How Did Small Business-Owning Households Fare During the Longest U.S. Economic Expansion?

by

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for

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By George Haynes, Montana State University, Bozeman, MT 69715; and Charles Ou, U.S. Small Business Administration, Office of Advocacy. 2006. [29] pages. Under contract no. SBAHQ-03-M-0274

During the 1990s, the U.S. economy enjoyed its longest expansion on record. U.S. household income and wealth rose significantly during this period. This report examines how households that owned businesses fared during this boom period. Were they well-represented in the high earnings and high net worth categories? Did their wealth and income grow faster or more slowly than households that did not own businesses? Did their share of wealth and income rise or fall? This study uses the Federal Reserve Board's 1992 and 2001 Surveys of Consumer Finance to explore these trends over the period 1992-2001.

Overall Findings

The authors found that households owning small businesses were more likely to be found in the top echelons of income and wealth than households that did not own a business. However, over the course of the study period, the likelihood of being in the high income and high wealth category increased at a faster rate for non-business owning households than for households with small businesses. In addition, small business owners saw their share of aggregate household wealth decline from 42.5 percent in 1992 to 40.6 percent in 2001.

Highlights

- Business-owning households remained significantly more likely to have high incomes and high net worth than households not owning businesses. In 2001, small business-owning households were more than twice as likely to be classified as high income (57.1 percent versus 25.5 percent) and more than eight times as likely to be classified as high wealth (21.2 percent versus 2.5 percent) as households not owning a business. Households that owned more than one business had the highest probability of being classified as high income (67 percent) and high wealth (38 percent).
- By 2001 the wealth and income gap between households with and without businesses had narrowed. From 1992 to 2001, the likelihood of being in the high-income or high wealth category increased at a faster rate for households without a business than for households that owned small businesses. For households without small businesses, the chance of being in the high income category increased 42.5 percent and the chance of being in the high net worth category increased 92 percent; for small business-owning households, these figures were 24.7 percent and 61.8 percent, respectively.
- For all households, aggregate income increased by 29.5 percent and aggregate wealth by 71.0 percent over the period 1992–2001. Small business-owning households realized higher percentage changes in aggregate income than non-business-owning households (31.5 percent versus 23.6 percent). Multiple business-owning households realized the largest increase in aggregate income (45.2 percent) of any group. On the growth in wealth, aggregate wealth increased slightly more for households that did not own businesses (a 68.3 percent rate of growth for non-business owners versus 63.5 percent for business owners). Of the three groups, households with multiple businesses experienced the smallest rise in aggregate wealth, 54 percent.
- In 1992 high income households were more likely to be headed by a well-educated, married male, 35 to 54 years of age. The household was more likely to own public stock. Households owning a sole proprietorship were less likely than those owning a regular corporation to be high income. A

This report was developed under a contract with the Small Business Administration, Office of Advocacy, and contains information and analysis that was reviewed and edited by officials of the Office of Advocacy. However, the final conclusions of the report do not necessarily reflect the views of the Office of Advocacy.

somewhat different picture emerges for 2001. The head of the high income household was more likely to be between 45 and 54 years of age, married, the owner of public stock, with employees, and having acquired his business by buying it. Most importantly, households owning one or multiple businesses were equally likely to be high income households in both years. In 1992 high wealth households were typically headed by older individuals with public stock holdings. These high wealth households owned larger and older businesses and were more likely to own multiple businesses. In 2001 the age effect was still present, owners were well-educated, and they were still likely to hold public stock. Households owning sole proprietorships were less likely to be millionaires than households owning regular corporations. In addition, these wealthy households typically owned larger and older businesses, and they were more likely to own multiple businesses.

Methodology

Data from the 1992 and 2001 Surveys of Consumer Finance are the main sources used in this study. This study continues a topic examined in an earlier report, *Wealth and Income: How Did Small Businesses Fare from 1989 to 1998,* prepared by George Haynes under contract to the U.S. Small Business Administration (*www.sba.gov/advo/research/rs205tot.pdf).* Like the previous study, the variables of interest include each household's business ownership status, income, and wealth (including assets and debt held by members of the household). Different categories of businesses were identified: self-employed business owner/managers with one or no employees; small business managers who are owner/managers with more than one employee; angel investors who are business owners with no active management responsibilities in any business; and other angel investors who are primarily owners with other investments where they provide some management support.

This study is primarily descriptive, using family income and wealth to compare business- and non-business-owning households. The probability of being classified as high income or high wealth by each group is estimated: real mean income and wealth were compared and the share of each group in the total family income and aggregate wealth in both years were estimated for comparison. Logistic regression models are used to assess the types of households and business owners more likely to be classified as high income or high wealth. This study uses non-linear logistic regression models to predict the likelihood of high family income or wealth from binomial classifications of high income (yes/no) and high wealth (yes/no).

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

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Executive Summary

Recent reports by the Labor Department suggest that self-employment has grown by only 592,000 since the last recession (WSJ, 2005). Individuals have the incentive to start new businesses and expand existing businesses when they can expect a higher return on these investments than other types of investments. In this study, we compared changes in income and wealth of small business-owning households, large business-owning households and households with no business activity during the 1992-2001 period. We found that the likelihood of being high income or high net worth increased at a faster rate for households without any business than for households with small businesses. Small business owners actually saw their piece of the pie decline from 42.5 percent to 40.6 percent of aggregate household wealth. It appears that households owning larger businesses (over 500 employees) made the most progress in increasing their wealth and income.

It's important for prospective and existing small business owners to compare themselves to others in the workforce. Practitioners can utilize this information to provide encouragement to the entrepreneur by showing the increased probability of becoming a high income earner and wealth holder, as well as to provide a dose of reality by showing how small business owners have fared against others in the workforce with substantially smaller financial risk.

So what? Small business ownership will increase if owners are adequately compensated for their risk. This study is a warning shot – households with small business owners seem to capture a very small risk premium and are losing ground to other households, especially households owning large businesses. This result highlights the importance of practitioner understanding of financial issues and public policy programs to reduce the financial risk to small business owners.

Table of Contents

Executive Summary 1

Introduction 3

Literature Review 4

Empirical Considerations 7

Data 7

Models 10

Results 12

So What? 16

Conclusions 17

References 23

Introduction

During the 1990s, amid the longest economic expansion in U.S. history, the number of small business employers grew by over 11.4 percent to over 5.6 million (SBA, 2003). These small businesses hired nearly 14 percent more people over the 1990s totaling over 57 million employees in 2000. The Dow Jones Industrial Average increased from 3,250 to over 12,000 points, unemployment rates declined from 6.9 to less than 5 percent, and consumer confidence soared. The expanding economy stimulated growth in the number of businesses, in owner and investor income, and in payments to employees working for these businesses. It also brought about changes in wealth. Using the Board of Governors' of the Federal Reserve's Survey of Consumer Finances, this study examines two important equity questions:

(1) Did households owning small businesses realize larger increases in income and wealth than households that did not own small businesses during this expansion?

(2) Who are the small business owners earning the income and accumulating the wealth?

The general economic expansion of the 1990s dramatically increased the wealth of some individuals while leaving others with more modest increases, or decreases, in wealth. While there has been ample discussion of the growth of businesses in the United States during the past 20 years, knowledge about the owners of privately held businesses (individuals or households) is quite limited. Public debate about wealth distribution and income inequality has centered around the rich/poor axis, rather than on the distinction between those who owned and/or operated businesses and those who worked for others.

This study examines changes in the distribution of income and wealth for three primary types of households: households not owning a business, households owning and managing only one small business (single business owners), and households owning and managing at least one small business and owning other businesses (multiple business owners). Using this classification of households (and business owners) and the Surveys of Consumer Finance in 1992 and 2001, this study assesses changes in the income earned and wealth accumulated by different types of households from 1992 to 2001.

Literature Review

The financial situation of U.S. families changed substantially between 1983 and 2001. The literature review examines relevant literature assessing changes in income and wealth of U.S. families. Special attention is given to evidence on changes in the income and wealth of U.S. families that own one or more small business. Relatively comprehensive literature exists on the financial condition (income and wealth) of families, but the literature is much less comprehensive for the subset of families that own businesses.

The Federal Reserve Board assesses recent changes in the U.S. family finances every three years when summarizing results derived from the most recent Survey of Consumer Finances (Kennickell and Shack-Marquez, 1992; Kennickell and Starr-McCluer, 1994; Kennickell and Starr-McCluer, 1997; Kennickell, Starr-McCluer and Surette, 2000; and Aizcorbe, Kennickell and Moore, 2003). The reporting of both mean and median financial estimates (income and net worth) is important because of the skewed distribution of both income and net worth data. For instance, a comparison of the

relative changes in mean and median net worth indicates whether the share of aggregate net worth held by the poorest or wealthiest has increased or decreased. An increase in the mean that is higher than a corresponding increase in the median often suggests an increase in the wealth shares of families at the top end of the distribution.

Between 1983 and 1989 real mean family income increased (from $44,400 to $51,700 in 1998 dollars) while real median family income remained virtually unchanged at around $32,000 (Kennickell and Shack-Marquez, 1992). Mean wealth rose by over 24 percent, while median wealth rose nearly 10 percent. These findings suggest that family income and wealth became somewhat more concentrated among families with higher income and wealth, respectively. Kennickell and Shack-Marquez (1992) suggest that several factors affected family income and wealth, including financial deregulation; progressive elimination of tax deductions for consumer interest; and tax changes, such as the elimination of general deductions for individual retirement accounts.

Between 1989 and 1992, real mean and median family income and real mean and median family wealth decreased (Kennickell and Starr-McCluer, 1994). Several important changes occurred during this period. Interest rates declined and families tended to move their asset portfolios away from time deposits and toward mutual funds; families owned more tax deferred retirement accounts; and income and wealth grew substantially for non-White and Hispanic families.

Between 1992 and 1995, real mean and median family income increased slightly, although not sufficiently to offset the declines realized from 1989 to 1992 (Kennickell and Starr-McCluer, 1997). By 1995, median income and wealth were nearly the same as in 1989, however mean income and wealth had not fully recovered. This period of time

from 1992 through 1995 was one of continued economic expansion in the U.S. economy. By 1998, real mean and median family income had surpassed their 1989 levels, having exhibited strong growth between 1995 and 1998. This period was marked by an increase in the holding of stock equity and a booming stock market (Kennickell, Starr-McCluer and Surette, 2000). While family indebtedness increased over this period of time, asset growth was more rapid. At this juncture in 1998, the economy was in the seventh year of an economic expansion. Civilian unemployment was around 4.5 percent and the average annual inflation rate of 2.2 percent, as measured by the consumer price index, had been low for the previous three years. Mean and median family income continued to grow from 1998 through 2001, with the fastest growth occurring among higher income households (Azicorbe, Kennickell and Moore, 2003).

From 1989 through 1998, real family income and wealth increased in the United States. However, this growth in family income and wealth did not appear to be evenly distributed across the economy. Using the 1989 through 1995 Survey of Consumer Finances, Wolff (1998) argues that the distribution of wealth had become much less equal and that only households in the top 20 percent of income and wealth made any substantive gains. He suggested that all other groups suffered real wealth and income losses.

While no other authors addressed small business owners, Wolff (1998) argues that "small business equity, which tends to move with stock prices, is also highly concentrated among the rich." While small business owners may have realized an increase in the value of their assets with the increase in the stock market, other evidence suggests that small business owners hold more debt than non-business-owning families

(Haynes and Avery, 1996). In addition, recent research suggests that small business owners are willing to assume more risk and hold more risky portfolios of assets (Xaio, Alhabeeb, Hong and Haynes, 2001). Thus, whether or not families owning small businesses have improved their financial status between 1992 and 2001 is an open question. This study examines changes in the real income and wealth of families owning small businesses to determine if they have higher mean income and wealth and increasing or decreasing shares of total income and wealth from 1992 to 2001.

Empirical Considerations

This following sections summarize the data utilized in this study from the 1992 and 2001 Surveys of Consumer Finances and present the statistical models employed. While this study is primarily a descriptive study of small businesses in two time periods, it employs multivariate logistics regression models to assess the determinants of high income and wealth of small business-owning households.

Data

The 1989 through 2001 Surveys of Consumer Finances (SCF) were conducted for the Federal Reserve Board. The 1989 SCF was collected by the Survey Research Center at the University of Michigan. The most recent surveys were collected by the National Opinion Research Center at the University of Chicago. The surveys are designed to supply detailed and reliable information on balance sheets, use of financial services, pensions, labor force participation, cash income and demographic characteristics of U.S. households.

The SCF utilizes a dual frame sample to provide adequate coverage of the population. One frame is a multistage area probability sample, which provides adequate coverage of widely held assets and liabilities. The second frame is a list design employed to over-sample relatively wealthy households. Response rates for the area probability and list samples in 1992 and 2001 were approximately 70 and 30 percent, respectively.

Research conducted by the Federal Reserve Bank suggests that non-response is positively correlated with wealth. This study is primarily interested in examining small business-owning families. However, the entire sample is employed to assess the differences between business-owning and non-business-owning families. The SCF survey asks respondents about the previous year, hence the SCF for 2001 actually gathers information about the finances of the family and business in 2000.

The variables of interest in this study include business ownership status of the household, household income and household wealth (including assets and debt held by members of the household). Business ownership status was determined by whether an individual owned and/or actively managed at least one business. Households owning large businesses (500 or more employees) and household with only investors (owner, but not managers) were not included in this study. Small business owners are separated into two categories: single business owners (who own and manage only one business); and multiple business owners (who own and/or own and manage at least one small business).

Financial data (such as income and wealth data), often have a substantial percentage of missing values. The SCF is a fully imputed data set with five separate implicates available for every missing value. This study utilizes only one implicate in the SCF. Household income and wealth were computed using all of the financial information

reported in the SCF. Household income is computed by summing the following sources of income: wages and salaries, interest, dividends, asset sales, rents, unemployment, child support, welfare, social security and other sources. The wealth of the household was determined by generating a balance sheet, using a program supplied by the Federal Reserve Board, to estimate the wealth of each household. Total wealth was computed by subtracting total liabilities from total financial and non-financial assets. Financial assets were computed by summing the value of transaction accounts, certificates of deposit, directly held mutual funds, stocks, bonds, individual retirement accounts, saving bonds, cash value of life insurance, other managed assets and other financial assets. Non-financial assets were computed by summing the value of vehicles, primary residence, other residential real estate, equity in nonresidential real estate, business interests and other non-financial assets. Liabilities were tabulated by summing the value of housing debt, other lines of credit, debt for other residential property, credit cards, installment loans and other debts.

In all cases, mean and median family income were higher in 1989 than in 1992. Hence, this study will discuss the changes in income from the recession in the early 1990s to the most recent data collected in 2001. All income figures have been adjusted to 1992 dollars using the current consumer price index as employed by Aizcorbe, Kennickell and Moore (2003).

Control variables include personal and demographic characteristics of the household head and business owner, and characteristics of the business. The personal and demographic characteristics include age, race (White, Black, Hispanic and other), gender, education (no high school diploma, high school diploma, some college and

college degree or more), marital status (married, previously married or never married) and census region (northeast, north central, south and west). Business characteristics include number of employees, age of the firm, legal organization, industrial classification, founding strategy and gross sales.

The sampling frame for this analysis is U.S. households, which are referred to as families in this report. Personal and demographic characteristics are those characteristics of the respondent interviewed, typically the household head. If the respondent or someone in the household owns and manages a business, this study is referring to the largest business. No business information is available for businesses owned but not managed by the respondent. Small businesses are those businesses with fewer than 500 employees that are owned and managed by a family member.

Models

This study is primarily descriptive, where family income and wealth are compared for business and non-business-owning families. This descriptive analysis requires the careful comparison of means using chi-square and t-tests to assess differences among business and non-business-owning families across time (1992 through 2001). These simple comparisons are supported by more complex empirical models, which are designed to assess the determinants of high income (greater than $50,000 total family income) and high wealth (greater than $1 million total family wealth).

Logistic regression models are used to assess the types of families and business owners more likely to be classified as high income or high wealth. This study uses non-linear logistic regression models to predict the likelihood of high family income or wealth

from binomial classifications high income (yes/no) and high wealth (yes/no). Personal and demographic characteristics of the family are regressed on dummy variables representing high income and high wealth. The income model is specified as follows:

$$HI = \alpha_0 + \alpha_1 age + \alpha_2 race + \alpha_3 gender + \alpha_4 ed + \alpha_5 ms + \alpha_6 stocks + \alpha_7 emp + \alpha_8 firm_age + \alpha_9 org + \alpha_{10} sic + \alpha_{11} found + \alpha_{12} multiple + \varepsilon$$

where HI = high income dummy (1=high income, 0 otherwise);

age = age of the household head (dummy variables for less than 35, 35 to 44, 45 to 54, 55 to 64, 65 to 74 and 75 or older);

race = race of the household head (dummy variables for White and and other);

gender = gender of household head (dummy variables for male and female);

ed = education level (categorical variables for some high school, high school graduate, some college, college graduate);

ms = marital status (dummy variables for married or otherwise);

stocks = owns publicly traded stock (yes=1, no=0);

employ = number of employees in the business (continuous);

firm_age = age of the business (continuous);

org = legal organization of the business (dummy variables for partnership, sole proprietorship, subchapter s corporation and regular corporation);

sic = standard industrial classification of the business (dummy variables for agriculture, construction/manufacturing, wholesale/retail and service/other);

found = founding status of the business (dummy variables for inherited, bought/invested and started); and

multiple = household owns multiple businesses (1=yes, 0=no).

The wealth model, which uses the same independent variables as those employed in the income model, is represented as follows:

$$HW = \alpha_0 + \alpha_1 age + \alpha_2 race + \alpha_3 gender + \alpha_4 ed + \alpha_5 ms + \alpha_6 stocks + \alpha_7 emp + \alpha_8 firm_age + \alpha_9 org + \alpha_{10} sic + \alpha_{11} found + \alpha_{12} multiple + \varepsilon$$

where HW = high wealth dummy (1=high wealth, 0 otherwise);

These regression models are employed for 1992 and 2001. The model specification is identical for each year. The next section summarizes the results of this study.

Results

This section assesses the probability of being classified as high income and/or high wealth, examines the number of business-owning households, compares the demographic and financial characteristics of single- and multiple-business-owning families, compares real mean and median income and wealth, compares the shares of total family income and wealth between business and non-business-owning families and

across different types of business owners, and assesses the determinants of high income and high wealth families over the six years of this study (1992 through 2001).

Families owning businesses are significantly more likely to be high income earners and high wealth holders than families not owning businesses (Table 1). In 1992, small business-owning households were more than two times more likely to be classified as high income (45.8 percent versus 17.9 percent) and over ten times more likely to be classified as high wealth (13.1 percent versus 1.3 percent) as households not owning a business. Multiple business owners had the highest probability of being classified as high income (56 percent) and high wealth (32.7 percent) of the small business owners. In 2001, a household owning any business had over a 57 percent chance of being classified as high income and over a 21 percent chance of being classified as high wealth. By 2001 the high income and wealth gap between households with and without businesses had narrowed. Small business-owning households were now less than three times more likely to be classified as high income (57.1 percent versus 25.5 percent) and small businesses were now about eight times more likely to be classified as high wealth (21.2 percent versus 2.5 percent). Multiple business owners still appeared to be the most prosperous small business group with over two-thirds of them classified as high income and over one-third classified as high wealth.

From 1992 to 2001 the likelihood of being high income or high wealth increased at a faster rate for households without any business (42.5 percent increase in the percentage of high income earners and 92 percent increase in the percentage of high wealth holders) than for households with small businesses (24.7 percent increase in the

percentage of high income earners and 61.8 percent increase in the percentage of high wealth holders).

The relatively lackluster performance of households owning a small business in relation to households with no business ownership would indicate that small business investment may have been a less attractive investment between 1992 and 2001 than other investments, such as publicly traded stock. Interestingly, the number of households owning a small business and number of small businesses owned by these households was quite stable between 1992 and 2001 (Table 2). The 12.6 million small business-owning households identified in the SCF owned 16.7 million businesses in 1992. By 2001 the number of business-owning households had remained quite stable with 13.2 million households owning 17.6 million businesses. Households with a single business remained stable at just over 10 million in 1992 and 2001. Households with multiple businesses remained stable, but the number of business owned per household decreased slightly from 2.59 to 2.52 businesses per household.

Table 3 compares mean household income for all households and those owning at least one business. Real mean income was significantly higher in 2001 than in 1992, increasing by 36.4 percent from $38,963 in 1992 to $53,157 in 2001. Households not owning a business realized a real mean income increase of 29.4 percent from 1992 to 2001. Even though small business income increased from $75,041 to $110,370 and single and multiple business-owning households realized substantial increases in real mean income no significant differences were found. The wealth story is very similar. Real mean wealth increased by nearly 76 percent for the entire sample. Households not owning a business realized a real mean wealth increase of 72 percent from $109,629 to

$188,535. Households that owned small businesses realized a substantial, yet not statistically significant, increase in wealth from $589,035 to $1,050,872 (or 78.4 percent). In 1992 and 2001, multiple business-owning households had significantly higher real mean income and wealth than other small business owners.

Aggregate family income increased by nearly 29.5 percent between 1992 and 2001 (Table 4). The unit of observation is all families belonging to a specific group in each time period. Aggregate income may increase over time either because the group has become larger or group members have earned more income. Families with small business ownership realized higher percentage changes in aggregate income than families without any business ownership (31.5 percent versus 23.6 percent). Households owning only multiple businesses realized the largest increase in aggregate income (45.2 percent) of any group.

Families with no business also realized higher percentage changes in aggregate wealth than families with some small business ownership (68.3 percent versus 63.5 percent). Small business owners did reasonably well by realizing increases in wealth of 72.1 percent and 53.8 percent for single and multiple business owners, respectively.

Multiple business owners are a critical part of the economic engine provided by small business owners. In 1992 these multiple business households comprised about 21 percent of all small business-owning households, however they earned over 30 percent of total household income and held 47 percent of the wealth of small business owners. In 2001, they still comprised about 20 percent of all small business-owning households, however they now earned nearly 34 percent of total household income and held 44 percent of the wealth of small business-owning households.

Table 5 examines the determinants of high income and high wealth for households owning a small business in 1992 and 2001. In 1992 high income households are likely to be headed by an individual in their prime working years (35 to 54 years of age) who is male, well-educated, and married. The household is more likely to own public stock. Households owning a sole proprietorship were less likely than households owning a regular corporation to be in the high income category. A somewhat different picture emerges for 2001. The typical high-income head of household is now between 45 and 54 years of age, married, the owner of public stock, with employees, and who acquired the business by buying it. Most importantly, households owning single and multiple businesses were equally likely to be high income households in both years.

In 1992 high wealth households were typically headed by older individuals with public stock holdings. These high wealth households owned larger and older businesses and they were more likely to own multiple businesses. In 2001, the age effect was still present; owners were well educated and they were still likely to hold public stock. Households owning sole proprietorships were less likely to be millionaires than households owning regular corporations. In addition, these wealthy households typically owned larger and older businesses and they were more likely to own multiple businesses.

So What?

So what? Small business ownership will increase if owners are adequately compensated for their risk. This study is a warning shot – households with small business owners seem to capturing a very small risk premium and are losing ground to other households, especially households owning large businesses. Small business growth

is critically important to our economy, where small businesses comprise 99.7 percent of all businesses with employees and provide about 50 percent of the jobs (U.S. Small Business Administration, 2002). This result highlights the importance of practitioner understanding of financial issues and public policy programs to reduce the financial risk to small business owners.

Conclusions

This study is primarily concerned with changes in income and wealth of families owning and not owning small businesses from the recession of the early 1990s through 2001. Who fared better in the 1990s? This study utilizes cross-section data to assess changes in income and wealth of families owning different types of businesses during the 1992-2001 period. While panel data would be preferred, the unit of observation is all families belonging to a specific group in each time period. Clearly, the economic pie increased in size during the 1990s for most groups of small business owners, however some types of small businesses appeared to have fared better than others.

This study suggests that households owning and managing at least one small business are more likely to be high income earners and high wealth holders than households with no business ownership in 1992 and 2001. From 1992 to 2001 the likelihood of being high income or high wealth increased at a faster rate for households without any business (42.5 percent increase in the percentage of high income earners and 92 percent increase in the percentage of high wealth holders) than for households with small businesses (24.7 percent increase in the percentage of high income earners and 61.8 percent increase in the percentage of high wealth holders). Households with more than

one small business are more likely to be high income earners and high wealth holders than those with only one small business. Multiple business owners are more likely to be in their prime working age (35 – 54 years of age), male and married. The number of households owning businesses and the total number of businesses was relatively static from 1992 to 2001. While households with multiple businesses had significantly higher real mean income and wealth than households with a single business, neither type of business realized a statistically significant increase in either mean income or wealth from 1992 to 2001.

Small business-owning households realized an increase of 31.5 percent in aggregate income and an increase of 63.5 percent in aggregate wealth between 1992 and 2001. Households owning a small business comprise about 12 percent of all households, however these households earned over 25 percent of total household income and held over 40 percent of household wealth in 2001. Households owning more than one small business comprise about 22 percent of all households owning a small business, and these households have consistently earned over 30 percent of the total household income of small business owners and hold over 45 percent of the total household wealth of small business owners. Households with multiple businesses realized the most substantial gains in aggregate income (45.2 percent), however their gains in aggregate wealth (53.8 percent) were somewhat lower than aggregate wealth gains realized by single business owners. Even though aggregate wealth gains were higher for households owning only one business, the multivariate analysis still suggests that households with multiple businesses were significantly more likely to be classified as high wealth.

The likelihood of being high income or high wealth increased at a faster rate for households without a business than for households with small businesses. While the robust financial growth in the early 1990s appeared to increase the size of the economic pie (measured in terms of household wealth), small business owners actually saw their piece of the pie decline from nearly 42.5 to just under 40.6 percent of aggregate household wealth. Households not owning businesses realized similar results; their share of the pie declined from 51 percent to 50 percent. Based on these data, it appears that households owning larger businesses (over 500 employees) made the most progress in increasing their wealth and income.

Interestingly, small business owners realized larger percentage increases in aggregate income and somewhat smaller increases in aggregate wealth than households with no business ownership. This evidence suggests that other investments, such as investments in public stock, produced a higher rate of return from 1992 to 2001 than investments in business ventures. The period of rapid economic expansion may have been a difficult time to start and nurture a new business and expand an existing small business venture for several reasons:

(1) Labor costs increased. The unemployment rate fell from nearly 7 percent in 1991 to 4.0 percent in 2000, hence labor supplies tightened (Bureau of Labor Statistics, 2005). In this type of labor market, small business owners were facing higher wages. In addition, small business owners may have faced substantial challenges finding and retaining high quality employees.

(2) The opportunity cost of capital increased. While financial capital became less expensive to borrow over this period of time with the prime rate declining from just over 10 percent in 1990 to 8.5 percent in 1999, the value of the stock market (S&P 500) was increasing over 16 percent annually (Statistical Abstract, 2000). Investors, particularly family and friends who may have been willing to invest in a small business venture, had less risky alternatives for their excess cash. In this type of financial market, small business owners may have been facing higher costs of financing and restricted access, especially for start-up financing.

(3) Other employment opportunities increased the opportunity cost of prospective owners. If higher inflation-adjusted net income and wealth are the most important criteria considered by the business owner, many of the families members owning a business may have been better off working for someone else. In a market with relatively low unemployment in a growing economy, the opportunity cost of risking one's family's financial resources in a small business venture increases substantially.

The competitive challenges of owning and managing a business are only compounded by higher labor costs and lower quality labor available in the market, diminished access to financial capital from family and friends, and the lure of reasonably good job opportunities working for someone else in a vibrant economy.

Among households owning small businesses, multiple business owners seemed to realize the most substantial gains in income, but single business owners realized the most substantial gains in wealth from 1992 to 2001. Multiple business owners had a higher

probability of being classified as high income and high wealth, somewhat higher real mean income and aggregate income growth, and somewhat lower real mean wealth and aggregate wealth growth. Most importantly, small business owners as a group realized substantial gains in real income and wealth from 1992 to 2001, and they competed well with other households not owning small businesses. Small business-owning households' relatively modest financial success in gaining wealth in comparison to non-business-owning households in this very prosperous economic time suggests that investments in businesses realized lower financial returns that investments in other assets. Even among the small business owners, it appears that more of the growth in wealth was derived from ownership in publicly traded stocks than from the ownership of the small business. Given the relatively modest difference in aggregate gains in wealth between households with and without small businesses, it should come as no surprise that the number of households owning small businesses has remained quite stable at around 12 to 13 million households.

These results should concern small business investors. Small businesses are risky ventures, hence these owners reasonably expect higher returns on their investments in business assets than can be earned on other investments. While the robust financial growth in the early 1990s appeared to increase the size of the economic pie (measured in household wealth), small business owners actually saw their piece of the pie decline from nearly 42.5 to just under 40.6 percent of aggregate household wealth. It is possible that these results are created by a sampling problem. During an economic expansion, families that previously wouldn't have been included in the sampling frame because they were relatively poor and couldn't be easily contacted by telephone are included in the more

recent sampling frames. These families are less likely to be small business owners, hence the population of families owning small businesses may be underestimated. It is also possible that robust economic times are fiscally challenging for small business owners as human, physical and financial capital become more expensive and other less risky investments yield similar or better returns. If a risk premium isn't earned by small business owners, other non-pecuniary benefits (such as being your own boss and having a passion for your vocation) of small business ownership become more important. Further research utilizing high quality panel data is needed to compare the returns on business and other assets and assess the modest gains in income and wealth of small business-owning households during this time of robust economic growth.

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Table 1 Probability of Being a High Income or High Net Worth Household in 1992 and 2001

Characteristics	1992 n	1992 High Income[1]	1992 High Wealth[2]	2001 n	2001 High Income	2001 High Wealth
		(%)	(%)		(%)	(%)
All respondents	3,906	21.9	3.1	4,442	30.0	5.2
No business ownership	2,640	17.9	1.3	3,088	25.5	2.5
Any business ownership	1,266	46.0	13.6	1,354	58.3	22.4
Small business ownership (less than 500 employees)	1,089	45.8	13.1	1,125	57.1	21.2
Owns and manages a single business	628	43.2	8.2	693	54.4	16.6
Owns and manages multiple businesses	461	56.0	32.7	432	66.6	37.6

[1] Households with $50,000 or more total household income in 1992 dollars are classified as high income.

[2] Households with $1 million or more of net worth in 1992 dollars are classified as high wealth.

Table 2 Number of Total Households, Business-Owning Households and Businesses, 1992 and 2001

Characteristics	1992 Number of Households	1992 Number of Businesses	1992 Businesses per Household	2001 Number of Households	2001 Number of Businesses	2001 Businesses per Household
	(x 1 million)			(x 1 million)		
Total households	95.9	18.3	0.19	106.5	20.0	0.19
No business ownership	82.2	0.0	0.00	91.9	0.0	0.00
Any business ownership	13.7	18.3	1.33	14.6	20.0	1.37
Small business ownership	12.6	16.7	1.32	13.2	17.6	1.33
Owns and manages a single business	10.1	10.1	1.00	10.3	10.3	1.00
Owns and manages multiple businesses	2.6	6.6	2.59	2.9	7.3	2.52

Table 3 Mean Income and Net Worth for All Households and Selected Types of Business-Owning Households, 1992 and 2001

Characteristics	1992 Mean Income	2001 Mean Income	Percent Change	1992 Mean Net Worth	2001 Mean Net Worth	Percent Change
	(2001 Dollars)		(%)	(2001 Dollars)		(%)
Total households	38,963	53,157	36.4	182,605	321,055	75.8
No business ownership	32,553	42,108	29.4	109,629	188,535	72.0
Any business ownership	77,526	122,658	58.2	621,581	1,154,706	85.8
Small business ownership	75,041	110,370	47.1	589,035	1,050,872	78.4
Owns and manages a single business	65,088	93,140	43.1	391,845	750,702	91.6
Owns and manages multiple businesses	114,196	171,992	50.6	1,364,875	2,124,424	55.6

Table 4 Shares of Household Population and Aggregate Income and Wealth, 1992 and 2001

Household/Business	Number of Households			Aggregate Income			Aggregate Wealth		
	1992	2001	Percent Change	1992	2001	Percent Change	1992	2001	Percent Change
	(x 1 million)			(x $1 billion)			(x $1 billion)		
All households	95.9	106.5	11.1	4,371.5	5,661.0	29.5	19,996.9	34,191.1	71.0
No business ownership	82.2	91.9	11.8	3,131.6	3,869.3	23.6	10,294.1	17,324.2	68.3
Any business ownership	13.7	14.6	6.6	1,239.9	1,791.7	44.5	9,702.8	16,866.8	73.8
Small business ownership	12.6	13.2	4.8	1,107.0	1,456.2	31.5	8,481.2	13,864.7	63.5
Owns and manages a single business	10.1	10.3	2.0	765.6	960.3	25.4	4,498.5	7,740.2	72.1
Owns and manages multiple businesses	2.6	2.9	11.5	341.4	495.8	45.2	3,982.7	6,124.5	53.8

Table 5 Determinants of High Income and High Wealth for All Currently Employed Small Business Owners

Dependent Variable	High Income				High Wealth			
	1992		2001		1992		2001	
Characteristics[1]	Parameter Estimate	p-value	Parameter Estimate	p-value	Parameter Estimate	p-value	Parameter Estimate	p-value
Intercept	-3.2413	0.0002	-2.3647	0.0018	-6.0701	0.0001	-6.1711	0.0001
Age, 35 - 44	1.0654	0.0012	0.6110	0.0925	0.7340	0.3284	0.8526	0.1723
Age, 45 - 54	1.4331	0.0002	1.1378	0.0022	1.7467	0.0198	0.9757	0.1164
Age, 55 - 64	0.5162	0.2237	0.6379	0.1102	1.7282	0.0263	1.7187	0.0078
Age, 65 - 74	-0.3770	0.4536	0.3640	0.4831	2.9770	0.0004	1.7454	0.0194
Age, 75 and over	0.2010	0.8096	0.4654	0.5697	1.6366	0.1634	3.1484	0.0028
Race, non-minority (white)	-0.3749	0.2751	0.1659	0.6269	0.7654	0.1070	-0.3567	0.5088
Gender, male	1.0744	0.0453	-0.7781	0.0855	1.0344	0.2515	0.2781	0.6922
Education, high school diploma	-0.0021	0.9965	-0.6327	0.1611	-1.1269	0.1501	0.3755	0.6969
Education, some college	0.3285	0.5164	0.4029	0.3961	0.1022	0.8889	1.0524	0.2838
Education, college degree or more	1.3331	0.0047	0.8132	0.0625	0.3919	0.5624	2.2552	0.0133
Marital status, married	1.1959	0.0002	1.3185	0.0001	0.0705	0.8955	0.1494	0.7382
Public stock ownership	1.3270	0.0001	1.3720	0.0001	1.3417	0.0001	1.9156	0.0001
Employees	0.0170	0.1334	0.0279	0.0328	0.0088	0.0271	0.0134	0.0013
Business age	0.0081	0.5216	0.0148	0.2369	0.0467	0.0046	0.0406	0.0091
Organization, partnership	-0.3663	0.4385	-0.2211	0.6169	-0.1589	0.7556	-0.3737	0.4136
Organization, sole proprietorship	-0.8202	0.0438	-0.5635	0.1347	-0.6180	0.1710	-1.2866	0.0014
Organization, corporation - subchapter s	-0.7474	0.1482	0.4520	0.3061	0.6972	0.1920	-0.1726	0.6797
Industry, construction, manufacturing	0.3133	0.4726	0.2534	0.5163	0.1716	0.8064	0.3972	0.5239
Industry, wholesale, retail	-0.6630	0.1217	0.1688	0.6962	-0.1942	0.7732	0.6691	0.2871
Industry, services and other	0.3195	0.4163	0.1915	0.5823	0.5492	0.3778	0.2892	0.6015
Founding status, bought or invested	0.1379	0.6361	0.6200	0.0370	-0.4417	0.2615	-0.0985	0.7820
Founding status, started	0.0722	0.9045	0.5227	0.3884	0.2243	0.7428	0.1745	0.7982
Owns and manages more than one business	-0.3367	0.2666	-0.1033	0.7080	1.3184	0.0001	0.7601	0.0096
-2 Log Likelihood		502		569		278		372
Observations		1,089		1,125		1,089		1,125

[1] The left-out dummy variables are age (less than 35), race (minority), gender (female), education (less than high school), marital status (not married), region (Northeast), organization (regular corporation), industry (agriculture), founding status (inherited) and owner-manager/investor families.

[2] Unclassified legal organizations are included in partnerships and other; unclassified industrial classifications are included in service and other; and unclassified founding status are included with started and other.