

2002–2003

*The* SMALL  
BUSINESS  
ECONOMY

*The* SMALL BUSINESS ECONOMY

2002–2003

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A REPORT TO THE PRESIDENT

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*Dear Mr. President:*

The Office of Advocacy of the U.S. Small Business Administration is pleased to present *The Small Business Economy: A Report to the President*. This report is the second in a series of annual reports on small businesses and their importance to the overall economy and builds on a long tradition of Advocacy documenting data and issues of relevance for small firms. The data for this report cover 2001 and 2002.

Small businesses play a vital role in the U.S. economy, and fortunately, policies from your Administration and the Congress continue to emphasize this. For instance, on March 19, 2002, you unveiled your Small Business Agenda and proposed a series of initiatives to promote entrepreneurship. By promoting a favorable tax and regulatory environment, proposing more options for small firms to provide health care, and assuring a competitive government contracting process, your Small Business Agenda was tailored to provide a favorable environment for small firms to flourish.

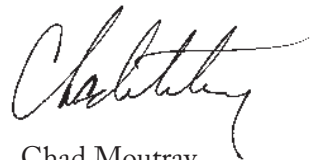
Part of the Small Business Agenda was to strengthen the Office of Advocacy and its enforcement of the Regulatory Flexibility Act. On August 13, 2002, you signed Executive Order 13272 which did just that. This action strengthened the influence that small firms have in reducing burdensome regulations imposed at the federal level. Advocacy has built on your commitment to small businesses by enhancing its partnership with the Office of Information and Regulatory Affairs (OIRA) and through effective outreach and training with federal agencies, part of our efforts as the “watchdog for small business.”

The two years discussed in this report were trying times economically for many Americans. The U.S. economy suffered from a recession, national security concerns, and corporate accounting scandals. But the nation's economic health is quite resilient. According to the National Bureau of Economic Research, the recession lasted just eight months, and many economic indicators showed positive improvement in the months following that period. In the labor market, which has struggled, many policymakers, including you, have looked to small business as the source of new jobs. Our figures from the U.S. Census Bureau indicate the wisdom in such a strategy; over the past decade, small businesses have accounted for 60 to 80 percent of the net new jobs.

The American entrepreneur will continue to make the U.S. economy stronger and more competitive in the global environment. New, innovative firms stretch the capabilities of the marketplace and provide for a vibrant business climate. Advocacy research, for example, shows that university research and development efforts lead to new businesses being created in the surrounding area. Therefore, innovation has an important role in economic growth. This is no surprise. Small firms will continue to innovate, create jobs, and stimulate the economy for many years to come.



Thomas M. Sullivan  
*Chief Counsel for Advocacy*



Chad Moutray  
*Chief Economist*

## *Acknowledgments*

*The Small Business Economy: A Report to the President* was prepared by the U.S. Small Business Administration, Office of Advocacy. The Chief Counsel for Advocacy is Thomas M. Sullivan; the Chief Economist is Chad Moutray. The project was managed by Kathryn J. Tobias, senior editor. Thanks to Dawn Crockett for her assistance. Specific sections were written or prepared by the following staff:

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## *Executive Summary*

Small businesses have important roles in the economy, responding to demand for new products and services, employing half of private sector workers, and creating most of the net new jobs. In the economic life cycle, small businesses are often the beginnings of large businesses. Small and large businesses often work together, taking risks and building on each other's innovations to generate economic growth. Small firms change market structure, and when market demand fluctuates, they also act as shock absorbers by using flexible production techniques.

### *The Small Business Economy in 2001–2002*

The Information Revolution, the latest technological challenge for small businesses, has slowed in recent years after two decades of growth that affected the economy overall. The technology slowdown affected the NASDAQ stock market by March 2000, while the overall economy experienced a downturn in 2001.

Economic troubles hit the labor market in both 2001 and 2002, but output in the economy increased over both years, reflecting continuing increases in productivity. The number of employers and the self-employed declined slightly, by 0.6 and 1.8 percent, respectively, over the 2001–2002 period. The unemployment rate climbed, but inflation remained low. Small firms as a group held their ground, reflected in the relatively stable numbers of both employer firms and self-employed individuals.

The year 2002 set the stage for recovery. While the technology gains remained, it was unclear whether the Information Revolution of recent decades had run its course.

## The Financial Markets for Small Firms

The recession of 2001, which ended in the third quarter, was relatively mild with respect to declines in gross domestic product, but the pace of recovery was slow. Consumer spending and household investment, as well as federal, state, and local government deficit spending, continued to support the economy. The collapse of business spending led the recession in 2001, caused by over-investment in the late 1990s. While the decline in corporate profits ended and reversed after the last quarter of 2001, corporate profits remained at a low level, and capacity utilization in the manufacturing sector remained low.

The Federal Reserve Board maintained a steady, but very easy monetary policy throughout most of 2002 after 10 rate cuts in 2001, and lowered the discount rate one more time in November 2002 to stave off potential deflation. Short- and intermediate-term interest rates stabilized throughout most of 2002, then moved downward after the rate cut. Interest rates paid by small firms moved, with a time lag, in line with overall interest rate movements in the capital and credit markets.

Most banks reported continued weakness in demand for commercial and industrial loans, despite less tightening in credit standards and terms. Nevertheless, profitability at U.S. commercial banks was at historic highs as income from rising interest margins and home-mortgage-related lending surpassed rising default-related losses. Small business lending by banks showed moderate increases. For example, small business loans outstanding in loan sizes under \$1 million grew 5.1 percent between June 2001 and June 2002, compared with an increase of 5.4 percent in the previous period, as both borrowers and lenders continued to hold off on new borrowing and lending.

Activities in the initial public offering market for smaller issuers almost disappeared in the 2001–2002 period. Angel investment, a type of venture investing that has been less sensitive to the changes in the IPO markets, also declined by 50 percent.

## Federal Procurement from Small Firms, 2001–2002

The federal government awarded \$259.1 billion in contracts for the purchase of goods in FY 2002, up from \$242.6 billion in FY 2001. Small businesses were awarded \$54.1 billion (20.9 percent of the total) in direct prime contracts, while in the previous year they received \$53.9 billion (22.2 percent). Small businesses as federal subcontractors were awarded \$34.4 billion in subcontracts in FY 2002. Prime contract and subcontract amounts together totaled \$88.4 billion in FY 2002, down about \$1 billion from \$89.4 billion in FY 2001.

The prime and subcontracting dollar totals represent a variety of goods and services provided by small businesses, including research and development, educational and training courses, paint, toiletries, military weapons, housing and hardware. These goods and services support federal civilian and military personnel around the world.

## Minority- and Women-Owned Businesses

Business ownership continues to be an important means by which Americans, including women, minorities, and immigrants, have been able to enter the economic mainstream. A variety of data sources are used to examine business ownership by these groups; current year data are generally not available because of time lags in extracting the data.

Minority business ownership doubled from 7 percent in 1982 to almost 15 percent in 1997, the latest year for which Census data are available. Minorities also made important financial contributions to the U.S. economy, with payroll totaling \$95.5 billion in 1997.

Evidence indicates that business ownership is an effective means of improving the financial well-being of women. Three primary sources provide data on women in businesses: the Bureau of the Census, which produces data every five years in years ending in 2 and 7; the Bureau of Labor Statistics (BLS) which produces data monthly (although annual figures offer more detail), and the Internal Revenue Service, which produces figures annually. Women's self-employment increased from 1.76 million in 1976 to 3.75 million in 2000; their business ownership, according to Census data, increased from 6.40 million in 1992 to 7.45 million five years later; and their ownership of sole proprietorships increased from 5.6 million in 1990 to 7.1 million in 1998.

# 1 *The* SMALL BUSINESS ECONOMY, 2001–2002

## Synopsis

Small businesses use, create, and are often at the mercy of technology. The level of technology in the marketplace, and changes in the technologies used, affect small businesses through barriers to entry and economies of scale that affect their ability to compete.

The Information Revolution, the latest technological challenge for small businesses, has slowed in recent years after two decades of growth that affected the economy overall. The technology slowdown affected the NASDAQ stock market by March 2000, while the overall economy experienced a downturn in 2001.

Economic troubles hit the labor market in both 2001 and 2002, but output in the economy increased over both years, reflecting continuing increases in productivity. The number of employers and the self-employed declined slightly, by 0.6 and 1.8 percent, respectively, over the 2001–2002 period. The unemployment rate climbed, but inflation remained low. Small firms as a group held their ground, reflected in the relatively stable numbers of both employer firms and self-employed workers.

The year 2002 set the stage for recovery. While the technology gains remained, it was unclear whether the Information Revolution of recent decades had run its course.

## Introduction

Small businesses play a number of important roles in the economy, serving local and niche markets for products and services, employing half of private sector workers, including many young, old, female, and minority workers, and creating most of the net new jobs. In the economic life cycle, small businesses are often seeds for large businesses. They are both the beginning of the economy and the “rest of the economy.”



The story of the economy is a story of small and large businesses sometimes in fierce competition, but often working in tandem by taking risks and building on each other's innovations to generate economic growth. In short, small firms change market structure.<sup>1</sup> And when market demand fluctuates, they also act as shock absorbers by using flexible production techniques.<sup>2</sup>

Changes in the economy begin with technology. And new entrants—or the threat of new entrants—play a crucial role in driving technological enhancements.<sup>3</sup> Technology is the spark for each new revolution. An economic revolution often starts with numerous small firms that create new industries; then consolidation occurs and new specializations emerge. The role and share of small firms in the new industries is determined by economies of scale, barriers to entry in the market, and barriers to growth.

## History as a Guide

Early in U.S. history, agriculture consumed much of the nation's resources and farm size was limited by the relatively simple technology of the day. Technological advancements led to machinery that replaced labor. To recoup machinery costs, larger farms were needed, so farm size grew and the number of farms decreased. Technology later allowed for smaller, less expensive machinery, so smaller farms were again able to specialize and survive.

Next, the Industrial Revolution with its large manufacturing machinery employed workers no longer needed for farming. Large firms were again dominant, until later technology allowed smaller plants and specialized manufacturing to prosper.

As increased manufacturing productivity freed up more workers, the Information Revolution began to take shape, employing workers in industries that improved production processes for nearly all other industries.

The Information Revolution continues, so the cycle is incomplete, but comparisons with agriculture and manufacturing are interesting. While agriculture employed 48 percent of the civilian labor force in 1879 and manufacturing employed 42 percent in 1943, the information sector employed about 10 percent of the private sector labor force in 2000.<sup>4</sup> The information sector has had some consolidation, but is still nurturing niche markets where small firms can thrive.

As the Information Revolution matured, the economy stalled in 2001–2002, after the NASDAQ stock exchange peaked in March 2000. Two years later, the NASDAQ remained at half its highest level.

## The Shock to the System, 2001

Following the Internet collapse in 2000, the economy was looking for traction in 2001. Gross domestic product (GDP) exceeded \$10 trillion for the first time, reaching \$10.1 trillion. GDP fluctuated on a quarterly basis, growing somewhat in the first quarter, then flattening, declining, and finally lifting in the fourth quarter (*Table 1.1*). So 2001 ended with momentum for 2002. And as in the previous decade, inflation remained muted.

The rate of unemployment increased and civilian employment declined throughout the year. Employment from establishment closures exceeded employment from establishment births by 302,000 for the first three quarters of the year, the only net negative job change over the previous nine years. Nevertheless, the labor market was strong enough that compensation increased by 5.2 percent. Productivity, expected to be uneven in a downturn, increased relatively rapidly during the fourth quarter.

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1 Zoltan Acs, in a study funded by the U.S. Small Business Administration, Office of Advocacy, *Are Small Firms Important?* (Norwell, Mass.: Kluwer Academic Publishers, 1999).

2 See *The State of Small Business: A Report of the President, 1987* (Springfield, Va.: National Technical Information Service, 1987), Chapter 3, "The Role of Small Business in Efficient Resource Allocation."

3 As central as small businesses are to competition and technology, efforts to measure these contributions are made more difficult by the constant changes in the size of businesses as they grow and shrink.

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4 Information and professional, scientific, and technical services were used as a proxy for this sector. This figure is probably understated, as some firms in other industries have "information" workers, but by occupation, computer programmers, computer analysts, scientists and engineers constitute only about 5 percent of the private sector labor force.

The labor market declines represented an about-face from the shortage of qualified workers listed as the number one problem on one survey of small businesses going into 2001; by the end of the year, that concern had fallen to fourth on the small business list.<sup>5</sup>

Poor sales seemed to affect larger small businesses more than their smaller counterparts in 2001. Proprietors' income rose 1.8 percent during the year, to \$728 billion, while corporate profits of both small and large firms declined 7.2 percent to \$732 billion.

Small businesses' main cost, labor, was stable during the year, as wages and salaries increased 2.4 percent.

Although the downturn had financial impacts on individual small firms, the number of firms was relatively stable in 2001. Employer firms numbered an estimated 5.6 million and the number of self-employed (unincorporated) numbered 9.8 million (*Table 1.2*).<sup>6</sup> But employer firm births declined during the year while firm closures increased slightly. A steep annual increase in business bankruptcies was a concern, but the level of bankruptcies was in line with historical figures.

Signs for the future often show up in the availability of financing. The year 2001 ended with banks continuing to tighten lending standards for small businesses. However, no credit crunch materialized, as demand for loans had been decreasing rapidly over the course of the year.<sup>7</sup>

Research sponsored by the Office of Advocacy examined how small firms perform through the business cycle and found that industries react differently in changing economic conditions.<sup>8</sup> Manufacturing firms had noticeable cyclical differences across firm size categories, while service businesses exhibited less cyclical effect and the trade industries showed very little cyclical impact.

5 National Federation of Independent Business, *Small Business Economic Trends*, January 2002 and 2003. Taxes led the list by the end of the year, followed by poor sales.

6 Firms with fewer than 500 employees represent 99.7 percent of employers. Although nonemployer figures from the U.S. Department of Commerce, Bureau of the Census, would be a more comparable measure, self-employment data are more current, available on a monthly basis from the Department of Labor.

7 See Chapter 3 for detail on small business financing and Appendix A for detailed data.

8 *Small Business During the Business Cycle*, Joel Popkin and Company, 2003, sponsored by the Office of Advocacy, U.S. Small Business Administration. See <http://www.sba.gov/advo/research/#business>.

**Table 1.1 Quarterly Economic Measures, 2001–2002 (percentages)**

	2001				2002			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Real GDP change	-0.6	-1.6	-0.3	2.7	5.0	1.3	4.0	1.4
Unemployment rate	4.2	4.5	4.8	5.6	5.6	5.8	5.8	5.9
Implicit price deflator	0.9	0.6	0.5	-0.1	0.3	0.3	0.3	0.4
Productivity change	-1.5	-0.2	1.8	7.6	8.3	1.8	5.8	0.3
Establishment births	-1.1	-2.6	0.3	2.1	-1.2	1.5	-0.6	0.0
Establishment closures	0.9	-0.3	1.8	-2.0	-0.6	0.9	-10.0	8.5

Source: U.S. Small Business Administration, Office of Advocacy, from figures provided in *Economic Indicators* by the U.S. Department of Commerce, Bureau of Economic Analysis, and the U.S. Department of Labor, Bureau of Labor Statistics.

**Table 1.2 Business Measures, 2001–2002**

	2001	2002	Percent Change
Employer firms (nonfarm)	e 5,629,600	e 5,595,200	-0.6
Employer firm births	e 545,400	e 550,100	0.8
Employer firm terminations	e 568,300	e 584,500	2.9
Self-employment (non-incorporated)	9,826,000	9,650,000	-1.8
Business bankruptcies	39,719	38,155	-3.9

e estimated.

Sources: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census; the U.S. Department of Labor; and the Administrative Office of the U.S. Courts.

## The Flat Terrain, 2002

The U.S. economy began a slow awakening in 2002. Real GDP increased 2.4 percent, although fourth quarter GDP was below the yearly average, an indication that the economy was still on the mend. Again, inflation was very mild.

The labor market was an ongoing concern. Unemployment rose by about one percentage point to 5.8 percent. Employment figures from two primary U.S. Department of Labor sources conflicted, with the payroll survey showing a decline of 1.5 million private sector jobs over the course of 2002 and the household survey showing a 1.1 million job increase.<sup>9</sup> Still, the labor market showed signs of improvement during 2002 as employment from establishment births outnumbered establishment deaths, a turnaround from the prior year.

Small businesses also showed signs of a turnaround. The number of businesses that filed for bankruptcy decreased in 2002 to 38,155; proprietor's income increased 4 percent (corporate profits increased 7.6 percent); and self-employment rose throughout the year.

The percentage of banks reporting tightened lending standards for small firms began to level off during the year. But caution prevailed among small firms, as demand for loans continued to decrease, even with relatively low interest rates. Businesses held off the need to grow by maintaining increases in productivity from late 2001.<sup>10</sup>

By the end of 2002, the National Federation of Independent Business found the cost and availability of insurance to be the number one small business problem, an indication that concerns more closely tied to the business cycle were waning.<sup>11</sup>

Small business and other economic data for 2001 and 2002 indicate that the economy was as much flat as in a downturn. Overall, the period is more likely to be remembered for concerns about terrorism, increased security, and military actions, rather than economic achievements.

## Conclusion

Small business and technology are tied together. With the Information Revolution losing momentum in 2000, the economy, and subsequently small businesses, lost momentum, and the number of businesses declined. Most of the negatives were in the labor market, where employment declined and unemployment levels hovered around 6 percent. By the end of the period, employment was turning around, evident in the dynamic changes in establishment openings and closures. While employment losses from closures outnumbered gains from business openings through the first three quarters of 2001, by the fourth quarter of 2001 and throughout 2002, employment growth from business starts outnumbered losses from closures.

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9 The two Department of Labor sources have different definitions, with the payroll survey measuring the number of jobs and the household survey measuring the number of employed individuals. Their divergence makes analyzing the labor market difficult. The household survey tracks the employed population and those who are out of work and actively seeking a job. The payroll survey has shown continued decreases at companies, indicating a drop in overall employment.

10 Increases in productivity are not uncommon in the year following a downturn.

11 National Federation of Independent Business, *Small Business Economic Trends*, January 2003.

## 2 MINORITIES *and* WOMEN *in* BUSINESS

### Synopsis

Business ownership continues to be an important means by which Americans, including women, minorities, and immigrants, have been able to enter the economic mainstream.

The share of minority business ownership doubled from 7 percent in 1982 to almost 15 percent in 1997. Minorities also made important financial contributions to the U.S. economy, with payroll totaling \$95.5 billion in 1997. Payroll per employee varied by minority group from \$20,000 to \$23,000, compared with about \$29,000 in nonminority-owned businesses. “Minorities” refers here to both race (grouped by, for example, White, African American, or Asian) and ethnicity (including, for example, groupings for White Hispanic and White non-Hispanic). Major race and ethnic groupings, dictated largely by the availability of Census data, include White, African American, American Indian and Alaska Native, Asian and Pacific Islander, and Hispanic.

Evidence indicates that business ownership is one of the most effective means of improving the financial well-being of women. Three primary sources provide data on women in businesses: the Bureau of the Census, which produces data every five years in years ending in 2 and 7; the Bureau of Labor Statistics (BLS) which produces data monthly (although annual figures offer more detail), and the Internal Revenue Service, which produces figures annually. Women’s self-employment increased from 1.76 million in 1976 to 3.75 million in 2000; their business ownership, according to Census data, increased from 6.40 million in 1992 to 7.45 million five years later; and their ownership of sole proprietorships increased from 5.6 million in 1990 to 7.1 million in 1998. They also made significant contributions in terms of receipts and income, although their share of business income, compared with men’s share, remained relatively low.

## Minorities in Business

Minority-owned businesses have been a fast-growing segment of the U.S. economy. The minority-owned business population grew dramatically over the 1980s and 1990s, more than doubling their share of U.S. firms from less than 7 percent in 1982 to more than 15 percent by 1997, and increasing their shares of revenues and employment at rapid rates. This report takes a look at these phenomena and other aspects of the minority business population.<sup>1</sup>

### The Minority Population

Of the 281.4 million people in the United States in 2000, 97.6 percent claimed one racial identity, including 75.1 percent White, 12.3 percent African American, 3.6 percent Asian, 0.9 percent American Indian and Alaska Native, 0.1 percent Native Hawaiian and other Pacific Islander, and 5.5 percent other races (*Table 2.1*).<sup>2</sup> Another 2.4 percent—more than 6.8 million people—reported that they were combinations of two or more races.

Cutting across racial boundaries were more than 35.3 million people—12.5 percent of the population—who claimed Hispanic or Latino ethnicity. According to estimates in the March 2000 Supplement of the Current Population Survey (CPS), 95 percent of Hispanics and Latinos were White, 3.3 percent African American, 1.1 percent American Indian and Alaska Native, and 0.6 percent Asian and Pacific Islander.

### Minorities in the Labor Force

About 141 million people were in the American labor force in 1999 (*Table 2.2*).<sup>3</sup> About 118 million (83.5 percent) were White, 17 million (11.8 percent) African American, 5 million (3.9 percent) Asian or Pacific Islander,

1 This section is based on the U.S. Small Business Administration, Office of Advocacy's report on *Minorities in Business, 2001*. For more detail, consult the full report at <http://www.sba.gov/advo/stats/min01.pdf>.

2 U.S. Department of Commerce, Bureau of the Census, *Census of Population and Housing, Profile of General Demographic Characteristics, 2000* (May 2001).

3 See U.S. Department of Commerce, Bureau of the Census, *Current Population Survey, March Supplement 2000*. The labor force discussed here consists of four groups: employed at work, employed—absent, unemployed on layoff, and unemployed looking for a job.

**Table 2.1 Racial and Ethnic Characteristics of the U.S. Population, 2000**

	Number	Percent <sup>1</sup>
<b>Total Population</b>	281,421,906	100.0
One Race	274,595,678	97.6
White	211,460,626	75.1
African American	34,658,190	12.3
American Indian and Alaska Native	2,475,956	0.9
Asian	10,242,998	3.6
Asian Indian	1,678,765	0.6
Chinese	2,432,585	0.9
Filipino	1,850,314	0.7
Japanese	796,700	0.3
Korean	1,076,872	0.4
Vietnamese	1,122,528	0.4
Other Asian	1,285,234	0.5
Native Hawaiian and Other Pacific Islander	398,835	0.1
Native Hawaiian	140,652	-
Guamanian or Chamorro	58,240	-
Samoa	91,029	-
Other Pacific Islander	108,914	-
Other Race	15,359,073	5.5
Two or More Races	6,826,228	2.4
<b>Total Population</b>	281,421,906	100.0
Hispanic or Latino (of Any Race)	35,305,818	12.5
Mexican	20,640,711	7.3
Puerto Rican	3,406,178	1.2
Cuban	1,241,685	0.4
Other Hispanic or Latino	10,017,244	3.6
Not Hispanic or Latino	246,116,088	87.5
White Alone	194,552,774	69.1
<b>Total Householders<sup>2</sup></b>	105,480,101	37.5

<sup>1</sup> Percentage of total population

<sup>2</sup> Householders represent the person, or one of the people, in whose name the home is owned, being bought, or rented, and who is listed as Person #1 on the census questionnaire. If there is no such person in the household, any adult household member 15 years old or older may be designated as Person #1.

Source: U.S. Department of Commerce, Bureau of the Census, *2000 Census of Population and Housing, Profile of General Demographic Characteristics, 2000*.

**Table 2.2 Minority Components of the U.S. Civilian Labor Force, 1999**

Racial Group	Employed—at Work		Employed—Absent		Unemployed on Layoff		Unemployed and Looking for Work		Total		Business Density*
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
White	108,900,000	92.55	4,163,293	3.54	824,720	0.70	3,780,247	3.21	117,668,260	83.52	0.1511
African American	14,820,000	89.54	447,170	2.70	132,138	0.80	1,151,054	6.95	16,550,362	11.75	0.0498
Native American	1,045,232	86.97	44,403	3.69	5,207	0.43	107,011	8.90	1,201,853	0.85	0.1642
Asian	5,113,832	93.52	139,791	2.56	21,570	0.39	192,765	3.53	5,467,958	3.88	0.1670
Total	129,879,064	92.19	4,794,657	3.40	983,635	0.70	5,231,077	3.71	140,888,433	100.00	0.1478

\*Business density is defined here as the ratio of the number of businesses in 1997 (see Table 2.7) to the labor force (1999). The different years of data will create some distortion in this approximate figure.

Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor Bureau of Labor Statistics.

and 1 million (0.9 percent) American Indian, Eskimo or Aleut. Asians and Pacific Islanders had the highest labor force participation rates. Among the minority groups, American Indians and Alaska natives had the largest share unemployed and looking for work—almost 9 percent were in this situation.

### Citizenship Status

Since before the United States became a nation, the North American continent has been a magnet for people of many other continents; today, the people of the United States are a mixture of native peoples, earlier immigrants, and new immigrants from every nation.<sup>4</sup> For many immigrants, the “American Dream” has included the ownership of a small business that will serve as a gateway to America’s economic mainstream. They take the risks necessary to create jobs, develop innovative products, and introduce new business practices into the marketplace.

Many of the recent U.S. immigrants are Asians, Pacific Islanders, Hispanics, or Latinos (Table 2.3).<sup>5</sup> Of the other major minority groups documented in Census statistics—White; African American; and American Indian, Eskimo, or Aleut—roughly 90 percent were native citizens born in the United States or abroad of American parents and about 10 percent were first-generation immigrants. Of African Americans, 8.4 percent were new immigrants.

### Education

Education is one of the most important factors in economic growth, according to many economists.<sup>6</sup> The American labor force is well educated on the whole, but average education levels vary by minority group (Table 2.4).

4 In labor economics and macroeconomics, immigration is considered an important source of human capital contributing to the host country’s economic growth. Among many others, George J. Borjas, “The Economic Analysis of Immigration,” in the *Handbook of Labor Economics 1999*, volume 3, and Robert J. Barro and Xavier Sala-I-Martin, *Economic Growth, 1995*, provide empirical and theoretical analysis on the subject.

5 The data here include only householders; all other family members are excluded. This was done to capture only characteristics of the adult population, including business owners or business operators.

6 Paul M. Romer’s “Increasing Return and Long-Run Growth,” *Journal of Political Economy*, 94, October 1986, 1002–1037, initiated a wave of new research on economic growth. This so-called endogenous growth theory virtually credits human capital and the spillovers of knowledge across producers as the cause of continuous economic growth. Among many others, David Card (1999), “The Causal Effect of Education on Earnings,” in *Handbook of Labor Economics 1999*, volume 3, offers explanations about the importance of education in earnings.

**Table 2.3 Citizenship Status of the U.S. Population (percent), 1999**

Category	White	African American	American Indian, Eskimo or Aleut	Asian or Pacific Islander	Hispanic or Latino	Total
Native, born in the United States	88.1	90.8	88.5	16.5	38.0	86.0
Native, born in Puerto Rico or U.S. outlying area	0.7	0.6	0.4	1.2	5.9	0.7
Native, born abroad of American parent(s)	0.7	0.3	1.4	3.0	1.6	0.8
Foreign born, U.S. citizen by naturalization	4.4	4.0	5.5	45.0	18.5	5.8
Foreign born, not a citizen of the United States	6.0	4.4	4.2	34.4	36.0	6.8

Note: Including Hispanic or Latino as a category results in a double count because Hispanic is an ethnicity that overlaps racial groups. Because 95 percent of Hispanics or Latinos are White, the major double count occurs when White is one of the categories; it is minor in conjunction with the other three racial groups.

Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

**Table 2.4 2001 Education Level of Population 25 or Older, by Race or Ethnicity (percent)**

Educational Level Category	White	African American	American Indian, Eskimo or Aleut	Asian or Pacific Islander	Hispanic
< 9th grade	4	7	6	7	27
9–12th grade	40	48	52	27	44
Some college and college graduate	46	40	38	49	26
Post-graduate	10	5	4	16	3
Total	100	100	100	100	100

Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

### Work Experience and Earnings

Of three subsets of the nonagricultural sector—self-employment, other private sector employment, and government—most Americans—about 73 percent, worked in the private sector outside of self-employment in 1999 (*Table 2.5*). Another 12 to 20 percent worked in government.

While fewer African Americans have historically been self-employed, they have increased their self-employment rate since 1991, whereas the rate of self-employment has dropped for Whites, American Natives, and Asians and Pacific Islanders. Self-employment was the major earning source for about the same shares of Whites and Asians—6.4 to 6.5 percent (*Table 2.6*).

### Minority-owned Businesses

Minorities owned 14.6 percent of all U.S. businesses in 1997 (*Table 2.7*).<sup>7</sup> Of the 20.8 million U.S. firms in 1997, 1.2 million were owned by Hispanics, 913,000 by Asians and Pacific Islanders, 823,500 by African Americans, and 197,300 by American Indians and Alaska Natives. Hispanic Americans counted for about 5.8 percent of U.S. firms in 1997; African Americans constituted 4.0 percent; American Indians and Alaska Natives, 0.9 percent; and Asians and Pacific Islanders, 4.4 percent.

Business density is defined here as the number of businesses in the specific minority or nonminority population divided by the same population's labor force total (*Table 2.2*).<sup>8</sup> Business density by minority group was 0.15 for the population overall, 0.17 for Asians, 0.16 for Native Americans, 0.15 for Whites, and 0.05 for African Americans.

7 U.S. Department of Commerce, Bureau of the Census, Survey of Minority-Owned Business Enterprises (SMOBE) 1982, 1987, 1992, and 1997. With technical assistance from the Bureau of the Census, the Office of Advocacy compiled the four volumes of data and included C corporations for the first time in the 1997 SMOBE. To make the data comparable, however, C corporations will be excluded from multi-year comparisons of SMOBE data.

8 Business density is calculated here using labor force figures for 1999 and firm figures for 1997. The different years of population and firm data will create some distortion in this approximate figure.

**Table 2.5 Major Work Experience of the Nonagricultural Work Force by Race, 1991–1999 (percent)**

Year	Self-employment					Other private sector					Government				
	African American		Asian or Pacific Islander		American Indian, Eskimo or Aleut	African American		Asian or Pacific Islander		American Indian, Eskimo or Aleut	African American		Asian or Pacific Islander		American Indian, Eskimo or Aleut
	White	American	White	American	White	American	White	American	White	American	White	American	White	American	White
1999	9.1	4.5	4.6	9.6	73.2	73.8	71.8	76.3	14.0	19.5	20.1	12.5			
1998	9.2	3.9	4.5	10.0	73.5	75.0	72.9	75.6	13.8	18.8	18.6	12.1			
1997	9.9	3.6	6.8	10.9	73.1	74.9	71.6	74.1	13.5	19.8	19.3	12.6			
1996	9.9	3.9	7.0	10.8	72.8	73.9	69.3	74.7	13.6	20.2	20.3	12.6			
1995	9.4	3.8	6.4	9.4	72.5	73.1	68.9	74.7	14.0	20.3	21.7	13.5			
1994	9.8	3.5	5.7	8.8	71.4	71.9	69.0	73.7	14.7	21.8	21.8	14.9			
1993	10.0	3.8	8.1	10.2	70.8	70.1	64.7	72.3	15.0	23.0	24.7	15.3			
1992	9.9	3.5	6.8	9.6	70.9	70.2	63.9	71.2	14.9	22.7	22.9	15.9			
1991	9.7	3.3	7.7	11.2	71.5	71.3	67.1	72.0	14.7	22.2	21.6	13.9			
Average	9.7	3.8	6.4	10.1	72.2	72.7	68.8	73.8	14.2	20.9	21.2	13.7			

Source: Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

**Table 2.6 Major Earning Sources of the U.S. Nonagricultural Work Force by Race, 1991–1999 (percent)**

Year	Wage and salary					Self-employment				
	African American		Asian or Pacific Islander		American Indian, Eskimo or Aleut	African American		Asian or Pacific Islander		American Indian, Eskimo or Aleut
	White	American	White	American	White	American	White	American	White	American
1999	92.8	96.5	96.5	95.1	93.2	93.2	6.4	3.4	4.1	6.5
1998	92.5	96.8	96.8	95.4	92.3	92.3	6.7	3.2	3.7	7.3
1997	92.3	96.9	96.9	94.4	92.1	92.1	6.9	3.0	5.0	7.1
1996	93.8	97.4	97.4	95.2	93.6	93.6	5.6	2.5	4.2	5.9
1995	93.4	97.1	97.1	95.4	95.0	95.0	5.9	2.8	4.1	4.9
1994	91.7	96.9	96.9	94.2	93.9	93.9	7.2	3.1	5.0	5.9
1993	91.4	96.5	96.5	92.2	92.2	92.2	7.3	3.4	7.3	7.2
1992	91.4	96.7	96.7	92.5	91.9	91.9	7.4	3.2	6.7	7.3
1991	91.6	96.8	96.8	90.5	91.3	91.3	7.3	3.1	7.5	8.3
Average	92.3	96.8	96.8	93.9	92.8	92.8	6.7	3.1	5.3	6.7

Source: Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.



### Economic Contributions of Minority-owned Firms

Like other businesses, minority-owned businesses produce goods and services, create innovations, absorb labor and generate jobs, provide wages and salaries, and contribute to the support of government services through taxes. All of these business activities are important contributions to the dynamic American economy.<sup>9</sup>

In 1997, 615,000 minority-owned firms with paid employees had 4.5 million workers and payroll of about \$95.5 billion (*Table 2.7*). Asian-owned firms contributed 48.3 percent of total minority business payroll; Hispanic-owned firms, 31.2 percent; African American-owned firms, 15.0 percent; and American Native-owned firms, 6.9 percent. Of the various minority groups, Asians and American Natives had the most businesses relative to their population and Asians had the highest receipts per person in the population (*Table 2.8*).

Most U.S. firms are small; only 25.4 percent of firms had paid employees in 1997 (*Table 2.9*). Asians had the largest share of firms with paid employees, at nearly 31.8 percent. On average, nonminority-owned employer businesses had 21 workers, based on 1997 data. The employment numbers in minority-owned firms with paid employees were smaller, at seven on average. Payroll per employee in 1997 averaged \$28,742 in nonminority-owned firms and \$21,160 in minority-owned firms.

9 Milken Institute points out that “minority communities represent the most potent potential market in the American economy. Minority groups are experiencing higher rates of population growth than whites. By 2050, minorities are projected to comprise almost 50 percent of the U.S. population. Minority businesses are growing even faster than the population in terms of both numbers of new firms and revenues.” (See February 1999 Milken Institute Policy Brief.)

**Table 2.7 Firms, Employment, and Payroll by Race and Ethnic Origin, 1997**

	All firms		Firms with employees		Number of employees		Total payroll	
	Number	Percent	Number	Percent	Number	Percent	Millions of dollars	Percent
Total U.S. firms	20,821,934	100.00	5,295,151	100.00	103,359,815	100.00	2,936,493	100.00
Nonminority-owned firms	17,782,901	85.40	4,679,929	88.38	98,845,116	95.63	2,840,964	96.75
All minority-owned firms	3,039,033	14.60	615,222	11.62	4,514,699	4.37	95,529	3.25
African American-owned firms	823,499	3.96	93,235	1.76	718,341	0.69	14,322	0.48
Hispanic-owned firms	1,199,896	5.76	211,885	4.00	1,388,746	1.34	29,830	1.02
American Native-owned firms	197,300	0.94	33,277	0.63	298,661	0.28	6,624	0.23
Asian-owned firms	912,959	4.38	290,000	5.48	2,203,080	2.13	46,180	1.57

Note: The percentages may not sum to 100 because Hispanics may be of any race and may therefore be double counted.

Source: U.S. Department of Commerce, Bureau of the Census, Survey of Minority-owned Business Enterprises, 1997.

**Table 2.8 Minority Population, 2000, Minority-owned Firms and Receipts, 1997**

Race/ethnic group	Population		Total receipts (thousands of dollars)	Population per business <sup>2</sup>	Receipts per person in population (dollars) <sup>3</sup>
	Number	Percent <sup>1</sup>			
All U.S.	281,421,906	100.0	18,553,243,000	13.5	65,927
Nonminority	194,552,774	69.1	18,036,263,127	10.1	92,706
All minorities	86,869,132	30.9	516,979,920	28.6	5,951
African American	34,658,190	12.3	71,214,662	42.1	2,055
Hispanic	35,305,818	12.5	186,274,581	29.4	5,276
American Native	2,475,956	0.9	34,343,907	12.6	13,871
Asian	10,641,833	3.78	306,932,982	11.7	28,842

<sup>1</sup> Percentages are a share of U.S. total.

<sup>2</sup> This number reflects the number of individuals in the population (2000) per firm owned by a member of the population (1997). The different years of population and firm data will create some distortion in this approximate figure.

<sup>3</sup> Receipts per person is defined as the 1997 dollar value of business sales and receipts per person of population (2000).

Sources: U.S. Department of Commerce, Bureau of the Census, firm data from the Survey of Minority-owned Business Enterprises; population data from the 2000 Census of Population.

### *Sizes of Minority-owned Firms*

Most minority-owned businesses have no employees—that is, 89 percent of African American-owned businesses, 83 percent of American Indian- and Alaska Native-owned, 82 percent of Hispanic-owned, and 68 percent of Asian- and Pacific-Islander-owned firms. Of firms with paid employees, almost all had fewer than 100 employees: 98.1 percent of those owned by nonminorities and about 99 percent of those owned by the various minority groups (*Table 2.10*).

**Table 2.9 Contributions of Minority-owned Firms, 1997**

Race or ethnicity	Firms with employees (percent of group firms)	Employees per firm*	Payroll per employee (dollars)
All U.S. firms	25.43	20	28,410
Nonminority-owned firms	26.32	21	28,742
All minority-owned firms	20.24	7	21,160
African American-owned firms	11.32	8	19,938
Hispanic-owned firms	17.66	7	21,480
American Native-owned firms	16.87	9	22,180
Asian or Pacific Islander-owned firms	31.76	7	23,070

\* A measure of the average size of firms in the group.

Source: U.S. Small Business Administration, Office of Advocacy, calculations based on U.S. Department of Commerce, Bureau of the Census, Survey of Minority-owned Business Enterprises, 1997.

Of minority-owned firms with fewer than 100 employees, about 47 percent were owned by Asians or Pacific Islanders, about 35 percent by Hispanics, about 15 percent by African Americans and about 6 percent by American Indians and Alaska natives. African Americans and American Indian natives were more strongly represented in the larger firms than they were in the smaller firms (*Table 2.10*). Measured by receipts size, Asian-owned businesses were the largest of the minority-owned businesses, on average (*Table 2.11*).

Table 2.10 Employment Sizes of Minority-owned Businesses, 1997

Group of firms	All firms	Firms with		1-9	10-19	20-99	100 or more
		no paid employees	No employees*				
All U.S. firms	20,821,934	15,526,783	619,990	3,536,055	570,401	473,051	95,654
Nonminority-owned firms	17,782,901	13,102,972	529,819	3,109,125	515,700	434,062	91,222
All minority-owned firms	3,039,033	2,423,811	90,171	426,930	54,701	38,989	4,432
African American-owned firms	823,499	730,264	15,217	63,996	7,171	5,961	889
Hispanic-owned firms	1,199,896	988,012	29,118	149,454	19,860	12,330	1,121
American Native-owned firms	197,300	164,023	3,705	23,928	2,932	2,357	355
Asian and Pacific Islander-owned firms	912,959	622,961	43,658	199,117	25,820	19,319	2,084
<b>Share of total minority-owned firms (percent)</b>							
African American-owned firms	27.10	30.13	16.88	14.99	13.11	15.29	20.06
Hispanic-owned firms	39.48	40.76	32.29	35.01	36.31	31.62	25.29
American Native-owned firms	6.49	6.77	4.11	5.60	5.36	6.05	8.01
Asian and Pacific Islander-owned firms	30.04	25.70	48.42	46.64	47.20	49.55	47.02

\*\*"No employees" refers to firms reporting annual payroll that did not report employees on their payroll during the specified period in 1997.

Source: U.S. Small Business Administration, Office of Advocacy, based on U.S. Department of Commerce, Bureau of the Census, 1997 Economic Census, Survey of Minority-owned Business Enterprises.

Table 2.11 Receipts Sizes of Minority-owned Businesses, 1997

Group of firms	Total receipts (\$1000)	Firms with		\$10,000-\$24,999	\$25,000-\$99,999	\$100,000-\$499,000	\$500,000 or more
		<\$5,000	\$5,000-\$9,999				
Nonminority-owned firms	18,036,263,127	3,932,476	2,273,136	2,991,559	3,854,217	3,022,738	1,708,875
All minority-owned firms	516,979,920	692,861	487,107	627,591	648,895	413,019	169,460
African American-owned firms	71,214,662	247,536	156,255	188,811	152,147	61,567	17,182
All Hispanic-owned firms	186,274,582	263,071	212,214	273,321	252,430	143,975	54,256
American Native-owned firms	34,343,907	50,433	30,387	41,515	42,024	23,794	9,147
All Asian and Pacific Islander-owned firms	306,932,982	151,751	107,890	147,311	221,949	192,198	91,860
<b>Share of total minority-owned firms (percent)</b>							
African American-owned firms	13.78	35.73	32.08	30.09	23.45	14.91	10.14
All Hispanic-owned firms	36.03	37.97	43.57	43.55	38.90	34.86	32.02
American Native-owned firms	6.64	7.28	6.24	6.61	6.48	5.76	5.40
All Asian and Pacific Islander-owned firms	59.37	21.90	22.15	23.47	34.20	46.53	54.21

Note: Because Hispanics can be of any race, the sum of various minority groups' receipts will not equal total minority receipts.

Source: U.S. Small Business Administration, Office of Advocacy, based on U.S. Department of Commerce, Bureau of the Census, 1997 Economic Census, Survey of Minority-owned Business Enterprises.

### Legal Forms of Ownership

Minorities make various choices of legal forms of organization for their businesses. Of all U.S. businesses, 72.6 percent are sole proprietorships, 11.5 percent are C corporations, 9.5 percent are S corporations, 5.9 percent are partnerships, and .5 percent are other (Table 2.12). A sole proprietorship is defined as an unincorporated business with a single owner—the most commonly used legal form of ownership for new businesses. For tax purposes, the business’s assets and liabilities belong directly to the owner. All minority groups except Asians were more likely than average to choose the sole proprietorship form of organization, doing so more than 85 percent of the time. Asians were slightly less likely than average to form a sole proprietorship and more likely to incorporate: 71.0 percent of Asian-owned businesses were sole proprietorships, but 14.0 percent were C corporations and 10.2 percent were S corporations. Most new and small businesses are sole proprietorships, and this form of ownership has lower average business receipts and lower shares of firms with paid employees (Tables 2.7 and 2.9).

### Industry Divisions

Minority-owned firms were well represented in many major industries in 1997 (Table 2.13). At the national level, the largest proportion (42.7 percent) of businesses were in the services industry, followed by retail trade (14.0 percent), construction (11.2 percent), and finance, insurance, and real estate (10.8 percent).

Hispanic-owned businesses were distributed much like the average business distribution in most major industries, except mining, and finance, insurance, and real estate. African American-owned firms tended to be concentrated in the transportation, communications and public utilities and service sectors. A large share of American Indian-owned businesses were in the “unclassified” category.<sup>10</sup> American Indian-owned firms were also concentrated in agricultural, construction and manufacturing industries. Asian- and Pacific-Islander-owned firms tended to be engaged in greater than average proportions in retail and wholesale trade and services.

10 The unclassified category may reflect a large proportion of businesses in gaming. For figures, see <http://www.indiangaming.org/library/index.html>.

**Table 2.12 Minority-owned Firms by Legal Form of Organization, 1997**

Legal form of organization	Total		African American		Hispanic		American Native		Asian/Pacific Islander	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	20,821,934	100.00	823,499	3.95	1,199,896	5.76	197,300	0.95	912,960	4.38
C corporation	2,390,478	11.48	42,729	5.19	78,463	6.54	9,379	4.75	127,480	13.96
S corporation	1,979,425	9.51	29,410	3.57	65,244	5.44	9,618	4.87	92,877	10.17
Sole proprietorship	15,122,882	72.63	737,076	89.51	1,027,411	85.63	173,385	87.88	648,337	71.01
Partnership	1,226,455	5.89	13,595	1.65	27,998	2.33	4,626	2.34	40,854	4.47
Other	102,694	0.49	688	0.08	781	0.07	293	0.15	3,412	0.37

Source: U.S. Small Business Administration, Office of Advocacy, based upon data published by the U.S. Department of Commerce, Bureau of the Census, 1997 Survey of Minority-owned Business Enterprises.

**Table 2.13 Minority-owned Firms by Industry, 1997**

Major industry	Total		African American		Hispanic		American Native		Asian/Pacific Islander	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All	20,821,934		823,499	3.95	1,199,896	5.76	197,300	0.95	912,960	4.38
Agriculture	496,164	2.38	12,464	1.51	40,040	3.34	8,942	4.53	12,988	1.42
Mining	126,809	0.61	231	0.03	1,909	0.16	947	0.48	660	0.07
Construction	2,333,424	11.21	56,508	6.86	152,573	12.72	27,435	13.91	27,711	3.04
Manufacturing	688,782	3.31	10,447	1.27	25,552	2.13	6,717	3.40	23,242	2.55
Transportation	919,570	4.42	71,586	8.69	84,554	7.05	6,291	3.19	37,501	4.11
Wholesale	797,856	3.83	8,120	0.99	31,480	2.62	4,365	2.21	50,400	5.52
Retail	2,889,041	13.87	87,568	10.63	155,061	12.92	14,768	7.49	195,691	21.43
Finance	2,237,675	10.75	37,934	4.61	56,629	4.72	4,616	2.34	68,765	7.53
Services	8,891,023	42.70	437,646	53.14	500,449	41.71	34,144	17.31	406,010	44.47
Unclassified	1,480,003	7.11	101,128	12.28	151,931	12.66	89,243	45.23	90,509	9.91

Source: U.S. Small Business Administration, Office of Advocacy, from data published by the U.S. Department of Commerce, Bureau of the Census, 1997 Survey of Minority-owned Business Enterprises.

### Geographic Distribution

Minority-owned businesses are most prevalent in the southern states and in urban areas where minority populations tend to be larger. In 1997, California, Florida, Texas, New Mexico, Hawaii, Maryland, and the District of Columbia all had concentrations of minority-owned businesses exceeding 20 percent (*Chart 2.1*). In sheer numbers, New York had the largest number of African American-owned businesses—more than 86,000; Hawaii had the largest number of businesses owned by Pacific Islanders—nearly 7,000; and California had the largest numbers of minority-owned businesses owned by Hispanics (336,000), Asians (313,000), and American Indians (27,000).

### The Growth of Minority-owned Businesses

The number of minority-owned businesses has grown explosively since 1982 (*Table 2.14*). Fewer than 7 percent of U.S. firms were minority-owned in 1982 (*Chart 2.2*).

Minority-owned firms' share more than doubled to almost 15 percent in 1997.<sup>11</sup> Minority-owned firms increased at rates between three and seven times those of nonminority-owned firms, by 55 percent from 1982 to 1987, 68 percent between 1987 and 1992, and 30 percent from 1992 to 1997.

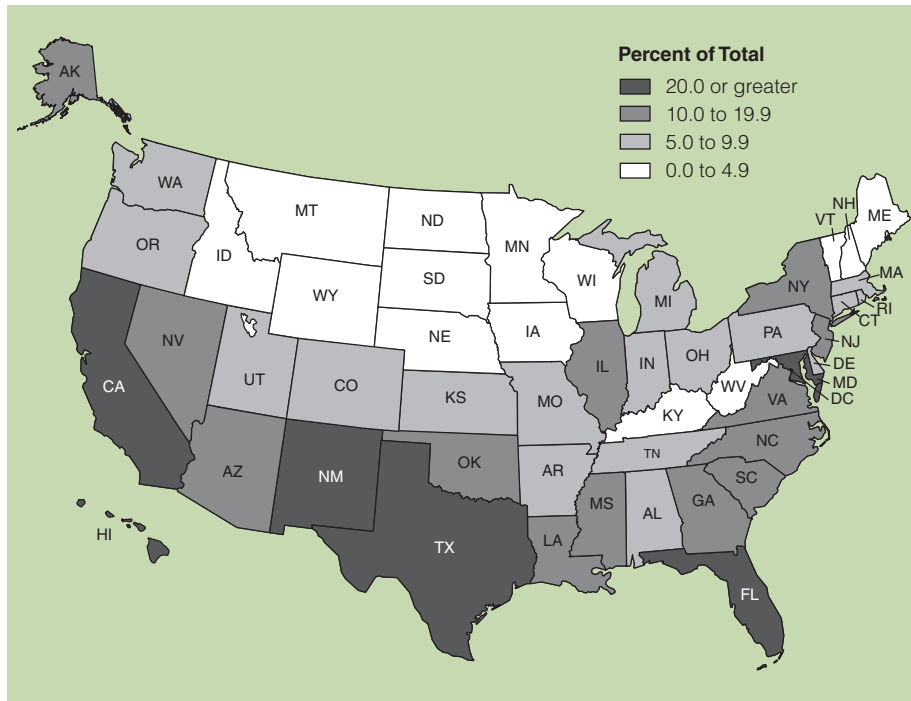
One reason for minority-owned firm growth is simply the rate of minority population growth. The small growth rates of nonminority-owned firms match the low growth rates of the nonminority population for the three quinquennial periods.<sup>12</sup> For the same periods, the rapid growth rates of minority-owned firms parallel growth rates in the minority population, particularly for Hispanics and Asians and Pacific Islanders, whose population growth was on average four times the total U.S. population growth rate.<sup>13</sup>

11 Changes in the Survey of Minority-Owned Business Enterprises (SMOBE) database over the years have made comparisons difficult. When data are adjusted to include only those groups covered in 1982, the 1997 minority business share is 15.1 percent.

12 Population data from U.S. Department of Commerce, Bureau of the Census, *The National Data Book, Statistical Abstract of the United States 1998*.

13 This average was determined by first calculating for each minority group the growth rate relative to all U.S. population growth. For example, the Hispanic population grew at five times, four times, and four times the U.S. population growth rates during the three quinquennial periods.

**Chart 2.1 Geographic Distribution of Minority-owned Businesses, 1997**



Source: U.S. Department of Commerce, Bureau of the Census, Survey of Minority-owned Business Enterprises, 1997

The rapid business growth occurred across minority groups (Table 2.14). African American-owned businesses increased their numbers by 38 percent from 1982 to 1987, by 46 percent from 1987 to 1992, and by another 26 percent from 1992 to 1997.<sup>14</sup> The quinquennial growth rates for Hispanic-owned businesses were 73 percent, 76 percent, and 30 percent. Asian and Pacific Islander-owned businesses increased by 72 percent, 46 percent, and 30 percent over the three periods. The most striking percentage increases were in

14 The faster growth in Black-owned businesses may reflect increased opportunity, greater equality, and better education, among other factors. An entrepreneurial focus emerged in the 1970s, and the number of Black-owned firms increased by 47 percent over the 1977–1982 period.

**Table 2.14 Growth in Numbers of Minority-owned Firms, 1982–1997<sup>1</sup>**

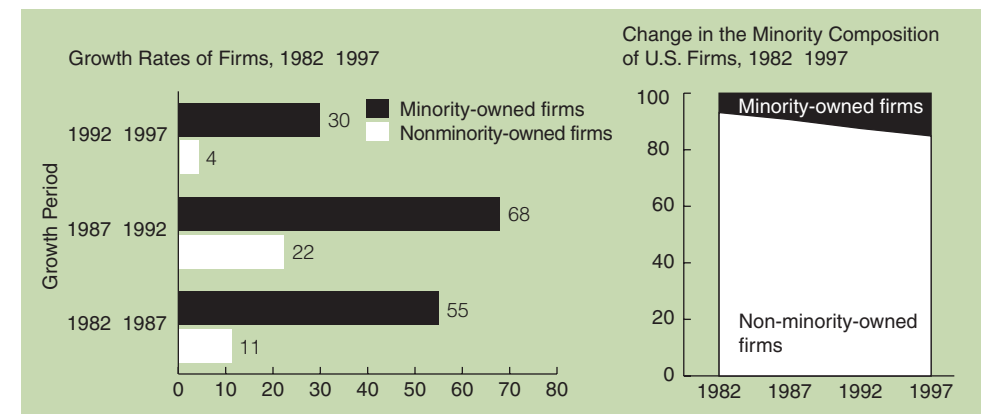
	Number of firms				Growth rates (percent)		
	1982	1987	1992	1997	1982–1987	1987–1992	1992–1997
All U.S. firms	12,059,950	13,695,480	17,253,143	18,431,456	14	26	7
Nonminority-owned firms	11,234,999	12,419,170	15,103,959	15,645,358	11	22	4
All minority-owned firms	824,951	1,343,910	2,149,184	2,786,098	55	68	30
African American-owned firms	308,260	424,165	620,912	780,770	38	46	26
Hispanic-owned firms	284,011	489,973	862,605	1,121,433	73	76	30
American Indian and Alaskan Native-owned firms	17,100	24,931	102,271	187,921	46	310	84
Asian, and Pacific Islander-owned firms <sup>2</sup>	240,806	414,340	603,426	785,480	72	46	30

<sup>1</sup> Estimated undercounts have been included to illustrate trends believed reliable at the all-firm level. Estimates are based on a large sample mailout designed to measure the undercoverage of Hispanic and Asian firms of firms not identified by race code or surname.

<sup>2</sup> Undercounts for Asians and Pacific Islanders, American Indians, and Alaskan Natives are estimated based on total undercounts for the combined categories.

Source: U.S. Small Business Administration, Office of Advocacy, based on data from the U.S. Department of Commerce, Bureau of the Census, Survey of Minority-owned Business Enterprises, Company Statistics Series 1982, 1987, 1992, and 1997.

**Chart 2.2 Growth in the Minority-owned Business Population, 1982–1997**



Source: U.S. Department of Commerce, Bureau of the Census, Survey of Minority-owned Business Enterprises

businesses owned by American Indians and Alaska Natives, which grew at about nine times the rate of U.S. firms overall. It is estimated that, excluding C corporations, the number of American Indian-and Alaska Native-owned businesses rose 47 percent from 1982 to 1987, 310 percent from 1987 to 1992, and 84 percent from 1992 to 1997.<sup>15</sup>

#### *Minority Business Turnover*

The SBA's Office of Advocacy sponsored a study that examined minority business turnover and the reasons for it, using a database of firms with employees that started in 1992.<sup>16</sup> Forty-seven percent of the businesses with positive payrolls that started in 1992 survived until at least 1996. The survival rate for new White non-Hispanic-owned businesses was 48.7 percent. For new African American-owned businesses, it was 34.7 percent and for new White Hispanic-owned businesses it was 44.9 percent. For businesses started by Asians and other minorities, the survival rate was 50.4 percent.

The study also examined, for each nonminority and minority group, the top five industries in terms of 1992–1996 survival rates (*Table 2.15*). The highest survival rate by industry was almost 82 percent for White non-Hispanic businesses in the oil and gas extraction industry, and the highest rates by industry for minority-owned businesses ranged from 79.1 percent for African American-owned businesses in legal services to 65.6 percent for White Hispanic-owned businesses in health services.

The industries with the highest survival rates among minority-owned businesses are generally service-producing industries—industries where entry costs tend to

**Table 2.15 Top Five Major Industries in Business Survival Rates by Ethnicity, 1992–1996**

Major industry name	SIC code	Survival rate (percent)
<b>White, non-Hispanic-owned</b>		
Oil and gas extraction	13	81.69
Electric, gas, and sanitary services	49	76.61
Measuring, analyzing, and controlling instruments	38	76.36
Fabricated metal products (except machinery and transportation equipment)	34	71.50
Health services	80	69.55
<b>African American-owned</b>		
Legal services	81	79.11
Social services	83	66.42
Real estate	65	57.00
Insurance agents, brokers, and service	64	56.24
Miscellaneous retail	59	54.10
<b>White, Hispanic-owned</b>		
Health services	80	65.60
Legal services	81	58.43
Construction special trade contractors	17	58.06
Automotive dealers and gasoline service stations	55	54.71
Wholesale trade—durable goods	50	54.60
<b>Asian/other-owned</b>		
Health services	80	76.33
Legal services	81	71.83
Hotels, rooming houses, camps, and other lodging places	70	68.52
Business services	73	59.90
Wholesale trade—durable goods	50	57.90

\*Note: Data pertain exclusively to new (in 1992) firms (employer identification numbers or EINs) with positive payrolls in 1992. Also, in order to be included in this tabulation, a major industry must have had at least 50 new firms (EINs) in 1992.

Source: Special tabulations of 1992–1996 Business Information Tracking Series (BITS) data matched with 1992 SMOBE and SWOBE data. This merged data series was created by Dr. Alicia Robb of the Federal Reserve Board of Governors while she was employed by the Office of Advocacy of the U.S. Small Business Administration.

15 The rapid growth in American Indian and Alaska Native-owned firms, especially the 310 percent increase over the 1987–1992 period, appears to reflect strong growth starting from a relatively small base of firms. The 1988 Indian Gaming Regulatory Act (IGRA) made it possible for federally recognized tribes to legally run casinos on Indian lands. The 1987–1992 period covers firm growth starting one year before IGRA's enactment and continuing through the first years after enactment.

16 Alicia Robb matched the Census Bureau's 1992 Survey of Minority-Owned Business Enterprises (SMOBE) and 1992 Women-Owned Businesses survey data with the 1989–1996 Business Information Tracking Series (BITS). The BITS is an annual, longitudinal database containing data on nearly all U.S. businesses and establishments with positive payrolls. It is now possible to examine a wide variety of longitudinal inquiries over the 1992–1996 time period by gender, race, and/or ethnicity of business ownership. See Richard Boden, "Analyses of Business Dissolution by Demographic Category of Business Ownership," unpublished report prepared for the Office of Advocacy of the U.S. Small Business Administration, Washington, D.C., December 2000.

be lower—while for White non-Hispanic-owned businesses, the highest survival rates are in considerably more capital-intensive industries. As a general proposition, this is probably a manifestation of racial and ethnic differences in the industrial distribution of businesses. The fact that minority-owned businesses tend to be more prevalent in industries with lower entry costs may—at least in part—reflect more binding liquidity constraints and historically less access to startup capital among prospective minority business owners.

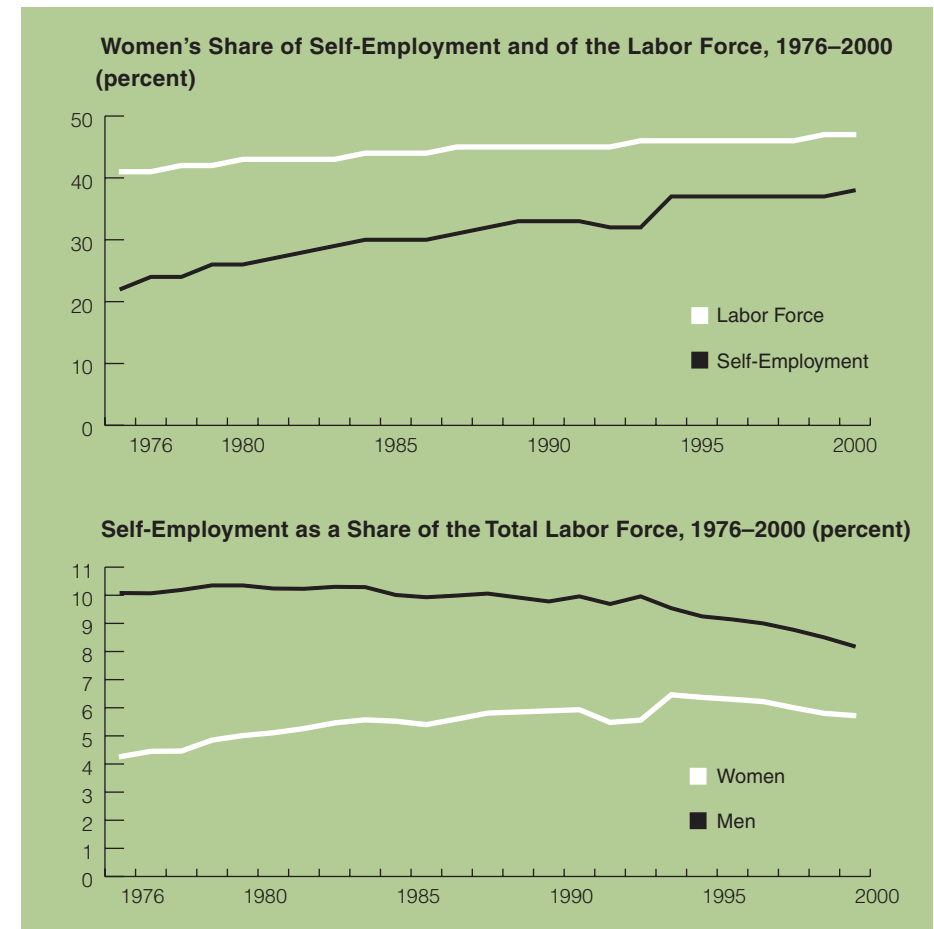
## Women and Small Business

Three primary sources discussed here provide data on the number of women-owned businesses: the Bureau of Labor Statistics (BLS) produces monthly and annual self-employment data; the Bureau of the Census produces data on women-owned businesses every five years in years ending in 2 and 7; and the Internal Revenue Service produces sole proprietorship figures annually.<sup>17</sup> Although the three data sources show different levels of female participation in ownership, all are at a significant level and climbing, indicating women's increasing presence in the U.S. economy.

### Self-employment

BLS figures for 2000 show 3.8 million women listing self-employment as their primary occupation—37.9 percent of all the self-employed (*Chart 2.3*).<sup>18</sup> Nearly 10 million of the 141 million Americans in the labor force were self-employed in 2000. Women's shares of the labor force and of self-employment increased from 40.5 percent and 22.4 percent in 1976 to 46.4 percent and

**Chart 2.3 Women in the Labor Force and in Self-Employment, 1976–2000**



*Note:* According to the Bureau of Labor Statistics, there was a significant change in the definition of self-employment in the 1994 Current Population Survey. Various subsets of the self-employment data set are therefore not comparable; however, some subsets, such as self-employment for 1976–1993 and for 1994–2000 are comparable.

*Sources:* Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

17 The unit of analysis is different for each of the three sources. The Census Bureau uses a survey of tax returns as a base, BLS uses a labor force definition (self-designation of self-employment activities), and the IRS uses a survey of sole proprietors. A fourth, auxiliary data source, the Federal Reserve Board's Survey of Small Business Finances, provides valuable information on the financing of women-owned businesses. For more detail, see the Office of Advocacy study, *Women in Business 2001*, at <http://www.sba.gov/advo/stats/wib01.pdf>.

18 BLS figures are based on the Current Population Survey. The microdata from this survey are available to the public, so other definitions of self-employment can be created. For example, another definition of self-employment used in this report is individuals with any self-employment earnings during the year.



37.9 percent in 2000, respectively. While the number of women in the labor force increased 69 percent during those 25 years, the number of self-employed women increased 126 percent.

The self-employed share of the female labor force increased significantly from 1976 to 1995, when it reached its highest point of 6.4 percent, then began declining, although at a slower pace than men's self-employment share. Between 1995 and 2000, the self-employment shares of both the male and female labor forces declined slightly, but the declines were greater for men.

#### Characteristics of Self-employed Women

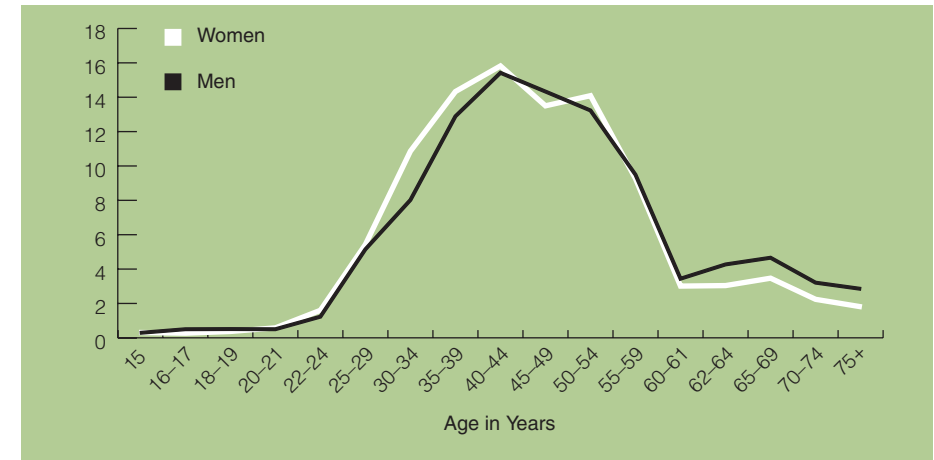
Age is a factor in the self-employment rates of men and women, along with education, income, and marital status (*Chart 2.4*).<sup>19</sup> Women are more represented on the younger side of the peak age for self-employment. However, it appears that more men than women past the age of 65 seek self-employment as a hobby or social security supplement.

In the education distribution, self-employed women are proportionally more represented than men in the "some college" category, but less in the doctorate and professional degree categories (*Chart 2.5*). Self-employed women's lower shares in the higher degree categories may help explain the lower self-employment incomes reported by women. The other education categories were similar across gender lines.

Of self-employed women and men, about 90 percent were white, and about 10 percent were minorities in 1999 (*Table 2.16*). Within all groups, a much higher proportion of the self-employed were men than women, but the gender components varied by minority group. Women's share of African American self-employment was 40.6 percent, 6.5 percentage points above that of White women, 5.5 percentage points above that of Asian or Pacific Islanders, and 2.3 percentage points higher than that of American Indian, Eskimo or Aleut women.

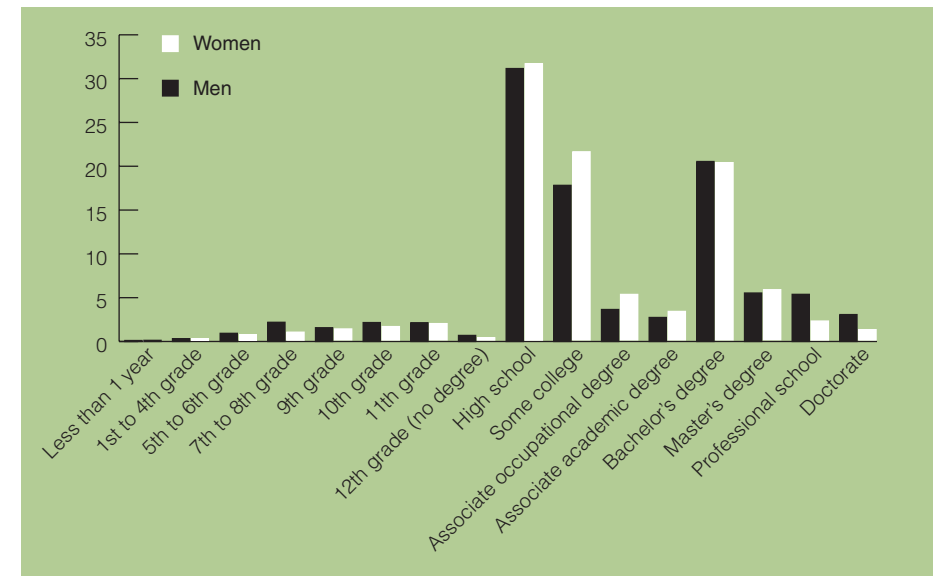
19 Unless otherwise explained in the context, the data here were compiled from the March Supplement to the 2000 Annual Current Population Survey by the U.S. Bureau of Census. Several variables can be used for the study of self-employment. The variable used here is the incorporated self-employed job held longest in the previous year, non-incorporated and farm self-employed. The data in this report may not match data from other sources because of differences in the variables included: this study includes all incorporated, nonincorporated, and farm self-employed.

**Chart 2.4 Age Distribution of Self-employed Men and Women, 1999 (percent)**



Source: U.S. Department of Commerce, Bureau of the Census, Annual Demographic Survey, March Supplement, 2000.

**Chart 2.5 Educational Distribution of Self-employed Men and Women**



Note: about 0.13 percent of self-employed women received less than one year of education, 0.31 percent went through first to fourth grade. The corresponding numbers for men were 0.11 percent and 0.32 percent.

Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

**Table 2.16 Racial and Gender Components of Self-employed Persons, 1999**

Race	Percent within race		Percent within gender	
	Male	Female	Male	Female
White	65.9	34.1	90.4	88.7
African American	59.4	40.6	5.3	6.8
American Indian, Eskimo or Aleut	61.7	38.3	0.5	0.5
Asian or Pacific Islander	64.9	35.1	3.9	4.0
Total	65.5	34.5	100.0	100.0

Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

**Table 2.17 Other Socioeconomic Factors Relating to Self-employed Individuals by Gender, 1999 (percent)**

Marital Status	Men	Women
Married, spouse present	74	75
Married, spouse absent	1	1
Widowed	1	4
Divorced	10	10
Separated	1	2
Never married	13	9
Total	100	100

Number of Own Children under 18 Years Old	Men	Women
None	61	57
1 Child	15	16
2 Children	15	17
3–4 Children	9	10
5+ Children	0	1
Total	100	100

Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

There were no radical differences between self-employed men and women in terms of marital status and the number of children under 18 years of age (*Table 2.17*).<sup>20</sup> It is noticeable, however, that although proportionally more of the older self-employed were men, about two-thirds of widowed self-employed individuals were women.

#### *Self-Employment by Size of Firm*

In 1999, nearly 90 percent of self-employed women owned firms with fewer than 10 employees (*Chart 2.6*). Fewer than 2 percent of self-employed women owned large businesses with more than 500 employees.

#### *Self-Employment Income*

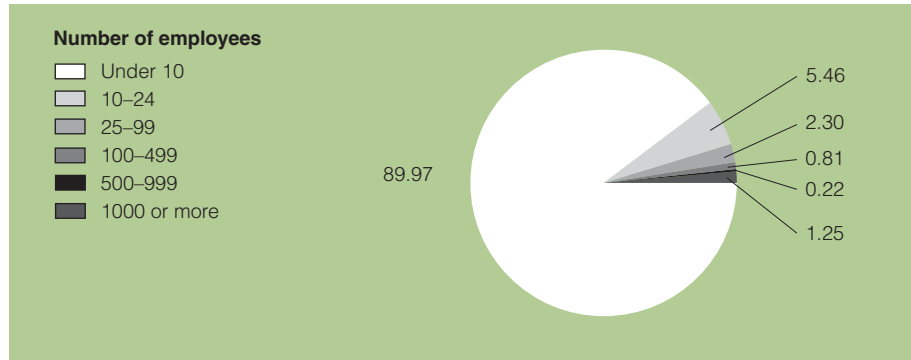
Self-employed family income, a measure of the family's total income, represents the economic well-being of the family. Self-employed personal income, a measure of the self-employed individual's income, captures working people's personal earnings and other income.

Whether the self-employed person is a man or a woman, self-employed family income is distributed similarly (*Chart 2.7*). Roughly 40 percent of self-employed individuals report family income between \$25,000 and \$65,000. The large "tail" toward the higher end of the income distribution curve reflects that a large proportion of self-employed—27 percent of men and 24 percent of women—had family income in the \$95,000+ bracket. About 20 percent of the self-employed—both men and women—had family income in the lowest three brackets below \$25,000.

With respect to personal income from self-employment, most had incomes below \$45,000, but this was much truer for women (83 percent) than for men (59 percent). Thirteen percent of both men and women who were self-employed had annual personal income between \$25,000 and \$35,000. At the personal income levels below \$25,000 were many more self-employed women than self-employed men. At the levels above \$35,000, the distribution curve of self-employed women was consistently below that of men.

20 In "Flexible Working Hours, Family Responsibilities, and Female Self-Employment," *The American Journal of Economics and Sociology* (January 1999), vol. 58, no. 1, Dr. Richard Boden argues that women—especially women with young children—are more likely than men to cite flexibility of schedule and family-related reasons for becoming self-employed.

**Chart 2.6 Employment Sizes of Firms Owned by Self-employed Women, 1999 (percent)**



Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

**Chart 2.7 Family and Personal Annual Income Distribution of Self-employed Persons, 1999**



Source: Based on the Current Population Survey, March Supplement 2000, a joint project of the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

## Census Data on Women-owned Businesses

According to the most recent available data in the Census Bureau's Survey of Women-owned Business Enterprises (SWOBE), women-owned businesses represented 26.0 percent of the 20.8 million nonfarm businesses in the United States in 1997. Of the 5.4 million women-owned nonfarm businesses in 1997, 847,000 were employer firms, employing 7.1 million employees. These women-owned firms generated \$818.7 billion (4.4 percent) of business revenues. In addition to the 5.4 million businesses owned by women, there were 3.6 million firms owned equally by men and women that employed 8.3 million workers and generated \$943.9 billion in revenue.

### Size of Firms

Of the 5.4 million women-owned businesses, only 15.6 percent were employer firms in 1997, compared with 25.4 percent of all firms. Very small businesses with fewer than 5 employees represented more than 60.0 percent of women-owned firms with paid employees, but generated just 16.5 percent of the revenues of these businesses, and employed 13.0 percent of the labor force.

As measured by receipts, women-owned businesses were also mostly very small ventures. About 1.6 million women-owned businesses—30 percent of the women-owned businesses—had less than \$5,000 in revenues and contributed less than 1 percent of total women-owned business receipts. Some 98,870 women-owned firms (1.8 percent) had receipts of more than \$1 million; they accounted for 68.3 percent of total women-owned business revenues.

### Industry Characteristics

In 1997, women-owned businesses operated in all industries (*Table 2.18*). Fifty-five percent were in the service sector, 17.0 percent in retail trade, and nearly 9.0 percent in finance, insurance, and real estate. The construction industry accounted for almost 3.0 percent of women-owned businesses, while another 8.0 percent fell into the "unclassified industry" category. Women-owned firms in the wholesale and retail trade and services industries generated a total of 64.3 percent of women's total revenues. Employment was concentrated in the services, retail, and manufacturing sectors. Compared with men, women have lower shares of firms in construction and in finance, insurance and real estate, but a higher share in the service industries.

**Table 2.18 Number of Firms, Employment and Receipts of Women-owned Businesses by Industry, 1997**

Major Industry	Number of firms	Percent of firms	Number of employees	Receipts (billions of dollars)	Percent of receipts
All industries	5,417,034	100	7,076,081	818.7	100
Agricultural services, forestry and fishing	74,444	1.4	77,370	5.9	0.7
Mining	20,030	0.4	25,982	7.2	0.9
Construction	157,173	2.9	518,142	67.6	8.3
Manufacturing	121,108	2.2	901,434	113.7	13.9
Transportation, communications, and utilities	128,999	2.4	321,759	32.9	4.0
Wholesale trade	125,645	2.3	468,276	188.5	23.0
Retail trade	919,990	17.0	1,574,747	152.0	18.6
Finance, insurance, and real estate	479,469	8.9	276,045	56.0	6.8
Services	2,981,266	55.0	2,908,080	186.2	22.7

Source: U.S. Department of Commerce, Bureau of the Census, Survey of Women-owned Business Enterprises (SWOBE), 1997.

### *Geographic Concentrations of Women-owned Businesses*

The large states of California, New York and Texas accounted for 27.2 percent of all women-owned businesses. Combined, they had a total of 1.5 million women-owned firms, and generated \$245.7 billion in revenue. The top three rankings by county, metropolitan area, city, and state, based on the number of women-owned firms located in them, were all in four states: California, New York, Illinois, and Texas (Table 2.19). Not surprisingly, the largest number of women-owned businesses in a metropolitan area was in New York.

### *The Growth of Women-owned Businesses*

The numbers of women-owned businesses has been increasing dramatically. Because the definition of women-owned businesses used by the Bureau of the Census has changed over the years, the figures from 1982 to 1997 are not directly comparable. For the 1992 to 1997 period, Census attempted to create comparable figures, enabling the calculation of growth rate.

**Table 2.19 Top Five Rankings for Number of Women-owned Businesses by County, Metropolitan Area, City, and States, 1997**

Rankings	County	Metropolitan Area	City	State
1	Los Angeles, CA	New York, NY	New York, NY	California
2	Cook, IL	Los Angeles-Long Beach, CA	Los Angeles, CA	New York
3	New York, NY	Chicago, IL	Chicago, IL	Texas
4	Harris, TX	Washington, DC-MD-WA-WV	Houston, TX	Florida
5	Orange, CA	Atlanta, GA	San Diego, CA	Illinois

Source: U.S. Department of Commerce, Bureau of the Census, Survey of Women-owned Business Enterprises (SWOBE), 1997.

Between 1992 and 1997, the number of women-owned businesses rose by 16 percent, compared with a 6 percent increase in the number of all U.S. firms. Women-owned business revenues increased by 33 percent, compared with an increase of 24 percent for all firms, and employment rose by 28 percent compared with 8 percent for all firms (Table 2.20). The number of C corporations owned by women increased slightly compared with the number of sole proprietorships, partnerships and Subchapter S corporations owned by women. While the number of C corporations increased very little, these firms generated most of the total revenue.

## **Women-owned Sole Proprietorships**

As mentioned previously, a business owner may choose one of several legal forms of organization, including C corporation, Subchapter S corporation, partnership, or sole proprietorship.<sup>21</sup> A sole proprietorship is an unincorporated business with a single owner. For tax purposes, the business's assets and liabilities belong directly to the business owner.<sup>22</sup> The tax liability is determined

21 This section is based on the Office of Advocacy's March 2003 report, *Dynamics of Women-Operated Sole Proprietorships, 1990-1998*. The data for that report were drawn largely from Internal Revenue Service data. For the complete report and supporting tables, visit [http://www.sba.gov/advo/stats/rwosp\\_03.pdf](http://www.sba.gov/advo/stats/rwosp_03.pdf).

22 The identification with a single owner is what allows researchers to assign a gender to the sole proprietorship's ownership or operation; for larger businesses, this is more difficult.

**Table 2.20 Growth in Women-owned Businesses (thousands, except as noted), 1992–1997**

	1997	1992	Change in Number	Percent Change
Firms	7,452	6,403	1,049	16.4
Employer Firms	1,684	1,233	451	36.6
Receipts (Billions of Dollars)	1.6	1.2	0.4	33.3
Employees	14,591	11,411	3,180	27.9

Source: U.S. Department of Commerce, Bureau of the Census. Survey of Women-owned Business Enterprises (SWOBE), 1997.

by the business owner's individual tax rate—no separate tax schedule applies. Simplicity is the advantage of this legal form of organization.

Sole proprietorships are great in number, small in size. Most U.S. firms (72.6 percent in 1997)—and an even larger percentage of women-owned businesses (84.8 percent)—operate as sole proprietorships (*Table 2.21*).<sup>23</sup> Most are small: the average dollar value of U.S. sole proprietorship gross receipts in 1997 (\$58,000) was lower than that of other legal forms of organization, and the figure for those owned by women was \$31,000 on average.

#### *Growth in Women-Operated Sole Proprietorships*

Women are a significant and growing part of the population of American sole proprietors. In 1990, women operated just one-third—33.5 percent—of the total number of sole proprietorships, on average, with 15.2 percent of total receipts, and 16.9 percent of net income. By 1998, sole proprietorships operated by women in the United States had increased dramatically in numbers, gross receipts, and net income. The number increased by an average of 3.2 percent annually from 5.6 million in 1990 to 7.1 million (36.8 percent of the total) eight years later (*Tables 2.22 and 2.23*).

23 Note that for purposes of comparisons with other legal forms of organization, the data used are taken from the Census Bureau's Survey of Women-Owned Business Enterprises. The numbers and shares differ somewhat from Internal Revenue Service data used elsewhere in this report.

**Table 2.21 Firms and Receipts by Legal Form of Organization and Gender of Operator, 1997**

Legal Form of Organization	All U.S. firms			Women-operated firms		
	Firms	Percent	Average receipts (thousands of dollars)	Firms	Percent	Average receipts (thousands of dollars)
U.S. Total	20,821,934	100.0	890	5,417,034	100.0	151
C corporations	2,390,478	11.5	5,811	314,659	5.8	1,166
Subchapter S corporations	1,979,425	9.5	1,504	335,619	6.2	814
Sole proprietorships	15,122,882	72.6	58	4,595,571	84.8	31
Partnerships	1,226,455	5.9	507	166,027	3.1	191
Other*	102,694	0.5	1,853	5,176	0.1	1,029

\*"Other" includes cooperatives, receiverships, estates, and businesses classified as unknown legal forms of organization. Notes: Receipts are average business receipts per firm in 1997. Because of differences in data sources, figures in this table differ from those based on Internal Revenue Service data.

Sources: U.S. Department of Commerce, Bureau of the Census, Survey of Women-owned Business Enterprises, 1997.

Women's sole proprietorship receipts increased over the period from 15.2 percent of the total to 18.0 percent; their net income increased from 16.9 percent to 21.5 percent. The male-female jointly operated shares of the number, receipts and net income of sole proprietorships were stable, averaging 1.9 percent, 2.7 percent and 0.8 percent, respectively, between 1990 and 1998.<sup>24</sup> Over the 1990–1998 period, the share of the number, receipts, and income of male-operated sole proprietorships dropped 3.06, 2.87, and 5.41 percentage points, respectively.

24 Jointly operated firms, rather than being a blend as one might expect, had quite different characteristics from either female- or male-operated firms. Their average receipts, \$73,000 per business, were 20 percent higher than the male-operated average but their net income per firm, \$7,000, was barely half of the men's average.

**Table 2.28 Number, Receipts, and Net Income of U.S. Sole Proprietorships by Gender of Operator, 1990-1998**  
(income and receipts in thousands of dollars)

Proprietorships	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>All</b>									
Number	16,596,384	16,957,636	17,292,286	17,714,120	18,108,776	18,391,237	19,031,717	19,218,649	19,376,799
Receipts	730,606,020	718,401,208	737,082,032	757,215,452	790,630,020	807,363,638	843,233,843	870,392,286	918,268,196
Net income	141,430,193	141,864,014	153,960,246	156,458,803	166,798,668	169,262,336	176,755,693	186,643,910	202,274,720
<b>Male-operated</b>									
Number	10,739,682	10,968,712	11,047,449	11,347,261	11,393,090	11,623,688	11,861,679	11,901,611	11,946,523
Receipts	602,574,868	591,221,509	607,006,127	620,643,031	646,656,149	652,689,327	672,014,384	690,312,254	731,077,613
Net income	117,167,282	115,504,737	125,065,782	126,182,671	134,490,502	136,850,199	139,652,357	146,825,965	156,619,331
<b>Female-operated</b>									
Number	5,552,239	5,729,370	5,915,700	6,039,877	6,325,942	6,380,074	6,738,158	6,977,611	7,126,365
Receipts	111,197,297	109,000,234	112,497,774	116,219,872	121,748,812	128,009,490	142,692,699	153,864,817	165,097,918
Net income	23,834,966	25,672,685	27,555,222	29,288,650	30,902,968	30,976,935	35,445,472	37,954,716	43,576,529
<b>Male/female-operated</b>									
Number	304,463	259,554	329,136	326,982	369,744	387,474	431,880	339,427	303,911
Receipts	16,833,855	18,179,464	17,578,131	20,352,548	22,225,058	26,664,821	28,526,760	26,215,215	22,092,666
Net income	427,945	686,592	1,339,242	987,482	1,405,198	1,435,202	1,657,864	1,863,229	2,078,860

Note: All figures are estimates based on samples.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of the Treasury, Internal Revenue Service.

**Table 2.23 Shares of the Total Number, Receipts, and Net Income of U.S. Sole Proprietorships by Gender of Operator, 1990-1998 (percent)**

Proprietorships	1990	1991	1992	1993	1994	1995	1996	1997	1998	Average
<b>Male-operated</b>										
Number	64.71	64.68	63.89	64.06	62.91	63.20	62.33	61.93	61.65	63.26
Receipts	82.48	82.30	82.35	81.96	81.79	80.84	79.69	79.31	79.61	81.15
Net income	82.84	81.42	81.23	80.65	80.63	80.85	79.01	78.67	77.43	80.30
<b>Female-operated</b>										
Number	33.45	33.79	34.21	34.10	34.93	34.69	35.40	36.31	36.78	34.85
Receipts	15.22	15.17	15.26	15.35	15.40	15.86	16.92	17.68	17.98	16.09
Net income	16.85	18.10	17.90	18.72	18.53	18.30	20.05	20.34	21.54	18.93
<b>Male/female-operated</b>										
Number	1.83	1.53	1.90	1.85	2.15	2.11	2.27	1.77	1.57	1.89
Receipts	2.30	2.53	2.38	2.69	2.81	3.30	3.38	3.01	2.41	2.76
Net income	0.30	0.48	0.87	0.63	0.84	0.85	0.94	1.00	1.03	0.77

Note: All figures are estimates based on samples.

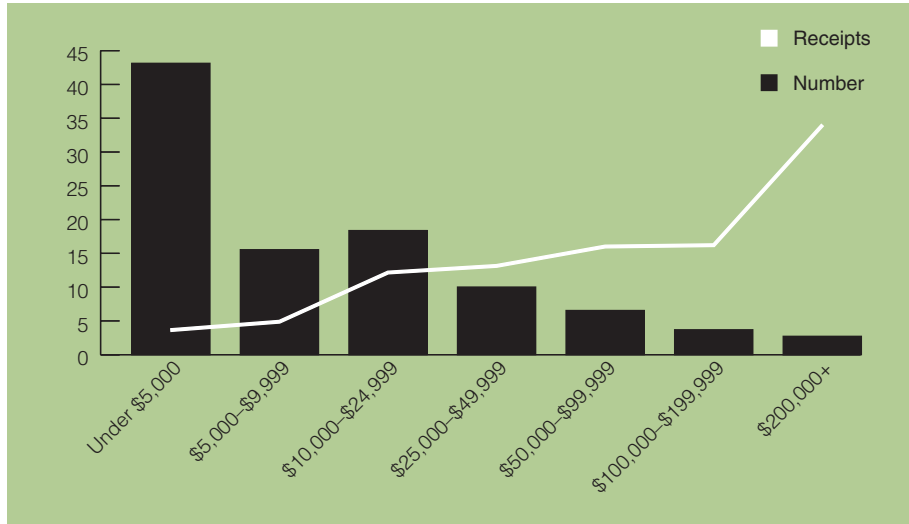
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of the Treasury, Internal Revenue Service.

### Business Size

Between 1990 and 1998, just under half of women-operated sole proprietorships—43.1 percent on average—had less than \$5,000 in gross receipts annually (*Chart 2.8*). This group accounted for just over 3.6 percent of women-operated sole proprietorship receipts. In 1998, these businesses had \$1,820 in receipts on average and experienced a net income loss of \$150.

Another 43.9 percent were in the next three receipts size categories under \$50,000. They accounted for 30.2 percent of the receipts and about 45.5 percent of the net income, on average, over the 1990-1998 period. In 1998, the average gross receipts for these three groups ranged from \$6,630 to \$28,000, and their net income ranged from \$2,840 to \$10,290. These women are likely to be operating their businesses part-time and relying on other sources of income—such as a second business, job, family member, or savings—to cover living expenses.

**Chart 2.8 Composition of the Number and Total Receipts of Women-Operated Sole Proprietorships, by Receipts Size of Business (1990–1998 average)**



Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of the Treasury, Internal Revenue Service.

About 13.0 percent of the women-operated sole proprietorships had receipts over \$50,000. A business with at least \$50,000 in receipts is more likely to be a full-time business or at least to require a significant part of the proprietor’s time. The businesses in the three receipts size categories over \$50,000 accounted for two-thirds—66.2 percent—of women-operated sole proprietorships’ receipts and 54.9 percent of the income.

The largest women-operated sole proprietorships—the 2.7 percent with gross receipts of at least \$200,000—generated one-third (almost 34.0 percent) of women-operated business receipts. These women-operated sole proprietorships averaged \$296,580 in gross receipts and net income of \$47,300 in 1998.

Among women-operated sole proprietorships in various receipts size categories, the fastest growing was the group with receipts in the \$25,000–\$50,000 range; their numbers increased by 5.5 percent on average. All other size groups had average growth rates under 4 percent.<sup>25</sup>

#### *Marital Status of Women Sole Proprietors*

Taxpayers may claim one of four marital status categories on their tax returns (*Chart 2.9*). Joint returns of married couples accounted for, on average, 64.2 percent of the tax returns of women sole proprietors over the 1990–1998 period.<sup>26</sup> The remaining sole proprietorship returns were filed by single women (23.1 percent), heads of household, defined as unmarried individuals with dependents (11.0 percent), and married women who chose to file separately from their spouses (1.6 percent).

The percentage of women operators of sole proprietorships who were married and filed their income tax returns jointly declined from 66.6 percent in 1990 to 61.0 percent in 1998.<sup>27</sup> Their share of gross receipts also dropped over the period from 64.2 percent to 61.5 percent; their net income share declined from 62.5 percent to 57.7 percent. Women sole proprietors filing as unmarried heads of household with dependents increased from 8.4 percent to 14.2 percent between 1990 and 1998, with growth in receipts from 9.3 percent to 12.4 percent; and income from 8.0 percent to 15.4 percent. The other filing status categories remained about the same over the period: 23.1 percent on average were single and 1.6 percent were married filing separate returns. Unmarried women sole proprietors, whether heads of households or single, had business receipts about half as much per firm as men with the same filing status; married women proprietors had receipts about one-third those of married men.<sup>28</sup>

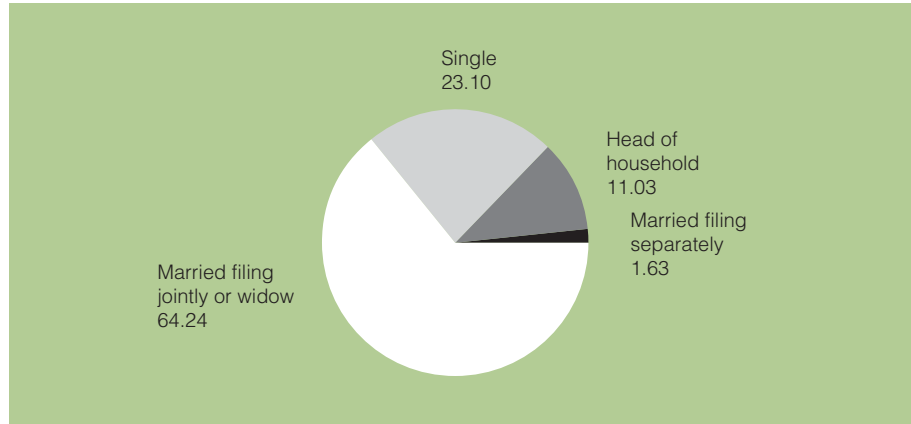
25 Note, however, that these data are not indexed for inflation, so growth in real dollars will be less over time than is shown in these figures. When the businesses are grouped by the size of their net income, each successively larger group (leaving aside those that reported a loss) exhibited a faster growth rate between 1990 and 1998; this pattern might change if the amounts were indexed for inflation.

26 This filing status also includes a small number of widows and widowers, who may use this status for two years after their spouse dies.

27 The changes may reflect changes in U.S. society overall, and/or changes in the economic situations of women who choose to become sole proprietors

28 Based on 1998 data, women’s receipts averaged about \$20,200 for heads of household, \$23,400 for married women filing jointly, and \$23,600 for women filing singly; men’s receipts averaged \$42,400 for heads of household, \$67,900 for married men filing jointly, and \$45,200 for singles.

**Chart 2.9 Composition of the Numbers of Women Sole Proprietors, by Filing Status (1980–1998 average percent)**



Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of the Treasury, Internal Revenue Service

### *Types of Business Activities*

About half (53.0 percent on average) of women-operated sole proprietorships were concentrated in 10 major business activities over the 1990–1998 period (*Chart 2.10*). The most common activity (19.7 percent of the top 10 types of activities) was door-to-door sales, followed by child day care (16.7 percent), other business services (13.5 percent), real estate agents and brokers (11.8 percent), beauty shops (11.1 percent), miscellaneous personal services (11.1 percent), janitorial and related services (8.2 percent), consulting and research (6.9 percent), miscellaneous specialty trade contractors (0.6 percent), and carpentry and floor contractors (0.4 percent). Women real estate agents and brokers had the highest average net income, at \$19,010. Consultants and researchers had average net income of \$11,590; women in other business services, \$8,360; beauty shops, \$7,370; carpentering and floor contractors, \$6,600; miscellaneous specialty trade contractors, \$5,580; janitorial and related services, \$4,880; child day care, \$3,920; and door-to-door sales, \$290.

### *Major Industries*

Women sole proprietors operated their businesses in a range of industries over the 1990–1998 period, with concentrations in two (*Chart 2.11*). The majority (60.7 percent on average) were in services; more than one-fifth (22.6 percent) were in wholesale and retail trade; and the rest were in finance, insurance and real estate (9.0 percent); mining, construction and manufacturing (4.3 percent), transportation, communications and public utilities (2.1 percent); and agriculture, forestry and fishing (1.5 percent).

In comparison (based on 1998 data alone), sole proprietorships owned by men were less concentrated, with about 45 percent in services; 21 percent in mining, manufacturing, and construction; 15 percent in wholesale and retail trade; 8 percent in finance, insurance, and real estate; 6 percent in transportation, communications, and utilities; and 4 percent in agricultural services, forestry, and fishing.<sup>29</sup>

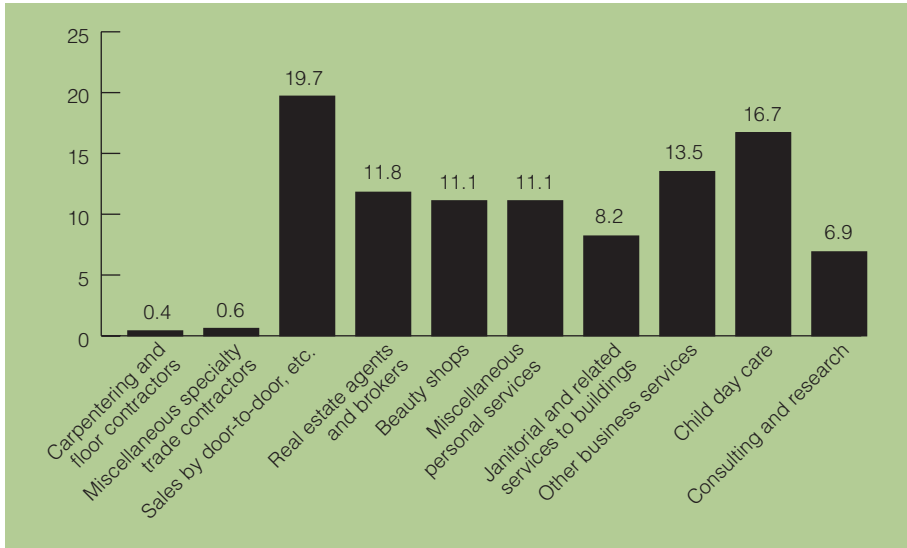
The number of women-operated sole proprietorships increased in nearly every industry over the period, except in finance, insurance, and real estate, where the numbers remained about even from 1990 to 1998. As a result, the finance industry's share of the total number of women-operated sole proprietorships declined from 10.5 percent in 1990 to 8.2 percent in 1998. At the same time, this industry's share of receipts increased from 9.3 percent in 1990 to 14.1 percent in 1998, and its net income share increased from 16.4 percent in 1990 to 20.1 percent in 1998.

Average net income for these women-operated businesses was the highest in finance, insurance, and real estate, where it averaged \$15,260 in 1998. It was lowest in agriculture, forestry, and fishing (\$1,710), and wholesale and retail trade (\$1,770).

<sup>29</sup> Again, jointly operated firms showed quite different characteristics from those owned by either gender alone. Their most frequent industry group was trade ("mom-and-pop" stores), accounting for 37 percent of the jointly operated total. These businesses have high average receipts.

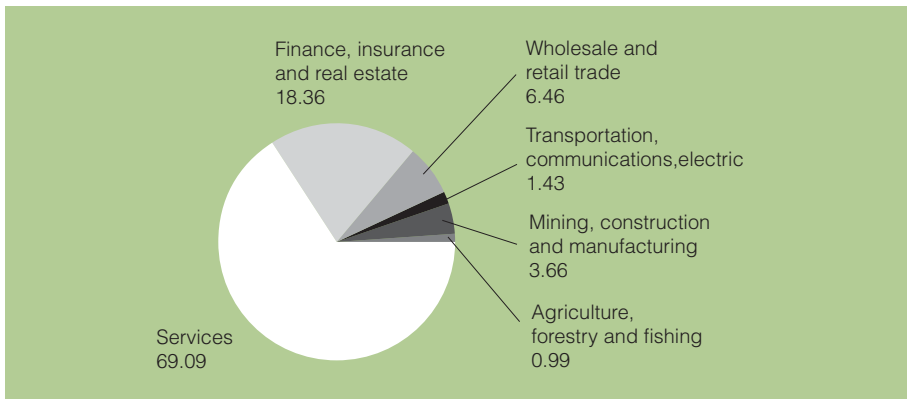


**Chart 2.10 Composition of the Number of Women-Operated Sole-Proprietorships in Ten Major Business Activities (1990–1998 average)**



Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of the Treasury, Internal Revenue Service

**Chart 2.11 Composition of Net Income of Women-Operated Sole Proprietorships, by Major Industry (1990–1998 average percent)**



Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of the Treasury, Internal Revenue Service

### *Women Sole Proprietors in the 10 Most Populous States*

Growth in the number of women-operated sole proprietorships varied widely from state to state, and from year to year within states over the 1990–1998 period.<sup>30</sup> A look at the 10 most populous states over the period indicates that the number of women-operated sole proprietorships increased at the highest average rate, 6.6 percent annually, in North Carolina. In Florida, the average rate of increase was 5.9 percent; in Ohio, 4.5 percent. Of the 10 states, California had the slowest average rate of increase, at 2.2 percent annually. Again, the national average growth rate in the number of women-operated sole proprietorships was 3.2 percent per year from 1990 to 1998.

More than a quarter of the women-operated proprietorships in these 10 states, 27.5 percent, were in California. Another 12.8 percent were in Texas, 12.0 percent in New York, and 10.2 percent in Florida. Women-operated sole proprietorships in California earned the most in average gross receipts at \$36,090, and net income at \$8,350, in 1998.

Nationally, there were 10.3 sole proprietorships per 100 adults in the population.<sup>31</sup> For women, the national average was 7.2 sole proprietorships per 100 adult women, with a range among the 10 most populous states from 8.8 in California to 5.3 in Pennsylvania. Nationally, the number of women who operated sole proprietorships was 55 percent of the number of men. Among the major states, the ratio ranged from 60 percent in California to 40 percent in Pennsylvania.

## Conclusion

Minorities and women continue to make inroads in the business world. Moreover, it appears that these businesses are becoming larger and more profitable with the rapid increase in their numbers. Further analysis is needed to understand more about the characteristics, profitability, and future support needed for these important sectors of the U.S. economy.

<sup>30</sup> The analysis was limited to 10 states because of concerns about the accuracy of sample-based estimates for less populous states.

<sup>31</sup> Population estimates are for July 1, 1998, for men and women at least 21 years of age (on the assumption that most sole proprietorships are operated by adults). The analysis was limited to 10 states because of concerns about the accuracy of sample-based estimates for less populous states. North Carolina was included based on adult population; Georgia had a higher total population on that date.

# 3 SMALL BUSINESS FINANCING

## Synopsis

In a period of weak recovery sustained by household spending and government budgetary deficits, overall spending by the business sector remained weak in 2002. Borrowing in the financial markets reflected this dichotomy: overall borrowing increased significantly, dominated by household and government borrowing, while business borrowing declined further from the level of 2001. As the Federal Reserve Board continued a policy of easy credit, short- and intermediate-term interest rates stabilized during most of 2002 and then declined further in November with an additional rate cut.

Net business borrowing, especially corporate borrowing, declined further in 2002. Net corporate borrowing declined to a meager annual rate of \$60 billion. Net borrowing by nonfarm, noncorporate businesses also declined, though at much lower rates than corporate borrowing. The collapse in the equity market continued for the third consecutive year, as indicated by continued substantial declines in initial public offerings (IPOs) by small companies, and in venture capital commitments and investments. Angel investment, a type of venture investing that has been less sensitive to the changes in the IPO markets, also declined by 50 percent.

## Economic and Credit Conditions in 2002

Although the recession of 2001, which ended in the third quarter, was relatively mild with respect to declines in gross domestic product (GDP), the pace of recovery was weaker than in previous recoveries. The economy continued to be supported by spending in the household sector (consumer spending as well as housing investment) and by deficit spending in the federal, state, and local governments. Business spending did not show much sign of recovery in 2002, and the fear of a potential double-dip recession re-emerged during the second half of the year, especially in the winter of 2002, when the prospect of a potential war against Iraq became real.

The recession of 2001 was led by the collapse of business spending, especially capital expenditures, caused by over-investment during the second half of the 1990s. While the decline in corporate profits ended and reversed after the last quarter of 2001, corporate profits remained at a very low level, and capacity utilization in the manufacturing sector remained low. Overall expenditures by business sectors remained weak. Borrowing in the financial markets reflected the dichotomy—heavy demand by the household and government sectors and very weak demand by the business sectors, especially nonfinancial corporations.

## Interest Rate Movements

While the Federal Reserve Board maintained a steady, but very easy monetary policy throughout most of 2002 after 10 rate cuts in 2001—a historic level—the Federal Reserve lowered the discount rate one more time in November 2002 to stave off potential deflation. Short- and intermediate-term interest rates stabilized throughout most of 2002 until the last two months of the year, when the rates moved downward after an additional rate cut. Most interest rates declined after November, falling below the lowest levels of 2001 by year's end. Corporate bond rates rose slightly during the first half of 2002 and declined steadily after, ending the year at 6.21 percent, down from 6.55 percent at the beginning of the year. A similar trend was observed in the prime rate, which stayed at 4.75 percent for most of the year and declined to 4.25 percent after the discount rate cut in November 2002.

Overall, interest rates paid by small firms moved, with a time lag, in line with overall interest rate movements in the capital and credit markets. The prime rate—the base rate for most small business loans—remained steady at 4.75 percent. Rates paid by small business owners showed little change during the first three quarters of 2002. Rates for small fixed-rate term loans (one year or longer in maturity) were at 7.75 percent to 7.90 percent during the first three quarters before declining to 7.34 percent in November (*Table 3.1*). Most rates for small variable-rate loans were around 5 to 6 percent, but showed no observable direction in their movement over the four quarters of 2002.

**Table 3.1 Loan Rates Charged by Banks by Loan Size, February 2001–November 2002 (percent)**

	Loan size (thousands of dollars)	Fixed-rate term loans	Variable-rate loans (2–30 days)	Variable-rate loans (31–365 days)
November 2002	1–99	7.34	5.14	7.11
	100–499	6.21	4.42	5.51
	500–999	5.99	3.93	4.91
	Minimum-risk loans	2.84	3.85	3.19
August 2002	1–99	7.75	5.05	7.32
	100–499	6.51	4.32	5.14
	500–999	5.92	3.69	3.88
	Minimum-risk loans	6.94	3.74	2.58
May 2002	1–99	7.75	5.06	7.09
	100–499	6.81	4.46	6.08
	500–999	6.39	3.69	5.13
	Minimum-risk loans	4.58	3.05	2.43
February 2002	1–99	7.91	5.26	7.28
	100–499	6.57	4.31	5.89
	500–999	6.41	3.73	4.45
	Minimum-risk loans	7.11	2.23	2.70
November 2001	1–99	7.97	5.53	7.59
	100–499	6.83	4.79	6.23
	500–999	6.30	4.29	4.56
	Minimum-risk loans	5.71	2.59	3.20
August 2001	1–99	8.73	7.15	8.60
	100–499	7.72	6.46	7.29
	500–999	6.63	6.81	6.06
	Minimum-risk loans	7.47	4.34	4.83
May 2001	1–99	9.12	7.91	8.87
	100–499	8.34	7.25	8.06
	500–999	7.40	6.55	6.24
	Minimum-risk loans	7.23	5.20	5.24
February 2001	1–99	9.84	9.10	9.89
	100–499	8.88	8.24	9.11
	500–999	8.08	7.51	7.75
	Minimum-risk loans	8.13	6.18	6.63

Note: Small loans refer to loans under \$100,000.

Source: Board of Governors of the Federal Reserve System, Survey of Terms of Lending, Statistical Release E.2, various issues, and special tabulations prepared by the Federal Reserve Board for the U.S. Small Business Administration, Office of Advocacy.

## Uses of Funds by Major Nonfinancial Sectors

Net borrowing in the financial markets by all nonfinancial sectors continued to increase significantly during 2002, up 23 percent from \$1.11 trillion in 2001 to \$1.38 trillion in 2002. The borrowing increases were in the household and government sectors, while business borrowing declined further from 2001 levels (*Table 3.2*).

### Borrowing by the Federal Government

Declines in tax revenues accompanied by continued increases in federal government spending contributed to budgetary deficits, which made the federal government a major borrower in the financial markets in 2002. The federal government was a net borrower in the second half of 2001 and all through the four quarters of 2002. Total net borrowing amounted to an annual rate of \$258 billion in 2002, compared with a negative \$5.6 billion in 2001. The weaker economy contributed to the decline in tax revenues, while government spending on homeland security and the military increased (*Table 3.2*).

### Borrowing by State and Local Governments

State and local government revenues continued to increase in 2002. Rising receipts were sustained by higher tax and fee revenues from rising housing prices and consumption-related spending. However, public expenditures by state and local governments increased faster than revenues, resulting in large budgetary deficits in 2002. With budgetary deficits up from \$31 billion to \$52 billion, borrowing by state and local governments increased significantly again, by 37 percent to \$145 billion from \$106 billion in 2001 (*Table 3.2*).<sup>1</sup>

### Borrowing by the Household Sector

Continued spending by the household sector enabled the U.S. economy to recover after a brief and shallow decline. Consumer spending remained robust, in spite of continued declines in household wealth and increases in unemployment in 2002.

<sup>1</sup> See Federal Reserve Bank of St. Louis, "Government Revenues, Spending, and Debt," in *National Economic Trends*, August 2003, 16.

**Table 3.2 Credit Market Borrowing by the Nonfinancial Sector, 1989–2002 (billions of dollars)**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total domestic borrowing	720.3	669.4	480.6	544.5	589.4	575.2	712.0	731.4	804.7	1,041.9	1,030.9	853.5	1,114.0	1,374.6
Government														
Federal	146.4	278.2	304.0	256.1	155.9	155.9	144.4	145.0	23.1	-52.6	-71.2	-295.9	-5.6	257.5
State and local	246.9	46.6	81.6	31.0	74.7	-46.2	-51.5	-6.8	56.1	67.7	38.5	15.5	105.8	145.3
Business														
Farm	0.6	1.0	2.1	1.3	2.6	4.4	2.9	4.8	6.2	8.0	5.5	10.9	7.5	7.9
Nonfarm noncorporate	69.6	1.1	-11.0	-16.0	3.2	3.3	30.6	81.4	94.7	159.7	182.4	184.1	156.8	132.0
Nonfinancial corporate	183.2	110	-53.0	42.7	45.5	142.3	243.7	148.8	291.1	408.4	377.2	380.1	235.3	60.1
Total	253.4	112.1	-61.9	28.0	51.3	150.0	277.2	235.0	392.0	576.1	565.1	575.1	399.6	200.0
Households	269.5	263.7	182.7	160.7	205.9	316.3	350.3	358.1	332.7	450.8	498.6	558.8	614.6	771.8
Foreign borrowing in the United States	10.2	23.9	14.8	23.7	69.8	-13.9	71.1	88.4	71.8	31.2	13.0	57.0	-49.7	6.0

Source: Board of Governors of the Federal Reserve System, *Flow of Funds Accounts, Second Quarter 2003: Flows and Outstandings* (September 2003)

Spending by American households was sustained by continued increases in borrowing through credit cards, new and existing home mortgages, and reduced interest payments from refinancing as interest rates reached historic lows.<sup>2</sup> By the end of 2002, net household borrowing reached another record high of \$772 billion, a 26 percent increase over the level of \$615 billion in 2001 (*Table 3.2*).

## Business Borrowing

Declines in business spending continued in spite of the improved economy and a recovery in corporate profits. Corporate profits improved every quarter in 2002, rising from an annual rate of \$287 billion during the first quarter to \$362 billion in the fourth. Nevertheless, after-tax corporate profits remained low, amounting to \$326.5 billion, about the same as in 2001.<sup>3</sup> Moreover, the weak recovery in profits came mainly as a result of cost cutting—improved efficiency in business operations and accelerated layoffs, rather than from increased sales (*Table 3.3*). More use of internal sources of funds, accompanied by continued reluctance to increase capital expenditures, sharply reduced U.S. business borrowing in 2002.

Net business borrowing, especially corporate borrowing, declined further in 2002. Net corporate borrowing declined to a meager annual rate of \$60 billion in 2002, from \$235 billion in 2001. Net corporate borrowing was at the lowest level since the recession of 1991–1992. The only borrowing corporations did in 2002 was to issue low-interest corporate bonds to replace short-term debt such as commercial paper and bank loans (*Tables 3.2. and 3.3*).

Net borrowing by nonfarm, noncorporate businesses also declined—though at much lower rates than that of corporations—from an annual rate of \$157 billion in 2001 to \$132 billion in 2002. Net business debt rose as a result of additional borrowing to finance new business start-ups and cash flow imbalances, and as a result of small business delays in paying off existing debts.

2 Data for mortgage rates before 1973 were not comparable with the recorded rates since 1973. Even at this, the new home mortgage rates in the winter of 2002 were close to the rates in 1963 when the rates were reported.

3 Quarterly corporate profits were at the recession's low points in the fourth quarter of 2001 and the first quarter of 2002.

**Table 3.3 Major Sources and Uses of Funds by Nonfarm, Nonfinancial Corporate Businesses, 1989–2002 (billions of dollars)**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Before-tax profit	236.5	236.5	217.1	256.7	307.4	391.9	437.7	458.8	494.5	460.1	458.9	436.0	326.9	326.5
Domestic undistributed profit	32.2	20.5	8.3	33.7	55.9	106.0	111.7	108.3	120.2	65.1	55.2	6.1	-73.1	-88.8
Depreciation with inventory valuation adjustment	349.3	354.3	364.3	373.7	384.4	418.6	430.7	504.2	548.2	570.6	613.9	633.1	720.9	817.5
Total internal funds, on book basis	384.8	377.9	372.6	407.3	440.3	524.5	542.4	612.5	659.9	635.7	669.1	639.2	647.8	728.7
Net increase in liability	347.4	183.5	67.1	161.3	217.9	241.6	390.8	398.5	283.5	616.0	987.6	1,237.4	185.7	206.7
Funds raised in credit markets	183.2	110.0	-55.1	42.7	45.5	134.1	218.6	148.8	291.9	408.4	377.2	380.1	235.3	60.1
Net new equity issues	-124.2	-63.0	18.3	27.0	21.3	-44.9	-58.3	-69.5	-114.4	-215.5	-110.4	-118.2	-47.4	-41.9
Capital expenditures	399.4	394.5	371.9	382.0	445.2	511.1	567.7	684.7	760.2	826.5	885.6	957.2	794.2	802.6
Net financial investment	-113.9	-68.3	62.7	-8.9	124.1	41.7	42.7	4.8	-11.1	-46.1	-17.7	-28.2	4.1	-26.5

Source: Board of Governors of the Federal Reserve System, *Flow of Funds Accounts, Second Quarter 2003: Flows and Outstandings* (September 2003)

The net income of the nonfarm, noncorporate sector increased by 2 percent, from \$763 billion to \$799 billion. Smaller declines in capital expenditures and stable internal sources of funds allowed this sector to limit demand for external financing during the weak recovery (*Tables 3.2 and 3.4*).

## Bank Loans to Small Businesses

A weak and uncertain recovery affected both the demand for and supply of business loans. Total commercial and industrial (C&I) loans outstanding made by domestically chartered commercial banks were down from \$836 billion in December 2001 to \$786 billion in December 2002, a decline of 6.4 percent. According to the Federal Reserve Board's Senior Loan Officer Survey, most banks also reported continued weakness in demand for C&I loans, despite less tightening in credit standards and terms.<sup>4</sup> Despite rising loan losses, the net operating income for all FDIC-insured banks continued to rise, from \$71.1 billion in 2001 to \$85.7 billion in 2002. Profitability at U.S. commercial banks was also at historic highs.<sup>5</sup> Income from rising interest margins and home-mortgage-related lending surpassed rising default-related losses (*Table 3.1*).

### Lending to Small Businesses by Commercial Banks

As expected, small business lending by banks showed only moderate increases. Small business loans outstanding in loan sizes under \$1 million grew 5.1 percent between June 2001 and June 2002, compared with an increase of 5.4 percent in the previous period. Both borrowers and lenders continued to hold off on new borrowing/lending in the face of an uncertain economy.

4 Although an increased number of responding banks reduced both the tightening of credit standards and loan rate spreads in 2002, most banks still reported weak demand for commercial and industrial loans. See the charts on "Measures of Supply and Demand for C & I Loans," in the Federal Reserve Board's "Senior Loan Officer Opinion Survey on Bank Lending Practices," various issues.

5 Return on assets (ROA) and return on equity (ROE) for U.S. commercial banks reached highs of 1.33 percent and 14.5 percent, respectively, in 2002. See "Profitability and Balance Sheet Developments at U.S. Commercial Banks in 2002," *Federal Reserve Bulletin*, June 2003, 243–259.

**Table 3.4 Major Sources and Uses of Funds by Nonfarm, Noncorporate Businesses, 1989–2002 (billions of dollars)**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Net income	407.0	434.9	464.1	441	473.9	495.3	534.2	569.7	609.9	656.5	709.6	746.7	762.5	799.1
Gross investment	77.0	80.6	67.5	82.9	84.4	64.7	56.4	110.8	118.5	125.0	132.5	141.0	148.0	154.1
Fixed capital expenditures	118.0	106.4	91.1	96.8	93.5	94.6	99.2	109.6	118.8	123.9	187.1	213.8	196.0	170.6
Changes in inventories	1.6	0.3	-0.1	0.1	1.3	2.5	1.9	1.1	3.0	3.6	3.1	3.3	-3.1	0.2
Net financial investments	-42.6	-26.1	-23.5	-14.1	-10.5	-32.5	-44.7	0	-3.3	-2.5	-57.7	-76.1	-44.9	-16.7
Net increase in credit market debt	61.1	13.8	-15.0	-16.4	3.2	3.3	23.9	81.4	94.7	159.7	182.4	184.1	156.8	132.0
Mortgages	56.1	4.1	-9.9	-15.1	-1.5	-13.8	-2.2	50.9	47.7	117.7	144.7	143.1	150.1	142.0
Net investment by proprietors	-28.1	20.3	18.5	28.6	26.9	61.8	51.9	-18.1	-55.1	-64.8	-67.2	-32.8	-31.8	-37.6

Source: Board of Governors of the Federal Reserve System, *Flow of Funds Accounts, Second Quarter 2003: Flows and Outstandings* (September 2003)

Small business loans outstanding (loans under \$1 million) amounted to \$484 billion in June 2002, an increase of \$24 billion over the June 2001 level (*Table 3.5*).<sup>6</sup> For the first time in years, total business loans declined over this period, with business loans outstanding down slightly—by 1.3 percent—from \$1.32 trillion to \$1.31 trillion. The decline came totally from loans to large corporations; the largest loans (over \$1 million) declined from \$864 billion to \$823 billion.<sup>7</sup>

One major exception to the slower growth in bank lending to small firms in 2002 was the rapid increase in the small business credit card market, as evidenced by the burgeoning number of small loans under \$100,000. While the dollar value of these smallest business loans grew a meager 1.7 percent, the number increased substantially—by 45 percent, from 10.8 million to 15.6 million loans from June 2001 to June 2002 (*Tables 3.5, 3.6, and 3.7*). The increase seemed to have come primarily from the promotion of small business credit cards (*Table 3.8*).

Of some 8,000 banks submitting call reports—Consolidated Reports of Condition and Income—in June 2002, 24 banks with significant small business credit card operations (“small business credit card banks”) had 10.8 million of the smallest loans, with these loans outstanding valued at \$16.1 billion (*Table 3.8*).<sup>8</sup> They accounted for 69 percent of the total number and 12.5 percent of the amount of the smallest loans outstanding from all banks in June 2002. The average loan outstanding for these banks was valued at about \$2,500, compared with an average of around \$20,000 at all other banks. The relatively small average size is another indication of the dominance of credit card lending in the loan portfolios of these banks, which included individual banks and members of large bank holding companies (BHCs) (*Table 3.8*).<sup>9</sup>

6 Net loans outstanding can increase, even with little increase in the volume of new loans, as long as annual flows of new loans exceed the amount of payoffs of existing loans.

7 As indicated in the previous section, continued declines in loans related to securities trading and in loans to facilitate corporate mergers and acquisitions, as well large corporate borrowers’ movement to the corporate bonds market accounted for the decline in bank loans.

8 More than 90 percent of these loans were made by six banks—7.7 million loans by Citibank USA, GE Capital, and American Express Centurion and another 1.9 million by Advanta Bank Corp, Bank One, and MBNA. See *Small Business and Micro Business Lending in the United States, 2002 Edition*, at [http://www.sba.gov/advo/stats/lending/2002/sbl\\_study.pdf](http://www.sba.gov/advo/stats/lending/2002/sbl_study.pdf), for the definition of “small business credit card banks.”

9 Most business credit card accounts had small balances relative to the line limits provided by the card issuers. The average line limits are \$10,000 to \$50,000, while average loan balances as of June 2002 ranged from less than \$1,000 to over \$6,000 for one bank that had a large share of regular small business loans in the smallest loan category in the call reports.

**Table 3.5 Dollar Amount and Number of Small Business Loans, 1999–2002**  
(dollars in billions, numbers in millions)

Loan size		1999	2000	2001	2002	Percent change 2001–2002
Under \$100,000	dollars	113.9	121.4	126.8	128.9	1.67
	number	7.73	9.80	10.79	15.65	45.0
Under \$250,000	dollars	195.0	209.4	218.4	225.0	3.03
	number	8.41	10.54	11.57	16.50	42.6
Under \$1 million	dollars	398.5	437.0	460.4	487.0	5.12
	number	9.00	11.17	12.25	17.24	40.8
Total business loans	dollars	1,142.3	1,300.3	1,324.5	1307.0	-1.33

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues, and *Small Business and Micro Business Lending in the United States, 2002 Edition*.

**Table 3.6 Change in the Dollar Amount of Business Loans by Loan Size, 1996–2002 (percent)**

Loan size	1996– 1997 <sup>1</sup>	1997– 1998 <sup>1</sup>	1998– 1999 <sup>2</sup>	1999– 2000	2000– 2001	2001– 2002
Under \$100,000	2.9	3.0	2.5	6.7	4.4	1.7
\$100,000–250,000	5.2	8.1	6.3	8.5	4.1	4.9
\$250,000–\$1 million	5.7	7.7	11.2	11.8	6.4	7.0
More than \$1 million	11.5	13.0	14.6	16.1	0.9	-4.8

<sup>1</sup> Changes for 1996–1997, and 1997–1998 were estimated based on revised estimates for Keycorp in 1997.

<sup>2</sup> So that 1998–1999 trends could be shown, 1998 figures were revised to exclude the credit card operation of Mountain West Financial, which was purchased by a nonbank financial intermediary and thus excluded from 1999 data.

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues, and *Small Business and Micro Business Lending in the United States, 2002 Edition*.

**Table 3.7 Change in the Number of Small Business Loans by Loan Size, 1996–2002 (percent)**

Loan size	1996– 1997 <sup>1</sup>	1997– 1998 <sup>1</sup>	1998– 1999 <sup>2</sup>	1999– 2000	2000– 2001	2001– 2002
Under \$100,000	26.6	19.3	10.1	26.9	10.1	45.0
\$100,000–250,000	8.6	1.8	5.4	7.0	5.9	8.8
\$250,000–\$1 million	8.0	1.4	7.6	8.4	7.0	9.8

<sup>1</sup> Changes for 1996–1997, and 1997–1998 were estimated based on revised estimates for Keycorp in 1997.

<sup>2</sup> So that 1998–1999 trends could be shown, 1998 figures were revised to exclude the credit card operation of Mountain West Financial, which was purchased by a nonbank financial intermediary and thus excluded from 1999 data.

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues, and *Small Business and Micro Business Lending in the United States, 2002 Edition*.

**Table 3.8 Number and Amount of Small Business Loans from All Banks and Small Business Credit Card Banks, June 2001 to June 2002**

	2001	2002	Percent of all banks (2002)
<b>All banks</b>			
Number of reporting banks	8,158	7,949	
Total assets (billions of dollars)	5,548	5,912	100.0
Loans under \$100,000			
amount (billions of dollars)	126.8	128.9	100.0
number (millions)	10.79	15.65	100.0
<b>All credit card banks</b>			
Number of reporting banks	21	24	
Total assets (billions of dollars)	139.7	360.8	6.1
Loans under \$100,000			
amount (billions of dollars)	10.7	16.09	12.5
number (millions)	5.86	10.81	69.0
<b>All banks minus credit card banks</b>			
Number of reporting banks	8,137	7,925	
Total assets (billions of dollars)	5,409	5,551	93.9
Loans under \$100,000			
amount (billions of dollars)	116.1	112.8	87.5
number (millions)	4.94	4.84	31.0

Note: More than 90 percent of these loans were made by six banks—7.7 million loans by Citibank, USA, GE Capital, and American Express Centurion and another 1.9 million loans made by Advanta Bank Corp, Bank One, and MBNA. See *Small Business and Micro Business Lending...*, at [http://www.sba.gov/advo/stats/lending/2002/sbL\\_study.pdf](http://www.sba.gov/advo/stats/lending/2002/sbL_study.pdf), for the definition of “small business credit card banks.”

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues, and *Small Business and Micro Business Lending in the United States, 2002 Edition*.

Bank consolidations continued to affect the relative importance of banks of different sizes in the small business loan market. The number of commercial banks filing call reports continued to decline—by 301 between June 2000 and June 2001. The decline was primarily in the smallest banks with assets of less than \$100 million (*Table 3.9 and Chart 3.1*).<sup>10</sup> While the number of very small banks continued

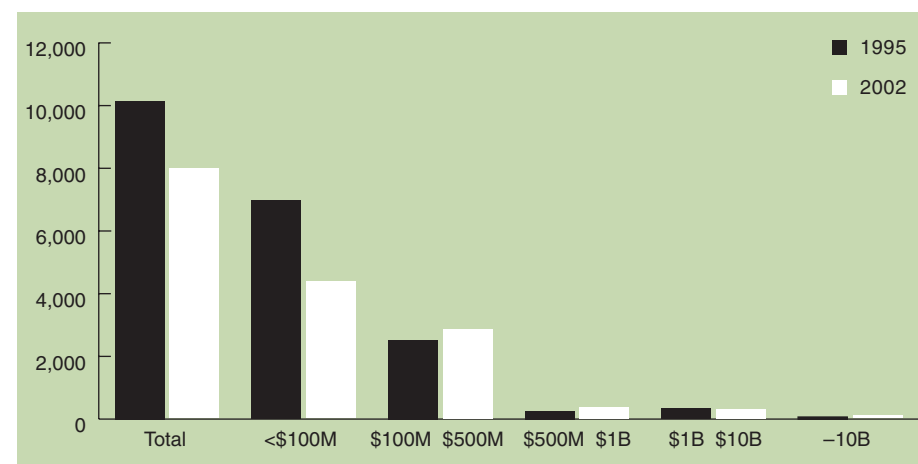
10 Changes in the number of reporting banks could also be caused by the financial reporting consolidation of several BHCs. While the number of banks declined, the number of banking offices, including offices and branches, continued to increase. See Federal Deposit Insurance Corporation, “Banking Statistics,” on the website at [www.fdic.gov/bank/statical/stats/index.html](http://www.fdic.gov/bank/statical/stats/index.html)

**Table 3.9 Number of Reporting Banks by Asset Size, 1995–2002**

Bank Asset Size	1995	1996	1997	1998	1999	2000	2001	2002
Less than \$100 million	6,980	6,465	6,047	5,644	5,302	5,034	4,674	4,369
\$100 million to \$500 million	2,521	2,548	2,590	2,656	2,683	2,751	2,777	2,839
\$500 million to \$1 billion	256	260	292	303	290	302	320	353
\$1 billion to \$10 billion	326	326	300	302	309	293	306	311
More than \$10 billion	66	71	64	61	75	79	76	77
Total	10,149	9,670	9,293	8,966	8,659	8,459	8,158	7,949

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues, and *Small Business and Micro Business Lending in the United States, 2002 Edition*.

**Chart 3.1 Number of Reporting Banks by Bank Asset Size, 1995 and 2002**



Note: Changes in the number of reporting banks may be caused by the financial reporting consolidation of bank holding companies.

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues.

to fall, most of the disappearing small banks either grew into the next size category, merged, or were acquired by larger banks. The number of banks in most other size categories either increased or remained the same from 1995 to 2002. As the banking industry is becoming more concentrated, it is important to examine the performance of large multi-billion-dollar BHCs in the small business loan markets.



As expected, most multi-billion-dollar BHCs have become national lenders in the small business loan markets, extending small business loans throughout most of the United States.<sup>11</sup> Of a total of \$484 billion in small business loans outstanding from all banks in June 2002, \$218 billion was from the 58 major BHCs. As a group, these BHCs accounted for 45.0 percent of small business loans under \$1 million and 70.9 percent of total domestic bank assets in the United States. These large BHCs increased their presence in the small business loan market slightly in 2001–2002, while showing a slight increase in their share of total assets and a decline in total business loans (*Tables 3.10 and 3.11 and Chart 3.2*).<sup>12</sup>

Most of the increase came from the smallest loans: these loan amounts increased from 38.9 percent to 42.9 percent of all banks' lending in this size category, while the number increased significantly, from 38.6 percent to 46.4 percent. The shares of loans between \$100,000 and \$250,000 and between \$250,000 and \$1 million declined slightly from 44.0 percent to 43.6 percent and 48.1 percent to 46.1 percent respectively (*Tables 3.10 and 3.12*). Again, increased lending in the smallest loan sizes was most likely the result of the promotion of business credit card programs by large BHCs, which also acquired credit card operations from other financial institutions.

## Lending by Finance Companies

Business receivables by finance companies stopped declining and showed a small increase in 2002. Total business receivables outstanding rose 1.9 percent to \$455 billion, slightly lower than the high level reached in 2000. Information on the allocation of business loan receivables by loan size (or to small business borrowers) is not available for finance companies, so little can be said about the changing share of finance companies' lending to small businesses relative to lending to large businesses (*Table 3.13*).

**Table 3.10 Large Bank Holding Companies' Amount and Share of Total Assets, Loans, and Business Lending, June 2000 through June 2002 (dollars in billions, numbers in millions)\***

Loan Sizes	2000		2001		2002	
	Value	Percent of all banks	Value	Percent of all banks	Value	Percent of all banks
Number of multi-billion-dollar BHCs	59		56		58	
<b>Loans under \$100,000</b>						
Amount (billions of dollars)	43.7	36.0	49.4	38.9	55.3	42.9
Number (millions)	3.5	35.6	4.2	38.6	7.3	46.4
<b>Loans of \$100,000 to &lt;\$250,000</b>						
Amount (billions of dollars)	38.4	43.6	40.3	44.0	41.9	43.6
Number (millions)	0.327	44.5	0.341	43.9	0.395	46.6
<b>Loans of \$250,000 to &lt;\$1 million</b>						
Amount (billions of dollars)	110.0	48.3	116.5	48.1	120.5	46.5
Number (millions)	0.305	48.3	0.323	47.6	0.367	49.3
<b>Total small business loans under \$1 million</b>						
Amount (billions of dollars)	192.1	44.0	206.2	44.5	217.7	45.0
Number (millions)	4.0	36.9	4.8	39.5	8.03	46.5
<b>Large business loans over \$1 million</b>						
Amount (billions of dollars)	718.5	83.2	706.2	81.7	646.2	78.5
Total business loans (billions of dollars)	910.6	70.0	912.2	68.9	863.8	66.1
Total assets (billions of dollars)	3,713	71.0	3,903	70.3	4,189	70.9

\*These numbers are not strictly comparable to the numbers in last year's study, as the total and changes are for the currently existing 59 BHCs. With all the mergers and acquisitions, it is not always clear whether all the components of the BHCs have been correctly accounted for.

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues, and *Small Business and Micro Business Lending in the United States*, 2002 Edition.

11 For a detailed discussion of major BHCs' participation in small business loan markets across the states, see U.S. Small Business Administrator, Office of Advocacy, *Small Business and Micro Business Lending in the United States, 2002 edition* The study analyzed the CRA database for location-specific lending by major banks.

12 It is difficult to examine the change in lending activity over time for the group because of its changing composition—caused by the mergers and acquisitions of these BHCs.

**Table 3.11 Changes in Shares of Small and Large Business Loans, and Total Assets by Bank Size, 1996–2002 (percent)**

	Small business loan dollars			Large business loan dollars (over \$1 million)	Total business loan dollars	Total assets
	<\$100,000	\$100,000–\$250,000	\$250,000–\$1 million			
<b>Banks with assets under \$100 million</b>						
2002	14.5	8.3	6.4	0.5	3.6	3.7
2001	16.3	13.0	9.6	0.4	3.6	4.1
2000	19.3	9.0	10.4	0.4	3.8	4.6
1999	20.5	9.5	11.2	0.5	4.2	5.2
1998	22.8	9.8	12.3	0.5	4.8	5.9
1997	24.5	10.8	13.3	0.5	5.5	6.9
1996	27.0	12.3	14.8	0.5	6.2	7.7
<b>Banks with assets of \$100 million to \$500 million</b>						
2002	24.3	26.3	24.0	5.7	12.7	10.0
2001	26.1	26.3	25.0	4.7	11.7	10.3
2000	28.9	27.5	26.2	4.2	11.5	10.8
1999	28.9	27.1	26.0	4.2	11.8	11.3
1998	29.5	27.5	26.4	4.2	12.2	11.8
1997	29.4	27.6	26.6	4.7	13.1	12.9
1996	30.0	27.9	27.0	4.8	13.5	13.3
<b>Banks with assets of \$500 million–\$1 billion</b>						
2002	6.7	9.1	9.2	3.9	5.6	4.0
2001	6.7	7.4	7.9	4.7	4.8	3.9
2000	6.2	8.0	7.6	2.9	4.5	4.1
1999	6.0	8.0	7.6	2.8	4.4	4.2
1998	6.9	8.8	8.1	3.2	5.0	4.7
1997	7.0	8.5	8.1	3.1	5.0	5.0
1996	6.3	7.7	7.3	2.9	4.6	4.7
<b>Banks with assets of \$1 billion–\$10 billion</b>						
2002	16.5	18.6	19.9	16.2	17.2	15.0
2001	15.1	16.9	18.9	16.0	17.0	15.7
2000	15.6	19.6	19.0	14.7	16.2	16.4
1999	15.0	20.9	20.1	16.4	17.7	18.0
1998	16.8	22.5	21.9	19.2	20.1	20.9
1997	15.9	22.8	22.0	22.5	22.9	22.6
1996	19.2	27.3	25.9	26.4	26.7	26.4

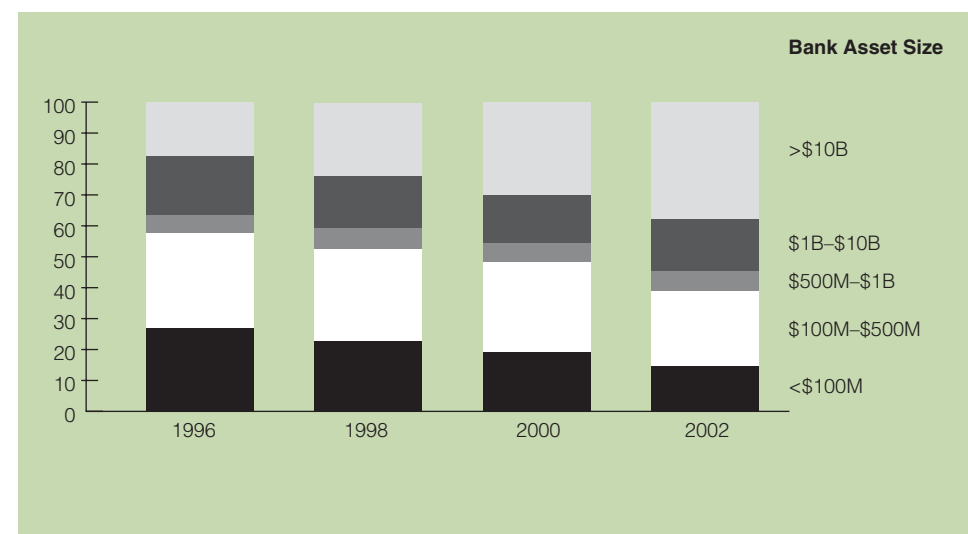
(continued, next page)

**Table 3.11 (Continued)**

	Small business loan dollars			Large business loan dollars (over \$1 million)	Total business loan dollars	Total assets
	<\$100,000	\$100,000–\$250,000	\$250,000–\$1 million			
<b>Banks with assets over \$10 billion</b>						
2002	38.1	37.7	40.6	73.6	60.7	67.2
2001	35.8	36.4	38.7	75.8	62.9	66.0
2000	30.0	35.9	36.7	77.8	64.0	64.0
1999	29.6	34.4	35.1	76.2	61.9	61.3
1998	23.8	31.3	31.3	73.0	57.8	56.7
1997	23.2	30.3	30.1	68.8	53.9	52.7
1996	17.6	24.8	25.0	65.1	49.4	48.0

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues. Prepared for the Office of Advocacy by James Kolari, A&M University, College Station, Texas.

**Chart 3.2 Changes in the Share of the Amount of Small Business Loans Under \$100,000 by Bank Size, 1996–2002**



Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various issues.

**Table 3.12 Small Business Loans Outstanding by U.S. Commercial Banks, June 1999–June 2002**

	Small business loans of \$100,000–\$250,000			Small business loans of \$100,000–\$1 million		
	Total value (millions of dollars)	Change (millions of dollars)	Percent change	Total value (millions of dollars)	Change (millions of dollars)	Percent change
June 30, 2002	96,124.6	4,504.6	4.90	355,101.0	21,455.0	6.40
June 30, 2001	91,620.0	3,620.7	4.10	333,646.0	18,101.1	5.70
June 30, 2000	87,999.3	6,876.2	8.50	315,544.9	20,945.3	10.90
June 30, 1999	81,123.1			284,599.6		

Source: Call reports submitted by banks to federal financial institution regulatory agencies.

## Equity Borrowing in the Public Issue Markets

The U.S. stock markets continued to decline in 2002 for the third consecutive year. As a result, activities in the IPO market for smaller issuers almost disappeared. Total IPO offerings declined from \$37.9 billion in 2001 to \$25.8 billion in 2002—a 60 percent decline from the peak of \$62.9 billion in 1999. Offerings by small issuers suffered even larger declines. Offerings by issuers with assets of \$25 million or less fell from \$463 million in 2001 to \$138 million in 2002, compared with \$9.15 billion in the peak year of 1999. Offerings by small issuers with assets of \$10 million or less completely disappeared—with only one IPO for \$6 million in 2002 (*Table 3.14*). IPO offerings by venture-backed companies showed declines similar to those in the overall IPO market. The number of venture-backed IPOs declined from 41 in 2001 to 24 in 2002, while the amount decreased from \$3.5 billion in 2001 to \$2.47 billion in 2002. The average size of venture-backed IPOs increased further, to more than \$100 million in 2002.<sup>13</sup>

13 National Venture Capital Association, “Venture-backed IPO market shows sign of life in 3rd quarter 2003,” press release.

**Table 3.13 Business Loans Outstanding from Finance Companies, December 31, 1980–December 31, 2002**

	Total receivables outstanding		Annual change in chain-type* price index for GDP (percent)
	Billions of dollars	Change	
December 31, 2002	455.3	1.9	NA
December 31, 2001	447.0	-2.5	NA
December 31, 2000	458.4	16.3	NA
December 31, 1999	405.2	16.6	NA
December 31, 1998	347.5	9.1	NA
December 31, 1997	318.5	2.9	NA
December 31, 1996	309.5	2.6	1.8
December 31, 1995	301.6	9.7	2.4
December 31, 1994	274.9	-6.7	2.5
December 31, 1993	294.6	-2.3	2.3
December 31, 1992	301.3	1.9	2.5
December 31, 1991	295.8	0.9	2.6
December 31, 1990	293.6	14.6	3.4
December 31, 1989	256.0	9.1	4.6
December 31, 1988	234.6	13.9	3.9
December 31, 1987	206.0	19.7	4.0
December 31, 1986	172.1	9.3	3.2
December 31, 1985	157.5	14.3	2.5
December 31, 1984	137.8	21.9	3.5
December 31, 1983	113.4	12.9	3.8
December 31, 1982	100.4	0	5.3
December 31, 1981	100.3	11.1	8.5
December 31, 1980	90.3		

NA = Not available

\*Changes from the fourth quarter of the year before.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, Table 1.52 (or 1.51), various issues; U.S. Department of Commerce, Bureau of Economic Analysis, *Business Conditions Digest*, various issues, and idem., *Survey of Current Business*, various issues.

**Table 3.14 Common Stock Initial Public Offerings, 1995–2002**

	Common stock		
	Number	Amount (millions of dollars)	Average size (millions of dollars)
<b>Offerings by all issuers</b>			
2002	86	25,780.1	299.8
2001	96	37,941.5	395.2
2000	383	60,508.4	158.0
1999	511	62,857.1	123.0
1998	365	38,071.6	104.3
1997	615	44,854.8	72.9
1996	850	52,190.3	61.4
1995	570	32,786.1	57.5
<b>Offerings by issuers with assets of \$25 million or less</b>			
2002	5	138.0	27.6
2001	11	462.9	42.1
2000	49	2,464.3	50.3
1999	168	9,151.4	54.5
1998	120	3,540.6	29.5
1997	248	5,869.9	23.7
1996	422	10,642.0	25.2
1995	248	5,603.1	22.6
<b>Offerings by issuers with assets of \$10 million or less</b>			
2002	1	6.0	6.0
2001	4	341.2	85.3
2000	22	728.6	33.1
1999	76	3,517.2	46.3
1998	63	1,575.2	25.0
1997	137	2,586.6	18.9
1996	268	5,474.4	20.4
1995	159	2,545.2	16.0

Note: Registered offerings data from the Securities and Exchange Commission are no longer available.

Source: Special tabulations prepared for the U.S. Small Business Administration, Office of Advocacy, by Thomson Financial Securities Data, September 2003.

## Venture Capital Funds

The collapse in the venture capital market mirrored that in the IPO market over the 2001–2002 period. Funds raised by venture capital firms declined to \$8.6 billion from \$37.8 billion in 2001, as compared with the peak-year amount of more than \$100 billion in 2000. The proportion of venture funding going to first-round investments declined further, from an average of around 30 percent of total financing over the 1998–2000 period to a low of 20 percent in 2001 and 2002 (*Table 3.15*). There were also indications that the venture capital industry had deserted the early-stage ventures, preferring later-stage ventures.<sup>14</sup> There is little doubt that there was much soul-searching in the venture capital industry over the 2001–2002 period. Some funds were returning investment capital to investors while other funds cut their management fees to keep the investors.<sup>15</sup> Total capital under management was at \$253 billion at the end of 2002, slightly less than the high reached in the previous year (*Table 3.15*). Commitments by all private limited partners declined in proportion to declines in the total amount, with little change in relative shares of participation by major investor groups (*Table 3.16*).

Disbursements to small businesses by small business investment companies (SBICs) also decreased—in the amount, from \$4.46 billion in FY 2001 to \$2.66 billion in FY 2002 and to a lesser extent in the number, from 4,277 to 4,004 (*Table 3.17*). Investment by specialized SBICs (301d companies or SSBICs) declined further to become very insignificant, with an amount of less than \$40 million in 2002.<sup>16</sup>

14 See Figure 3.09, National Venture Capital Association, *2003 National Venture Capital Association Yearbook*, July 2003, 30.

15 The convention is for the fund manager(s) to charge fees for the amount of capital committed, not the amount actually invested. With most funds retrenching from committing money to new ventures, most of the committed funds were not called during the past two years.

16 Data for specialized small business investment companies are available only for total disbursements to small businesses for time periods ending in the month of March of any given year.

**Table 3.15 New Commitments, Disbursements, and Total Capital Pool of the Venture Capital Industry, 1982–2002 (billions of dollars)**

	Commitments	Disbursements	Initial round	Follow-on	Capital under management
2002	7.7	21.2	4.33	16.89	253.2
2001	37.9	41.0	7.40	33.63	254.3
2000	105.8	106.3	29.11	77.18	227.2
1999	62.8	54.9	16.14	38.79	145.9
1998	29.7	21.5	7.24	14.22	91.4
1997	19.0	15.1	4.89	10.25	63.2
1996	12.2	11.6	4.33	7.26	49.3
1995	10.0	7.7	3.58	4.10	40.7
1994	7.8	4.2	1.73	2.47	36.1
1993	3.8	3.9	1.43	2.41	32.2
1992	5.1	3.6	1.27	2.11	30.2
1991	1.9	2.2	0.56	1.67	29.3
1990	3.3	2.8	0.84	1.97	31.4
1989	5.4	3.3	0.98	2.32	30.4
1988	4.4	3.3	1.03	2.23	27.0
1987	4.8	4.5	0.94	2.23	24.6
1986	3.7	4.1	0.89	2.09	20.3
1985	3.1	3.4	0.71	2.01	17.2
1984	3.2	3.3	0.86	2.09	13.9
1983	4.2	3.1	0.90	1.97	10.6
1982	2.0	1.8	0.59	1.00	6.7

Source: *Venture Capital Journal* (various issues) and *National Venture Capital Association Yearbook 2003*. Prepared by Venture Economics.

In a financial market collapse, noninstitutional investors and lenders usually take on a larger role in the financing of small businesses, providing a buffer to large declines in other funding. There were indications that angel investors, informal individual investors in early stage ventures, provided the only hope of equity financing for many new ventures over the two-year period. Angel investing has been less linked to activities in the public stock and IPO markets. Many successful entrepreneurs who sold their businesses remained in the markets looking for additional businesses to own and/or run. Unfortunately, little information is available about angel investment in the United States. A recent study by Professor Jeff Sohl of the University of New

**Table 3.16 Sources of Capital Committed to Independent Venture Funds, 1989–2002 (percent except as noted)**

	Total (billions of dollars)	Sources					Total
		Corporations	Endowments/ foundations	Individuals/ families	Financial institutions	Pension funds	
2002	7.67	2.35	20.86	9.13	25.42	42.24	100.0
2001	37.94	2.61	21.80	9.41	24.49	41.70	100.0
2000	105.80	3.70	21.10	11.80	23.30	40.10	100.0
1999	62.77	14.19	17.21	9.61	15.50	43.49	100.0
1998	29.68	11.86	6.30	11.32	10.34	60.14	100.0
1997	17.60	25.23	16.59	12.44	6.25	39.43	100.0
1996	12.42	19.89	11.92	6.84	3.06	58.37	100.0
1995	9.93	4.63	20.24	16.72	19.94	38.37	100.0
1994	7.81	9.35	21.90	12.16	9.73	46.85	100.0
1993	3.78	8.20	11.90	7.41	11.64	60.85	100.0
1992	5.11	3.72	21.33	12.13	17.42	45.79	100.0
1991	1.87	4.81	27.27	13.37	5.88	48.13	100.0
1990	3.25	7.38	14.15	12.62	9.85	56.31	100.0
1989	5.44	23.35	13.97	6.80	14.89	41.18	100.0

Source: *Venture Capital Journal* (various issues) and *National Venture Capital Association Yearbook 2003*. Prepared by Venture Economics.

**Table 3.17 Disbursements to Small Businesses by Small Business Investment Companies, Initial and Follow-on Financing, Fiscal Year 1992–Fiscal Year 2002 (amounts in millions of dollars)**

Fiscal Year	Initial financing		Follow-on financing		Total	
	Number	Amount	Number	Amount	Number	Amount
2002	1,060	1,274	2,944	1,386	4,004	2,660
2001	1,477	2,497	2,800	1,958	4,277	4,455
2000	2,251	3,860	2,388	1,606	4,639	5,466
1999	1,379	2,926	1,717	1,295	3,096	4,221
1998	1,721	2,037	1,725	1,202	3,446	3,239
1997	1,360	1,658	1,371	711	2,731	2,369
1996	1,081	1,022	1,026	594	2,107	1,616
1995	1,322	725	899	524	2,221	1,249
1994	1,241	517	1,107	484	2,348	1,001
1993	1,086	443	906	364	1,992	807
1992	1,056	322	943	222	1,999	544

Source: U.S. Small Business Administration, Investment Division.

Hampshire estimated that “the angel investor market has declined in 2002 with total investment of \$15.7 billion, down from the previous year of \$30 billion. A total of 36,000 entrepreneurial ventures received angel funding in 2002. The number of entrepreneurial start-ups receiving angel funding declined by 25 percent.”<sup>17</sup>

## Conclusion

While overall borrowing in the financial markets continued to show significant increases in 2002 as a result of borrowing in the household and government sectors, business borrowing declined further from the levels of 2001. Interest rates paid by small businesses remained low, although not as low as interest rates in the capital markets, as the Federal Reserve Board continued an easy-credit policy.

Net business borrowing, especially corporate borrowing, declined further in 2002. Net corporate borrowing declined to a meager annual rate of \$60 billion, while net borrowing by nonfarm, noncorporate businesses declined at much lower rates. Loans to small businesses by commercial banks showed similar changes. The only exception was the promotion of small business credit cards by major banks; the number of the smallest loans, many representing credit card issuances, jumped almost 50 percent from June 2001 to June 2002.

The collapse in equity markets continued for a third consecutive year, indicated by continued substantial declines in small company IPOs, and venture capital commitments and investments. Angel investments, venture investing that has been less sensitive to the IPO market, also declined by 50 percent.

# 4 PROCUREMENT

## Synopsis

Small businesses won \$54.1 billion in direct federal contracts in FY 2002, and \$34.4 billion in subcontracts, for a total of \$88.4 billion. Total dollars in direct contracts and subcontracts were down slightly from the previous fiscal year, 2001, in which small businesses won \$89.4 billion, \$53.9 billion in direct contracts and \$35.5 billion in subcontract dollars.

The \$54.1 billion in direct contract dollars was up slightly from the \$53.9 billion in the previous year but the percentage of awards to small businesses decreased from 22.2 percent in FY 2001 to 20.9 percent in FY 2002. Both years however, represented about a 20 percent increase in dollars from FY 2000.

Small businesses are winning larger contracts. The small business share of federal prime contracts over \$25,000 has been increasing gradually nearly every year since FY 1987, when it was 14.9 percent. However, in FY 2002 the percentage decreased slightly to 19.3 percent from the FY 2001 level of 20.9 percent. The small business share of smaller contracts under \$25,000 declined, on the other hand, from about 51 percent, where it hovered in the FY 1989–FY 1995 period, to 36.9 percent in FY 2002, its lowest level since the \$25,000 threshold was instituted in FY 1984. In FY 2002, its share of the smaller contracts increased again to 47.2 percent.

Part of the explanation for the decline may be the unintended effects of procurement reform on the small business procurement marketplace.

## Introduction

Why did Congress in 1953 emphasize the importance of small business in federal procurement? The reason is that small businesses are a vital part of our economy, representing more than 99.7 percent of all employers, employing more than half of all private sector workers, creating 60 to 80 percent of the net

17 Center for Venture Research, University of New Hampshire, “The Angel Investor Market in 2002: Investment Activity and Growth Prospects.” See <http://www.unh.edu/cvr/>

new jobs, and generating half of the private gross domestic product.<sup>1</sup> They also invent and develop technological advances that are the linchpin of America's industrial defense.

Research by the Office of Advocacy shows that small patenting firms are roughly 13 times more innovative per employee than larger firms.<sup>2</sup> And small firms have a major technological impact in industries such as biotechnology, computers and peripherals, semi-conductors, and telecommunications.

Upon entering office, President Bush determined that much progress had been made in the fulfillment of the policy of the 1953 Small Business Act; however, small businesses were still encountering barriers to the \$200 billion federal acquisition marketplace. On March 19, 2002, as part of his small business agenda, he announced support for full and open competition in government contracting. To do this he told his administration to:

- Ensure that government contracts are open to all small businesses that can supply the government's needs,
- Avoid unnecessary contract bundling, and
- Streamline the appeals process for small businesses that contract with the federal government.

## Effects of Federal Acquisition Reform on the Small Business Marketplace

Changes in the federal procurement marketplace in effect since the mid-1990s have had unprecedented effects on small business. The Federal Acquisition Reform Act of 1996 (FARA), among other things, authorized the Office of Management and Budget to designate executive agents for government-wide acquisitions of information technology (GWACs). In addition, FARA authorized the use of multi-agency contracts for acquisition of information technology. Many of these acquisition

vehicles either excluded small businesses, or where small businesses were included in the acquisition methods they were nevertheless seldom awarded task order contracts. The U.S. Department of Commerce attempted to respond to this with its own vehicle limited to small businesses, the COMMITTS information technology acquisition vehicle, which was the first of its kind offered by a federal agency.

The Federal Acquisition Streamlining Act of 1994 (FASA) allowed for direct micro-purchases of items costing less than \$2,500 without competitive quotations and included an exemption from the small purchase set-aside requirement. More than half of the government's purchase actions are for less than \$25,000, and most of those are under \$2,500 (the micro-purchase level). FASA also authorized agencies to permit people other than the contracting officer to make micro-purchases; this is done without the full reporting and accountability procedures outlined in the FAR for regular acquisitions. These changes encouraged more use of the purchase card. Agencies increased their credit card purchases from about \$5 billion in FY 1997 to more than \$14 billion in FY 2002. Over the same period, the number of credit card actions more than doubled from 11 million to over 25 million. A research study sponsored by the Office of Advocacy indicates that agencies have not been collecting data on the number of small businesses awarded contracts through credit card purchases. There are concerns that while small businesses have historically been the beneficiary of small purchase orders, procurement reform may have changed this.

Acquisition reform has also had mixed results for various subgroups within the broad category of small business. For example, women-owned businesses have a 5 percent government-wide procurement goal for federal prime and subcontracts, established by FASA in Public Law 103-355. Federal agencies have never achieved the 5 percent goal, and achievements have fluctuated from year to year. In FY 2002, women were awarded 2.7 percent of all prime contracts, or \$7.1 billion, down from 3.0 percent or \$7.2 billion in FY 2001. The FY 2002 share for minority-owned firms moved down to 6.0 percent from a FY 2001 level of 6.2 percent, but actual dollars increased from \$15.0 billion in FY 2001 to \$15.8 billion in FY 2002. Service-disabled veterans have also had mixed experience in obtaining federal contracts since their 3 percent goal was established in 1999 by Public Law 106-50. FY 2001 was the first year federal agencies were required to report goal achievements for these veteran-owned firms. In FY 2001 these firms were awarded 0.25 percent of the total federal procurement budget and in FY 2002 they received 0.23 percent. Small businesses in Hubzones experienced a slight increase in FY 2002 with 0.71 percent or \$1.6 billion in contracts, slightly more than the FY 2001 level of \$1.5 billion (0.72 percent).

1 For more detail, see Frequently Asked Questions at <http://app1.sba.gov/faqs/faqindex.cfm?areaID=2>

2 See *Small Serial Innovators: the Small Firm Contribution to Technical Change*, prepared for the U.S. Small Business Administration, Office of Advocacy, by CHI Research, Inc., (Springfield, Va: National Technical Information Service, 2003), released Feb. 27, 2003, available at <http://www.sba.gov/advocacy/research/rs225tot.pdf>.

## The Federal Procurement Marketplace, FY 2001–FY 2002

In FY 2002, the federal government awarded \$259.1 billion in contracts for the purchase of goods, up from \$242.6 billion in FY 2001 (*Table 4.1*).<sup>3</sup> Small businesses were awarded \$54.1 billion in direct prime contracts, up from \$53.9 billion in FY 2001. However, the percentage of contract dollars awarded to small businesses decreased slightly from 22.2 percent in FY 2001 to 20.9 percent in FY 2002.

Small businesses are also federal subcontractors. In FY 2002, they were awarded \$34.4 billion in subcontracts. Adding the prime contract and subcontract amounts results in a contracting total for small businesses in FY 2002 of \$88.4 billion, a decrease of about \$1 billion from the previous year's \$89.4 billion total.

The prime and subcontracting dollar totals represent a variety of goods and services provided by small businesses, including research and development, educational and training courses, paint, toiletries, military weapons, housing and hardware. These goods and services support federal civilian and military personnel around the world.

### Size of Federal Contract Actions

Contract actions over \$25,000 are considered large transactions. In FY 2002, more than 94 percent (\$244.6 billion) of federal procurement dollars were awarded in contract actions over \$25,000. Although small firms' share of these contracts decreased from 20.9 percent in FY 2001 to 19.3 percent in FY 2002, over the long view, they have won a gradually increasing share of these larger transactions (*Table 4.2*). Since FY 1995, the small firm percentage has ranged between 18 and 21 percent, and the FY 2001 level was the highest ever.

In contrast, although small firms have historically been more successful in competing for the smaller awards of less than \$25,000, their share of these

<sup>3</sup> Figures in this report may differ from some figures reported elsewhere. For example, the U.S. Small Business Administration's Office of Government Contracting excludes certain categories of contract awards from the base or denominator of percentages awarded to small businesses because SBA officials believe that small businesses do not have a reasonable opportunity to compete for them. These exclusions are not included in the data presented here, which is prepared by Eagle Eye Publishers from Federal Procurement Data Center information.

**Table 4.1 Total Federal Prime Contract Actions, FY 2001 and FY 2002**

	Thousands of dollars		Small business share (percent)
	Total	Small business	
<b>Total, FY 2002</b>	<b>259,084,850</b>	<b>54,080,122</b>	<b>20.9</b>
Actions under \$25,000	14,506,369	6,854,072	47.2
Actions over \$25,000*	244,578,481	47,226,050	19.3
<b>Total, FY 2001</b>	<b>242,555,819</b>	<b>53,855,605</b>	<b>22.2</b>
Actions under \$25,000	19,217,539	7,091,100	36.9
Actions over \$25,000*	223,338,280	46,764,505	20.9

\* Reported individually.

Source: General Services Administration, Federal Procurement Data Center, and Eagle Eye Publishers.

**Table 4.2 Federal Contract Actions over \$25,000, FY 1984–FY 2002**

Fiscal year	Thousands of dollars		Small business share (percent)
	Total	Small business	
2002	244,578,481	47,226,050	19.3
2001	223,338,280	46,764,505	20.9
2000	207,401,363	39,102,363	18.9
1999	188,846,760	35,898,754	19.0
1998	184,178,721	34,299,353	18.6
1997	179,227,203	33,240,512	18.5
1996	183,489,567	33,768,690	18.4
1995	185,119,992	33,924,015	18.3
1994	181,500,339	30,318,281	16.7
1993	184,426,948	30,548,921	16.6
1992	183,081,207	29,523,629	16.1
1991	193,550,425	30,121,644	15.6
1990	179,286,902	27,565,861	15.4
1989	172,612,189	25,753,580	14.9
1988	176,544,042	26,481,763	15.0
1987	181,750,326	28,046,374	15.4
1986	183,681,389	28,863,410	15.7
1985	188,186,629	26,708,810	14.2
1984	168,101,394	25,536,585	15.2

Note: Starting in FY 1983, the dollar threshold for reporting detailed information on DOD procurement actions increased from \$10,000 to \$25,000. For civilian agencies, a similar change was made starting in FY 1986.

Source: General Services Administration, Federal Procurement Data Center, Eagle Eye Publishers, and *Special Report S89522C*, prepared for the U.S. Small Business Administration, Office of Advocacy (Washington, D.C.: U.S. Government Printing Office, June 12, 1989).



smaller awards has been on the decline. Over the FY 1990–1995 period, their share of small award dollars was in the 50 to 52 percent range.<sup>4</sup> But in FY 1996, as procurement reforms began taking effect, their percentage and dollar shares of these small contracts actions began dropping steadily, and in FY 2002 small businesses were awarded 47.2 percent of contract dollars valued at \$25,000 or less, an increase from the FY 2001 low of 36.9 percent.

Prior to enactment of FASA, which was intended to simplify the process, only procurements of \$25,000 or less could be set aside for small businesses with limited competition. Government procurement personnel may now follow a simplified small business acquisition process for purchases between \$2,500 and \$100,000, as long as there is a reasonable expectation of bids being received from two or more responsible small businesses whose bids are competitive and commensurate with market expectations. But because other options, including credit card purchases, are now open to contracting officers, the effect has been a decline in the percentage of small contract dollars awarded to small businesses. Thus, the perception of some potential small firm contractors is that the doorway through which new and small businesses can enter the federal procurement marketplace has narrowed to the extent that they are discouraged from trying.

### Sources of Small Business Awards by Department/Agency

The largest share of all federal purchases in contracts over \$25,000 has historically come from the Department of Defense (DOD) (*Table 4.3*). The DOD share of awards overall declined steadily from 80 percent of these contract dollars in FY 1985 to 66.3 percent in FY 1993. Since the early 1990s, the DOD share has remained at about two-thirds of all dollars in contracts over \$25,000. DOD awards constituted some 60 percent of the \$48 billion in FY 2002 prime contract dollars over \$25,000 awarded to small businesses and 53 percent of the \$47 billion in FY 2001 (*Table 4.4*). The next largest source of federal contracting awards to small businesses was the General Services Administration, which accounted for 10 percent in FY 2002 and 10.3 percent in FY 2001. Third in FY 2002 was the National Aeronautics and Space Administration, at 3.4 percent and fourth was the U.S. Department of Agriculture at 3.3 percent.

4 See *The State of Small Business: A Report of the President*, editions for 1992 to 1996 (Springfield, Va.: National Technical Information Service). The 1999–2000 edition is available on the Office of Advocacy website at [www.sba.gov](http://www.sba.gov), along with the 2001 edition of *The Small Business Economy*.

**Table 4.3 Procurement Dollars in Contract Actions over \$25,000 by Major Agency Source, FY 1984–FY 2002**

Fiscal year	Total (billions of dollars)	Percent of total			
		DOD	DOE	NASA	Other
2002	244,578,481	67.2	7.8	4.7	20.3
2001	223,338,280	64.8	8.4	5.0	21.8
2000	207,401,363	64.4	8.2	5.3	22.2
1999	188,846,760	66.4	8.4	5.8	19.4
1998	184,178,721	64.1	8.2	5.9	21.8
1997	179,227,203	65.4	8.8	6.2	19.5
1996	183,489,567	66.5	8.7	6.2	18.7
1995	185,119,992	64.3	9.1	6.3	20.2
1994	181,500,339	65.4	9.9	6.3	18.4
1993	184,426,948	66.7	10.0	6.4	16.8
1992	183,081,207	66.3	10.1	6.6	16.9
1991	193,550,425	70.2	9.5	6.1	14.2
1990	179,286,902	72.0	9.7	6.4	11.9
1989	172,612,189	75.0	8.8	5.7	10.6
1988	176,544,042	76.9	8.2	4.9	10.0
1987	181,750,326	78.6	7.7	4.2	9.5
1986	183,681,389	79.6	7.3	4.0	9.0
1985	188,186,597	80.0	7.7	4.0	8.3
1984	168,100,611	79.3	7.9	4.0	9.0

Note: DOD = Department of Defense; DOE = Department of Energy; NASA = National Aeronautics and Space Administration. Starting in FY 1983, the dollar threshold for reporting detailed information on DOD procurement actions increased from \$10,000 to \$25,000. For civilian agencies, a similar change was made starting in FY 1986.

Source: General Services Administration, Federal Procurement Data Center, Eagle Eye Publishers, and *Special Report 87458A*, prepared for the U.S. Small Business Administration, Office of Advocacy (Washington, D.C.: U.S. Government Printing Office, May 19, 1988).

While small businesses received more than half of their award dollars over \$25,000 from the DOD in both FY 2001 and FY 2002, the total DOD dollar awards to small businesses each year constituted just over 17 percent of the DOD's total procurement budget (*Table 4.5*). The agency devoting the largest share of its contracting budget to small business contracts, and the only one spending more than half on small businesses in FY 2002, was the Department of Commerce, at 50.8 percent. In

**Table 4.4 Distribution of Small Business Share of Dollars in Contract Actions Over \$25,000 by Procuring Agency Source, FY 2001 and FY 2002**

	Total small business (thousands of dollars)		Small business distribution (percent)		Rank	
	FY 2002	FY 2001	FY 2002	FY 2001	FY 2002	FY 2001
Total, all agencies	47,226,050	46,764,505				
American Battle Monuments Commission		49		0.0001		48
Agency for International Development	123,465	439,206	0.2603	0.8520	19	15
Commission on National and Community Service		1,463		0.0028		40
Commodity Futures Trading Commission	190	1,408	0.0004	0.0027	44	41
Consumer Product Safety Commission	3,281	3,118	0.0069	0.0060	31	36
Court Services and Offender Supervision Agency	87		0.0002		45	
Department of Agriculture	1,582,779	1,872,254	3.3375	3.6321	4	4
Department of Commerce	762,672	525,979	1.6082	1.0204	11	13
Department of Defense	28,698,688	24,743,287	60.5154	52.9104	1	1
Department of Education	229,130	104,396	0.4832	0.2025	17	21
Department of Energy	570,625	537,721	1.2032	1.0431	13	12
Department of Health and Human Services	1,305,979	1,201,454	2.7538	2.3307	5	6
Department of Housing and Urban Development	281,142	305,205	0.5928	0.5921	15	17
Department of the Interior	1,054,655	1,158,848	2.2239	2.2481	9	8
Department of Justice	1,177,376	1,152,202	2.4827	2.2352	8	9
Department of Labor	406,345	369,327	0.8568	0.7165	14	16
Department of State	669,978	513,832	1.4127	0.9968	12	14
Department of Transportation	1,195,070	1,180,340	2.5200	2.2898	7	7
Department of the Treasury	797,781	942,862	1.6822	1.8291	10	11
Department of Veterans Affairs	1,261,566	1,083,686	2.6602	2.1023	6	10
Environmental Protection Agency	260,008	252,874	0.5483	0.4906	16	18
Equal Employment Opportunity Commission	2,951	4,116	0.0062	0.0080	33	35
Executive Office of the President	20,491	16,084	0.0432	0.0312	27	27
Federal Communications Commission		8,713		0.0169		31
Federal Election Commission	1,361	617	0.0029	0.0012	39	43
Federal Emergency Management Agency	56,325	63,714	0.1188	0.1236	20	22
Federal Maritime Commission	475	62	0.0010	0.0001	41	47
Federal Trade Commission	9,840	8,221	0.0207	0.0159	29	32
General Services Administration	4,749,645	5,310,291	10.0153	10.3016	2	2
International Trade Commission	4,088	753	0.0086	0.0015	30	42
National Aeronautics and Space Administration	1,593,733	1,525,457	3.3606	2.9593	3	5
National Archives and Records Administration	32,347	12,428	0.0682	0.0241	22	29
National Foundation on the Arts and Humanities	441	119	0.0009	0.0002	42	46
National Labor Relations Board	2,351	6,575	0.0050	0.0128	34	33
National Mediation Board	1,783	2,283	0.0038	0.0044	36	39
National Science Foundation	17,260	13,263	0.0364	0.0257	28	28
National Transportation Safety Board	555		0.0012		40	
Nuclear Regulatory Commission	26,781	32,010	0.0565	0.0621	24	25
Office of Personnel Management	27,900	177,557	0.0588	0.3444	23	19
Peace Corps	1,690	4,653	0.0036	0.0090	37	34
Railroad Retirement Board	1,858	2,795	0.0039	0.0054	35	38

(continued, next page)

**Table 4.4 (continued)**

	Total small business (thousands of dollars)		Small business distribution (percent)		Rank	
	FY 2002	FY 2001	FY 2002	FY 2001	FY 2002	FY 2001
	Securities and Exchange Commission	3,238	9,940	0.0068	0.0193	32
Selective Service System		486		0.0009		45
Small Business Administration	22,059	49,282	0.0465	0.0956	26	24
Smithsonian Institution	36,928	49,551	0.0779	0.0961	21	23
Social Security Administration	204,966	168,531	0.4322	0.3269	18	20
U.S. Holocaust Memorial Museum		589		0.0011		44
U.S. Information Agency	25,273	18,758	0.0533	0.0364	25	26
U.S. Soldiers' and Airmen's Home	1,399	3,047	0.0029	0.0059	38	37
U.S. Trade and Development Agency	212	2,885,099	0.0004	5.5969	43	3
Other (information unavailable)	-717		-0.0015		46	

Source: General Services Administration, Federal Procurement Data Center, and Eagle Eye Publishers.

**Table 4.5 Small Business Share of Dollars in Contract Actions Over \$25,000 by Top 25 Major Procuring Agencies, Fiscal Years 2001 and 2002 (excluding FAA)**

Agency	FY 2002 (thousands of dollars)		Small business share (percent)		FY 2002 share rank
	Total	Small business	2001	2002	
Total, all agencies	244,578,481	47,226,050	19.3	20.9	
Department of Defense	164,294,780	28,698,688	17.47	17.10	20
Department of Energy	18,989,269	570,625	3.01	2.87	25
General Services Administration	12,262,280	4,749,645	38.73	44.20	5
National Aeronautics and Space Administration	11,534,375	1,593,733	13.82	13.67	22
Department of Health and Human Services	5,417,531	1,305,979	24.11	27.99	17
Department of Veterans Affairs	4,646,017	1,261,566	27.15	25.23	13
Department of Justice	4,052,492	1,177,376	29.05	28.52	12
Department of Transportation	3,524,110	1,195,070	33.91	51.54	8
Department of Agriculture	3,420,159	1,582,779	46.28	48.60	3
Department of the Treasury	3,318,565	797,781	24.04	30.05	18
Department of State	2,216,728	669,978	30.22	55.80	11
Department of the Interior	2,206,836	1,054,655	47.79	29.22	2
Department of Labor	1,663,226	406,345	24.43	26.95	16
Department of Commerce	1,500,912	762,672	50.81	42.15	1
Environmental Protection Agency	1,010,529	260,008	25.73	25.47	14
Department of Education	932,469	229,130	24.57	11.46	15
Agency for International Development	883,527	123,465	13.97	76.11	21
Department of Housing and Urban Development	773,542	281,142	36.34	59.16	7
Social Security Administration	563,739	204,966	36.36	33.92	6
Office of Personnel Management	330,568	27,900	8.44	64.69	24
Federal Emergency Management Agency	308,358	56,325	18.27	20.17	19
National Science Foundation	185,749	17,260	9.29	7.71	23
National Archives and Records Administration	97,946	32,347	33.03	27.33	9
Nuclear Regulatory Commission	87,521	26,781	30.60	42.98	10
Smithsonian Institution	80,496	36,928	45.88	43.39	4

Note: All agencies are represented in the total dollars for FY 2002; the organizations listed are those agencies that awarded at least \$100 million in individual contract actions over \$25,000 in FY 2002.

Source: General Services Administration, Federal Procurement Data Center, and Eagle Eye Publishers.

FY 2001, five agencies—the Agency for International Development, the Office of Personnel Management, the Department of Housing and Urban Development, the Department of State, and the Department of Transportation—spent more than half of their contract dollars in small firms.

## Product/Service Categories

Three major categories of goods and services—supplies and equipment, research and development, and other services and construction—make up the federal procurement markets. In FY 2001 and 2002, small businesses received about half of their federal procurement dollars for other services and construction, just over one-third for supplies and equipment, and the remainder—less than one-sixth—for research and development (*Table 4.6*).

The volume of award dollars in each of the three major procurement categories shifted upward from FY 2001 to FY 2002 (*Table 4.7*). Contract dollars in the services and construction category, which includes activities as diverse as architectural and engineering services, data processing, telecommunications, general construction, and management support services, increased from \$114.6 billion in FY 2001 to \$122.6 billion in FY 2002. Expenditures for supplies and equipment, the second largest category, increased from \$81.5 billion in FY 2001 to \$89.4 billion in FY 2002. Research and development expenditures also increased from \$27.2 billion in FY 2001 to \$32.5 billion in FY 2002.

Overall, the small business market shares grew less than the overall federal marketplace in FY 2002. Supplies and equipment was the category that had a dollar and percentage increase, from \$12.5 billion or 15.4 percent in FY 2001 to \$14 billion or 15.7 percent in FY 2002. In the category of research and development, small businesses were awarded more dollars—up from \$3.9 billion to \$4.1 billion—but a smaller share—down from 14.5 percent in FY 2001 to 12.8 percent in FY 2002. In other services and construction, small businesses saw declines in FY 2002 in both dollars and market shares—down from \$30.2 billion or 26.4 percent in FY 2001 to \$29 billion or 23.7 percent in FY 2002.

## Small Business Innovation Research

The Small Business Innovation Development Act requires the federal departments and agencies with the largest extramural research and development (R&D) budgets to award a portion of their R&D funds to small businesses. Ten government agencies with extramural research and development obligations over \$100 million

**Table 4.6 Distribution of Prime Contract Actions Over \$25,000 by Major Product or Service Category for FY 2001 and FY 2002 (percent)**

Product/service category	FY 2001	FY 2002
Total	100.0	100.0
Research and development	12.2	13.3
Other services and construction	51.3	50.1
Supplies and equipment	36.5	36.6

Source: General Services Administration, Federal Procurement Data Center, and Eagle Eye Publishers.

**Table 4.7 Small Business Share of Dollars in Contract Actions Over \$25,000 by Major Product or Service Category, FY 2001 and FY 2002**

	FY 2001		FY 2002	
	Thousands of dollars	Small business share (percent)	Thousands of dollars	Small business share (percent)
Total	223,337,000		244,578,481	
Small business total*	46,763,225	20.9	47,226,050	19.3
Research and development				
Total	27,249,280		32,544,855	
Small business	3,941,345	14.5	4,152,805	12.8
Other services and construction				
Total	114,591,736		122,629,593	
Small business	30,248,364	26.4	29,014,575	23.7
Supplies and equipment				
Total	81,495,984		89,404,033	
Small business	12,573,516	15.4	14,058,670	15.7

\*The Federal Aviation Administration did not break out product/service codes for FY 2002, so the FY 2002 figure here does not match the total shown elsewhere.

Source: General Services Administration, Federal Procurement Data Center, and Eagle Eye Publishers.

initially participated in this program: the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, and Transportation, and the Environmental Protection Agency, the National Aeronautics and Space Administration, and the National Science Foundation.

A total of \$13.6 billion has been awarded to small businesses over the 19 years of the program (*Table 4.8*). Participating agencies received a total of 25,254 proposals in FY 2002, up from 19,232 in FY 2001. More than 70,000 Phase I and Phase II awards have been made since the beginning of the program.

In FY 2002, awards were made in every state, the District of Columbia, and Puerto Rico, with concentrations in California and Massachusetts (*Table 4.9*). Other states receiving more than 200 awards each were Virginia, Colorado, Maryland, New York, Ohio, Texas, and Pennsylvania.

### Procurement from Minority- and Women-owned Businesses

Small women- and minority-owned businesses continue to account for a small percentage of total federal award dollars in comparison with their representation in the U.S. economy. Women-owned businesses constitute approximately 26 percent of the total nonagricultural business population of the United States, but they obtained 3.0 percent of federal contract dollars in FY 2001 and 2.7 percent in FY 2002 (*Tables 4.10 and 4.11*). Socially and economically disadvantaged businesses (minority-owned businesses) won 6.0 percent of the awards in FY 2002, down from 6.2 percent in FY 2001.

Although the shares of prime contract dollars awarded in FY 2002 to small socially and economically disadvantaged businesses declined, the actual total prime contract dollars increased, from \$15.0 billion to \$15.7 billion. Women-owned businesses were awarded slightly less in FY 2002 than in the previous year.

Nearly all of the contract dollars are in larger contracts over \$25,000—97.6 percent of awards to small disadvantaged businesses in FY 2002 and 93.8 percent of awards to women-owned businesses. The trends in dollars and shares to women- and minority-owned firms in these larger contracts were similar to the overall patterns (*Table 4.10*).

As is true for small businesses overall, fewer actual dollar amounts in the smallest contracts are going to small socially and economically disadvantaged and small women-owned firms. On the other hand, the shares of total dollars in contracts of

**Table 4.8 Small Business Innovation Research Program, FY 1983–FY 2002**

Fiscal year	Phase I		Phase II		Total awards (millions of dollars)
	Number of proposals	Number of awards	Number of proposals	Number of awards	
Total	350,569	51,107	40,391	19,100	13,629.1
2002	22,340	4,243	2,914	1,577	1,434.8
2001	16,666	3,215	2,566	1,533	1,294.4
2000	17,641	3,172	2,533	1,335	1,190.2
1999	19,016	3,334	2,476	1,256	1,096.5
1998	18,775	3,022	2,480	1,320	1,100.0
1997	19,585	3,371	2,420	1,404	1,066.7
1996	18,378	2,841	2,678	1,191	916.3
1995	20,185	3,085	2,856	1,263	981.7
1994	25,588	3,102	2,244	928	717.6
1993	23,640	2,898	2,532	1,141	698.0
1992	19,579	2,559	2,311	916	508.4
1991	20,920	2,553	1,734	788	483.1
1990	20,957	2,346	2,019	837	460.7
1989	17,233	2,137	1,776	749	431.9
1988	17,039	2,013	1,899	711	389.1
1987	14,723	2,189	2,390	768	350.5
1986	12,449	1,945	1,112	564	297.9
1985	9,086	1,397	765	407	199.1
1984	7,955	999	559	338	108.4
1983	8,814	686	127	74	44.5

*Note:* Phase I evaluates the scientific and technical merit and feasibility of an idea. Phase II expands on the results and further pursues the development of Phase I. Phase III commercializes the results of Phase II and requires the use of private or non-SBIR federal funding. The Phase II proposals and awards in FY 1983 were pursuant to predecessor programs that qualified as SBIR funding.

*Source:* U.S. Small Business Administration, Office of Innovation, Research, and Technology (annual reports for FY 1983–FY 2002).

**Table 4.9 SBIR Awards by State, FY 2002 (thousands of dollars)**

State	Phase 1		Phase 2		Total	
	Awards	Dollars	Awards	Dollars	Awards	Dollars
Alabama	62	6,129	37	23,586	99	29,715
Alaska	2	79	0	0	2	79
Arizona	73	6,597	39	27,409	112	34,006
Arkansas	6	537	2	1,498	8	2,034
California	892	89,952	305	209,310	1,197	299,263
Colorado	205	18,340	89	55,913	294	74,253
Connecticut	79	7,269	25	16,138	104	23,407
Delaware	12	984	4	1,701	16	2,685
District of Columbia	19	2,152	7	5,312	26	7,464
Florida	102	9,189	30	20,251	132	29,440
Georgia	45	4,575	16	9,628	61	14,204
Hawaii	15	1,716	5	1,735	20	3,451
Idaho	11	886	4	3,435	15	4,321
Illinois	61	6,615	16	10,052	77	16,668
Indiana	28	2,705	10	5,847	38	8,552
Iowa	12	1,770	5	3,647	17	5,417
Kansas	11	1,075	8	4,035	19	5,110
Kentucky	8	858	6	3,525	14	4,383
Louisiana	9	982	4	2,259	13	3,241
Maine	16	1,314	2	1,345	18	2,659
Maryland	199	21,580	75	52,704	274	74,284
Massachusetts	580	59,636	219	155,824	799	215,460
Michigan	89	8,923	21	15,063	110	23,985
Minnesota	55	5,232	32	21,534	87	26,767
Mississippi	9	719	3	2,493	12	3,211
Missouri	22	2,083	7	4,862	29	6,944
Montana	27	2,922	7	3,947	34	6,868
Nebraska	8	848	2	1,026	10	1,874
Nevada	16	1,442	9	5,824	25	7,266
New Hampshire	50	4,341	23	15,068	73	19,409
New Jersey	122	12,204	48	34,405	170	46,609
New Mexico	66	5,703	23	13,879	89	19,582
New York	164	17,836	60	44,818	224	62,654
North Carolina	37	4,809	24	18,334	61	23,143
North Dakota	5	765	2	596	7	1,361
Ohio	152	15,438	68	48,089	220	63,527
Oklahoma	17	1,809	6	3,213	23	5,023
Oregon	49	5,643	19	12,920	68	18,563
Pennsylvania	147	15,114	58	39,771	205	54,884
Puerto Rico	1	97	0	0	1	97
Rhode Island	14	1,443	5	3,985	19	5,428
South Carolina	18	1,855	7	4,777	25	6,632
South Dakota	5	456	4	1,706	9	2,161
Tennessee	28	2,656	13	7,621	41	10,277

(continued, next page)

**Table 4.9 (continued)**

State	Phase 1		Phase 2		Total	
	Awards	Dollars	Awards	Dollars	Awards	Dollars
Texas	162	14,870	58	38,552	220	53,422
Utah	44	4,308	17	11,390	61	15,697
Vermont	8	759	2	1,566	10	2,325
Virginia	229	20,659	104	69,059	333	89,718
Washington	90	9,1765	45	34,060	135	43,236
West Virginia	13	1,271	0	0	13	1,271
Wisconsin	39	5,252	15	9,869	54	15,121
Wyoming	5	747	5	2,430	10	3,177

Note: Based on awards issued and funding obligations for new awards only.

Source: U.S. Small Business Administration, Office of Advocacy, based on data from SBA's Office of Technology.

**Table 4.10 Total Federal Contract Actions to Small, Women-Owned, and Minority-Owned Businesses, FY 2001 and FY 2002 (Thousands of Dollars)**

	Total actions		Actions over \$25,000		Actions of \$25,000 or less	
	Thousands of dollars	Share of total (percent)	Thousands of dollars	Share of total (percent)	Thousands of dollars	Share of total (percent)
<b>Total, FY 2001</b>	<b>242,555,819</b>		<b>223,338,280</b>		<b>19,217,539</b>	
Small business	53,855,605	22.2	46,764,505	20.9	7,091,100	36.9
Women-owned business	7,155,398	3.0	6,681,215	3.0	474,184	2.4
Minority-owned business	14,962,221	6.2	14,553,698	6.5	408,523	2.1
<b>Total, FY 2002</b>	<b>259,321,114</b>		<b>244,814,745</b>		<b>14,506,369</b>	
Small business	54,277,869	20.9	47,226,050	19.3	6,854,072	47.2
Women-owned business	7,122,260	2.7	6,677,620	2.7	444,640	3.1
Minority-owned business	15,678,769	6.0	15,308,067	6.3	370,702	2.6

Source: General Services Administration, Federal Procurement Data Center, and Eagle Eye Publishers.

\$25,000 or less increased for women-owned businesses from 2.4 percent in FY 2001 to 3.1 percent in FY 2002 and for small minority-owned businesses from 2.1 percent to 2.6 percent.

Small disadvantaged 8(a) firms won \$5.5 billion in FY 2002, down slightly from \$6.2 billion in FY 2001 (Table 4.12). The 8(a) share of dollars in contracts over \$25,000 has been declining for the past six years, from 3.7 percent in FY 1996 to 2.3 percent in FY 2002.

Service-disabled veteran business owners are now among the socioeconomic groups that are measurable in the federal procurement marketplace. Public Law 106-50 established a statutory goal of 3 percent of all prime and subcontracting dollars to be awarded to service-disabled veterans. In FY 2001, they were awarded 0.25 percent of direct federal contract dollars; in FY 2002, the percentage was 0.17 percent.

Some data are available on subcontracting for subgroups of small businesses. In FY 2002, small disadvantaged businesses were awarded \$5.5 billion in subcontracts; women-owned small businesses received \$4.6 billion; and HUBZone businesses recorded \$705.4 million.

**Table 4.11 Annual Change in the Dollar Volume of Contract Actions Over \$25,000 Awarded to Small, Women-Owned, and Minority-Owned Businesses, FY 1980–FY 2002 (Thousands of Dollars)**

	Total, all business			Small business			Women-owned business			Minority-owned business		
	Total (thousands of dollars)	Change from prior year		Total (thousands of dollars)	Change from prior year		Total (thousands of dollars)	Change from prior year		Total (thousands of dollars)	Change from prior year	
		Thousands of dollars	Percent		Thousands of dollars	Percent		Thousands of dollars	Percent		Thousands of dollars	Percent
2002	244,814,745	21,476,465	9.6	47,226,050	461,545	9.9	6,677,620	-3,595	*	15,308,067	754,369	5.2
2001	223,338,280	17,490,979	8.5	46,764,505	7,983,057	20.6	6,681,215	2,226,212	50.0	14,553,698	1,966,900	15.6
2000	205,847,301	20,722,610	11.2	38,781,448	3,036,256	8.5	4,455,003	427,264	10.6	12,586,798	727,575	5.8
1999	185,124,691	1,013,686	0.6	35,745,192	1,485,753	4.3	4,027,739	485,838	13.7	11,859,223	414,203	3.6
1998	184,111,005	5,186,111	2.8	34,259,439	-7,013,742	-17.0	3,541,901	-48,406	-1.3	11,445,020	312,398	2.8
1997	178,924,894	-4,558,799	-2.5	41,273,181	8,082,760	24.4	3,590,307	621,845	20.9	11,132,622	491,851	4.6
1996	183,483,693	-1,636,299	-0.9	33,190,421	1,383,158	4.3	2,968,462	148,214	5.3	10,640,771	121,302	1.2
1995	185,119,992	3,619,653	2.0	31,807,263	3,384,230	11.9	2,820,248	508,700	22.0	10,519,469	1,459,981	16.1
1994	181,500,339	-2,926,609	-1.6	28,423,033	475,592	1.7	2,311,548	262,828	12.8	9,059,488	255,468	2.9
1993	184,426,948	1,345,741	0.7	27,947,441	-282,308	-1.0	2,048,720	56,155	2.8	8,804,020	1,007,913	12.9
1992	183,081,207	-10,469,218	-5.4	28,229,749	-617,609	-2.1	1,992,565	227,399	12.9	7,796,107	1,309,818	20.2
1991	193,550,425	14,263,523	8.0	28,847,958	3,445,732	13.6	1,765,166	287,272	19.4	6,486,289	796,229	14.0
1990	179,286,902	6,674,713	3.8	25,401,626	1,685,455	7.1	1,477,894	74,955	5.3	5,690,060	356,172	6.7
1989	172,612,189	-3,931,853	-2.2	23,716,171	-1,955,147	-7.8	1,402,939	75,215	5.7	5,333,888	141,382	2.7
1988	176,544,042	-5,206,284	-2.9	25,671,318	-2,256,401	-8.1	1,327,724	74,839	6.0	5,192,506	343,381	7.1
1987	181,750,326	-1,931,063	-1.1	27,927,719	-852,373	-3.0	1,252,885	56,034	4.7	4,849,125	563,200	13.1
1986	183,681,389	-4,505,240	-2.4	28,780,092	2,077,397	7.8	1,196,851	102,643	9.4	4,285,925	401,286	10.3
1985	187,985,466	20,085,235	11.9	26,702,695	1,196,672	4.7	1,094,208	238,077	27.8	3,884,639	-119,500	-3.0
1984	167,933,486	12,513,288	8.0	25,506,023	3,425,999	15.5	856,131	244,755	40.0	4,004,139	817,048	25.6
1983	155,588,106	3,190,222	2.1	22,080,024	-1,478,539	-6.3	611,376	60,775	11.0	3,187,091	328,180	11.5
1982	152,397,884	23,533,140	18.3	23,558,563	3,489,774	17.4	550,601	-534,772	-49.3	2,858,911	223,903	8.5
1981	128,864,744	27,971,359	27.7	20,068,789	4,742,668	30.9	1,085,373	297,844	37.8	2,635,008	813,087	44.6
1980	100,893,385	-	-	15,326,121	-	-	787,529	-	-	1,821,921	-	-

\* Less than 0.05 percent.

Source: Federal Procurement Data System, "Special Report S89522C" (prepared for the U.S. Small Business Administration, Office of Advocacy, June 12, 1989); and idem, *Federal Procurement Report* (Washington, D.C.: U.S. Government Printing Office, July 10, 1990, March 13, 1991, February 3, 1994, January 13, 1997, 1998, 1999, 2000), and Eagle Eye Publishers.



**Table 4.12 8(a) Share of Contract Actions Over \$25,000, FY 1984–FY 2002**

Fiscal year	Thousands of dollars		
	Total	8(a) set-aside	8(a) share (percent)
2002	244,578,481	5,504,282	2.3
2001	223,338,280	6,162,811	2.8
2000	207,401,363	5,777,083	2.8
1999	188,846,760	6,125,439	3.2
1998	184,178,721	6,527,210	3.5
1997	179,227,203	6,510,442	3.6
1996	183,489,567	6,764,912	3.7
1995	185,119,992	6,911,080	3.7
1994	181,500,339	5,977,455	3.3
1993	184,426,948	5,483,544	3.0
1992	183,081,207	5,205,080	2.8
1991	193,550,425	4,147,148	2.1
1990	179,286,902	3,743,970	2.1
1989	172,612,189	3,449,860	2.0
1988	176,544,042	3,528,790	2.0
1987	181,750,326	3,341,841	1.8
1986	183,681,389	2,935,633	1.6
1985	188,186,629	2,669,174	1.4
1984	168,101,394	2,517,738	1.5

Source: General Services Administration, Federal Procurement Data Center.

## Conclusion

The federal procurement sector offers valuable opportunities for small firms to enter the marketplace and grow, and where small firms have been in a position to take advantage of the opportunities, they have made many important contributions. Ensuring that the federal contracting market remains open to small firms is an ongoing challenge.

## APPENDIX A

### *Small Business Data*

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Table A.1 U.S. Business Measures, 1980–2002

Year	Real GDP (billions of 1996 dollars)	Employer firms	Establishments*	Self- employment (thousands)	Self- employment rate	Nonfarm business tax returns	Nonfarm sole propri- etorships	Employer births	Employer termina- tions	Business bankruptcies
2002	9,440	e 5,595,200	NA	9,650	6.7	26,363,800	18,389,000	e 550,100	e 584,500	38,155
2001	9,215	e 5,629,600	7,095,302	9,826	6.8	25,631,200	17,904,900	e 545,400	e 568,300	39,719
2000	9,191	5,652,544	7,070,048	9,907	6.9	25,106,900	17,570,500	574,300	542,831	35,219
1999	8,859	5,607,743	7,008,444	10,087	7.2	24,750,100	17,377,100	579,609	544,487	37,639
1998	8,509	5,579,177	6,941,822	10,303	7.5	24,285,900	17,183,700	589,982	540,601	44,197
1997	8,160	5,541,918	6,894,869	10,513	7.7	23,857,100	17,176,000	590,644	530,003	53,819
1996	7,813	5,478,047	6,738,476	10,490	7.8	23,115,300	16,955,000	597,792	512,402	53,200
1995	7,544	5,369,068	6,612,721	10,482	7.9	22,555,200	16,424,000	594,369	497,246	50,516
1994	7,348	5,276,964	6,509,065	10,648	8.1	22,191,000	16,154,000	570,587	503,563	50,845
1993	7,063	5,193,642	6,401,233	10,280	8.0	20,874,796	15,848,000	564,504	492,651	62,399
1992	6,880	5,095,356	6,319,300	9,960	7.8	20,476,775	15,495,000	544,596	521,606	69,848
1991	6,676	5,051,025	6,200,859	10,274	8.1	20,498,855	15,181,000	541,141	546,518	70,605
1990	6,708	5,073,795	6,175,559	10,097	8.0	20,219,400	14,783,000	584,892	531,400	63,912
1989	6,592	5,021,315	6,106,922	10,008	8.1	19,560,700	14,298,000	NA	NA	62,449
1988	6,368	4,954,645	6,016,367	9,917	8.2	18,619,400	13,679,000	NA	NA	62,845
1987	6,113	NA	5,937,061	9,624	8.0	18,351,400	13,091,000	NA	NA	81,463
1986	5,912	NA	5,806,973	9,327	7.9	17,524,600	12,394,000	NA	NA	79,926
1985	5,717	NA	5,701,485	9,269	8.0	16,959,900	11,929,000	NA	NA	70,644
1984	5,505	NA	5,517,715	9,338	8.2	16,077,000	11,262,000	NA	NA	64,211
1983	5,132	NA	5,306,787	9,143	8.2	15,245,000	10,704,000	NA	NA	62,412
1982	4,919	NA	4,633,960	8,898	8.1	14,546,000	10,106,000	NA	NA	69,242
1981	5,021	NA	4,586,510	8,735	8.0	13,858,000	9,585,000	NA	NA	48,086
1980	4,901	NA	4,543,167	8,643	8.1	13,021,600	8,932,000	NA	NA	43,252

e estimated.

NA = Not available

\* Units with paid employees in the fourth quarter through 1983. 1984 on includes units active in any quarter of the year.

Sources: U.S. Small Business Administration, Office of Advocacy, from data provided by sources below:

Real gross domestic product (GDP) from the U.S. Department of Commerce, Bureau of Economic Analysis.

Employer firms, births and terminations from the U.S. Department of Commerce, Census Bureau, with 2001 and 2002 estimates based on U.S. Census Bureau and Department of Labor data.

Establishments from the U.S. Census Bureau.

Self-employment (unincorporated, primary occupation) from the U.S. Department of Labor, Bureau of Labor Statistics.

The self-employment rate is based on the civilian labor force.

Nonfarm business tax returns and nonfarm sole proprietors from the U.S. Department of the Treasury, Internal Revenue Service.

Bankruptcies from the Administrative Office of the U.S. Courts (business bankruptcy filings).

**Table A.2 Macroeconomic Indicators, 1990–2002**

	1990	1995	2000	2001	2002	Percent Change 2001–2002
Gross domestic product (GDP) (billions of dollars) <sup>1</sup>						
Current dollars	5,803.2	7,400.5	9,824.6	10,082.2	10,446.2	3.6
Constant dollars (billions of 1996 dollars)	6,707.9	7,543.8	9,191.4	9,214.5	9,439.9	2.4
Personal consumption expenditures	3,831.5	4,969.0	6,683.7	6,987.0	7,303.7	4.5
Sales (billions of dollars) <sup>2</sup>						
Manufacturing	242.7	284.5	343.7	324.8	321.3	-1.1
Wholesale trade	149.5	176.2	228.6	225.7	229.3	1.6
Retail trade	153.7	188.2	254.9	264.0	272.2	3.1
Income (billions of dollars)						
Compensation of employees <sup>3</sup>	3,351.0	4,202.5	5,723.4	5,874.9	5,977.4	1.7
Nonfarm proprietors' income	349.9	475.5	692.2	708.8	743.7	4.9
Farm proprietors' income	31.1	22.2	22.6	19.0	12.9	-32.1
Corporate profits <sup>4</sup>	408.6	668.8	788.1	731.6	787.4	7.6
Output and productivity (business sector indexes, 1992=100)						
Output	98.6	111.5	140.0	139.8	143.5	2.6
Hours of all persons worked	102.6	108.7	119.7	118.2	115.9	-1.9
Productivity (output per hour)	96.1	102.6	116.9	118.2	123.8	4.7
Employment and compensation						
Nonfarm private employment (millions) <sup>3</sup>	91.1	97.9	111.0	111.0	109.5	-1.3
Unemployment rate (percent)	5.6	5.6	4.0	4.7	5.8	23.4
Total compensation cost index (Dec.) (June 1989=100)	107.0	126.7	150.9	157.2	162.3	3.2
Wage and salary index (Dec) (June 1989=100)						
Employee benefits cost index (Dec.) (June 1989=100)	106.1	123.1	147.7	153.3	157.5	2.7
Bank loans, interest rates, and yields						
Bank commercial and industrial loans (billions of dollars)	641.2	724.2	1,088.3	1,031.3	964.2	-6.5
Prime rate (percent)	10.01	8.83	9.23	6.91	4.67	-32.4
U.S. Treasury 10-year bond yields (percent)	8.55	6.57	6.03	5.02	4.61	-8.2
Investments by nonfarm nonfinancial corporate business (billions of dollars)						
Capital expenditures	387.8	638.7	957.2	794.2	802.9	1.1
Change in financial assets	131.5	426.4	761.4	287.8	240.3	-16.5
Federal budget (billions of dollars, fiscal year)						
Receipts	1,032.0	1,351.8	2,025.2	1,991.2	1,853.2	-6.9
Outlays	1,253.2	1,515.8	1,788.8	1,863.9	2,011.0	7.9
Surplus or deficit	-221.2	-164.0	236.4	127.3	-157.8	—
Price indices (inflation measures)						
Consumer price index (urban) (1982–84 = 100)	130.7	152.4	172.2	177.1	179.9	1.6
Producer price index (finished goods) (1982 = 100)	119.2	127.9	138.0	140.7	138.8	-1.4
GDP implicit price deflator (1996 = 100)	86.5	98.1	106.9	109.4	110.7	1.1

<sup>1</sup> *Small Business Share of Private, Nonfarm Gross Domestic Product* by Joel Popkin and Company (Office of Advocacy-funded study) estimates small businesses with fewer than 500 employees created 52 percent of the total nonfarm private output in 1999.

<sup>2</sup> U.S. Department of Commerce, Bureau of the Census, Statistics of U.S. Business, showed that in 1997, small firms with fewer than 500 employees accounted for 24.8 percent of manufacturing, 52.6 percent of retail, 46.8 percent of wholesale sales.

<sup>3</sup> Bureau of the Census, *Statistics of U.S. Businesses*, showed that in 2000, small firms accounted for 44.5 percent of annual payroll and 50.1 percent of total nonfarm private employment.

<sup>4</sup> With inventory valuation adjustment and capital consumption adjustments.

Sources: U.S. Small Business Administration, Office of Advocacy, from the U.S. Department of Commerce, Bureau of Economic Analysis, and *Economic Indicators*, March 2000 and March 2003.

**Table A.3 Small Business Indicators, 1990–2002**

	1990	1995	2000	2001	2002	Percent Change 2001–2002
<b>Number of businesses<sup>1</sup></b>						
Employer firms (nonfarm) <sup>2</sup>	5,073,795	5,369,068	5,652,544	e 5,629,600	e 5,595,200	-0.6
Self-employment (unincorporated)	10,097,000	10,482,000	9,907,000	9,826,000	9,650,000	-1.8
Business tax returns (nonfarm)	20,219,400	22,555,200	25,106,900	e 25,631,200	e 26,363,800	2.9
Sole proprietor tax returns (nonfarm)	14,149,000	16,157,000	17,570,500	17,904,900	18,389,000	2.7
<b>Business turnover</b>						
Employer firm births <sup>2</sup>	584,892	594,369	574,300	e 545,400	e 550,100	0.9
Employer firm terminations <sup>2</sup>	531,400	497,246	542,831	e 568,300	e 584,500	2.9
Bankruptcies	63,912	50,516	35,219	39,719	38,155	-3.9
<b>Income (billions)</b>						
Wage and salary income	2,754.6	3,424.7	4,836.3	4,950.6	5,023.9	1.5
Proprietors' income	381.0	497.7	714.8	727.9	756.9	4.0
Federal corporate taxes	118.1	179.3	223.8	170.2	NA	NA
State and local corporate taxes	22.5	31.7	35.6	29.1	NA	NA

<sup>1</sup> Self-employment presented here represents individuals whose primary occupation is self-employment; they may or may not have employees. Note that some businesses file more than one tax return.

<sup>2</sup> Births and terminations for 2001 and 2002 are estimated from 2000 data from the Bureau of the Census, and yearly percent changes in similar data provided by the Department of Labor, Employment and Training Administration, and rounded. Births and terminations are from prior year's March through current year's March. Employer firm estimates are the previous year figure plus the difference between birth and termination estimates.

Sources: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census and Economic Analysis, and from the U.S. Department of Labor, Bureau of Labor Statistics, and Employment and Training Administration, and the Administrative Office of the U.S. Courts.

**Table A.4 Number of Employer Firms by State, 1990–2002**

State	1990	1995	2000	2001	2002
United States	5,073,795	5,369,068	5,652,544	e 5,629,600	e 5,595,200
Yearly Change (percent)	—	—	0.8	-0.4	-0.6
Alabama	80,289	83,038	88,222	86,007	85,895
Alaska	13,176	15,214	16,190	16,398	16,511
Arizona	79,109	91,244	103,893	106,680	107,894
Arkansas	49,066	56,649	59,431	59,757	60,668
California	767,697	764,169	939,979	985,846	1,022,192
Colorado	89,419	109,695	134,085	138,411	140,704
Connecticut	95,132	93,135	96,344	96,916	96,677
Delaware	18,368	21,554	24,782	25,199	25,097
District of Columbia	20,865	24,161	26,157	26,312	26,503
Florida	311,377	343,017	385,113	392,756	413,476
Georgia	142,831	160,715	189,156	192,736	194,062
Hawaii	26,588	26,775	28,112	28,569	28,800
Idaho	26,209	33,326	39,089	40,459	40,633
Illinois	248,675	265,927	278,754	279,627	278,839
Indiana	109,077	119,805	124,654	125,119	124,673
Iowa	61,956	66,350	68,970	68,704	68,466
Kansas	58,573	63,374	67,461	67,197	67,757
Kentucky	71,381	76,970	88,460	88,138	87,589
Louisiana	80,449	87,371	96,441	95,829	93,989
Maine	33,676	34,431	38,711	38,907	39,180
Maryland	112,823	122,202	130,628	132,049	133,536
Massachusetts	151,995	153,829	167,740	170,026	173,896
Michigan	178,726	203,374	213,865	212,608	211,567
Minnesota	100,061	112,477	128,943	130,348	131,646
Mississippi	45,781	49,089	53,509	53,303	53,409
Missouri	126,548	123,007	128,319	129,404	129,777
Montana	23,867	27,499	32,593	32,891	33,339
Nebraska	39,785	42,332	44,699	45,019	45,342
Nevada	28,423	34,951	44,741	46,339	47,340
New Hampshire	32,921	34,584	39,643	39,542	39,211
New Jersey	204,807	209,145	265,758	277,425	274,966
New Mexico	33,767	38,640	41,535	41,616	42,066
New York	491,566	488,360	471,808	473,471	474,425
North Carolina	134,990	149,462	172,661	175,461	178,560

(continued, next page)

**Table A.4 (continued)**

State	1990	1995	2000	2001	2002
North Dakota	17,766	18,467	18,637	18,544	18,639
Ohio	207,701	223,751	232,755	232,266	230,705
Oklahoma	64,901	70,722	74,554	75,177	75,250
Oregon	77,338	92,717	99,521	99,943	100,726
Pennsylvania	233,679	236,746	259,492	265,451	268,723
Rhode Island	27,806	30,430	32,666	33,011	32,295
South Carolina	70,624	77,822	88,668	89,300	89,634
South Dakota	18,888	20,905	22,556	22,759	22,803
Tennessee	93,666	104,633	110,510	109,376	108,928
Texas	318,352	360,735	388,439	390,390	394,303
Utah	32,687	42,358	51,940	54,461	56,346
Vermont	18,986	19,681	20,976	21,247	20,755
Virginia	128,895	147,710	160,988	162,459	165,185
Washington	134,944	162,525	194,977	199,233	200,909
West Virginia	35,098	37,900	38,665	37,805	37,364
Wisconsin	103,039	115,278	121,850	122,051	122,249
Wyoming	15,059	17,219	18,566	19,141	19,339
Puerto Rico	—	—	50,645	51,164	50,228

e estimated.

Notes: State data are from the U.S. Department of Labor and U.S. data, 1990–2000, are from the U.S. Department of Commerce, Bureau of the Census. State totals do not add to the U.S. figure as firms can be in more than one state. U.S. 2001 and 2002 estimates are based on data from the U.S. Census Bureau and the U.S. Department of Labor, Employment, and Training Administration.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Labor, Employment and Training Administration, and the U.S. Department of Commerce, Bureau of the Census.

**Table A.5 Private Firms, Establishments, Employment, Annual Payroll, and Receipts by Firm Size, 1988–2000**

Item	Year	Non-employers	Employer totals	Employment size of firm					
				0*	0–19	20–99	100–499	<500	500+
<b>Employer firms</b>									
	2000	16,529,955	5,652,544	726,862	5,035,029	515,977	84,385	5,635,391	17,153
	1999	16,152,604	5,607,743	709,074	5,007,808	501,848	81,347	5,591,003	16,740
	1998	15,708,727	5,579,177	711,899	4,988,367	494,357	80,075	5,562,799	16,378
	1997	15,439,609	5,541,918	719,978	4,958,641	487,491	79,707	5,525,839	16,079
	1996	NA	5,478,047	717,991	4,909,983	476,312	76,136	5,462,431	15,616
	1995	NA	5,369,068	688,584	4,807,533	469,869	76,222	5,353,624	15,444
	1994	NA	5,276,964	691,141	4,736,317	452,383	73,267	5,261,967	14,997
	1993	NA	5,193,642	671,306	4,661,601	445,900	71,512	5,179,013	14,629
	1992	14,325,000	5,095,356	644,453	4,572,994	439,084	69,156	5,081,234	14,122
	1991	NA	5,051,025	NA	4,528,899	439,811	68,338	5,037,048	13,977
	1990	NA	5,073,795	NA	4,535,575	453,732	70,465	5,059,772	14,023
	1989	NA	5,021,315	NA	4,493,875	443,959	69,608	5,007,442	13,873
	1988	NA	4,954,645	NA	4,444,473	430,640	66,708	4,941,821	12,824
<b>Establishments</b>									
	2000	16,529,955	7,070,048	730,027	5,093,832	674,106	312,112	6,080,050	989,998
	1999	16,152,604	7,008,444	711,990	5,068,096	670,822	309,211	6,048,129	960,315
	1998	15,708,727	6,941,822	713,512	5,048,528	674,503	307,294	6,030,325	911,497
	1997	15,439,609	6,894,869	721,844	5,026,425	682,580	308,633	6,017,638	877,231

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll. (continued, next page)

**Table A.5 (continued)**

Item	Year	Non-employers	Employer totals	Employment size of firm					
				0 *	0-19	20-99	100-499	<500	500+
	1996	NA	6,738,476	720,241	4,976,014	636,285	280,635	5,892,934	845,542
	1995	NA	6,612,721	690,772	4,876,327	638,616	283,993	5,798,936	813,785
	1994	NA	6,509,065	693,992	4,809,575	631,324	283,782	5,724,681	784,384
	1993	NA	6,401,233	673,408	4,737,778	631,873	285,184	5,654,835	746,398
	1992	14,325,000	6,319,300	646,065	4,653,464	634,713	283,719	5,571,896	747,404
	1991	NA	6,200,859	NA	4,603,523	593,248	260,595	5,457,366	743,493
	1990	NA	6,175,559	NA	4,602,362	590,496	254,747	5,447,605	727,954
	1989	NA	6,106,922	NA	4,563,257	586,494	252,335	5,402,086	704,836
	1988	NA	6,016,367	NA	4,516,707	581,622	244,697	5,343,026	673,341
<b>Employment</b>									
	2000	0	114,064,976	0	20,587,385	20,276,634	16,260,025	57,124,044	56,940,932
	1999	0	110,705,661	0	20,388,287	19,703,162	15,637,643	55,729,092	54,976,569
	1998	0	108,117,731	0	20,275,405	19,377,614	15,411,390	55,064,409	53,053,322
	1997	0	105,299,123	0	20,118,816	19,109,691	15,316,863	54,545,370	50,753,753
	1996	0	102,187,297	0	19,881,502	18,643,192	14,649,808	53,174,502	49,012,795
	1995	0	100,314,946	0	19,569,861	18,422,228	14,660,421	52,652,510	47,662,436
	1994	0	96,721,594	0	19,195,318	17,693,995	14,118,375	51,007,688	45,713,906
	1993	0	94,773,913	0	19,070,191	17,420,634	13,825,238	50,316,063	44,457,850
	1992	0	92,825,797	0	18,772,644	17,121,010	13,307,187	49,200,841	43,624,956
	1991	0	92,307,559	0	18,712,812	17,146,411	13,143,390	49,002,613	43,304,946
	1990	0	93,469,275	0	18,911,906	17,710,042	13,544,849	50,166,797	43,302,478
<b>Annual payroll (thousands of dollars)</b>									
	1999	0	91,626,094	0	18,626,776	17,353,444	13,373,640	49,353,860	42,272,234
	1988	0	87,844,303	0	18,319,642	16,833,702	12,761,379	47,914,723	39,929,580
<b>Annual payroll (thousands of dollars)</b>									
	2000	NA	3,879,430,052	38,594,167	591,123,880	608,446,434	527,544,627	1,727,114,941	2,152,315,111
	1999	NA	3,554,692,909	34,264,682	561,547,424	564,974,625	474,607,339	1,601,129,388	1,953,563,521
	1998	NA	3,309,405,533	31,634,539	535,184,511	531,231,157	446,353,485	1,512,769,153	1,796,636,380
	1997	NA	3,047,907,469	29,732,398	503,130,254	494,617,183	418,452,574	1,416,200,011	1,631,707,458
	1996	NA	2,848,623,049	27,583,182	481,008,640	465,229,685	384,020,002	1,330,258,327	1,518,364,722
	1995	NA	2,665,921,824	25,787,172	454,009,065	437,065,364	361,060,815	1,252,135,244	1,413,786,580
	1994	NA	2,487,959,727	24,081,138	432,791,911	408,053,078	335,573,696	1,176,418,685	1,311,541,042
	1993	NA	2,363,208,106	22,361,727	415,254,636	385,005,072	316,183,732	1,116,443,440	1,246,764,666
	1992	NA	2,272,392,408	21,432,778	399,804,694	368,969,129	298,174,483	1,066,948,306	1,205,444,102
	1991	NA	2,145,015,851	NA	381,544,608	352,032,797	279,436,898	1,013,014,303	1,132,001,548
	1990	NA	2,103,971,179	NA	375,313,660	352,390,861	279,451,864	1,007,156,385	1,096,814,794
	1989	NA	1,989,941,554	NA	357,259,587	332,733,188	264,144,335	954,137,110	1,035,804,444
	1988	NA	1,858,652,147	NA	342,168,460	315,751,201	244,647,178	902,566,839	956,085,308
<b>Receipts (thousands of dollars)</b>									
	1997	586,315,756	18,242,632,687	190,570,902	2,786,839,570	2,519,756,576	2,161,615,554	7,468,211,700	10,774,420,987

NA = Not available

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll.

Notes: Establishments are locations with active payroll in any quarter. Firms are an aggregation of all establishments owned by a parent company. This table illustrates the changing importance of firm sizes over time, not job growth, as firms can grow or decline and change firm sizes over time. Receipts data are available only for 1997.

Source: U.S. Small Business Administration, Office of Advocacy, based on data provided by the U.S. Department of Commerce, Bureau of the Census, Statistics of U.S. Business and Nonemployer Statistics.

**Table A.6 Employer Firms, Establishments, Employment, and Annual Payroll by Firm Size and State, 2000**  
(Annual payroll in thousands of dollars)

State	Total	Employment Size of Firm					500+
		0-19*	20-99	100-499	<500		
United States	Firms	5,035,029	515,977	84,385	5,635,391	17,153	
	Establishments	5,093,832	674,106	312,112	6,080,050	989,998	
	Employment	20,587,385	20,276,634	16,260,025	57,124,044	56,940,932	
	Annual payroll	591,123,880	608,446,434	527,544,627	1,727,114,941	2,152,315,111	
Alabama	Firms	68,236	7,591	1,770	77,597	2,255	
	Establishments	68,939	9,883	4,898	83,720	16,097	
	Employment	297,525	285,155	222,505	805,185	847,889	
	Annual payroll	6,738,125	7,049,010	5,799,791	19,586,926	24,370,890	
Alaska	Firms	14,040	1,128	279	15,447	481	
	Establishments	14,250	1,598	855	16,703	1,798	
	Employment	52,958	40,111	34,343	127,412	77,475	
	Annual payroll	1,716,439	1,303,174	1,157,500	4,177,113	3,472,635	
Arizona	Firms	79,262	8,764	2,294	90,320	2,684	
	Establishments	80,060	10,780	5,411	96,251	18,553	
	Employment	323,326	325,525	268,432	917,283	1,002,070	
	Annual payroll	8,907,303	8,661,294	7,552,099	25,120,696	33,115,083	
Arkansas	Firms	45,372	4,430	1,035	50,837	1,568	
	Establishments	45,799	5,790	3,022	54,611	8,574	
	Employment	185,154	162,277	131,162	478,593	512,237	
	Annual payroll	3,927,786	3,568,004	2,960,678	10,456,468	14,206,867	
California	Firms	581,084	65,114	12,700	658,898	5,687	
	Establishments	587,316	80,345	33,987	701,648	98,215	
	Employment	2,368,864	2,511,101	1,955,055	6,835,020	6,049,672	
	Annual payroll	80,136,408	85,838,266	77,439,173	243,413,847	270,946,631	
Colorado	Firms	101,516	9,549	2,262	113,327	2,896	
	Establishments	102,332	11,646	5,200	119,178	18,350	
	Employment	383,003	351,465	251,263	985,731	927,571	
	Annual payroll	11,553,786	10,747,557	8,542,599	30,843,942	37,335,248	
Connecticut	Firms	67,240	7,338	1,785	76,363	2,091	
	Establishments	67,892	8,781	3,994	80,667	11,769	
	Employment	282,128	271,444	222,037	775,609	770,641	
	Annual payroll	10,204,231	10,347,284	9,727,063	30,278,578	37,106,232	
Delaware	Firms	16,611	1,756	534	18,901	1,266	
	Establishments	16,739	2,136	1,005	19,880	3,891	
	Employment	63,565	61,266	44,651	169,482	207,795	
	Annual payroll	1,889,741	1,917,461	1,348,636	5,155,838	9,164,173	
District of Columbia	Firms	12,399	2,040	804	15,243	1,085	
	Establishments	12,465	2,351	1,315	16,131	3,524	
	Employment	53,438	71,548	76,422	201,408	213,575	
	Annual payroll	2,662,481	3,145,868	3,372,807	9,181,156	10,803,349	
Florida	Firms	319,256	24,952	5,539	349,747	4,216	
	Establishments	321,883	30,567	14,567	367,017	61,421	
	Employment	1,157,688	939,149	736,176	2,833,013	3,384,373	

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll. (Continued, next page)

**Table A.6 (continued)**

State	Total	Employment Size of Firm				
		0-19*	20-99	100-499	<500	500+
Florida	177,378,971	32,245,461	26,477,458	21,243,068	79,965,987	97,412,984
Georgia						
Annual payroll	160,440	138,279	14,395	3,833	156,507	3,933
Firms	200,442	139,462	17,649	8,757	165,868	34,574
Establishments	3,483,500	548,972	530,709	435,255	1,514,936	1,968,564
Employment	112,899,269	15,955,082	15,372,648	13,495,207	44,822,937	68,076,332
Hawaii						
Annual payroll	24,325	20,753	2,244	529	23,526	799
Firms	29,853	21,132	3,120	1,719	25,971	3,882
Establishments	432,092	89,735	85,381	71,066	246,182	185,910
Employment	12,331,233	2,409,129	2,206,639	1,900,522	6,516,290	5,814,943
Idaho						
Annual payroll	32,181	28,007	2,626	564	31,197	984
Firms	37,429	28,272	3,471	1,589	33,332	4,097
Establishments	450,788	112,395	94,018	56,514	262,927	187,861
Employment	12,395,973	2,465,081	2,180,122	1,406,977	6,052,180	6,343,793
Illinois						
Annual payroll	254,071	218,064	25,308	6,234	249,606	4,465
Firms	308,067	220,267	30,705	14,049	265,021	43,046
Establishments	5,501,036	893,919	957,495	812,262	2,663,676	2,837,360
Employment	201,319,268	28,541,440	31,521,116	27,880,817	87,943,373	113,375,895
Indiana						
Annual payroll	116,256	98,121	12,277	2,926	113,324	2,932
Firms	146,321	99,249	15,866	7,980	123,095	23,226
Establishments	2,650,774	436,420	464,865	391,891	1,293,176	1,357,598
Employment	78,992,813	10,487,392	12,383,578	11,124,232	33,995,202	44,997,611
Iowa						
Annual payroll	65,558	56,172	6,221	1,495	63,888	1,670
Firms	80,890	56,940	8,657	4,736	70,333	10,557
Establishments	1,265,064	236,636	234,669	196,637	667,942	597,122
Employment	33,752,570	5,019,013	5,687,940	5,007,330	15,714,283	18,038,287
Kansas						
Annual payroll	61,551	52,388	5,809	1,426	59,623	1,928
Firms	74,939	53,044	7,833	3,638	64,515	10,424
Establishments	1,128,732	215,414	215,125	173,770	604,309	524,423
Employment	31,990,762	5,015,514	5,483,086	4,565,363	15,063,963	16,926,799
Kentucky						
Annual payroll	72,300	61,042	7,242	1,803	70,087	2,213
Firms	89,921	61,626	9,299	4,608	75,533	14,388
Establishments	1,513,722	266,536	265,426	225,448	757,410	756,312
Employment	41,233,591	5,906,234	6,461,576	5,696,531	18,064,341	23,169,250
Louisiana						
Annual payroll	81,669	69,495	8,295	1,779	79,569	2,100
Firms	101,016	70,260	10,564	4,594	85,418	15,598
Establishments	1,592,357	304,430	316,245	232,741	853,416	738,941
Employment	42,975,159	7,107,858	7,387,814	6,003,215	20,498,887	22,476,272
Maine						
Annual payroll	34,148	30,099	2,584	601	33,284	864
Firms	39,466	30,356	3,369	1,744	35,469	3,997
Establishments	491,780	116,489	98,136	80,213	294,838	196,942
Employment	13,490,186	2,742,728	2,440,307	2,173,032	7,356,067	6,134,119
Maryland						
Annual payroll	105,971	90,442	10,423	2,496	103,361	2,610
Firms	128,467	91,310	12,699	5,479	109,488	18,979
Establishments	2,058,304	376,154	388,037	311,165	1,075,356	982,948
Employment						

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll. (continued, next page)



**Table A.6 (continued)**

State	Total	Employment Size of Firm				
		0-19*	20-99	100-499	<500	500+
Maryland	70,877,270	11,391,044	12,100,958	10,725,808	34,217,810	36,659,460
Massachusetts						
Annual payroll	148,235	127,819	14,045	3,405	145,269	2,966
Firms	176,222	129,029	16,798	8,405	154,232	21,990
Establishments	3,087,044	521,516	539,616	472,875	1,534,007	1,553,037
Employment	131,444,257	18,121,661	20,431,135	19,976,988	58,529,784	72,914,473
Michigan						
Annual payroll	145,482,490	20,704,359	22,870,385	19,499,049	63,073,793	82,408,697
Firms	116,199	99,443	11,633	2,631	113,707	2,492
Establishments	139,080	100,405	14,653	6,790	121,848	17,232
Employment	2,395,361	405,566	444,369	370,819	1,220,754	1,174,607
Annual payroll	82,483,852	12,334,415	12,955,976	11,923,660	37,214,051	45,269,801
Mississippi						
Annual payroll	22,843,586	3,611,330	3,454,543	2,874,930	9,940,803	12,902,783
Firms	118,063	101,094	11,509	2,641	115,244	2,819
Establishments	144,755	102,270	14,737	6,828	123,835	20,920
Employment	2,398,979	421,073	437,427	331,585	1,190,085	1,208,894
Annual payroll	72,195,796	10,666,162	11,644,242	9,629,869	31,940,273	40,255,523
Missouri						
Annual payroll	6,808,075	1,890,020	1,494,500	989,226	4,373,746	2,434,329
Firms	41,413	35,533	3,720	848	40,101	1,312
Establishments	49,623	35,982	4,901	2,507	43,390	6,233
Employment	751,076	146,346	138,874	99,614	384,834	366,242
Annual payroll	20,283,421	3,186,923	3,458,018	2,611,774	9,256,715	11,026,706
Montana						
Annual payroll	6,808,075	1,890,020	1,494,500	989,226	4,373,746	2,434,329
Firms	27,996	25,009	1,982	370	27,361	635
Establishments	31,849	25,216	2,598	1,174	28,988	2,861
Employment	296,220	95,819	71,205	41,850	208,874	87,346
Annual payroll	20,283,421	3,186,923	3,458,018	2,611,774	9,256,715	11,026,706
Nebraska						
Annual payroll	20,283,421	3,186,923	3,458,018	2,611,774	9,256,715	11,026,706
Firms	41,413	35,533	3,720	848	40,101	1,312
Establishments	49,623	35,982	4,901	2,507	43,390	6,233
Employment	751,076	146,346	138,874	99,614	384,834	366,242
Annual payroll	20,283,421	3,186,923	3,458,018	2,611,774	9,256,715	11,026,706
Nevada						
Annual payroll	26,597,395	4,098,056	4,019,493	3,688,736	11,806,285	14,791,110
Firms	40,251	33,407	3,830	1,254	38,491	1,760
Establishments	48,178	33,685	4,537	2,417	40,639	7,539
Employment	902,775	132,691	136,673	125,175	394,539	508,236
Annual payroll	26,597,395	4,098,056	4,019,493	3,688,736	11,806,285	14,791,110
New Hampshire						
Annual payroll	17,826,474	3,505,294	3,423,991	2,580,743	9,510,028	8,316,446
Firms	32,100	27,307	3,010	701	31,018	1,082
Establishments	37,414	27,538	3,624	1,589	32,751	4,663
Employment	546,400	113,607	109,324	79,578	302,509	243,891
Annual payroll	17,826,474	3,505,294	3,423,991	2,580,743	9,510,028	8,316,446
New Jersey						
Annual payroll	147,082,234	23,960,959	22,889,782	18,379,527	65,230,268	81,851,966
Firms	202,213	178,359	16,830	3,795	198,984	3,229
Establishments	233,559	179,550	19,199	7,484	206,233	27,326
Employment	3,548,429	686,472	627,126	489,860	1,803,458	1,744,971
Annual payroll	147,082,234	23,960,959	22,889,782	18,379,527	65,230,268	81,851,966
New Mexico						
Annual payroll	549,352	123,630	111,642	82,230	317,502	231,850
Firms	35,469	30,147	3,151	786	34,084	1,385
Establishments	42,782	30,446	4,024	2,018	36,488	6,294
Employment	549,352	123,630	111,642	82,230	317,502	231,850

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll. (continued, next page)

**Table A.6 (continued)**

State	Total	Employment Size of Firm				
		0-19*	20-99	100-499	<500	500+
New Mexico	14,303,193	2,766,352	2,559,684	2,092,952	7,418,988	6,884,205
New York	424,784	379,214	34,158	7,146	420,518	4,266
	492,073	381,774	40,150	16,989	438,913	53,160
	7,353,209	1,419,136	1,292,076	1,094,571	3,805,783	3,547,426
	330,586,554	49,460,408	48,627,488	44,258,621	142,346,517	188,240,037
North Carolina	163,643	141,994	14,968	3,349	160,311	3,332
	203,903	143,468	19,288	9,290	172,046	31,857
	3,385,492	591,728	555,598	445,460	1,592,786	1,792,706
	99,687,306	15,003,583	14,712,724	12,569,715	42,286,022	57,401,284
North Dakota	17,163	14,654	1,548	391	16,593	570
	20,139	14,862	2,097	1,034	17,993	2,146
	255,178	61,106	58,557	46,116	165,779	89,399
	6,057,225	1,258,177	1,265,149	1,009,244	3,532,570	2,524,655
Ohio	212,542	180,515	23,136	5,090	208,741	3,801
	270,509	182,897	29,682	13,530	226,109	44,400
	5,001,980	807,707	891,431	724,635	2,423,773	2,578,207
	155,035,151	21,063,775	24,802,667	20,954,971	66,821,413	88,213,738
Oklahoma	70,156	60,970	6,005	1,316	68,291	1,865
	85,094	61,596	7,919	3,499	73,014	12,080
	1,201,606	247,840	226,771	166,943	641,554	560,052
	31,700,630	5,556,027	5,294,419	4,135,895	14,986,341	16,714,289
Oregon	85,116	74,186	7,262	1,632	83,080	2,036
	100,645	74,884	9,384	4,832	89,100	11,545
	1,355,442	298,502	262,821	195,978	757,301	598,141
	43,689,551	7,503,389	7,531,253	5,884,605	20,919,247	22,770,304
Pennsylvania	237,518	204,601	23,773	5,231	233,605	3,913
	294,741	207,048	29,956	13,948	250,952	43,789
	5,087,237	881,571	909,926	762,844	2,554,341	2,532,896
	165,108,376	23,385,060	26,599,197	22,969,932	72,954,189	92,154,187
Rhode Island	25,243	21,521	2,256	564	24,341	902
	28,534	21,682	2,546	1,168	25,396	3,138
	415,168	85,980	84,212	71,898	242,090	173,078
	12,585,945	2,369,301	2,415,629	1,979,197	6,764,127	5,821,818
South Carolina	78,360	67,179	7,231	1,732	76,142	2,218
	97,146	67,895	9,051	4,549	81,495	15,651
	1,601,532	284,965	263,703	201,636	750,304	851,228
	43,362,158	6,677,478	6,280,274	4,963,819	17,921,571	25,440,587
South Dakota	20,558	17,663	1,783	451	19,897	661
	23,783	17,895	2,337	1,307	21,539	2,244
	306,704	72,817	64,364	50,082	187,263	119,441
	7,296,364	1,419,559	1,439,541	1,148,341	4,007,441	3,288,923
Tennessee	102,427	86,664	10,165	2,617	99,446	2,981
	130,876	87,549	12,747	6,373	106,669	24,207
	2,390,322	370,457	379,300	324,365	1,074,122	1,316,200

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll. (continued, next page)

**Table A.6 (continued)**

State	Total	Employment Size of Firm				
		0-19*	20-99	100-499	<500	500+
Tennessee	69,411,435	9,389,906	10,500,389	8,971,192	28,861,487	40,549,948
Texas						
Annual payroll	369,039	321,265	35,286	7,462	364,013	5,026
Firms	471,509	325,247	45,556	20,919	391,722	79,787
Establishments	8,026,438	1,342,771	1,348,425	1,032,371	3,723,567	4,302,871
Employment	269,917,800	38,998,092	38,342,576	32,092,967	109,433,635	160,484,165
Annual payroll						
Firms	46,190	39,280	4,256	1,019	44,535	1,655
Establishments	55,379	39,589	5,312	2,405	47,306	8,073
Employment	917,089	158,063	156,546	117,480	432,089	485,000
Annual payroll	25,439,601	3,972,493	4,131,469	3,212,170	11,316,132	14,123,469
Vermont						
Firms	19,112	16,666	1,502	350	18,518	594
Establishments	21,564	16,793	1,935	1,050	19,778	1,786
Employment	253,541	66,885	53,516	44,664	165,065	88,476
Annual payroll	6,938,080	1,555,247	1,331,456	1,217,825	4,104,528	2,833,552
Virginia						
Firms	139,737	120,324	13,054	3,210	136,588	3,149
Establishments	175,582	121,576	16,475	8,098	146,149	29,433
Employment	2,903,548	500,840	481,901	405,573	1,388,314	1,515,234
Annual payroll	97,692,222	13,895,707	14,439,894	13,204,881	41,540,482	56,151,740
Washington						
Firms	138,228	120,931	11,996	2,671	135,598	2,630
Establishments	164,018	122,151	15,529	6,906	144,586	19,432
Employment	2,267,485	481,339	440,357	332,306	1,254,002	1,013,483
Annual payroll	87,746,294	13,314,188	13,409,193	12,109,036	38,832,417	48,913,877
West Virginia						
Firms	33,496	28,789	2,904	663	32,356	1,140
Establishments	41,047	29,151	3,825	1,972	34,948	6,099
Employment	558,171	122,635	105,949	73,836	302,420	255,751
Annual payroll	14,019,258	2,382,954	2,400,580	1,634,945	6,418,479	7,600,779
Wisconsin						
Firms	115,609	98,174	12,412	2,632	113,218	2,391
Establishments	140,415	99,270	16,036	7,154	122,460	17,955
Employment	2,414,834	431,722	474,938	391,532	1,298,192	1,116,642
Annual payroll	72,892,099	10,889,914	12,501,494	11,174,051	34,565,459	38,326,640
Wyoming						
Firms	15,935	13,932	1,192	268	15,392	543
Establishments	18,120	14,052	1,598	639	16,289	1,831
Employment	174,614	54,818	40,069	25,657	120,544	54,070
Annual payroll	4,540,493	1,160,815	938,133	683,318	2,782,266	1,758,227

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll.

Notes: For state data, a firm is defined as an aggregation of all establishments owned by a parent company within a state. Establishments are locations with active payroll in any quarter.

Source: Office of Advocacy, U.S. Small Business Administration, based on data provided by the U.S. Department of Commerce, Bureau of the Census.

**Table A.7 Employer Firms, Establishments, Employment, and Annual Payroll by Firm Size and Industry, 2000**  
(annual payroll in thousands of dollars)

Industry	Total	0-19*	20-99	100-499	0-499	500+
Total	5,652,544	5,035,029	515,977	84,385	5,635,391	17,153
Firms	7,070,048	5,093,832	674,106	312,112	6,080,050	989,998
Establishments	114,064,976	20,587,385	20,276,634	16,260,025	57,124,044	56,940,932
Employment	3,879,430,052	591,123,880	608,446,434	527,544,627	1,727,114,941	2,152,315,111
Annual payroll	25,450	23,814	1,315	224	25,353	97
Agriculture, forestry, fishing, and hunting	26,076	23,838	1,394	417	25,649	427
Establishments	183,565	86,439	46,326	29,065	161,830	21,735
Employment	4,682,533	2,136,310	1,155,392	651,469	3,943,171	739,362
Annual payroll	18,756	15,880	2,094	447	18,421	335
Mining	23,738	16,149	2,649	1,185	19,983	3,755
Establishments	456,128	64,606	76,770	59,098	200,474	255,654
Employment	22,091,246	2,364,413	3,083,379	2,877,049	8,324,841	13,766,405
Annual payroll	7,022	5,645	888	274	6,807	215
Utilities	17,301	5,698	1,385	1,029	8,112	9,189
Establishments	655,230	21,919	39,078	43,739	104,736	550,494
Employment	40,650,836	646,038	1,655,283	2,157,831	4,459,152	36,191,684
Annual payroll	701,947	639,129	55,431	6,381	700,941	1,006
Construction	709,590	639,286	56,044	7,701	703,031	6,559
Establishments	6,572,800	2,522,546	2,077,191	1,075,331	5,675,068	897,732
Employment	239,910,149	76,570,937	77,786,601	44,632,067	198,989,605	40,920,544
Annual payroll						
Manufacturing	306,303	221,593	63,860	16,186	301,639	4,664
Firms	354,498	222,012	67,334	25,765	315,111	39,387
Establishments	16,473,994	1,256,076	2,646,829	2,898,980	6,801,885	9,672,109
Employment	643,953,798	37,325,710	86,915,098	101,758,644	225,999,452	417,954,346
Annual payroll	354,153	301,595	41,254	8,004	350,853	3,300
Wholesale trade	446,237	306,630	56,106	25,150	387,886	58,351
Firms	6,112,029	1,360,220	1,510,645	1,015,656	3,886,521	2,225,508
Establishments	270,122,206	51,825,147	59,560,471	42,349,556	153,735,174	116,387,032
Employment	731,444	658,767	61,308	8,957	729,032	2,412
Annual payroll	1,113,573	674,435	97,703	52,214	824,352	289,221
Retail trade	14,840,775	2,916,245	2,279,862	1,295,499	6,491,606	8,349,169
Firms	302,552,506	56,674,705	58,906,964	35,766,023	151,347,692	151,204,814
Establishments	157,333	138,198	15,162	2,829	156,189	1,144
Employment	190,044	139,022	18,168	7,946	165,136	24,908
Annual payroll	3,790,002	519,261	582,262	454,573	1,556,096	2,233,906
Transportation and warehousing	125,592,421	13,708,415	16,373,144	13,911,158	43,992,717	81,599,704
Firms	79,565	67,279	9,098	2,094	78,471	1,094
Establishments	133,590	67,913	10,781	5,474	84,168	49,422
Employment	3,545,731	274,738	358,301	363,472	996,511	2,549,220
Annual payroll	209,393,800	12,906,113	16,765,223	22,180,082	51,851,418	157,542,382
Information						

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll. (continued, next page)

**Table A.7 (continued)**

Industry	Total	0-19*	20-99	100-499	0-499	500+
Finance and insurance						
Firms	227,034	206,607	15,171	3,626	225,404	1,630
Establishments	423,727	211,334	30,889	25,719	267,942	155,785
Employment	5,963,426	686,710	606,867	620,697	1,914,274	4,049,152
Annual payroll	346,805,452	30,312,248	29,984,626	33,202,192	93,479,066	253,326,386
Real estate and rental and leasing						
Firms	244,513	230,149	10,742	2,355	243,246	1,267
Establishments	300,177	234,060	17,491	10,460	262,011	38,166
Employment	1,942,046	691,744	379,343	286,773	1,357,860	584,186
Annual payroll	59,212,092	19,187,748	11,408,118	9,243,124	39,838,990	19,373,102
Professional, scientific, and technical services						
Firms	670,099	624,886	37,054	5,812	667,752	2,347
Establishments	722,698	628,216	45,377	15,633	689,226	33,472
Employment	6,816,216	2,061,970	1,383,599	962,674	4,408,243	2,407,973
Annual payroll	362,008,229	90,061,899	75,082,116	58,381,734	223,525,749	138,482,480
Management of companies and enterprises						
Firms	26,762	7,262	5,340	7,489	20,091	6,671
Establishments	47,387	7,322	5,535	8,487	21,344	26,043
Employment	2,873,521	18,880	66,768	221,993	307,641	2,565,880
Annual payroll	211,361,063	1,749,846	3,369,774	11,775,224	16,894,844	194,466,219
Administrative and support and waste management and remediation services						
Firms	299,329	261,768	26,625	7,754	296,147	3,182
Establishments	351,528	263,140	29,799	13,613	306,552	44,976
Employment	9,138,100	994,277	1,067,856	1,415,338	3,477,471	5,660,629
Annual payroll	210,281,063	28,205,461	26,982,624	30,408,677	85,596,762	124,684,301
Educational services						
Firms	60,934	45,506	11,558	2,890	59,954	980
Establishments	68,014	45,851	12,911	5,394	64,156	3,858
Employment	2,532,324	208,478	481,276	503,454	1,193,208	1,339,116
Annual payroll	61,923,347	4,382,424	9,844,823	11,911,498	26,138,745	35,784,602
Health care and social assistance						
Firms	532,042	466,620	48,611	13,320	528,551	3,491
Establishments	658,559	473,477	68,738	52,295	594,510	64,049
Employment	14,108,655	2,225,851	1,931,306	2,550,412	6,707,569	7,401,086
Annual payroll	431,430,402	82,295,966	59,387,606	61,543,090	203,226,662	228,203,740
Arts, entertainment, and recreation						
Firms	97,072	81,940	12,307	2,250	96,497	575
Establishments	103,816	82,244	13,284	3,527	99,055	4,761
Employment	1,741,497	313,143	496,809	373,153	1,183,105	558,392
Annual payroll	43,203,906	9,858,938	9,436,411	11,151,745	30,447,094	12,756,812
Accommodation and food services						
Firms	412,776	329,898	73,177	8,056	411,131	1,645
Establishments	542,411	332,631	85,660	32,224	450,515	91,896
Employment	9,880,923	1,754,785	2,775,956	1,423,334	5,954,075	3,926,848
Annual payroll	125,581,836	20,566,137	31,208,058	17,074,291	68,848,486	56,733,350
Other services (except public administration)						
Firms	661,709	615,919	40,222	4,336	660,477	1,232
Establishments	723,323	621,854	51,187	15,733	688,774	34,549
Employment	5,293,399	2,481,150	1,442,599	620,930	4,544,679	748,720
Annual payroll	109,876,770	46,674,803	28,851,875	14,876,218	90,402,896	19,473,874

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll. (continued, next page)

Table A.7 (continued)

Industry	Total	0-19*	20-99	100-499	0-499	500+
Auxiliaries, except corporate, subsidiary, and regional managing offices						
Firms	5,403	323	1,013	1,688	3,024	2,379
Establishments	14,793	334	1,089	2,146	3,569	11,224
Employment	1,001,015	886	10,852	45,854	57,592	943,423
Annual payroll	54,863,304	37,119	409,258	1,692,955	2,139,332	52,723,972
Unclassified						
Firms	98,968	98,386	582	0	98,968	0
Establishments	98,968	98,386	582	0	98,968	0
Employment	143,600	127,461	16,139	0	143,600	0
Annual payroll	3,933,093	3,633,503	299,590	0	3,933,093	0

\* Employment is measured in March; startups after March, closures before March, and seasonal firms will have no employment and some annual payroll.

Notes: Firms are an aggregation of all establishments owned by a parent company within an industry. The newer North American Industry Classification System (NAICS) 1998 figures differ slightly from Standard Industrial Classification (SIC) figures because of reclassification in the railroad industry.

Source: U.S. Small Business Administration, Office of Advocacy, based on data provided by the U.S. Department of Commerce, Bureau of the Census.

Table A.8 Self-employment by State, 1990-2002 (thousands)

State	1990	1995	2000	2001	2002
United States	10,097	10,482	9,907	9,826	9,650
Yearly change (percent)	—	—	-1.7	-0.8	-1.8
Alabama	140	140	144	123	119
Alaska	31	36	29	27	28
Arizona	148	153	156	170	153
Arkansas	127	111	87	102	98
California	1,453	1,532	1,505	1,489	1,478
Colorado	158	164	183	169	167
Connecticut	113	123	123	119	122
Delaware	18	21	22	19	17
District of Columbia	17	13	14	14	12
Florida	475	468	438	444	447
Georgia	231	242	248	230	251
Hawaii	44	54	47	45	49
Idaho	59	79	66	70	64
Illinois	382	384	332	335	343
Indiana	193	227	198	185	188
Iowa	191	189	140	141	131
Kansas	138	134	109	100	116
Kentucky	163	146	136	141	131
Louisiana	171	150	135	131	130
Maine	76	81	80	70	64
Maryland	131	143	159	154	161
Massachusetts	222	238	207	219	207
Michigan	270	298	297	301	289
Minnesota	243	270	216	246	236
Mississippi	95	82	106	98	106
Missouri	209	247	194	211	199
Montana	59	69	64	59	59
Nebraska	111	122	97	100	94
Nevada	45	52	47	51	52
New Hampshire	49	63	61	51	55
New Jersey	243	227	198	208	197
New Mexico	87	90	73	66	72
New York	569	546	541	527	536

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**Table A.8 (continued)**

State	1990	1995	2000	2001	2002
North Carolina	275	263	291	270	253
North Dakota	51	53	42	40	39
Ohio	337	374	343	352	318
Oklahoma	175	160	154	163	144
Oregon	170	172	193	162	150
Pennsylvania	405	421	379	405	375
Rhode Island	33	24	23	24	25
South Carolina	121	111	121	117	109
South Dakota	59	61	49	53	49
Tennessee	196	221	217	216	236
Texas	712	836	817	824	803
Utah	74	70	75	75	67
Vermont	43	39	35	32	37
Virginia	230	235	198	166	178
Washington	265	252	226	228	222
West Virginia	48	52	46	45	45
Wisconsin	212	218	220	212	206
Wyoming	27	32	31	30	26

Notes: Primarily self-employed and unincorporated. Figures for some years are directly from the U.S. Department of Labor, Bureau of Labor Statistics (BLS); for other years figures are from the Current Population Survey microdata, adjusted to match the BLS total figure.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the Current Population Survey, a joint U.S. Census Bureau and Bureau of Labor Statistics project.

**Table A.9 Nonemployer Firms and Receipts by State, 1997–2001**

State	Nonemployers					Receipts (millions of dollars)				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
United States	15,439,609	15,708,727	16,152,604	16,529,955	16,979,498	586,315.8	643,720.5	667,219.7	709,378.8	729,922
Alabama	208,305	213,556	219,932	223,103	229,687	7,598.6	8,317.4	8,516.5	8,827.2	9,179.6
Alaska	48,964	47,900	48,441	47,691	46,643	1,610.4	1,605.4	1,827.8	1,721.2	1,722.1
Arizona	240,925	248,462	260,743	268,969	276,858	8,676.5	10,151.5	10,943.6	11,931.3	12,070.8
Arkansas	143,236	147,162	151,948	152,871	156,711	4,886.8	5,298.8	5,663.7	5,738.0	5,851.0
California	1,936,556	1,971,388	2,050,809	2,103,178	2,149,145	85,757.7	93,824.8	98,922.7	106,592.1	107,604.7
Colorado	303,196	311,855	325,432	333,364	341,380	10,928.0	12,452.1	13,319.2	14,277.5	14,841.3
Connecticut	206,352	210,682	211,724	217,323	220,751	9,438.4	10,503.1	10,573.6	11,563.3	11,816.4
Delaware	37,783	39,244	39,181	41,082	42,303	1,484.0	1,719.6	1,734.3	1,854.1	1,962.8
District of Columbia	30,468	30,810	31,486	32,941	33,929	1,249.1	1,413.1	1,380.0	1,502.6	1,608.5
Florida	961,637	987,458	1,031,053	1,074,020	1,119,416	37,306.5	42,656.8	44,572.3	48,136.8	50,308.4
Georgia	419,856	435,338	452,567	468,430	492,725	17,187.4	19,040.8	20,297.2	21,142.8	22,045.6
Hawaii	70,203	71,039	72,610	73,810	74,969	2,350.4	2,560.1	2,664.3	2,835.7	2,901.8
Idaho	79,240	80,506	83,083	84,378	85,480	2,665.3	2,810.8	3,005.5	3,102.8	3,204.5
Illinois	637,794	640,441	665,553	668,171	692,871	23,007.8	25,085.4	25,926.2	26,162.1	27,691.8
Indiana	302,082	304,764	312,840	319,415	323,178	9,570.0	10,447.9	10,728.2	11,425.5	11,590.1
Iowa	164,267	165,933	169,753	171,483	173,658	4,604.5	5,042.7	5,198.9	5,464.3	5,605.8
Kansas	154,619	152,816	155,052	156,897	159,244	4,768.8	5,085.9	5,196.5	5,467.4	5,724.7
Kentucky	212,238	217,806	222,304	226,193	230,083	6,866.1	7,509.4	7,772.5	8,124.2	8,484.9

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Table A.9 (continued)

State	Nonemployers					Receipts (millions of dollars)				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Louisiana	216,095	219,073	228,628	234,114	241,640	7,670.3	8,406.5	8,687.0	9,267.4	9,390.0
Maine	95,557	97,068	96,884	98,499	99,709	3,024.7	3,249.8	3,295.7	3,602.1	3,666.7
Maryland	298,912	303,243	307,535	322,819	331,177	10,730.9	11,795.5	11,469.6	12,829.1	13,189.4
Massachusetts	399,906	402,837	404,333	410,481	412,941	16,635.0	18,182.5	18,386.3	19,810.8	20,051.9
Michigan	490,096	497,944	506,038	526,958	535,202	17,566.0	19,610.3	19,691.3	20,909.8	21,328.3
Minnesota	304,038	307,038	313,444	317,874	324,967	10,115.4	11,178.5	11,648.0	12,162.9	12,474.6
Mississippi	121,668	125,634	130,932	134,853	139,078	4,425.7	4,909.0	5,073.7	5,365.0	5,456.6
Missouri	297,332	302,681	310,678	311,786	319,456	9,427.4	10,270.2	10,728.7	11,201.0	11,661.9
Montana	67,187	68,038	69,327	70,243	71,298	2,026.2	2,186.5	2,290.3	2,352.2	2,446.3
Nebraska	99,298	100,146	102,137	103,272	105,475	2,933.9	3,196.1	3,232.9	3,405.9	3,565.4
Nevada	93,777	99,353	106,416	113,744	119,228	4,325.5	4,874.4	5,179.1	5,900.2	6,083.4
New Hampshire	84,981	86,035	86,589	88,899	90,333	3,343.5	3,743.3	3,893.9	4,153.3	4,360.7
New Jersey	457,920	465,587	471,485	482,699	495,109	21,184.6	22,970.8	23,406.6	25,100.3	25,634.5
New Mexico	96,964	97,101	99,319	81,398	100,502	2,896.5	3,142.2	3,216.6	2,432.7	3,446.3
New York	1,101,776	1,137,871	1,168,595	1,202,943	1,258,822	46,491.8	50,302.0	51,298.4	53,764.4	55,921.9
North Carolina	419,458	430,891	445,159	462,182	474,905	14,617.6	16,202.2	16,899.3	18,254.6	18,640.0
North Dakota	38,642	38,543	38,921	39,624	40,615	1,121.9	1,178.9	1,226.2	1,285.1	1,347.6
Ohio	575,489	579,907	591,150	602,921	608,520	19,938.7	21,690.4	21,930.4	23,131.5	23,352.2
Oklahoma	213,146	214,323	217,991	219,026	221,777	7,150.9	7,473.6	7,842.4	8,293.0	8,807.7
Oregon	209,846	209,844	212,334	212,165	213,523	7,491.4	8,058.0	8,485.9	8,435.5	8,662.5
Pennsylvania	612,630	613,272	614,594	632,469	639,679	23,565.1	25,062.9	24,651.4	27,029.4	27,212.2
Rhode Island	56,281	57,336	57,664	59,406	60,516	2,056.8	2,265.1	2,264.9	2,495.6	2,583.8
South Carolina	188,081	193,626	200,265	206,770	212,413	6,835.2	7,600.9	7,967.6	8,558.4	8,696.3
South Dakota	46,311	46,288	47,469	48,177	49,016	1,327.3	1,420.0	1,457.0	1,556.2	1,623.6
Tennessee	316,604	325,676	335,266	339,361	349,957	11,911.1	13,089.7	13,598.9	14,097.5	14,581.5
Texas	1,170,566	1,188,028	1,236,927	1,271,401	1,319,388	46,724.3	51,130.1	54,434.4	58,277.6	60,538.1
Utah	126,190	129,525	134,513	135,794	138,928	4,601.4	5,271.2	5,645.0	5,651.8	5,815.5
Vermont	49,032	49,835	49,696	51,220	52,136	1,501.7	1,659.2	1,649.0	1,828.2	1,857.0
Virginia	349,652	355,519	360,974	373,384	384,276	11,749.1	13,010.2	13,129.4	14,392.9	15,163.0
Washington	315,367	315,472	321,766	326,397	326,821	11,405.3	12,374.4	13,097.7	13,979.3	13,735.8
West Virginia	79,608	80,771	81,212	81,838	82,791	2,112.0	2,245.3	2,262.1	2,375.5	2,463.9
Wisconsin	255,299	258,776	264,657	268,268	273,758	8,478.1	9,392.4	9,833.8	10,417.2	10,692.5
Wyoming	34,179	34,286	35,195	35,651	36,511	974.0	1,052.5	1,103.5	1,193.7	1,256.3

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census, Nonemployer Statistics.



Table A.10 Employer Firm Births and Terminations by State, 1990–2002

State	Firm births					Firm terminations				
	1990	1995	2000	2001	2002	1990	1995	2000	2001	2002
U.S. Total	584,892	594,369	574,300	e 545,400	e 550,100	531,400	497,246	542,831	e 568,300	e 584,500
Yearly change (percent)	—	—	-0.9	-5.0	0.9	—	—	-0.3	4.7	2.9
Alabama	9,260	9,140	10,067	10,060	9,599	10,927	10,968	9,302	14,781	12,103
Alaska	2,688	2,521	2,333	2,438	2,270	3,382	2,530	2,671	2,575	2,541
Arizona	9,832	12,044	15,175	14,541	14,291	14,235	15,431	11,984	16,371	17,642
Arkansas	6,484	7,042	4,680	3,990	5,381	7,252	4,872	5,581	4,746	4,491
California	139,146	127,074	167,047	128,885	130,840	135,767	152,945	134,541	149,831	156,858
Colorado	11,962	19,703	25,462	24,730	25,290	12,864	17,933	7,561	6,954	10,332
Connecticut	9,399	9,395	9,910	9,074	8,726	11,994	11,619	11,528	11,348	11,383
Delaware	2,083	2,783	3,682	3,352	3,223	1,422	3,193	3,052	3,122	3,891
District of Columbia	3,226	3,250	4,472	4,090	4,157	3,715	3,302	4,996	4,013	3,973
Florida	48,391	54,006	59,912	60,370	72,720	54,009	52,467	55,186	54,573	52,241
Georgia	22,309	24,478	28,925	23,211	28,756	24,448	23,161	26,754	24,352	31,479
Hawaii	3,585	3,874	3,745	3,811	3,555	3,385	3,953	3,521	4,080	3,994
Idaho	3,853	5,053	5,829	5,534	5,039	3,337	4,861	6,249	5,851	7,040
Illinois	27,952	30,393	28,875	28,426	27,342	29,173	30,260	31,361	31,976	32,093
Indiana	10,993	14,355	14,112	13,903	13,530	10,632	14,129	15,738	15,839	16,156
Iowa	5,526	6,103	5,668	5,659	5,660	6,971	7,702	7,485	7,770	7,480
Kansas	6,716	7,600	6,483	7,026	6,703	8,788	8,387	6,981	8,055	6,876
Kentucky	7,730	9,078	8,637	8,713	8,526	11,276	9,307	7,508	9,883	11,614
Louisiana	8,321	9,817	10,468	9,816	9,810	10,883	11,347	13,708	13,319	14,416
Maine	3,978	4,476	5,135	4,667	4,428	4,737	4,676	4,906	5,401	5,042
Maryland	18,923	18,458	20,539	20,072	20,576	17,945	16,256	19,563	20,667	20,927
Massachusetts	14,697	16,040	18,640	18,166	21,725	17,539	15,417	18,164	18,268	20,532
Michigan	16,804	23,972	23,760	23,060	22,799	28,676	20,340	30,240	26,535	26,975
Minnesota	11,525	12,178	13,906	12,700	13,683	13,614	12,458	4,829	6,770	12,851
Mississippi	5,620	6,185	6,439	6,164	6,256	7,200	7,077	7,555	7,557	7,160
Missouri	13,336	14,935	13,996	14,360	16,337	16,674	17,588	17,580	18,188	21,653
Montana	2,295	3,377	4,418	3,608	3,569	3,453	4,066	2,435	3,881	4,445
Nebraska	4,143	3,895	4,441	4,419	4,372	6,144	4,645	5,234	5,394	5,234
Nevada	4,934	7,151	8,587	8,864	8,826	4,888	6,483	7,761	8,252	8,667
New Hampshire	4,278	4,988	4,677	4,398	4,562	6,018	5,044	7,341	5,264	5,418
New Jersey	24,610	27,106	e 27,885	36,747	29,916	25,538	25,667	23,950	27,890	31,571
New Mexico	4,721	4,837	5,836	5,753	5,281	4,943	5,240	6,451	5,495	7,949
New York	54,781	54,620	61,507	62,730	59,571	63,627	56,813	57,423	65,616	63,631
North Carolina	19,652	21,650	23,310	22,436	22,950	21,643	23,389	23,467	23,217	22,184
North Dakota	1,392	1,631	1,493	1,419	1,356	2,265	2,045	2,191	2,112	1,893
Ohio	20,286	27,046	22,290	22,951	22,379	23,863	28,091	24,276	25,460	24,269
Oklahoma	8,069	8,790	8,979	9,940	8,702	9,397	8,623	8,848	9,498	8,923
Oregon	15,504	13,770	14,729	13,246	13,160	11,921	13,022	16,102	15,512	14,793
Pennsylvania	26,125	23,820	35,104	33,497	31,939	27,929	27,254	34,893	33,426	35,859
Rhode Island	2,900	3,290	3,675	3,547	3,597	3,863	5,985	4,170	4,152	4,981
South Carolina	9,913	10,447	11,114	11,372	10,266	10,736	10,391	11,721	12,893	11,491
South Dakota	2,026	1,858	2,138	1,953	1,389	2,370	2,360	1,809	2,156	2,098

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Table A.10 (continued)

State	Firm births					Firm terminations				
	1990	1995	2000	2001	2002	1990	1995	2000	2001	2002
Tennessee	17,297	15,823	15,793	16,488	15,982	18,902	15,896	17,563	17,637	16,514
Texas	49,419	52,871	54,330	53,271	54,009	53,831	56,027	57,300	59,342	58,114
Utah	4,662	7,742	9,875	10,745	10,431	5,774	7,654	10,135	13,565	11,272
Vermont	2,183	2,139	2,511	2,226	2,331	2,687	2,577	2,653	2,578	3,501
Virginia	19,856	19,433	22,219	21,371	21,438	21,438	18,493	20,569	21,449	20,305
Washington	29,322	30,243	40,357	39,641	37,562	23,087	30,847	41,793	41,122	40,782
West Virginia	4,231	4,425	4,177	3,691	3,944	4,408	5,119	5,542	5,741	5,595
Wisconsin	10,307	12,342	12,436	12,025	12,172	11,591	13,054	15,151	14,135	13,651
Wyoming	1,879	2,230	2,314	2,558	2,275	2,900	2,735	2,908	2,969	2,895

e estimated.

Notes: State data are from the U.S. Department of Labor and U.S. data 1990–2000 are from the U.S. Department of Commerce, Bureau of the Census. State totals do not add to the U.S. figure as firms can be in more than one state. U.S. 2001 and 2002 estimates are based on U.S. Census Bureau and Department of Labor, Employment and Training Administration data. On occasion, some state terminations result in successor firms that are not listed as new firms.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Labor, Employment and Training Administration and the U.S. Department of Commerce, Bureau of the Census.

Table A.11 Business Bankruptcies by State, 1990–2002

State	1990	1995	2000	2001	2002
U.S. total	63,912	50,516	35,219	39,719	38,155
Yearly change (percent)	—	—	-6.4	12.8	-3.9
Alabama	1,356	796	445	428	381
Alaska	164	159	118	104	120
Arizona	2,377	1,045	765	753	756
Arkansas	467	422	261	290	282
California	7,391	12,097	4,595	5,238	5,141
Colorado	1,088	610	373	467	590
Connecticut	445	205	139	156	181
Delaware	114	277	2,320	1,374	649
District of Columbia	129	100	58	49	52
Florida	2,842	1,949	1,447	1,896	1,803
Georgia	2,366	496	1,012	1,162	1,359
Hawaii	74	159	63	68	53
Idaho	365	391	269	303	260
Illinois	2,041	1,624	1,270	1,547	1,240
Indiana	1,090	842	398	604	661
Iowa	893	556	214	289	354
Kansas	560	419	169	220	238
Kentucky	1,324	473	355	474	445
Louisiana	1,338	562	619	716	672
Maine	318	274	162	151	101
Maryland	1,356	1,493	677	758	873
Massachusetts	1,838	1,116	393	427	380
Michigan	1,633	1,072	577	688	802
Minnesota	1,771	1,901	1,492	1,887	1,729
Mississippi	288	283	203	289	309
Missouri	1,319	521	369	505	394
Montana	223	171	141	149	120
Nebraska	425	212	115	144	152
Nevada	354	390	332	419	462
New Hampshire	490	92	302	334	212
New Jersey	1,120	1,195	660	730	689
New Mexico	348	322	513	620	693
New York	2,606	3,374	1,960	2,432	2,585

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**Table A.11 (continued)**

State	1990	1995	2000	2001	2002
North Carolina	1,280	726	445	613	576
North Dakota	209	118	92	115	116
Ohio	1,778	1,052	1,471	1,794	1,538
Oklahoma	1,716	946	876	941	607
Oregon	1,061	781	1,453	1,389	1,606
Pennsylvania	1,751	1,770	1,455	1,541	1,263
Rhode Island	327	162	74	64	65
South Carolina	404	337	138	147	178
South Dakota	388	172	133	164	119
Tennessee	1,274	949	641	886	735
Texas	5,318	3,410	2,592	3,155	2,994
Utah	895	242	451	475	602
Vermont	179	167	71	97	91
Virginia	2,958	1,261	815	924	969
Washington	1,978	1,335	717	642	698
West Virginia	381	314	277	322	357
Wisconsin	1,366	1,067	685	734	856
Wyoming	136	109	47	45	47
Puerto Rico	—	—	209	333	351

Note: U.S. totals exclude Puerto Rico. A business bankruptcy is the legal recognition that a company is insolvent (i.e., not able to satisfy creditors or discharge liabilities) and must restructure or completely liquidate under Chapter 7, 11, 12, or 13 of the federal bankruptcy laws.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the Administrative Office of the U.S. Courts.

**Table A.12 Opening and Closing Establishments, 1992–2002 (thousands, seasonally adjusted)**

Year	Quarter	Opening establishments		Closing establishments		Net	
		Number	Employment	Number	Employment	Number	Employment
2002	Total	1,379	6,946	1,319	6,684	60	262
	4	345	1,632	333	1,627	12	5
	3	345	1,714	307	1,594	38	120
	2	347	1,787	341	1,719	6	68
	1	342	1,813	338	1,744	4	69
2001	Total	1,370	7,191	1,370	7,454	0	-263
	4	346	1,819	340	1,780	6	39
	3	339	1,794	347	1,918	-8	-124
	2	338	1,804	341	1,884	-3	-80
	1	347	1,774	342	1,872	5	-98
2000	Total	1,417	7,431	1,338	7,052	79	379
	4	351	1,813	339	1,785	12	28
	3	359	1,924	336	1,827	23	97
	2	350	1,785	330	1,726	20	59
	1	357	1,909	333	1,714	24	195
1999	Total	1,389	8,114	1,327	7,449	62	665
	4	364	2,020	328	1,813	36	207
	3	350	2,007	334	1,851	16	156

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**Table A.12 (continued)**

Year	Quarter	Opening establishments		Closing establishments		Net	
		Number	Employment	Number	Employment	Number	Employment
1998	2	341	2,003	342	1,836	-1	167
	1	334	2,084	323	1,949	11	135
	Total	1,354	8,064	1,255	7,256	99	808
	4	319	1,778	317	1,748	2	30
	3	336	1,987	314	1,705	22	282
1997	2	354	2,138	298	1,871	56	267
	1	345	2,161	326	1,932	19	229
	Total	1,314	7,528	1,239	6,877	75	651
	4	336	1,999	327	1,933	9	66
	3	328	1,934	311	1,760	17	174
1996	2	320	1,753	302	1,588	18	165
	1	330	1,842	299	1,596	31	246
	Total	1,293	7,238	1,185	6,176	108	1,062
	4	332	1,877	297	1,534	35	343
	3	330	1,861	294	1,568	36	293
1995	2	319	1,782	297	1,556	22	226
	1	312	1,718	297	1,518	15	200
	Total	1,233	6,761	1,146	5,915	87	846
	4	317	1,736	294	1,537	23	199
	3	303	1,662	296	1,533	7	129
1994	2	307	1,685	281	1,464	26	221
	1	306	1,678	275	1,381	31	297
	Total	1,208	6,705	1,115	5,725	93	980
	4	299	1,638	286	1,466	13	172
	3	311	1,717	273	1,320	38	397
1993	2	310	1,728	281	1,481	29	247
	1	288	1,622	275	1,458	13	164
	Total	1,187	6,730	1,069	5,775	118	955
	4	290	1,605	267	1,370	23	235
	3	299	1,613	262	1,352	37	261
1992	2	294	1,533	268	1,394	26	139
	1	304	1,979	272	1,659	32	320
	4	297	1,658	273	1,390	24	268
	3	289	1,705	278	1,595	11	110

Note: Establishments can be new ventures or new affiliates of existing ventures.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Labor, Bureau of Labor Statistics.

**Table A.13 Employer Firm Births and Deaths and Related Employment Changes by Employment Size of Firm, 1989–2000**

Firms	Period	Change	Total	Beginning year employment size of firm				Size class as percent of total	
				<20	<500	500+	<20	<500	
Firms	1999–2000	Firm births	574,300	548,030	574,023	277	95.4	100.0	
		Firm deaths	542,831	514,242	542,374	457	94.7	99.9	
		Net change	31,469	33,788	31,649	-180	—	—	
	1998–1999	Firm births	579,609	554,288	579,287	322	95.6	99.9	
		Firm deaths	544,487	514,293	544,040	447	94.5	99.9	
		Net change	35,122	39,995	35,247	-125	—	—	
	1997–1998	Firm births	589,982	564,804	589,706	276	95.7	100.0	
		Firm deaths	540,601	511,567	540,112	489	94.6	99.9	
		Net change	49,381	53,237	49,594	-213	—	—	
	1996–1997	Firm births	590,644	564,197	590,335	309	95.5	99.9	
		Firm deaths	530,003	500,014	529,481	522	94.3	99.9	
		Net change	60,641	64,183	60,854	-213	—	—	
1995–1996	Firm births	597,792	572,442	597,503	289	95.8	100.0		
	Firm deaths	512,402	485,509	512,024	378	94.8	99.9		
	Net change	85,390	86,933	85,479	-89	—	—		
1994–1995	Firm births	594,369	568,896	594,119	250	95.7	100.0		
	Firm deaths	497,246	472,441	496,874	372	95.0	99.9		
	Net change	97,123	96,455	97,245	-122	99.3	—		
1993–1994	Firm births	570,587	546,437	570,337	250	95.8	100.0		
	Firm deaths	503,563	476,667	503,125	438	94.7	99.9		
	Net change	67,024	69,770	67,212	-188	—	—		
Employment	1992–1993	Firm births	564,504	539,601	564,093	411	95.6	99.9	
		Firm deaths	492,651	466,550	492,266	385	94.7	99.9	
		Net change	71,853	73,051	71,827	26	—	100.0	
	1991–1992	Firm births	544,596	519,014	544,278	318	95.3	99.9	
		Firm deaths	521,606	492,746	521,176	430	94.5	99.9	
		Net change	22,990	26,268	23,102	-112	—	—	
	1990–1991	Firm births	541,141	515,870	540,889	252	95.3	100.0	
		Firm deaths	546,518	516,964	546,149	369	94.6	99.9	
		Net change	-5,377	-1,094	-5,260	-117	—	—	
	1989–1990	Firm births	584,892	558,478	584,660	232	95.5	100.0	
		Firm deaths	531,400	502,685	530,991	409	94.6	99.9	
		Net change	53,492	55,793	53,669	-177	—	—	
1990–1995	Firm births	1,797,117	1,679,831	1,795,661	1,456	93.5	99.9		
	Firm deaths	1,546,705	1,426,040	1,545,007	1,698	92.2	99.9		
	Net change	250,412	253,791	250,654	-242	—	—		
1999–2000	Firm births	3,228,804	1,792,946	3,091,079	197,725	55.5	93.9		
	Firm deaths	3,176,609	1,653,694	2,946,120	230,489	52.1	92.7		
	Existing firm expansions	15,857,582	3,378,838	7,744,430	8,113,152	21.3	48.8		
	Existing firm contractions	12,550,358	1,924,624	5,323,677	7,226,681	15.3	42.4		
	Net change	3,359,419	1,593,466	2,505,712	853,707	47.4	74.6		

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Table A.13 (continued)

Period	Change	Total	Beginning year employment size of firm				Size class as percent of total	
			<20	<500	500+	<20	<500	
1998–1999	Firm births	3,247,335	1,763,823	3,011,400	235,935	54.3	92.7	
	Firm deaths	3,267,136	1,676,282	3,052,630	214,506	51.3	93.4	
	Existing firm expansions	14,843,903	3,245,218	7,266,399	7,577,504	21.9	49.0	
	Existing firm contractions	12,236,364	1,969,501	5,482,142	6,754,222	16.1	44.8	
	Net change	2,587,738	1,363,258	1,743,027	844,711	52.7	67.4	
1997–1998	Firm births	3,205,451	1,812,103	3,002,401	203,050	56.5	93.7	
	Firm deaths	3,233,412	1,661,544	2,991,722	241,690	51.4	92.5	
	Existing firm expansions	14,885,560	3,238,047	7,471,622	7,413,938	21.8	50.2	
	Existing firm contractions	12,044,422	2,002,313	5,747,725	6,296,697	16.6	47.7	
	Net change	2,813,177	1,386,293	1,734,576	1,078,601	49.3	61.7	
1996–1997	Firm births	3,227,556	1,813,539	3,029,666	197,890	56.2	93.9	
	Firm deaths	3,274,604	1,620,797	2,960,814	313,790	49.5	90.4	
	Existing firm expansions	16,243,424	3,400,037	8,628,839	7,614,585	20.9	53.1	
	Existing firm contractions	13,092,093	2,035,083	6,343,489	6,748,604	15.5	48.5	
	Net change	3,104,283	1,557,696	2,354,202	750,081	50.2	75.8	
1995–1996	Firm births	3,255,676	1,844,516	3,055,596	200,080	56.7	93.9	
1994–1995	Firm deaths	3,099,589	1,559,598	2,808,493	291,096	50.3	90.6	
	Existing firm expansions	12,937,389	3,122,066	6,725,135	6,212,254	24.1	52.0	
	Existing firm contractions	11,226,231	1,971,531	5,512,726	5,713,505	17.6	49.1	
	Net change	1,867,245	1,435,453	1,459,512	407,733	76.9	78.2	
	Firm births	3,322,001	1,836,153	3,049,456	272,545	55.3	91.8	
1993–1994	Firm deaths	2,822,627	1,516,552	2,633,587	189,040	53.7	93.3	
	Existing firm expansions	13,034,649	3,235,940	7,197,705	5,836,944	24.8	55.2	
	Existing firm contractions	9,942,456	1,877,758	5,000,269	4,942,187	18.9	50.3	
	Net change	3,591,567	1,677,783	2,613,305	978,262	46.7	72.8	
	Firm births	3,105,753	1,760,322	2,889,507	216,246	56.7	93.0	
1992–1993	Firm deaths	3,077,307	1,549,072	2,800,933	276,374	50.3	91.0	
	Existing firm expansions	12,366,436	3,139,825	6,905,182	5,461,254	25.4	55.8	
	Existing firm contractions	10,450,422	2,039,535	5,400,406	5,050,016	19.5	51.7	
	Net change	1,944,460	1,311,540	1,593,350	351,110	67.5	81.9	
	Firm births	3,438,106	1,750,662	3,053,765	384,341	50.9	88.8	
Existing firm expansions	Firm deaths	2,906,260	1,515,896	2,697,656	208,604	52.2	92.8	
	Existing firm contractions	12,157,943	3,206,101	6,817,835	5,340,108	26.4	56.1	

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Table A.13 (continued)

Period	Change	Total	Beginning year employment size of firm				Size class as percent of total	
			<20	<500	500+	<20	<500	
	Existing firm contractions	10,741,536	1,965,039	5,386,708	5,354,828	18.3	50.1	
	Net change	1,948,253	1,475,828	1,787,236	161,017	75.8	91.7	
1991–1992	Firm births	3,200,969	1,703,491	2,863,799	337,170	53.2	89.5	
	Firm deaths	3,126,463	1,602,579	2,894,127	232,336	51.3	92.6	
	Existing firm expansions	12,894,780	3,197,959	7,510,392	5,384,388	24.8	58.2	
	Existing firm contractions	12,446,175	2,156,402	6,635,366	5,810,809	17.3	53.3	
	Net change	523,111	1,142,469	844,698	-321,587	—	—	
1990–1991	Firm births	3,105,363	1,712,856	2,907,351	198,012	55.2	93.6	
	Firm deaths	3,208,099	1,723,159	3,044,470	163,629	53.7	94.9	
	Existing firm expansions	11,174,786	2,855,498	6,323,224	4,851,562	25.6	56.6	
	Existing firm contractions	12,233,766	2,294,270	6,893,623	5,340,143	18.8	56.4	
	Net change	-1,161,716	550,925	-707,518	-454,198	—	—	
1989–1990	Firm births	3,211,064	1,886,311	3,090,643	120,421	58.7	96.3	
	Firm deaths	3,198,829	1,683,174	2,988,436	210,393	52.6	93.4	
	Existing firm expansions	12,084,225	3,266,584	6,854,850	5,229,375	27.0	56.7	
	Existing firm contractions	10,253,279	1,953,484	5,554,339	4,698,940	19.1	54.2	
	Net change	1,843,181	1,516,237	1,402,718	440,463	82.3	76.1	
1990–1995	Firm births	13,304,645	6,514,382	12,126,607	1,178,038	49.0	91.1	
	Firm deaths	11,808,721	5,611,968	11,113,149	695,572	47.5	94.1	
	Existing firm expansions	27,790,464	4,917,092	13,100,418	14,690,046	17.7	47.1	
	Existing firm contractions	22,432,604	2,459,610	8,872,397	13,560,207	11.0	39.6	
	Net change	6,853,784	3,359,896	5,241,479	1,612,305	49.0	76.5	

Notes: 1990–1995 represents firm births that survived until 1995, and firm deaths are firms that existed in 1990. The data represent activity from March of the beginning year to March of the ending year. Establishments with no employment in the first quarter of the beginning year were excluded. New firm births are classified by their first quarter employment size. Percent of size class is not calculated when size classes change in opposite directions. New firms represent new original establishments and deaths represent closed original establishments.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census, *Statistics of U.S. Business*.

**Table A.14 Bank Lending Information by Size of Firm, 1991–2002**  
(change in percent of senior loan officer responses on bank lending practices)

Year	Quarter	Tightening loan standards for businesses		Stronger demand for loans by businesses	
		Large and medium-sized	Small	Large and medium-sized	Small
2002	4	20	18	-53	-48
	3	21	6	-45	-36
	2	25	15	-36	-29
	1	45	42	-55	-45
2001	4	51	40	-70	-50
	3	40	32	-53	-42
	2	51	36	-40	-35
	1	60	45	-50	-30
2000	4	44	27	-23	-13
	3	34	24	-5	-4
	2	25	21	-9	5
	1	11	9	9	-2
1999	4	9	2	-2	-4
	3	5	2	0	0
	2	10	8	0	10
	1	7	4	20	11
1998	4	36	15	28	8
	3	0	-5	-9	0
	2	-7	-2	29	21
	1	2	2	26	15
1997	4	-7	-4	19	19
	3	-6	-2	13	20
	2	-7	-4	5	11
	1	-6	-5	5	15
1996	4	-8	-12	1	4
	3	-4	-2	12	18
	2	-1	2	10	24
	1	7	4	-4	14
1995	4	-4	-2	4	7
	3	-6	-2	4	25
	2	-6	-7	29	17
	1	-7	-5	35	18

(continued, next page)

**Table A.14 (continued)**

Year	Quarter	Tightening loan standards for businesses		Stronger demand for loans by businesses	
		Large and medium-sized	Small	Large and medium-sized	Small
1994	4	-17	-18	31	32
	3	-7	-7	31	19
	2	-12	-9	38	38
	1	-13	-12	26	26
1993	4	-18	-9	9	17
	3	-19	-12	18	14
	2	-8	-2	0	12
	1	3	-2	20	32
1992	4	4	-5	6	-2
	3	-2	-2	-9	7
	2	1	-7	6	25
	1	5	0	-27	-12
1991	4	9	5	-30	-25
	3	12	9	NA	NA
	2	16	7	NA	NA
	1	36	32	NA	NA

NA = Not available

*Notes:* Figures should be used with caution because the sample size of the survey is relatively small (about 80 respondents), but they represent a sizeable portion of the market. Small firms are defined as having sales of less than \$50 million.

*Source:* U.S. Small Business Administration, Office of Advocacy, from data provided by the Federal Reserve Board.



# APPENDIX B

## *New Small Business Research*

### Introduction

According to U.S. Census Bureau figures, in 2003 there were 23 million small businesses in the United States, representing 99.7 percent of all employers. Just over half of all workers are employed by a small firm. Sixty to 80 percent of all net new jobs stem from small businesses.<sup>1</sup> Moreover, according to a new Census Bureau working paper, startups in the first two years of operation accounted for virtually all of the net new jobs in the economy.<sup>2</sup>

Small firms account for a significant share of the nation's output. Research indicates that small business's share of private, nonfarm gross domestic product (GDP) has remained about 50 percent over the past two decades. Preliminary findings show a slight increase to 52 percent, attributable in large part to the increased share of services in the economy. While the small business share of private, nonfarm GDP fell in the manufacturing and mining sectors, for instance, there were significant increases in the importance of small businesses in the service sector.<sup>3</sup>

By industry, a 2002 study found that the highest concentrations of small businesses, using the North American Industry Classification System (NAICS), were found in construction (90 percent); arts, entertainment, and recreational services (76 percent); real estate, rental, and leasing (74 percent); other services (71 percent); professional and technical, administrative, support, and waste management (65 percent); and wholesale and retail trade (64 percent).<sup>4</sup> Other shares included educational services (43 percent); finance and insurance (29 percent); health and social services (57 percent); and mining and manufacturing (30 percent).

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1 See firm size data located on the Office of Advocacy website at: <http://www.sba.gov/advo/stats/data.html>.

2 Zoltan J. Acs and Catherine Armington. "Endogenous Growth and the Entrepreneurial Activity of Cities," U.S. Department of Commerce, Bureau of the Census, Center for Economic Studies, Working Paper No. CES-WP-03-02, January 2003.

3 Joel Popkin and Company. *Small Business Share of Economic Growth*. U.S. Small Business Administration, Office of Advocacy, contract no. SBAHQ-00-C-0001, (Springfield, Va: National Technical Information Service, January 2002).

4 Joel Popkin and Company. *Small Business Share of NAICS Industries*. U.S. Small Business Administration, Office of Advocacy, contract no. SBAHQ-01-M-0156, (Springfield, Va: National Technical Information Service, September 2002).

Given their importance to the U.S. economy, it is important to summarize the new research on small businesses conducted over the past two years. This appendix will highlight the findings of both Office of Advocacy and external research, as appropriate, and will end with a complete listing of all Advocacy research publications for the years 2002 and 2003.

### Small Business Dynamics

Roughly the same numbers of firms start and close each year. The dynamic nature of business is referred to as “creative destruction,” the process through which healthy, vibrant firms create innovations, often to the detriment of those that fail to innovate and stay competitive.

Conventional wisdom has had a negative view of the chances of success for a new business, but it is also true that many firms close for reasons other than failure. Two-thirds of new employer firms survive at least two years, and about half survive at least four. Owners of about one-third of firms that closed report that their firm was successful at closure. Major factors in a firm’s remaining open include an ample supply of capital, the fact that a firm is large enough to have employees, the owner’s education level, and the owner’s reason for starting the firm in the first place, such as freedom for family life or wanting to be one’s own boss.<sup>5</sup>

Business survival also varies by industry and demographics. The industry with the highest 1992–1996 survival rate for firms owned by white non-Hispanics was oil and gas exploration, which had an 82 percent survival rate for the four-year period. African Americans were most successful in legal services (79 percent), and Hispanic and Asian Americans in health services (66 percent and 76 percent, respectively).<sup>6</sup>

## Office of Economic Research Publications, 2002–2003

### Banking/Finance

*Small Business and Micro Business Lending in the United States, 2002 Edition*  
Charles Ou, Economist, Office of Advocacy; Advocacy report, September 2003  
[http://www.sba.gov/advo/stats/lending/2002/sbl\\_study.pdf](http://www.sba.gov/advo/stats/lending/2002/sbl_study.pdf)

This report combines two annual lending reports into one for the first time. It is drawn from two sources: the June 2002 call reports submitted by banks to their regulating agencies and the Community Reinvestment Act (CRA) reports for 2001. Small business lending by banks showed slight increases, as the U.S. economy continued a weak recovery from a mild recession after the fourth quarter of 2001. Borrowers and lenders tended to postpone new loan activity in response to an uncertain economy. Small business loans outstanding totaled \$484 billion in June 2002, an increase of \$23.6 billion or 5.1 percent between June 2001 and June 2002, compared with an increase of 5.4 percent over the previous period (June 2000 to June 2001). This report also notes the continued increase in the number of small business credit cards.

*Financing Patterns of Small Firms: Findings from the 1998 Survey of Small Business Finances*  
Charles Ou, Economist, Office of Advocacy; Advocacy report, September 2003  
[http://www.sba.gov/advo/stats/sbf\\_98.pdf](http://www.sba.gov/advo/stats/sbf_98.pdf)

This study presents statistical tables that profile the financing patterns of U.S. small businesses in various subcategories. The tables are based on the Federal Reserve Board’s 1998 Survey of Small Business Finances. Using the tables, it is possible to compare the borrowing patterns of one group of small firms with all small firms or other subgroups. These businesses’ use of financing is examined in terms of suppliers and kinds of credit; frequency of credit use; value of debt by kind of credit and credit supplier; and balance sheets that show the value and percentage of debt and equity for firms in different employment size categories. Financing patterns for all small firms and small minority-owned, Hispanic-origin, and women-owned firms are discussed in the report.

5 Headd, Brian. “Redefining Business Success: Distinguishing Between Closure and Failure.” *Small Business Economics*, 21 (1). August 2003, 51–61.

6 Boden, Richard J., “Analyses of Business Dissolution by Demographic Category and Business Ownership,” U.S. Small Business Administration, Office of Advocacy, contract no. SBAHQ-00-M-0497, (Springfield, Va: National Technical Information Service, March 2001).

*Impact of Tight Money and/or Recessions on Small Business*  
PM Keypoint LLC; Research Summary 230, June 2003  
<http://www.sba.gov/advo/research/rs230tot.pdf>

Small businesses may be particularly exposed to recessions, banking conditions, and monetary policy. Small firms typically rely more for their credit on bank lending than larger firms do and may be more adversely affected when tighter monetary policies or a deterioration in bank health reduce the supply of bank loans. This study finds that tighter monetary policy and adverse conditions in the banking sector reduce economic activity in businesses of all sizes. Evidence was found that increased flows of U.S. Small Business Administration (SBA)-guaranteed loans raised output, employment, wages and salaries, and nonfarm proprietors' incomes. To the extent that they did, SBA-guaranteed lending acted as an economic stabilizer. Moreover, small bank capital had the largest effect on employment, suggesting that capital at small banks was "high-powered capital," in terms of stimulating employment. The effect on employment of additional capital at small banks was about three times the effect at large banks.

*Assessing the Profitability and Riskiness of Small Business Lenders  
in the Banking Industry*<sup>7</sup>  
James W. Kolari; Research Summary 229, May 2003  
<http://www.sba.gov/advo/research/rs229tot.pdf>

Small banks have traditionally been one of the major suppliers of credit to small firms in the United States. In recent years, there has been concern that deregulation and consolidation in the industry, by reducing the number of small banks lending to small businesses, will reduce bank lending to small businesses overall. This research looks more closely at the reasons for the availability of bank credit to small business by asking how profitable small business lending is. The study explores whether banks that specialize in small business lending are more profitable and whether banks that diversify are less profitable as small business lending becomes a smaller component of their overall portfolio. It concludes that small business lending had no effect on a bank's overall profitability; however, small business lending can help banks, especially large ones, diversify and reduce the risk of failure.

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7 Presented at the Chicago Federal Reserve Bank's 39th annual conference on banking structure and competition, "Corporate Governance: Implications for Financial Services Firms," May 2003.

*An Exploration of a Secondary Market for Small Business Loans*  
Kenneth Temkin and Roger C. Kormendi, Gardner Partners;  
Research Summary 227, April 2003  
[http://www.sba.gov/advo/research/rs227\\_tot.pdf](http://www.sba.gov/advo/research/rs227_tot.pdf)

Small business policymakers have seen the development of a secondary market for small business loans as a way of improving the flow of capital to entrepreneurs. In a secondary market, loans are pooled together and packaged as securities for sale to investors. This practice makes more capital available by allowing lending institutions to remove existing loans from their balance sheets, freeing them to make new loans. The authors found that the increasing use of credit scoring and the emergence of multibillion-dollar bank holding companies in the U.S. banking sector have made the development of a secondary market for conventional small business loans more likely even in the absence of uniform underwriting standardization among small business lenders.

*A Profile of Owners and Investors of Privately Held Businesses in the  
United States, 1989–1998*<sup>8</sup>  
George W. Haynes, Associate Professor, Montana State University, and Charles  
Ou, Economist, Office of Advocacy; Advocacy working paper, November 2002  
<http://www.sba.gov/advo/stats/wkp02co.pdf>

This study utilized the Federal Reserve Board's Survey of Consumer Finances for the years 1989, 1992, 1995, and 1998 to provide estimates of the number of households owning privately held businesses in the United States, to compare the demographic and economic characteristics of business owners and non-business owners, and to examine the relationship between growth in the total numbers of business entities and of business owners from 1989 to 1998. This study concluded: (1) between 13 percent and 14 percent of U.S. households owned privately held businesses; (2) these households had relatively higher income and significantly higher net worth and were led by individuals in the prime age group of 35 to 60 years of age with relatively more education than those without such businesses; and (3) the increase in the total number of business entities during the 1990s seemed to be mostly the result of individual households owning more than one business.

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8 Presented at the annual conference of the Academy of Entrepreneurial and Financial Research, April 2002

*The Real Effects of Liquidity on Behavior: Evidence from Regulation and Deregulation of Credit Markets*

Jonathon Zinman, MIT dissertation chapters 1 and 2  
Research Summary 223, November 2002

<http://www.sba.gov/advo/research/rs223tot.pdf>

The Community Reinvestment Act (CRA) of 1976 and its 1995 reforms provided an incentive for banks to lend to small businesses in low- and moderate-income neighborhoods, since a bank's CRA record is considered when the bank applies for permission to expand. The author found that the CRA incentives have led to a 12 to 15 percent increase in small business lending. There was also evidence that these changes in the availability of credit produce real changes in the form of payroll increases and bankruptcy decreases in the affected counties. CRA lending did not appear to be offset by any decreases in non-CRA lending—that is, there was no crowding out.

*Small Business Lending in the United States, 2001 Edition*

Charles Ou, Economist, Office of Advocacy; Advocacy report, November 2002  
[http://www.sba.gov/advo/stats/lending/2001/sbl\\_study.pdf](http://www.sba.gov/advo/stats/lending/2001/sbl_study.pdf)

This study, like the micro-business-friendly banks study, used June 2001 call report and 2000 CRA report data. Its primary finding was that lending to small firms increased more than lending to large businesses for the first time in years. Small business lending (loans smaller than \$1 million) increased 5.4 percent to \$460 billion, and the number of loans under \$100,000 increased 10.1 percent. Again, this is evidence of the increased proliferation of business credit cards in the small business loan market. Meanwhile, the largest loans (over \$1 million) increased just 0.9 percent.

*Estimation of Small Business Wealth*

Joel Popkin and Company; Research Summary 217, September 2002  
<http://www.sba.gov/advo/research/rs217tot.pdf>

In this study, wealth was measured by an equity-based market value of the business. Total small business wealth grew from \$3.4 trillion in 1990 to \$8.3 trillion in 2000. Total business wealth was \$19.4 trillion in 2000. Meanwhile, corporate wealth quadrupled over the same period as the value of the stock market skyrocketed. Small

firms, often privately held, were not as affected by the stock market valuation increases. Hence, small businesses' share of total wealth declined from 59.3 percent to 42.8 percent of the total from 1990 to 2000.

*Micro-Business-Friendly Banks in the United States, 2001 Edition*

Charles Ou, Economist, Office of Advocacy; Advocacy report, August 2002  
[http://www.sba.gov/advo/stats/02micro\\_study.pdf](http://www.sba.gov/advo/stats/02micro_study.pdf)

This study was based on data reported by banks to their regulating agencies through call reports for June 2001 and Community Reinvestment Act (CRA) reports for 2000. The value of micro-business loans (under \$100,000) outstanding increased 4.4 percent between June 2000 and June 2001 to \$126.8 billion, and the total number of these loans increased 10.1 percent over the same time period. The data suggest that a primary reason for the increasing number of loans was the promotion of business credit cards by major banks and finance companies. Banks that were found to be micro-business-friendly are listed in the tables attached to the report.

## Environmental Issues

*Emission Trading for Small Business*

Jack Faucett Associates; Research Summary 216, March 2002  
<http://www.sba.gov/advo/research/rs216tot.pdf>

This study explored the hurdles small firms face in the emission trading market. Instead of the usual command-and-control regulation, emissions trading has allowed firms to either sell or use their certificates, which gives them the ability to release a desired level of (primarily air) pollutants. Thus, these certificates have provided an economic incentive to reduce emissions, as firms that have invested in cleaner technology are able to sell the certificates to those that have not. That said, many of the existing programs did not allow small firms to realize these benefits. For example, transaction costs were too high; scale economies allowed large firms to absorb the costs, but smaller firms found them prohibitive. Rules and protocol development for emissions trading also affect its usefulness for small businesses; the more complicated the protocol, the more costly and less effective it is for small firms.

## General Small Business

### *Expected Costs of Startup Ventures*

Blade Consulting Company; Research Summary 232, November 2003

<http://www.sba.gov/advo/research/rs232tot.pdf>

Using the Panel Study of Entrepreneurial Dynamics, this study explores the expected startup costs of nascent entrepreneurs. These “would-be” entrepreneurs felt that they needed little in the way of startup funds to begin a venture, on average \$6,000 for solo ventures. Their income expectations were in line with the equivalent of high wages, on average \$90,000 by the fifth year of existence for solo ventures. Team ventures, by contrast, had higher expectations of initial funds needed, fifth-year wages, and fifth-year income projections. This makes team ventures more likely to develop into employer firms. Policies that encourage team-owned businesses or networking among entrepreneurs might help foster “growth startups.”

### *Redefining Business Success: Distinguishing Between Closure and Failure*

Brian Headd, Economist, Office of Advocacy; published in *Small Business*

*Economics*, August 2003

[http://www.sba.gov/advo/stats/bh\\_sbe03.pdf](http://www.sba.gov/advo/stats/bh_sbe03.pdf)

Using two Census databases, the Business Information Tracking Series and Characteristics of Business Owners, it was shown that a closure is not necessarily a failure and closures are not as prevalent in new firms as is commonly believed. New firms with more resources—that is, those that are larger, with better financing, and with employees—were found to have better chances of survival. Factors that were characteristic of closure—such as having no start-up capital and having a relatively young owner—were also common in firms considered successful at closure. (Note that such factors as race and gender played negligible roles in determining survivability and success at closure.) Few defining factors can be isolated that are associated with true “failures.” These results call into question the use of survival rates, particularly in an era of planned exit strategies.

### *Small Business during the Business Cycle*

Joel Popkin and Company; Research Summary 231, July 2003

<http://www.sba.gov/advo/research/rs231tot.pdf>

Firm size differences related to the economic cycle are differentiated here from differences that might be related to longer term economic trends. The study also looks at various quarterly indicators produced by small business surveys to determine what, if any, insights they provide into where small businesses are in relation to the economic business cycle. The study finds that industries react differently to changes in the business cycle. Within some industries, primarily those that produce goods, there are noticeable differences between small and large business activities related to cyclical changes. In the construction industry, small business gross domestic product (GDP) fluctuates much more than large business GDP. The service industry reflects little difference between small and large firms in response to the business cycle. An assessment of the National Federation of Independent Business’s optimism index found that a value above 103 indicates an expansionary mode for small business GDP.

### *Small Business Economic Indicators*

2002 edition (June 2003), 2001 edition (February 2003),

2000 edition (January 2002)

Brian Headd, Economist, Office of Advocacy; Advocacy reports

<http://www.sba.gov/advo/stats/sbei02.pdf>

This report serves as a quick reference guide to current data on small business activity (new firms, employment, income, and failures) by state. Tables listing indicators for about the last 10 years by state are included.

### *Small Business by the Numbers: Answers to Frequently Asked Questions (FAQ)*

2003 Edition (May 2003), 2002 Edition (May 2002)

Chad Moutray, Chief Economist, and Brian Headd, Economist,

Office of Advocacy; Advocacy reports

<http://www.sba.gov/advo/stats/sbfaq.pdf>

This document was prepared as a summary of other research materials and provided a series of quick, easy-to-recite facts for an external audience to recognize the importance of small business in the economy.

*A Longitudinal Analysis of Industry, Enterprise, and Behavioral Predictors of SME Inter-Firm Cooperation*<sup>9</sup>

Robert Hartl, Research Fellow, DePaul University, and Doctoral Student, University of St. Gallen, Switzerland; Advocacy working paper, January 2003  
<http://www.sba.gov/advo/stats/wkp03rh.pdf>

Often the cooperative behavior of enterprises is described as a rational, conscious, and planned process. If so, a model should be able to identify distinguishing features that have a significant impact on the propensity for inter-firm cooperation. The study analyzes a firm's, entrepreneur's, and industry's behavior with a single model that can be used to explain different kinds of cooperation.

*The State of Small Business: A Report of the President, 1999–2000*

Advocacy Economic Research Staff and Kathryn Tobias, Senior Editor  
Released by the White House November 2002

In the 1998–1999 period covered by this report, prepared by the Office of Advocacy for White House release, the number of small businesses continued to increase and the 7.9 percent growth in proprietorship income generated by smaller firms outpaced the 5 percent growth in corporate income. The report looks at small business' role in the economy, as well as growth in the number of businesses owned by women and minorities, the share of federal government procurement going to small firms, the availability of financing to small businesses, and progress in efforts to mitigate regulatory burdens on small firms as a result of the implementation of the Regulatory Flexibility Act of 1980.

*Small Business Share of NAICS Industries*

Joel Popkin and Company; Research Summary 218, September 2002  
<http://www.sba.gov/advo/research/rs218tot.pdf>

The United States adopted the North American Industry Classification System (NAICS) in 1997 to replace the Standard Industrial Classification (SIC) system. This new system unified the classifications used by the United States, Canada, and Mexico. This study estimated the small business shares of

industries using the new system. Changes from SIC to NAICS affected the overall shares from sector to sector. This research concluded that the industries with the highest concentration of small businesses were construction (90 percent); arts, entertainment, and recreational services (76 percent); real estate, rental, and leasing (74 percent); other services (71 percent); professional and technical, administrative, support, and waste management (65 percent); and wholesale and retail trade (64 percent). Other shares included educational services (43 percent); finance and insurance (29 percent); health and social services (57 percent); and mining and manufacturing (30 percent).

*Small Business State Profiles*

2003 Edition (August 2003), 2002 Edition (August 2002)  
Vicky Williams, Economist, Office of Advocacy; Advocacy report  
<http://www.sba.gov/advo/stats/profiles/>

Building on information gathered from the *Small Business Economic Indicators* report, these profiles provided an overview of the important role small businesses play in each state. They include baseline statistics on each state's small business economy—number of firms, small business income, industrial composition, job growth, and data on minority- and women-owned businesses.

*Small Business Share of Economic Growth*

Joel Popkin and Company; Research Summary 211, January 2002  
<http://www.sba.gov/advo/research/rs211tot.pdf>

This study measured the impact of small businesses on the overall economy. It found that the share of private, nonfarm gross domestic product (GDP) produced by small businesses has remained about 50 percent over the past two decades. Preliminary findings indicated a slight increase in the small business share to 52 percent, attributable in large part to the increased share of services in the economy. While the percentage distribution of small businesses to private nonfarm GDP fell in the manufacturing and mining sectors, for instance, there were significant increases in the importance of small businesses in the service sector.

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<sup>9</sup> Office of Advocacy Best Paper Award, United States Association for Small Business and Entrepreneurship (USASBE) Conference, January 2003.

## Innovation and Technology

### *Foreign Patenting Behavior of Small and Large Firms: An Update*

Mary Ellen Mogege; Research Summary 228, April 2003

[http://www.sba.gov/advo/research/rs228\\_tot.pdf](http://www.sba.gov/advo/research/rs228_tot.pdf)

Both large and small firms are seeking foreign patent protection more often than they have in the past, and small firms are increasing their foreign patenting more rapidly, but large businesses still patent abroad more often than small firms. The high cost of filing foreign patents is one reason given for small firms not filing abroad more often. This study finds that small business patents were found to have more public value but less private value than large business patents. Small business patents are more likely to be among the rare patents that “hit the jackpot” in value: they represent a higher percentage of both the top 1 percent and the top 10 percent of patents most often cited in other patent applications. This has been particularly notable in the fields of communications, computers, and miscellaneous electrical technologies. Of the top 1 percent of often-cited patents, 59 percent belonged to small businesses and 41 percent to large firms. The researchers conclude that if small businesses are not patenting in foreign countries to the extent that they could, they may be missing commercial opportunities and possible sources of revenue that would contribute to growth in the U.S. economy.

### *Self-Employment and Technology*

Victoria Williams, Economist, Office of Advocacy; Advocacy report, April 2003

<http://www.sba.gov/advo/stats/sepc.pdf>

This report evaluates different aspects of self-employment and studies computer ownership and usage by the self-employed. The study relies on data from the Current Population Survey Internet and Computer Use Supplement for 1998 and 2000, which is produced by the U.S. Bureau of the Census. The number of self-employed individuals who owned personal computers grew by 14.7 percent, from 9.2 million in 1998 to 10.5 million in 2000. In 2000, 83.2 percent of the self-employed had Internet access predominantly through a regular or dial-up service. In addition, education plays an important role in self-employment activity, computer ownership, income, and Internet access. A quarter of all capital expenditures by small and medium-sized firms were on computer and communications equipment. Three key uses of the Internet by the self-employed were sending and receiving email, accomplishing job-related tasks, and searching for information.

### *Small Serial Innovators: The Small Firm Contribution to Technical Change*

CHI Research, Inc.; Research Summary 225, February 2003

<http://www.sba.gov/advo/research/rs225tot.pdf>

The objective of this study is to understand the role of small firm patenting in the United States compared with large firm patenting and to measure small and large firms' respective shares of patenting and contributions toward technical change in the economy. Patents for small firms (businesses with fewer than 500 employees) are more technically important on average since they are among the top 1 percent of most frequently cited patents. Small serial innovators are younger than large patenting firms, but they are not startups. The resilience of these firms makes them serial innovators; hence they concentrate in newer, science-based technologies such as biotechnology, semiconductors, and pharmaceuticals. Small firms represent one-third of the most prolific patenting companies that have 15 or more U.S. patents. They are roughly 13 times more innovative per employee than large patenting firms.

### *The Influence of R&D Expenditures on New Firm Formation and Economic Growth*

BJK Associates; Research Summary 222, October 2002

<http://www.sba.gov/advo/research/rs222tot.pdf>

This study looked at the spillover effects of university research and development (R&D) on the local economy. It found that a university's R&D expenditures lead to a significant increase in the number of firm formations in the labor market areas surrounding it. This positive effect was found to be identifiable for up to five years, although less prevalent as time elapsed. Thus, R&D expenditures contributed to the overall economy through the creation of new firms.

### *E-Biz.com: Strategies for Small Business Success*

Joanne H. Pratt; Research Summary 220, October 2002

<http://www.sba.gov/advo/research/rs220tot.pdf>

Electronic commerce has allowed small business owners to rethink their business strategies. Technological improvements have made the cost of setting up an Internet site relatively low; thus, small businesses could capitalize in a niche market with little start-up investment, without the traditional “brick and mortar” structures, and without being in a central location for distribution purposes. In addition, the ability to do a keyword search meant that businesses could

successfully market their niche without expensive mass mailings. The researchers found that the smallest firms (with fewer than 10 employees) benefited the most from being online: 35 percent gained 10 to 99 percent of their current sales directly or indirectly from their websites.

#### *Impact of E-Commerce on Auto Dealers*

Jack Faucett Associates; Research Summary 212, January 2002

<http://www.sba.gov/advo/research/rs212tot.pdf>

This study explored the impact of the Internet in the automobile retail sector. Eighty percent of U.S. new car dealers were small businesses, and new vehicle sales accounted for approximately 19 percent of total U.S. retail sales. In 2000, 83 percent of dealerships had a website, and on average dealers completed 6.2 percent of sales exclusively over the Internet. Twelve percent of dealers used the Internet for business-to-business transactions with their suppliers. Dealerships that used the Internet longer tended to experience greater results than those with a shorter experience in e-commerce. Meanwhile, state franchise laws, while favoring small business interests, also tended to make it more difficult to enter the online auto market.

## **Labor Market**

#### *Study of the Administrative Costs and Actuarial Values of Small Health Plans*

Rose C. Chu and Gordon R. Trapnell, Actuarial Research Corporation

Research Summary 224, January 2003

<http://www.sba.gov/advo/research/rs224tot.pdf>

This study looks at the noncare costs to insurers of small firm health policies and compares the value of the health care products that small and large firms buy. It finds that the prices that small and large firms paid for health insurance and the value of the products purchased are more similar than expected. However, insurers of small health plans have higher administrative expenses than those who insure larger companies. Sales, underwriting, and operating expenses are all higher for small health plans. Considering these expenses, it is unclear why small firms' insurance prices appear to be similar to those of large firms. At least part of the explanation may be that small firms received slightly less generous health insurance benefits, according to calculations of actuarial value. Legislation has

been proposed to exempt association health plans (AHPs) from rate regulation and state benefit mandates. The researchers' analysis indicates that AHPs have the potential to lower insurance premiums for small firms by freeing employers from direct and indirect state taxation, some mandated benefits, and the cost of compliance with multiple state regulations.

#### *Value of Worker Training Programs to Small Business*

Carolyn Loeff and Associates; Mark C. Berger, John Barron, and Dan A. Black

Research Summary 213, January 2002

<http://www.sba.gov/advo/research/rs213tot.pdf>

This study assessed the importance of government training programs to small businesses and served as an update to a study conducted in 1992. The previous research found large differences between large and small firms in the awareness and use of such programs; this new study has similar findings. While overall use of training programs fell for both large and small firms, small businesses with fewer than 25 employees were even less likely than they were in 1992 to use them. About one-quarter of small firms had heard of the programs, and only 4.5 percent had used them. These same firms were less likely to provide any form of training to their employees. That said, firms that did use the government training programs were generally pleased with them.

## **Procurement**

#### *Impact of Purchase Card Activity on Small Business*

Eagle Eye Publishers, Inc.; Research Summary 226, March 2003

<http://www.sba.gov/advo/research/rs226tot.pdf>

To reduce paperwork and time associated with federal procurement, agencies have turned to using credit cards to purchase the goods and services they need. Credit card purchases are by their nature small purchases that should be set aside for small firm procurement; however, federal agencies are not currently making all such purchases from small firms. This study looks at the impacts of federal agency credit card use on small business. Although credit card purchases are small purchases, the increasing use of credit cards by the government is decreasing small businesses' share of federal procurement. The finding is clear, but would be clearer if the data required to be collected were in fact collected and available.



*The Impact of Contract Bundling on Small Business, FY 1992 – FY 2001*<sup>10</sup>  
Eagle Eye Publishers, Inc.; Research Summary 221, October 2002  
<http://www.sba.gov/advo/research/rs221tot.pdf>

Federal agencies have looked to contract bundling—consolidating two or more contracts for goods or services previously requisitioned under separate smaller contracts—in an effort to reduce the government’s workload. However, this practice gave larger businesses a competitive advantage. The researchers found that 8.6 percent of prime contracts were bundled between fiscal years 1992 and 2001. The total value of these prime contracts was \$840.3 billion, or 44.5 percent of the total dollar value of \$1.89 trillion. The authors also concluded that existing contracts were more likely to be bundled when they were renewed and that smaller businesses were less likely to receive these awards. For instance, regression analysis showed that for every increase of 100 bundled contracts there was a decrease of 60 contracts issued to small businesses; also, for every additional \$100 awarded in bundled contracts, there was a decrease of \$12 to small businesses.

## Regulation

*Analysis of State Efforts to Mitigate Regulatory Burdens on Small Business*<sup>11</sup>  
Management Research and Planning Corporation; Research Summary 219,  
September 2002  
<http://www.sba.gov/advo/research/rs221tot.pdf>

This report explored the extent of efforts at the state level to protect the interests of small businesses in the regulatory process. In particular, it assessed whether states have an entity similar to the Office of Advocacy at the federal level. For instance, did they have similar legislative authorities such as the Regulatory Flexibility Act (RFA) of 1980 and the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, or did they have similar executive orders such

as 12866 (concerning regulatory planning and review) of 1993 or 13272 (on proper consideration of small entities in agency rulemaking) of 2002. Efforts of each of the states were detailed, but the authors cited five states that were more effective than others in considering the small business economic effects of their rules—Arizona, California, Illinois, New York, and Virginia.

*An Evaluation of Compliance with the Regulatory Flexibility Act by Federal Agencies*<sup>12</sup>  
Consad Research Corporation; Research Summary 215, March 2002  
<http://www.sba.gov/advo/research/rs215tot.pdf>

Compliance with the Regulatory Flexibility Act (RFA) of 1980 and the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 is of great interest to the Office of Advocacy. This research attempted to assess agency compliance with the RFA, and in particular examined the period after SBREFA. It found that some agencies made significant improvements in determining small business impacts in their rulemaking, while others continued noncompliance. In 1995, about 39 percent of final rule notices did not certify or explain the small business economic impacts of the regulation; by 1999, the rate of RFA noncompliance fell to 32 percent. The researchers recommended that Advocacy become more involved in pre-publication review of proposed rules and that the General Accounting Office and the Office of Management and Budget routinely document agency noncompliance.

## Tax

*Rules Versus Discretion in Tax Policy*<sup>13</sup>  
Radwan Saade, Economist, Office of Advocacy; Advocacy working paper,  
November 2002  
<http://www.sba.gov/advo/stats/wkp02rs.pdf>

The research suggested that the rules-versus-discretion debate is relevant to tax policy, and dealt with issues not related to arguments about the appropriate size of

10 This research led to the announcement on October 30, 2002, of a White House initiative to increase small business opportunities in the federal procurement process and to develop an Office of Management and Budget strategy for the unbundling of contracts.

11 These findings were used to draft model state legislation that seeks to emulate RFA and SBREFA, which are enforced by the Office of Advocacy at the federal level.

12 This study was conducted prior to the signing of Executive Order 13272. As a result, the Office of Advocacy is more involved in the pre-publication review of proposed rules and will work to train agencies on complying with the RFA requirement of determining small business impacts.

13 Presented at the annual conference of the National Tax Association, November 2002

government. The study extended the Barro-Gordon (1983a) framework to evaluate the proper role for rules in fiscal policy. The method suggested in this study emphasized the importance of the unexpected changes in tax rates, and recognized that they are a direct consequence of discretionary fiscal policy. A theoretical model was developed to demonstrate that an “infinitely lived” policymaker would favor rules that resist unforeseen changes in future tax rates. Rules were proven sustainable. Upon introducing discount rates (e.g., a finite term for the policymaker), the study demonstrated that it is rational for the tax authority to favor a discretionary regime over rules. In that setting, the rule’s equilibrium was no longer inherently sustainable, hence the call for explicit binding constraints.

## Women and Minorities

### *Dynamics of Women-Operated Sole Proprietorships, 1990–1998*

Ying Lowrey, Economist, Office of Advocacy; Advocacy Report, March 2003  
[http://www.sba.gov/advo/stats/rwosp\\_03.pdf](http://www.sba.gov/advo/stats/rwosp_03.pdf)

Sole proprietorship data from the IRS’s Statistics of Income division covering the 1990–1998 period provide a look at the recent trends in women’s share of this large segment of America’s business sector. Women are a significant and growing part of the sole proprietorship community. Most U.S. firms—72.6 percent—and an even larger share of those operated by women—84.8 percent—operate as sole proprietorships. These are the smallest of businesses that file tax returns—the average dollar value of sole proprietorship receipts was \$58,000 in 1997; for women, it was \$31,000. Most of women’s sole proprietorships—87 percent—were quite small, with receipts of less than \$50,000. But a significant share—13 percent—were in the larger-than-\$50,000 receipts size that accounted for two-thirds of women-operated sole proprietorships’ receipts and about 55 percent of the net income. The women-operated share, however, is growing. Sole proprietorships operated by women in the United States increased dramatically from 1990 to 1998 in numbers, gross receipts, and net income.

### *Race and Gender Differences in Business Ownership and Business Turnover*

Richard J. Boden,<sup>14</sup> Associate Professor, University of Toledo, and Brian Headd, Economist, Office of Advocacy; published in *Business Economics*, October 2002

This paper added to the limited literature on owner demographics for business survival. Using hazard models, the authors found differences across race and gender of ownership in business dissolution rates and factors related to dissolution. Unconditionally, white non-Hispanic owners had their highest survival rates in goods-producing industries, while the other owner groups fared better in services. In fact, industries largely differed with respect to survival factors for the different owner groups, making economy-wide generalizations for owner groups problematic. The findings largely corroborated what other researchers have found, but did so with the most robust data source to date, a matched U.S. Census Bureau database of employers and owner demographics.

### *An Investigation of Venture Capital in Women- and Minority-Led Firms*

CB Associates; Candida G. Brush, Principal; Research Summary 214, January 2002  
<http://www.sba.gov/advo/research/rs214tot.pdf>

This study examined the participation of women- and minority-owned firms in the venture capital markets. The proportion of funds that women-led ventures received was small relative to the whole although there was a slight increase in investments between 1995 and 1998. The women-led ventures most likely to receive funding tended to be in the Northwest or West and were in the computer hardware/software sector. The data on minority-led ventures were more limited, and the researchers collected anecdotal information to compensate in part for this. Funding to minorities tended to be more focused in the computer and information systems, health care services, and communications sectors. Minority women seeking capital faced greater hurdles than either white women or minority men.

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14 Richard J. Boden is a former economist with the Office of Advocacy.

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