five were underrepresented in bank-

\textsuperscript{126} See \textit{New Strategist} Editors, supra note 99, at 361 (reporting that the net worth of Americans age 55 or older is higher than the net worth of younger individuals).

\textsuperscript{127} The mean age of self-employed in our sample was 45.33 (N=234), with median of 44 and a standard deviation of 13. Outside of bankruptcy, self-employed report an average age of 40. The average age of the self-employed in the United States is 44 among men and 43 among women. See Lawrence M. Spizman, \textit{Work-Life Expectancy for the Self-Employed}, 1 THE EARNINGS ANALYSIS 81 (1988) (indicating that the average age for self-employed men in the United States is 44.4 years and 43.4 for self-employed women).

\textsuperscript{128} As this article proceeds, the phrase "senior entrepreneur" will mean any individual in the United States who is at least fifty-five years old who is also self-employed.
ruptcy as compared to their proportion in the general self-employed population of the United States. In contrast, the self-employed in each age category under forty-five were overrepresented in bankruptcy compared to their proportion in the self-employed general population of the United States.129

FIGURE 6. REPRESENTATION OF THE SELF-EMPLOYED IN BANKRUPTCY COMPARED TO THE SELF-EMPLOYED REPRESENTATION OUTSIDE OF BANKRUPTCY

![Bar chart]

Also, when comparing the senior entrepreneurs to their younger counterparts, this study found the senior entrepreneurs to be underrepresented. Based upon a 2002 Census Bureau survey, senior entrepreneurs make up 30.91% of all the owners of small businesses in the United States.130 As described below, the senior entrepreneurs comprised only 24% of the self-employed population in the bankruptcy sample.

The following table, Table 2, shows the data on senior entrepreneurs in the sample:

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130. See id. (reporting that in 2002, there were 15,996,348 small businesses (with employees and without employees) in the United States owned by individuals 55 years or older out of a total number of firms of 20,523,725).
TABLE 2: OLDER AND YOUNGER ENTREPRENEURS IN THE BANKRUPTCY SAMPLE

<table>
<thead>
<tr>
<th></th>
<th>Actual Data from Bankruptcy Sample</th>
<th>Expected Data from the General Population</th>
<th>Chi-square/Z Value/Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 55</td>
<td>154</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>55 and Older</td>
<td>50</td>
<td>63</td>
<td>3.88/1.95 Significant</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>204</td>
<td></td>
</tr>
</tbody>
</table>

When testing the hypothesis that filing for bankruptcy for the self-employed was independent of age, we implemented the chi-square test of independence. We first computed the observed frequencies and expected frequencies of entrepreneurs that were under fifty-five years old and senior entrepreneurs, those individuals that were fifty-five years old or older and self-employed, filing for bankruptcy in our sample. We found that the test statistics for the observed and expected frequencies was 3.88, while the critical value for a 95% confidence level at the right hand tail of chi-square distribution with one degree of freedom is 3.841. However, because the test statistics were greater than the critical value, the null hypothesis was rejected. Hence, we concluded that bankruptcy filing by the self-employed in our sample was not independent of age.

To check whether the senior entrepreneurs in our sample were over- or under-represented, we utilized the following one tail test of proportion:

- H0: Proportion of senior entrepreneurs filing for bankruptcy = Proportion of senior entrepreneurs in the general population
- H1: Proportion of senior entrepreneurs filing for bankruptcy < Proportion of senior entrepreneurs in the general population

Using the table of areas for the standard normal distribution, we found that the Z value for a 95% confidence level is 1.64 and that the test statistic was 1.94. Thus, the null hypothesis was rejected because the test statistic was greater than the critical value of 1.64. That is, senior entrepreneurs were not equally or overrepresented in the bankruptcy sample. Instead, the alternative hypothesis may be adopted. Thus, senior entrepreneurs were underrepresented in the bankruptcy sample at a 95% confidence level.\(^{151}\)

\(^{151}\) We conducted a similar test for entrepreneurs who were 50 years old or older and for entrepreneurs who were 65 years old or older. While older entrepreneurs in
The senior entrepreneurs and their younger counterparts displayed a number of similarities in the sample. Both the senior and the younger entrepreneurs were equally and predominantly pursuing protection under chapter 7 of the Bankruptcy Code, while just under half of both groups were represented by an attorney. Additionally, the senior and the younger entrepreneurs shared similar religious backgrounds with over 60% of them being affiliated with the Christian faith. Finally, the senior entrepreneurs and their younger counterparts reported comparable educational attainment with over half of them having at least some college education.

Nonetheless, the senior entrepreneurs in the sample were demographically different in a number of ways compared to their younger counterparts. As anticipated, the senior entrepreneurs relied more heavily on government assistance than their younger counterparts. Also, as Figure 7 indicates, while the senior and younger entrepreneurs reported similar marriage rates, a greater percentage of senior entrepreneurs were divorced, separated, or widowed. For example, only 15% of the younger entrepreneurs were divorced or separated compared to almost 31% among the senior entrepreneurs.

these groups were underrepresented in our bankruptcy sample compared to their younger counterparts, the differences were not statistically significant.

132. Among self-employed petitioners under the age of 55 in our sample, 99.4% pursued Chapter 7 protection (N=153). Similarly, among self-employed petitioners age 55 or older, 98% filed under Chapter 7 of the Bankruptcy Code (N=48). Among self-employed petitioners under the age of 55 in our sample, 48.1% were represented by an attorney (N=74). Similarly, among self-employed petitioners age 55 or older, 49% were represented by an attorney. The differences were not statistically significant.

133. Among self-employed petitioners under the age of 55 in our sample, 60.7% were Christians (N=51), 2.4% were Muslims (N=2), 14.3% were Jews (N=12), and 22.6% were affiliated with other religious denominations or with no religion (N=19). Among self-employed petitioners 55 or older in our sample, 61.8% were Christians (N=21), 2.9% were Muslims (N=1), 20.6% were Jews (N=7), and 14.7% were affiliated with other religious denominations or with no religion (N=6). The differences were not statistically significant.

134. The educational background of self-employed petitioners under the age of 55 was as follows: No school: 6% (N=0); 7th to 12th grade with no High School diploma: 5.2% (N=8); High School graduate: 20.1% (N=31); Some college work: 26.6% (N=41); Associate Degree: 11.7% (N=18); Bachelor’s degree: 23.4% (N=36); Advanced degree: 11% (N=17); Not available: 1.9% (N=3). The educational background of self-employed petitioners age 55 or over was as follows: No school: 2% (N=1); 7th to 12th grade with no High School diploma: 2% (N=1); High School graduate: 8.2% (N=4); Some college work: 28.8% (N=14); Associate Degree: 9.3% (N=4); Bachelor’s degree: 18.4% (N=9); Advanced degree: 24.6% (N=12); Not available: 6.1% (N=3). The differences were statistically significant at p=0.021.

135. Among self-employed petitioners under the age of 55 in our sample, 6.5% were receiving government assistance (N=10). In contrast, among self-employed petitioners age 55 or older, 30.6% were receiving government support (N=15). The differences were statistically significant at p=0.000.

136. The marital status of self-employed petitioners under the age of 55 was as follows: Single: 37.3% (N=68); Married: 39.6% (N=61); Divorced or Separated: 14.9%
Another demographic difference between the senior entrepreneurs and their younger counterparts was each group's racial composition. That is, the senior entrepreneurs in the sample tended to be less ethnically diverse as compared to their younger counterparts. While almost 85% of the senior entrepreneurs were identified as white, only 64% of the younger entrepreneurs were so identified.\footnote{The racial composition of self-employed petitioners under the age of 55 was as follows: White: 64.3\% (N=99); Black: 3.3\% (N=6); Asian Pacific: 6.5\% (N=10); Hispanic: 19.5\% (N=30); Native American: 6\% (N=1); Others: 5.2\% (N=8). In contrast, the racial composition of self-employed petitioners age 55 and over was as follows: White: 83.7\% (N=41); Black: 0\% (N=0); Asian Pacific: 2\% (N=1); Hispanic: 12.2\% (N=3); Native American: 0\% (N=0); Others: 2\% (N=1). The differences were not statistically significant.}
Also, while males constituted the majority of entrepreneurs, both in the senior and in the younger groups, in the sample, the sample reflected a greater gender disparity among the senior entrepreneurs. Finally, compared to their younger counterparts, more of the senior entrepreneurs in the sample were born in the United States.

As anticipated, the senior entrepreneurs in the sample reported having a significantly greater number of prior business ventures under their belts, and significantly longer experience as business owners, as compared to the self-employed entrepreneurs under the age of fifty-five. Nonetheless, while the senior entrepreneurs reported having engaged in their most recent business enterprise for longer periods of time than the younger entrepreneurs, the younger entrepreneurs reported larger businesses with a higher number of employees.

Both the senior and the younger entrepreneurs in the sample relied on credit card debt to finance at least a third of their business financing needs at the time of formation. Additionally, both groups

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138. Among self-employed petitioners under the age of 55 in our sample, 64.3% were males (N=99). In contrast, among self-employed petitioners age 55 or older, 71.4% were males (N=35). The differences were not statistically significant.

139. Among self-employed petitioners under the age of 55 in our sample, 72.5% were native born (N=111). In contrast, among self-employed petitioners age 55 or older, 83.7% were males (N=41). The differences were not statistically significant.

140. The average total number of prior business enterprises reported among self-employed petitioners under the age of 55 in our sample was .74, with a median of 0 and a standard deviation of 1.17 (N=137). In contrast, the average total number of prior business enterprises reported among self-employed petitioners age 55 or over in our sample was 1.41, with a median of 0 and a standard deviation of 2.3 (N=97). The differences were statistically significant at p=.018. Also, the average total number of years of business ownership experience reported among self-employed petitioners under the age of 55 in our sample was 7.84, with a median of 5.5 and a standard deviation of 6.64 (N=132). In contrast, the average total number of years of business ownership experience reported among self-employed petitioners age 55 or over in our sample was 19.45, with a median of 20 and a standard deviation of 11.7 (N=40). The differences were statistically significant at p=.000.

141. The average total number of years of business ownership experience in the most recent business enterprise reported among self-employed petitioners under the age of 55 in our sample was 6.3, with a median of 4 and a standard deviation of 5.7 (N=109). In contrast, the average total number of years of business ownership experience in the most recent business enterprise reported among self-employed petitioners age 55 or over in our sample was 12.35, with a median of 10 and a standard deviation of 11.28 (N=30). The differences were statistically significant at p=.000.

142. The average total number of employees in their last business enterprise reported among self-employed petitioners under the age of 55 in our sample was 6.97, with a median of 1 and a standard deviation of 21.2 (N=131). In contrast, the average number of employees in their last business enterprise reported among self-employed petitioners age 55 or over in our sample was only 2.9, with a median of 1 and a standard deviation of 5.103 (N=40). The differences were not statistically significant.

143. Credit card financing constituted an average 37.9% of the total debt financing upon business formation among self-employed petitioners over the age of 55 in our sam-
of entrepreneurs concentrated their businesses in the service sector. Furthermore, the majority of both the senior and the younger entrepreneurs in our sample were operating under a sole proprietorship.

When asked to identify the cause of their business failure, if any, both the senior and the younger entrepreneurs in the sample identified competition as the main source of their business’ demise. However, among the senior entrepreneurs, the second most prevalent contributor for business failure was tax-related problems. In contrast, the second most prevalent contributor for the business failure among the younger entrepreneurs was internal problems, such as mismanagement or employee embezzlement, etc.

Similarly, credit card financing constituted on average 34.9% of the total debt financing upon business formation among self-employed petitioners under the age of 55 in our sample. The differences were not statistically significant.

The industry profile of self-employed petitioners under the age of 55 was as follows: Retail: 27.4% (N=32); Manufacturing: 2.6% (N=3); Wholesale: 9% (N=1); Service: 68.2% (N=81). Similarly, the industry profile of self-employed petitioners age 55 and over was as follows: Retail: 16.7% (N=6); Manufacturing: 2.8% (N=1); Wholesale: 2.8% (N=1); Service: 77.8% (N=28). The differences were not statistically significant.

The type of business entity owned among the self-employed petitioners under the age of 55 was as follows: Sole Proprietorship: 53.2% (N=62); Corporation: 14.9% (N=23); Partnership: 11% (N=17); LLC: 2.6% (N=4); Other: 6.5% (N=10); Not available: 11.7% (N=18). Similarly, the type of business entity owned among the self-employed petitioners age 55 and over was as follows: Sole Proprietorship: 59.2% (N=29); Corporation: 16.3% (N=3); Partnership: 6.1% (N=3); LLC: 4.1% (N=2); Other: 4.1% (N=2); Not available: 10.2% (N=5). The differences were not statistically significant.

The following business problems were identified among self-employed petitioners under the age of 55 in our sample, who have identified business failure as the reason for their bankruptcy filings: Excessive Regulations: 1.9% (N=2); Internal Business Problems: 18.5% (N=20); Tax Problems: 6.6% (N=7); Competition: 45.3% (N=49); Lack of Financing: 8.6% (N=7); Excessive Debt: 4.7% (N=5); Personal Problems: 13.3% (N=13); Lawsuits: 3.8% (N=4). In contrast, the following business problems were identified among self-employed petitioners age 55 or over in our sample, who have identified business failure as the reason for their bankruptcy filings: Excessive Regulations: 0% (N=0); Internal Business Problems: 2.7% (N=1); Tax Problems: 21.6% (N=8); Competition: 61.4% (N=19); Lack of Financing: 2.7% (N=1); Excessive Debt: 5.6% (N=8); Personal Problems: 11.2% (N=10); Lawsuits: 5.4% (N=2). The differences were statistically significant at p=.05.
Despite some of the similarities in terms of personal and business demographics of the senior entrepreneurs and their younger counterparts in the sample, the financial position of the two groups of petitioners were dramatically different. On the one hand, the senior entrepreneurs exhibited some positive financial grounding as exhibited in a higher overall asset value compared to their younger counterparts. In addition, the senior entrepreneurs reportedly had fewer dependents to support.

Nonetheless, the senior entrepreneurs in the sample were in a dire financial state compared to their younger counterparts. The senior entrepreneurs’ peril was a product of lower income and substantially higher debt. Household incomes of the senior entrepreneurs in the sample were almost three times lower than that of their younger counterparts. Furthermore, the senior entrepreneurs in the sam-

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147. The average value of total assets reported among the self-employed petitioners under the age of 55 in our sample was $48,630, with a median of $5,275 and a standard deviation of 206,962 (N=112). In contrast, the average value of total assets reported among the self-employed petitioners age 55 or over in our sample was $58,210, with a median of $5,200 and a standard deviation of 167,716 (N=36). The differences were not statistically significant.

148. The average number of dependents reported among the self-employed petitioners in our sample under the age of 55 was 1.42, with a median of 1 and a standard deviation of 1.469 (N=144). In contrast, the average number of dependents reported among the self-employed petitioners in our sample age 55 or over was .87, with a median of 1 and a standard deviation of .894 (N=45). The difference was statistically significant at p=.020.

149. The average monthly household income reported among the self-employed petitioners under the age of 55 in our sample was $6,291, with a median of $3,600 and a standard deviation of 12,822 (N=50). In contrast, the average monthly household income reported among the self-employed petitioners in our sample age 55 or over was $2,240, with a median of $1,600 and a standard deviation of 1,582 (N=15). The differences were not statistically significant.
ple reported more than twice as much debt as their younger counterparts reported. Additionally, the senior entrepreneurs in the sample reported more than three times as much debt as senior entrepreneurs outside of bankruptcy. The senior entrepreneurs in the sample also reported a greater level of high cost debt in the form of credit card obligations. Indeed, credit card debts constituted more than 60% of the total debts reported by the senior entrepreneurs in the sample, but more than 50% of the total debts reported by their younger counterparts.

FIGURE 10. MEAN AND MEDIAN DEBT-TO-INCOME RATIO OF THE SELF-EMPLOYED IN BANKRUPTCY

As a result of their lower income and higher debt, the senior entrepreneurs had a significantly higher debt-to-income ratio. As a

150. The average total debt reported among the self-employed petitioners under the age of 55 in our sample was $173,527, with a median of $70,000 and a standard deviation of $351,569 (N=127). In contrast, the total average debt reported among the self-employed petitioners in our sample age 55 or over was $421,881, with a median of $322,500 and a standard deviation of 1,428,839 (N=40). The differences were not statistically significant.

151. See Copeland, supra note 111, at 1, 4 (reporting that in 2004, self-employed age 55 or older in the United States had on average $122,972 outstanding debt, with a median of $71,000).

152. The average total credit card debt reported among the self-employed petitioners under the age of 55 in our sample was $49,328, with a median of $35,000 and a standard deviation of 49,012 (N=114). In contrast, the average total credit card debt reported among the self-employed petitioners in our sample age 55 or over was $63,628, with a median of $40,000 and a standard deviation of 68,954 (N=36). The differences were not statistically significant.

153. The average credit card debt to total debt ratio reported among the self-employed petitioners under the age of 55 in our sample was .56, with a median of .57 and a standard deviation of .34 (N=111). In contrast, the average credit card debt to total debt ratio reported among the self-employed petitioners in our sample age 55 or over was .61, with a median of .70 and a standard deviation of .38 (N=34). The differences were not statistically significant.

154. The average debt to household income ratio reported among the self-employed petitioners under the age of 55 in our sample was 3.82, with a median of 2 and a standard deviation of 3.8 (N=44). In contrast, the average debt to household income ratio reported among the self-employed petitioners in our sample age 55 or over was 6.4, with
consequence of their higher debt level, the senior entrepreneurs in the sample also reported a significantly higher debt-to-asset ratio. The senior entrepreneurs in the sample reported an average debt-to-asset ratio that was double that of the younger entrepreneurs in the sample.156 Furthermore, while senior entrepreneurs outside of bankruptcy reported a median debt-to-asset ratio of 12.9% in 2004, the senior entrepreneurs reported a median debt-to-asset ratio in excess of 500% in 2004.156 Finally, as a further reflection of their financial distress, the senior entrepreneurs in sample had a lower net worth than the younger entrepreneurs.157

IV. CONCLUSION

This study found that seniors were significantly under-represented in bankruptcy relative to their representation in the population of the United States outside of bankruptcy. We found that while seniors, individuals who are fifty-five years old or older, were a quarter of the general population of the City of Los Angeles, California ("Los Angeles"), they constituted only 18% of the bankruptcy petitioners who filed in the Central District of California-San Fernando Valley Division. Indeed, petitioners in our bankruptcy sample in each age category over sixty were significantly under-represented in bankruptcy compared to their proportion in the general population of Los Angeles. In contrast, the petitioners in our bankruptcy sample in each age category under fifty were over-represented compared to their proportion in the general population of Los Angeles.158

The findings were similar among older self-employed petitioners in our sample. Senior entrepreneurs, self-employed petitioners who are fifty-five years old or older, were under-represented in our bankruptcy sample. Outside of bankruptcy, senior entrepreneurs constit-

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155. The average debt to asset ratio reported among the self-employed petitioners under the age of 55 in our sample was 34.1, with a median of 7.9 and a standard deviation of 42 (N=84). In contrast, the average debt to asset ratio reported among the self-employed petitioners in our sample age 55 or over was 63.5, with a median of 5.6 and a standard deviation of 145.3 (N=29). The differences were statistically significant at p=.027.

156. See Copeland, supra note 111, at 1, 10 (reporting that in 2004, self-employed age 55 or older in the United States had on a median debt-to-asset ratio of 12.9%).

157. The average net worth reported among the self-employed petitioners under the age of 55 in our sample was -$159,112.3, with a median of -$59,655 and a standard deviation of 383,554 (N=104). In contrast, the average net worth reported among the self-employed petitioners in our sample age 55 or over was -$403,871, with a median of -$58,000 and a standard deviation of 1,584,107 (N=32). The differences were not statistically significant.

158. See supra Table 1 and Figure 2 & 3.
tute 31% of all the self-employed individuals in the United States. In contrast, senior entrepreneurs in the sample comprised merely a quarter of the self-employed petitioners.159

This study has found that seniors filing for bankruptcy, who are filing at an increasing rate,160 report a dire financial condition compared to seniors outside of bankruptcy. Seniors in our sample reported 250% more average total debt than older individuals outside of bankruptcy reported.161 Also, the ratio of debt as a percentage of assets was ten times higher among seniors in bankruptcy compared to seniors outside of bankruptcy.162 Furthermore, seniors in bankruptcy reported having a median outstanding credit card debt that was ten times higher than the median credit card debt reported by seniors outside of bankruptcy.163

This study detected similar disparity among senior entrepreneurs, self-employed individuals age fifty-five or older, in bankruptcy compared to senior entrepreneurs outside of bankruptcy. For example, compared to senior entrepreneurs outside of bankruptcy, the senior entrepreneurs in our sample reported 300% more debt.164

Seniors in the sample were not only worse off financially than the seniors outside of bankruptcy, but they were also in worse financial shape than their younger counterparts in bankruptcy. When compared to their younger counterparts, seniors in the sample reported significantly lower household income, and were more heavily dependent on government assistance.165 Most dramatically, older petitioners in the sample had on average twice as much debt as the younger petitioners.166 Also, senior petitioners in the sample reported significantly more credit card debt than the petitioners under age fifty-five in our sample reported.167 As a result of lower income and higher debt load, older petitioners in the sample reported significantly higher debt-to-income ratios and twice as large negative net worths as the younger petitioners reported.168

Similarly, the senior entrepreneurs in the sample were in much worse financial shape compared to the self-employed individuals under the age of fifty-five years. Household incomes of the older self-

159. See supra Table 2.
161. See supra note 113 and accompanying text.
162. See supra note 112 and accompanying text.
163. See supra note 111 and accompanying text.
164. See supra note 148 and accompanying text.
165. See supra notes 109-10 and accompanying text.
166. See supra note 129 and accompanying text.
167. See supra note 117 and accompanying text.
168. See supra notes 118-21 and accompanying text.
employed individuals in our sample were almost three times lower than that of their younger counterparts.\footnote{See supra note 146 and accompanying text.} Also, these older self-employed individuals reported more than twice as much debt as their younger counterparts reported.\footnote{See supra note 147 and accompanying text.} Complicating matters for the senior entrepreneurs in our sample, senior entrepreneurs reported that high cost credit, in the form of credit card debt, constituted more than 60% of their total debts.\footnote{See supra note 150 and accompanying text.} As a result of the lower income and higher debt, senior entrepreneurs reported significantly higher debt-to-income ratios, significantly higher debt-to-asset ratios, and lower net worths as their younger counterparts reported.\footnote{See supra notes 151-52, 154 and accompanying text.}

The growing number of seniors filing for bankruptcy over the past twenty-five years and the dire financial state of the seniors in the sample is a product of changing financial insecurity of older individuals in society. In the mid-to-latter part of the twentieth century, individuals who reached the age of retirement were able to exit the workforce with sizeable financial strength. The financial security enjoyed by the retired individuals was largely a product of continued economic prosperity, augmentation in Old Age Survivor’s Insurance benefits, and the growth of private pensions in the United States.\footnote{Elizabeth A. Kutza, The Intersection of Economics and Family Status in Late Life: Implications for the Future, 37 MARRIAGE & FAM. REV. 13 (2005).}

However, recent trends in the economy have resulted in a retreat of the financial security of older individuals. Particularly, surveys suggest that baby boomers are not doing as well financially as their parents did while in the labor force, and they are not doing as well as their parents did upon retirement.\footnote{Id. at 16.} The baby boomers are saving significantly less than their parents were and are borrowing significantly more than their parents were.\footnote{Id. at 17.} For example, between 1989 and 1998, aggregate debt burdens increased from 5.2% to 8.7% among families headed by a person aged sixty-five to seventy-four.\footnote{John Gist & Carles Figueroa, Deeper In Debt: Trends Among Midlife and Older Americans, AARP, Apr. 2002, http://www.aarp.org/research/credit-debt/debt/aresearch-import-339-1D70.html.} Similarly, almost a quarter (22%) of all individuals who are sixty-five years old or older have incomes at or below 135% of the federal poverty level.\footnote{JoAnn Lamphere et al, Low-Income Older Americans and Their Health Coverage Needs Fact Sheet, AARP, Aug. 1998, http://www.aarp.org/research/assistance/low-income/aresearch-import-675-FS68.html.} Also, in 1996, the average household income for those indi-
individuals under the age of sixty-five was 60% greater than for those individuals over the age of sixty-five.\textsuperscript{179}

Furthermore, fewer older individuals are currently retiring with private pensions compared to their parents.\textsuperscript{179} Finally, increased marital dissolution among the baby boomers has resulted in greater financial vulnerability.\textsuperscript{180} Indeed, as a manifestation of the link between marital dissolution and financial vulnerability, older petitioners in the sample were almost three times more likely to be either divorced or separated compared to older individuals outside of bankruptcy.\textsuperscript{181}

As the number of older individuals facing financial trouble has increased in the recent past, more of the individuals have apparently pursued bankruptcy protection to address their financial plight. Given the increased financial insecurity of older individuals in society, one may expect the trend of ever growing number of elders in bankruptcy to increase and their representation in bankruptcy to shift where they would become over-represented in the bankruptcy population in the near future.

\textsuperscript{179} Id.
\textsuperscript{180} Id.
\textsuperscript{181} See supra note 108 and accompanying text.