2009

The SMALL BUSINESS ECONOMY

A REPORT TO THE PRESIDENT

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2009

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United States Government Printing Office

Washington: 2009

Dear Mr. President:

It is a pleasure to present the U.S. Small Business Administration (SBA) Office of Advocacy's 2009 edition of *The Small Business Economy: A Report to the President.* Given the dynamic nature of the current economic environment, we have chosen to expedite this annual report in the hope that the earlier release date will make it more relevant to current events.

The U.S. economic recession became progressively worse by the end of 2008, with rising unemployment, shrinking real gross domestic product, and increased anxiety among consumer and business leaders. Small businesses were challenged in many ways during the year, with many struggling to make ends meet. Their top concerns in the middle of 2008 included poor sales and inflation; by year's end, access to credit was a major concern. The nation's job generators were forced to reevaluate their businesses, lay off workers, and postpone plans to grow their firms.

Of course, even a bad economic environment can be seen as a time to look for opportunities, and entrepreneurs will, no doubt, be able to explore new markets for future growth—or make plans to do so as the economy revives. And the economy *will* revive, with help from America's entrepreneurs.

Over the past year, the Office of Advocacy has continued to conduct and solicit research documenting the importance of entrepreneurship in the American economy and highlighting policy issues of relevance to small firms (see Appendix B for a summary of recent research).

Innovation and entrepreneurship will be crucial to the nation's economic revival and competitiveness in a global marketplace. A 2008 update by Zoltan Acs, William Parsons, and Spencer Tracy to David Birch's seminal research of the 1980s and 1990s on "gazelles," or fast-growing, high-impact firms, found that these firms account for almost all of the growth in private sector employment and revenue in the economy. Lawrence A. Plummer and Brian Headd noted that establishment birth rates are similar in both rural and urban areas—a surprising result that illustrates how entrepreneurial ventures can spring up anywhere. Such findings help to explain why economic development officials seek out and support "second-stage businesses," many of which develop and employ innovations. A study by Anthony Breitzman and Diana Hicks again emphasized the significance of small business patents.

Small businesses owned by various demographic groups make important contributions to the American economy. For example, a 2008 study by Robert Fairlie showed that immigrant entrepreneurs generate nearly 12 percent of all business income in the United States. Darrene Hackler, Ellen Harpel, and Heike Mayer detailed gains made by self-employed women. Chad Moutray's October 2008 working paper on self-employment and baccalaureate education highlighted the importance of human capital, as did a chapter in the 2008 *Small Business Economy* by Jules Lichtenstein on small business training and development.

All of the Office of Advocacy's research can be found online at http://www.sba.gov/advo/research, and regular updates on new research can be accessed on the Office of Advocacy's research listserv at http://web.sba.gov/list.

We appreciate your interest in and support for small business, as well as for the data and research necessary to document their significant contributions.

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Acknowledgments

The Small Business Economy: A Report to the President was prepared by the U.S. Small Business Administration, Office of Advocacy. The Acting Chief Counsel for Advocacy is Shawne McGibbon; the Chief Economist is Chad Moutray. The project was managed by Senior Editor Kathryn J. Tobias. Specific chapters were written or prepared by the following staff:

Chapter 1	Chad Moutray with contributions from Jules Lichtenstein and Major Clark
Chapter 2	Victoria Williams with contributions from Charles Ou
Appendix A	Brian Headd
Appendix B	Chad Moutray

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Contents

Executive Summary

The 2009 edition of *The Small Business Economy* reviews the economic environment and, to the extent that data are available, how small firms fared in the recessionary economy and financial markets of 2008. Appendices provide additional data about small businesses along with summaries of 2008 small business research from the Office of Advocacy.

The State of Small Business, 2008

Small businesses create most of the nation's new jobs, employ about half of the nation's private sector work force, and provide half of the nation's nonfarm, private real gross domestic product (GDP), as well as a significant share of innovations. In 2008, with the rest of the economy, they faced a deepening recession.

Real gross domestic product saw a 1.1 percent gain for the year, but fourth quarter GDP was down 6.3 percent on an annualized basis. Trends in the components of GDP were revealing: consumption spending showed modest growth in the first half of the year, followed by sharp declines in the second half. Investment was bleak, with significant declines in all but the third quarter. Real government consumption and gross investment made up for a small portion of the decline. Real exports, which had been a bright spot, were down by 23.6 percent in the fourth quarter. The financial markets were characterized by instability, following the unraveling of the housing market in 2006.

Small businesses struggled to weather the downturn. Average unincorporated self-employment fell from 10.4 million in 2007 to 10.1 million in 2008—a number that averaged 9.6 million by November and December. Incorporated self-employment remained steady at 5.8 million, on average, over the 2007-2008 period. Some nongovernmental surveys found small firms expressing less willingness to expand, hire new workers, invest in new plant and equipment, or borrow money, at least in the near term. In particular, construction, an industry dominated by small firms, was hurting, having lost 682,000 jobs in 2008.

As the new year began, the incoming administration sought to counteract the falling aggregate demand through a massive stimulus package that invested in infrastructure development, educational facility improvements, broadband access, scientific research, and tax incentives. The stimulus also increased funding for guaranteed loans and other initiatives of the U.S. Small Business Administration in the hope of boosting small business growth.

The chapter briefly summarizes several of the current challenges faced by small firms, including access to capital, the cost and availability of health insurance, retaining a quality work force, global competition, and concerns about taxes, regulation, and federal procurement.

Small firms also make important contributions to the economy through innovations and the creation of jobs, enterprises, and entire new industries. In sum, small firms struggled mightily in the recessionary economy of 2008—and if the past is an indication, they will likely help lead the economic recovery.

Small Business Financing

By the beginning of 2008, an increasingly turbulent U.S. financial market was burdened with persistent doubts and fears about the survivability of major financial institutions—major investment banks as well as securities dealers at home and in Europe. The U.S. financial markets struggled, but failed by September 2008 to gain the confidence of market participants sufficient to restore market functioning in 2008, despite extraordinary efforts by the Treasury Department and the Federal Reserve Board.

Small firms faced difficult challenges in the extremely distressed financial environment. The credit freeze in the short-term funding market had a devastating effect on the economy and small firms. By late 2008, the normal production of goods and services had virtually stalled.

Although interest rates paid by small business owners followed a pattern similar to movements in the prime rate, which declined throughout the year, most small business owners faced a less accommodating credit market, especially in the second half of 2008. Lenders exhibited widening rate spreads and tightening terms of small business lending. Business borrowing plunged in the fourth quarter of 2008 to a low annual rate comparable to the levels experienced in the 2001 recession.

According to June 2007-June 2008 data from financial institutions' Call Reports to their regulators, developments in the financial markets had a limited impact on small business lending in the first half of 2008. A Federal Reserve Board (FRB) survey of lenders indicated loans were available at satisfactory levels in that period. Despite the lack of very current data, a number of indicators suggest that the flow of funds to small firms was much curtailed by the fourth quarter of 2008.

Ongoing studies based on the FRB's Survey of Small Business Finances provide detail on how small businesses and entrepreneurs participate in financial markets.

1 The State *of* Small Business

Synopsis

The economy fell into a deepening recession in 2008, as economic conditions deteriorated throughout the year. GDP was down 6.3 percent in the fourth quarter and 1.1 percent for the year. A look at the components of GDP—consumption, investment, government spending, and net exports—helps explain the drop. Consumption showed modest growth in the first half of the year and was down in the second. Real gross private domestic investment fell 6.7 percent, after falling 5.4 percent in 2007; much of the decline was the result of rapid curtailment of nonresidential investment in the fourth quarter, which had been increasing until that point. Residential investment peaked in late 2005, but has fallen steadily since and was down 44.9 percent by the end of December. Net exports have been a bright spot in the recent past. Real exports grew 6.2 percent for the year, as real imports declined by 3.5 percent, resulting in a higher trade deficit. In the last three months of 2008, both real exports and real imports fell, by 23.6 percent and 17.5 percent, respectively.

Small businesses felt the effects of the economy's fall as the year progressed. More than half of the 763,000 jobs lost in the first two quarters of 2008 were lost in small firms, and unincorporated self-employment fell from an average of 10.4 million in 2007 to an average of 10.1 million in 2008—9.6 million by November and December.

Small businesses continue to face challenges in the current climate, including accessing capital in the midst of financial instability. Over the longer term, small firms face concerns about the cost and availability of health insurance, attracting a quality work force, meeting global competition, and perennial concerns about regulation, taxes, and government procurement opportunities.

Research continues to show that small businesses and entrepreneurs will play important roles in the economy's eventual recovery, through their flexibility and ability to create innovative solutions, new industries, and jobs.

Small Businesses in the American Economy 2008

Small Businesses Struggle in a Down Economy

The American economy—indeed, the world economy—has fallen into a deepening recession. The National Bureau of Economic Research (NBER) has determined that the U.S. recession began in December 2007,[1] and economic conditions deteriorated as 2008 drew to a close. The downward trend persisted into 2009, as the economy continued to contract. While real gross domestic product (GDP) grew 1.1 percent for the year, growth turned negative in the second half of 2008, with the fourth quarter experiencing a 6.3 percent decline on an annualized basis.

The year 2008 began with relative optimism that the economic downturn—which had not yet been officially declared a recession—would be short and that concerted fiscal and monetary policy actions would help to spur economic activity and dampen the downturn. On February 13, 2008, President George W. Bush signed the bipartisan Economic Stimulus Act of 2008, which was designed to help blunt the effects of the economic downturn. Many Americans received tax rebates, and there were other incentives for small businesses, including increases in the expensing of capital purchases and a bonus depreciation allowance. The effects of the initial stimulus plan can mostly be seen in the second quarter of 2008.

1 See http://www.nber.org/cycles/dec2008.pdf for more detail on NBER's determination of the beginning of the current recession date. It will be some time before NBER will be able to date the full duration of this downturn in the business cycle, which is already tending to be longer than the post-WWII average. when real personal consumption grew 1.2 percent and real GDP was up 2.8 percent. In hindsight, it is clear that its positive impacts were temporary, and the efforts of the government were not enough to forestall greater declines in the second half of 2008.

As 2009 began, the incoming administration of President Barack Obama sought a massive stimulus package to counteract the falling aggregate demand in the private sector. On February 17, President Obama signed the American Recovery and Reinvestment Act, which invested $787 billion in infrastructure development, educational facility improvements, broadband access, scientific research, and tax incentives. It also increased funding for the U.S. Small Business Administration (SBA) by $730 million; a significant portion of that increase lowered the fees for SBA-guaranteed loans. Dollars were also targeted to support economic development and entrepreneurship, especially in rural, urban, and low-income communities.[2]

At this writing, the effects of these initiatives on small firms are still unfolding. In any economic climate, discussing small business economic trends is a difficult proposition because of lags in the availability of most data by firm size. For that reason, information about current conditions is often extrapolated from statistics about the larger macroeconomy. The basis for this logic is simple. Small businesses with fewer than 500 workers account for half of the nation's private, nonfarm real gross domestic product,[3] and half of all Americans who work in the private sector are employed by a small firm.[4] Indeed, the overall importance of the small business community has been well documented and the importance of new venture creation is widely recognized.

For their part, small business owners have struggled, along with their larger counterparts, to weather the economic downturn. Some surveys have shown that owners are less willing than in previous years to expand their small businesses, to hire additional workers, to invest in new plant and equipment, or to borrow money. A top concern, which had been the high cost of health

2 See http://www.speaker.gov/newsroom/legislation?id=0273#tax and http://appropriations.house.gov/pdf/PressSummary02-13-09.pdf.

3 See Kobe (2007).

4 See http://www.sba.gov/advo/research/us88_06.pdf.

insurance for the past few years, is now poor sales.[5] The Federal Reserve Board's quarterly report, the Senior Loan Officer Opinion Survey on Bank Lending Practices, recently showed tougher lending standards and reduced demand for small firm commercial and industrial loans.[6] Another survey showed that, while entrepreneurs are cautious, many believe managing their business through the recession has made them better business owners.[7] Many small business owners are awaiting signs that the economy is improving, while they look for ways to streamline their firms' operations, paying closer attention to their balance sheets.[8]

Looking forward, small businesses will be a large part of moving the economy ahead as entrepreneurs continue to spur new innovation and create employment. That said, industries will recover from the downturn in different ways,[9] and some industries, such as construction and business services, have clearly been hit harder than in past business cycles. Construction in particular is overwhelmingly dominated by small businesses—more than 86 percent of firms in this sector are considered small. The construction industry lost 682,000 jobs in 2008; only one other major industrial sector lost more jobs over the period—manufacturing, with a loss of 875,000 jobs. These employment trends will be discussed in more detail.

Some trends can be seen in available data. Using Statistics of U.S. Businesses (SUSB) data from the U.S. Census Bureau, the Office of Advocacy estimates that there were 6.1 million employer and 23.1 million nonemployer firms in the United States in 2008 *(*see *Table A.1* in Appendix A*)*. An estimated 627,200 employer firms were created and 595,600 employer firms were terminated that year *(Table*

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5 See National Federation of Independent Business (NFIB), http://www.nfib.com/page/sbet.

6 The report is available at http://www.federalreserve.gov/boarddocs/SnLoanSurvey/

7 See American Express OPEN Small Business Monitor, http://home3.americanexpress.com/corp/pc/2009/mtr.asp.

8 These comments came from a webinar sponsored by SAP (Systeme, Anwendungen und Produkte in der Datenverarbeitung), and myventurepad.com on small businesses and weathering the economy on September 25, 2008. Linked In users provided their own advice on this issue in conjunction with the forum.

9 See Joel Popkin and Company (2005).

A.2). These estimates based on 2006 counts do not represent the current picture, of course, given that the economic situation in 2008 was completely different from the environment in 2006.

With respect to job creation, since the mid-1990s, small businesses have generally created 60 to 80 percent of the net new employment, but in 2008 there was a net loss of 3.1 million jobs. While it is not yet possible to know how many were lost in smaller businesses, it is likely they were a significant share of the losses. In the first three quarters, the United States lost 1,695,000 jobs, of which 60 percent were in small businesses *(*see *Table A.12).* The recession forced businesses large and small to shed employment.

Trends in Self-employment, 2008

Average unincorporated self-employment fell from 10.4 million in 2007 to 10.1 million in 2008. In November and December 2008, this number was 9.6 million, reflecting a sharper drop-off than the yearly average suggests.[10] Meanwhile, incorporated self-employment remained steady at 5.8 million, on average, over the 2007-2008 period. The Kauffman Foundation's Index of Entrepreneurial Activity found that the entrepreneurial activity rate—the percent of American non-business-owning adults who start a business each month—increased slightly in 2008 over 2007.[11]

Conventional wisdom has suggested that self-employment would tend to rise during an economic downturn, in part because of "necessity entrepreneurship,"[12] but self-employment does not seem to be swayed much by cyclical changes.[13] The data are highly volatile, but it is possible to spot some trends *(Figure 1.1).* The

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10 The unincorporated self-employment numbers had risen to 9.9 million by March 2009, reflecting some volatility in the overall measure. Regardless, in the decade beginning in 2000, the value was lower than the averages of previous years; the decade peak was 10.6 million in 2006.

11 See Fairlie (2009).

12 It is important to note that entrepreneurship and self-employment are not identical. Self-employment data are often used as a proxy as these current data are more readily available than some other sources of data.

13 Fairlie (2004) observed that while self-employment grew steadily in the two decades after 1979, overall self-employment rates remained relatively constant over that time.

self-employment numbers appear to be higher in general since 2003 than in the previous decade, even with the most recent declines.

Moreover, there does not appear to be much correlation—and certainly not a countercyclical one, as suggested by conventional wisdom—between self-employment and unemployment. Falling unemployment in the late 1990s appears to have had little impact, and the growing economy of the mid-2000s coincided with rising (not falling) self-employment numbers. Clearly, other factors are at play in determining unincorporated and incorporated self-employment.

That said, past research has suggested that smaller firms have been able to recover from economic downturns with respect to employment growth more rapidly than their larger counterparts. Data from the SUSB indicate that net job creation in the immediate years following the 1990-1991 and 2001 recessions stemmed from employment generated by small firms with fewer than 500 employees, while large businesses grew little because of net contractions in employment.[14] During these two past recessions, firms with fewer than 20 employees were the only ones with positive net job growth; the larger category of small businesses with fewer than 500 employees, as well as large firms with 500 or more employees both experienced net employment losses (see *Table A.10)*. This finding has been backed by Business Employment Dynamics data, which found that very small firms had produced net job gains more quickly than their larger counterparts after a recession.[15]

The March 2008 supplement to the Current Population Survey focuses on 2007 data and some interesting trends on the characteristics of the self-employed over the 1995-2007 period *(Table A.13)*. The self-employed are overwhelmingly male, White,

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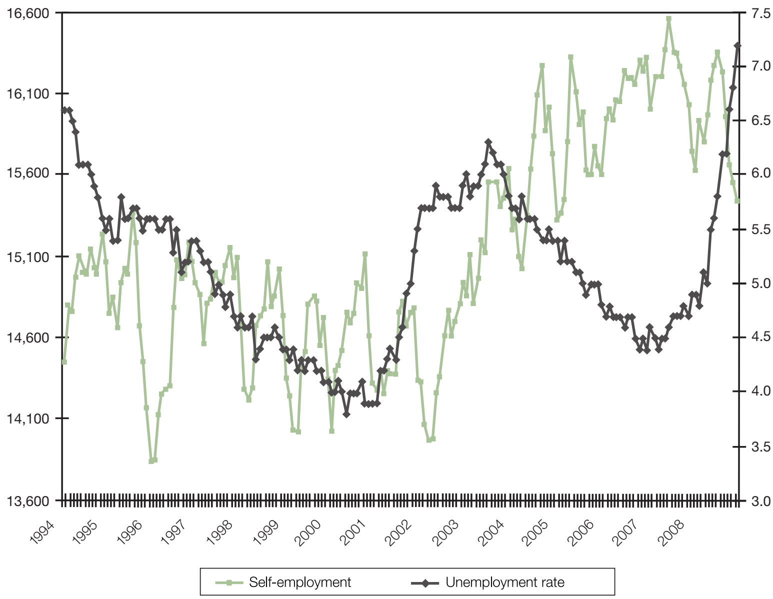
14 In general, small businesses generated 60 to 80 percent of the net new employment from the mid-1990s forward, according to SUSB data. Dynamic data for 2000-2001 through 2003-2004 show that all of the net new jobs stemmed from small businesses. For more information, see the net change in employment trends, http://www.sba.gov/advo/research/dyn_b_d8905.pdf. Note that these data have a three-year lag.

15 See http://www.bls.gov/news.release/pdf/cewfs.pdf.

Figure 1.1 **Trends in the Unemployment Rate and Self-employment, 1994-2008**

(left axis—unincorporated and incorporated self-employment in thousands; right axis—unemployment rate)



Source: Bureau of Labor Statistics.

married, and older; this is consistent with other studies.[16] Other demographic groups have made progress. Women and minorities have increased their proportion of the self-employed over this decade, with the largest gains coming from Hispanics. The number of self-employed Hispanics has more than doubled since 2000; their share has risen from 5.6 to 10.3 percent. Immigrant entrepreneurship constitutes a larger proportion of those who start their own business, as the percentage of native-born self-employed declined from 87.3 to 83.5 percent over the same time period.[17]

Age and education have become major determinants of self-employment as well. Roughly 15 percent of the self-employed were less than 35 years old in both 2000 and 2007, yet older Americans are more likely than before to be their own boss. The

16 See the results and the literature review discussion in Moutray (2007).

17 See Fairlie (2008) for more on this topic.

number of individuals between the ages of 55 and 64 increased from 16.4 percent of the self-employed in 2000 to 21.9 percent in 2007.[18] This trend is perhaps an indicator that more of the "Baby Boom" generation have sought entrepreneurship later in life. Fewer veterans are self-employed, a reflection of the aging of veterans from the Korean and Vietnam wars, although veterans are consistently self-employed at higher rates than nonveterans.[19]

The more educated share of the self-employed has increased. Individuals with at least a bachelor's degree accounted for 32.7 percent of the self-employed in 2000, and 36.6 percent in 2007. In contrast, the self-employed with a high school diploma or less accounted for 36.4 percent of the total in 2007, down from 39.7 percent in 2000.[20] The correlation between self-employment and educational attainment continues to strengthen.

The self-employed are more often located in urban and suburban areas than in rural communities *(*see *Table A.13)*. Rural self-employment declined 11.0 percent between 2000 and 2007, with its share of the total falling from 24.0 to 18.6 percent, while central city and suburban self-employment rose from 62.2 to 67.8 percent of the total. Much of this can be explained by demographic shifts. A working paper by Plummer and Headd (2008) found that the rates of establishment births and deaths do not vary much between rural and urban areas and that entrepreneurship does not hinge on rural or urban economic conditions.

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18 This increase came mostly at the expense of the 25 to 34 and 35 to 44 age groups, which saw their proportions of the self-employed fall from 41.7 to 35.9 percent. The 35- to 44-year-old age group was the only grouping to see a decline in the number of self-employed between 2000 and 2007.

19 Fairlie (2004). For more information, see Lichtenstein and Sobota (2007).

20 To further highlight these changes, the proportion of the self-employed with a high school diploma or less in 1995 was 43.5 percent; for those with a bachelor's and/or master's degree or above, the percent of the total was 30.8 percent.

The Macroeconomic Environment for Small Firms in 2008

Reduced Real Gross Domestic Product

Behind the 6.3 percent drop in real GDP in fourth quarter 2008 and the 1.1 percent rise in GDP for the year are changes in GDP's components—consumption, investment, government spending, and net exports.

Real personal consumption grew 0.2 percent between 2007 and 2008, down considerably from earlier in the decade *(Table 1.1)*. Consumption spending in 2008 is a story of two halves: modest growth in the first half of the year, followed by sharp declines in the second half. Consumers spent 3.8 percent and 4.3 percent less in the third and fourth quarters, respectively. These figures are mirrored in falling consumer confidence. The University of Michigan's consumer sentiment survey showed a marked change between 2007 and 2008, reflecting increased pessimism; it averaged 63.8 in 2008 compared with 85.6 in 2007 *(Table 1.2)*. Consumption accounts for 70 percent of overall output. Less spending has real effects in the overall economy.

The investment picture in 2008 was bleak, continuing a 2007 trend. For the year, real gross private domestic investment fell 6.7 percent in 2008, after a decline of 5.4 percent in 2007. But those numbers tell only part of the story. Except in the third quarter, 2008 was marked by significant declines *(Table 1.1)*. In the fourth quarter alone, overall investment fell 23.0 percent on an annualized basis. Much of this steep decline resulted from the rapid curtailment of nonresidential investment in the fourth quarter, which until that point had continued increasing even as residential investment shrank *(Figure 1.2)*.

Residential investment peaked in the fourth quarter of 2005, but has fallen steadily since and was down 44.9 percent by the end of December 2008. This phenomenon is largely the result of the bursting of the housing bubble. Home prices increased rapidly throughout much of the decade leading up to their peak in June 2006, based on the S&P/Case-Shiller Home Price Index *(Figure 1.3)*. Two and a half years later, home prices in the top 10 metropolitan areas were down 28.3 percent from the peak. Nonresidential investment, on the other hand, continued growing until the second quarter of 2008, and then fell 21.7 percent in the fourth quarter. On the positive side, real government consumption and gross investment grew 2.9 percent, making up for a small portion of the decline *(Table 1.1)*.

A bright spot over the past few years has been exports. American companies have benefited from a cheaper dollar, improved quality, and a renewed focus on exploring new overseas markets.[21] Indeed, much of 2008 continued this pattern. Real exports grew 6.2 percent for the year, as real imports declined by 3.5 percent, resulting in an improved trade deficit *(Table 1.1)*. With a shrinking economy affecting so many countries around the world, international trade also declined in the fourth quarter of 2008. In the last three months of the year, real exports and real imports fell 23.6 percent and 17.5 percent, respectively. Nevertheless, the overall volume of trade increased substantially over the decade, with exports up from $1.10 trillion in 2000 to $1.51 trillion in 2008, and imports up from $1.48 trillion to $1.90 trillion over the same time frame. Clearly, global economic opportunity has continued to expand for U.S. businesses large and small.

Declining Employment

The United States lost jobs in every month of 2008, with the rate of decline accelerating at year's end *(Table 1.3)*. The number of nonfarm payroll workers declined by 3.1 million from December 2007 to December 2008; nearly 1.7 million jobs were lost in the fourth quarter of 2008 alone. Moreover, the losses in employment have been broad-based. Only three major industries (at the two-digit North American Industry Classification System level) saw

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21 See Moutray and Tobias (2009).

Table 1.1 Real Gross Domestic Product and Components, 2000-2008

	Annual data									Quarterly data (2008)			
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**Q1**	**Q2**	**Q3**	**Q4**
Real gross domestic product*													
Level (trillions of dollars)	9.82	9.89	10.05	10.30	10.68	10.99	11.29	11.52	11.65	11.65	11.73	11.71	11.52
Annual percentage change	3.7	0.8	1.6	2.5	3.6	2.9	2.8	2.0	1.1	0.9	2.8	-0.5	-6.3
Real personal consumption expenditures*													
Level (trillions of dollars)	6.74	6.91	7.10	7.30	7.56	7.79	8.03	8.25	8.27	8.32	8.34	8.26	8.17
Annual percentage change	4.7	2.5	2.7	2.8	3.6	3.0	3.0	2.8	0.2	0.9	1.2	-3.8	-4.3
Real gross private fixed investment*													
Level (trillions of dollars)	1.74	1.60	1.56	1.61	1.77	1.87	1.91	1.81	1.69	1.75	1.70	1.70	1.60
Annual percentage change	5.7	-7.9	-2.6	3.6	9.7	5.8	2.1	-5.4	-6.7	-5.8	-11.5	0.4	-23.0
Real government consumption and gross investment*													
Level (trillions of dollars)	1.72	1.78	1.86	1.90	1.93	1.94	1.97	2.01	2.07	2.04	2.06	2.09	2.09
Annual percentage change	2.1	3.4	4.4	2.5	1.4	0.4	1.7	2.1	2.9	1.9	3.9	5.8	1.3
Real exports of goods and services*													
Level (trillions of dollars)	1.10	1.04	1.01	1.03	1.13	1.21	1.31	1.43	1.51	1.50	1.54	1.56	1.45
Annual percentage change	8.7	-5.4	-2.3	1.3	9.70	7.0	9.1	8.4	6.2	5.1	12.3	3.0	-23.6
Real imports of goods and services*													
Level (trillions of dollars)	1.48	1.44	1.48	1.55	1.72	1.82	1.93	1.97	1.90	1.96	1.93	1.91	1.82
Annual percentage change	13.1	-2.7	3.4	4.1	11.3	5.9	6.0	2.2	-3.5	-0.8	-7.3	-3.5	-17.5

*Seasonally adjusted, chained 2000 dollars. Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 1.2 **Various Monthly Macroeconomic Indicators, 2007-2008**

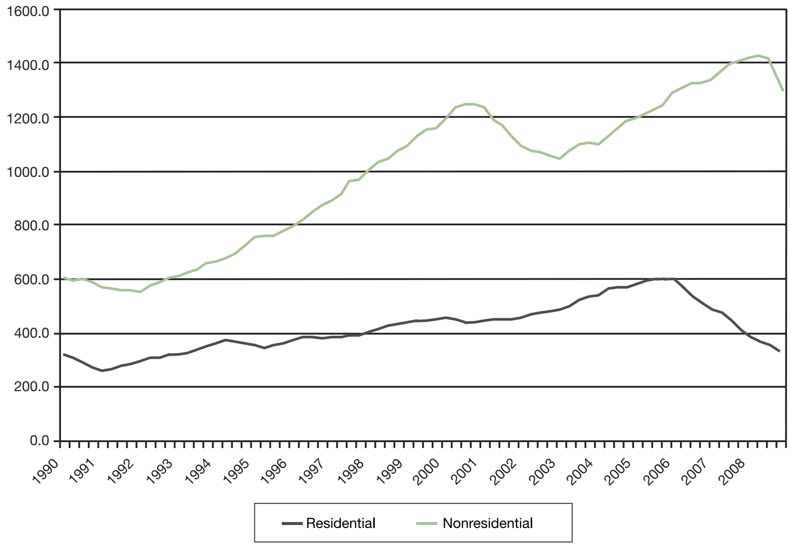
	Monthly data (2008)												Averages		Percent change from 2007
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2007	2008	
Consumer price index (all urban consumers and all items; 1982-84=100) *	212.5	212.9	213.7	214.0	215.0	217.0	218.6	218.6	218.7	217.9	213.3	211.6	207.3	215.2	3.8
Consumer price index (all urban consumers, all items except food and energy; 1982-84=100)*	213.7	213.9	214.3	214.5	215.0	215.6	216.2	216.5	216.8	216.8	216.9	216.9	210.7	215.6	2.3
Producer price index (1982=100)	181.0	182.7	187.9	190.9	196.6	200.5	205.5	199.0	196.9	186.4	177.5	171.3	172.7	189.7	9.9
NFIB small business optimism index (1986=100)	91.8	92.9	89.6	91.5	89.3	89.2	88.2	91.1	92.9	87.5	87.8	85.2	96.7	89.8	- 7.1
NFIB: next 3 months "good time to expand" (percent of respondents)	9.0	8.0	5.0	6.0	4.0	4.0	6.0	6.0	11.0	5.0	7.0	7.0	13.9	6.5	- 53.2
NFIB: net percent planning to hire in the next 3 months	9.0	11.0	3.0	5.0	2.0	5.0	5.0	9.0	7.0	0	-4.0	-6.0	12.9	3.8	- 70.5
NFIB: net percent with borrowing needs satisfied in the last 3 months (borrowers only)	29.0	31.0	26.0	29.0	27.0	30.0	25.0	29.0	27.0	25.0	24.0	26.0	31.1	27.3	- 12.2
NFIB: percent planning a capital expenditure in next 3 to 6 months*	25.0	26.0	25.0	26.0	25.0	26.0	21.0	23.0	21.0	19.0	21.0	17.0	28.8	22.9	- 20.5

Consumer price index (all urban consumers and all items; 1982-84=100) *	212.5	212.9	213.7	214.0	215.0	217.0	218.6	218.6	218.7	217.9	213.3	211.6	207.3	215.2	3.8
Consumer price index (all urban consumers, all items except food and energy; 1982-84=100)*	213.7	213.9	214.3	214.5	215.0	215.6	216.2	216.5	216.8	216.8	216.9	216.9	210.7	215.6	2.3
Producer price index (1982=100)	181.0	182.7	187.9	190.9	196.6	200.5	205.5	199.0	196.9	186.4	177.5	171.3	172.7	189.7	9.9
NFIB small business optimism index (1986=100)	91.8	92.9	89.6	91.5	89.3	89.2	88.2	91.1	92.9	87.5	87.8	85.2	96.7	89.8	- 7.1
NFIB: next 3 months “good time to expand” (percent of respondents)	9.0	8.0	5.0	6.0	4.0	4.0	6.0	6.0	11.0	5.0	7.0	7.0	13.9	6.5	- 53.2
NFIB: net percent planning to hire in the next 3 months	9.0	11.0	3.0	5.0	2.0	5.0	5.0	9.0	7.0	0	-4.0	-6.0	12.9	3.8	- 70.5
NFIB: net percent with borrowing needs satisfied in the last 3 months (borrowers only)	29.0	31.0	26.0	29.0	27.0	30.0	25.0	29.0	27.0	25.0	24.0	26.0	31.1	27.3	- 12.2
NFIB: percent planning a capital expenditure in next 3 to 6 months*	25.0	26.0	25.0	26.0	25.0	26.0	21.0	23.0	21.0	19.0	21.0	17.0	28.8	22.9	- 20.5

* Seasonally adjusted.

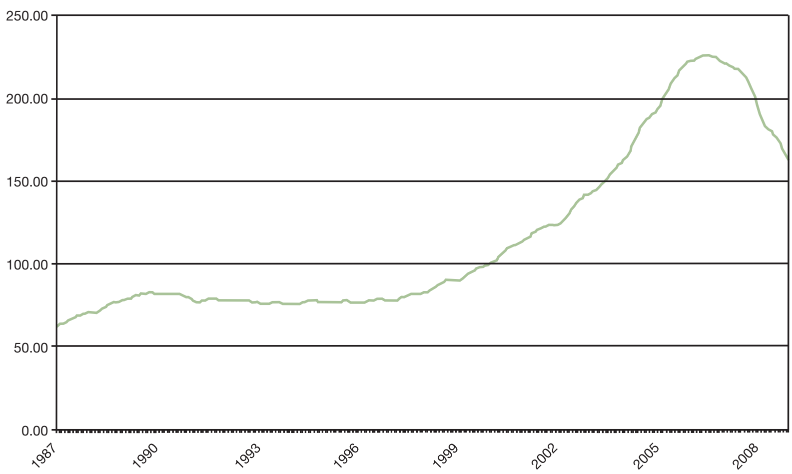
Sources: Board of Governors of the Federal Reserve System; U.S. Bureau of Labor Statistics, Current Population Survey; Dow Jones Energy Service; U.S. Department of Commerce, Bureau of the Census; Institute for Supply Management; National Federation of Independent Business; University of Michigan, Survey of Consumers.

Figure 1.2 Residential and Nonresidential Real Gross Private Domestic Investment, 1990-2008 (billions of chained 2000 dollars, seasonally adjusted)



Source: Bureau of Economic Analysis.

Figure 1.3 S&P/Case-Shiller Home Price Index, 1987-2008 (composite-10, 2000=100)



Note: This index examines average home prices in the 10 largest metropolitan areas: Boston, Chicago, Denver, Las Vegas, Los Angeles, Miami, New York, San Diego, San Francisco, and Washington, DC. Source: S&P/Case Shiller Indices; Fiserv, Inc.

gains; these were education and health services, government, and natural resources and mining *(Tables 1.3 and 1.4* and *Figure 1.4)*.

Two of the hardest hit industries are in the goods-producing sector. In 2008, construction and manufacturing lost a combined 1.56 million jobs, or roughly half of the overall total number of jobs lost in the economy for the year.[22] In each case, the declines constituted a significant proportion of the employment in the sector, 9.07 percent in construction and 6.35 percent in manufacturing. In construction, the losses have been especially devastating to the small business sector, as 86.14 percent of all firms involved in construction are classified as small, with fewer than 500 workers. The loss of construction jobs is directly tied to the housing price collapse.

The service sector has also suffered severe job losses—a sharp contrast from previous years *(Table 1.4)*. Service sector employment had grown over the decade, especially in three private sector industries—education and health services, leisure and hospitality, and professional and business services. Each experienced double-digit growth over the previous five years (2003 to 2008) and 10 years (1998 to 2003). Over the past year, as the recession began to take its toll, only two service sector industries—education and health services, and government—gained employment; most of the rest saw declines.[23]

While firm-size data for 2008 are not yet available, it is almost certain that small businesses have shed a significant number of jobs in this recession. Surveys tend to back anecdotal evidence that small business owners are struggling to maintain their work forces without layoffs.[24]

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22 Figures cited here differ from the annual average figures shown in *Tables 1.4 and 1.5*.

23 Figures shown in *Table 1.5* are annual averages.

24 One example is the American Express OPEN Small Business Monitor, which showed in spring 2009 that 28 percent of entrepreneurs planned to hire, "among the lowest Monitor readings in history." Another example is the National Federation of Independent Business (NFIB) monthly survey of small business owner sentiment *(see Table 1.2)*. In November and December 2008, the NFIB indicator of small business hiring intentions for the next three months turned negative, an observation that coincided with sharp drops in overall small business and consumer confidence. The optimism index in the survey fell to its second lowest level in its 30-year history. Owners suggested that the next three months were generally not a good time to invest in their businesses.

Table 1.3 **Monthly Employment on Nonfarm Payrolls by Major Sector (millions), 2008**

	Percent small business	2008 monthly data												2008 average
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Nonfarm payrolls	**50.22**	**138.08**	**137.94**	**137.81**	**137.65**	**137.52**	**137.36**	**137.23**	**137.05**	**136.73**	**136.35**	**135.76**	**135.07**	**137.04**
Goods-producing industries	**58.48**	**21.98**	**21.89**	**21.80**	**21.68**	**21.61**	**21.51**	**21.43**	**21.35**	**21.25**	**21.06**	**20.81**	**20.53**	**21.41**
Natural resources and mining	61.93	0.75	0.75	0.76	0.76	0.76	0.77	0.78	0.79	0.79	0.79	0.79	0.79	0.77
Construction	86.14	7.49	7.45	7.40	7.34	7.29	7.23	7.20	7.18	7.13	7.07	6.94	6.84	7.21
Manufacturing	44.18	13.74	13.69	13.64	13.59	13.56	13.51	13.45	13.39	13.32	13.20	13.08	12.90	13.42
Service-producing industries	**48.72**	**116.10**	**116.05**	**116.01**	**115.98**	**115.91**	**115.85**	**115.80**	**115.70**	**115.49**	**115.29**	**114.94**	**114.54**	**115.64**
Trade, transportation and utilities	45.27	26.72	26.66	26.63	26.56	26.50	26.47	26.43	26.35	26.26	26.16	26.01	25.84	26.38
Wholesale trade	60.94	6.03	6.02	6.01	6.00	5.99	5.98	5.97	5.95	5.95	5.92	5.89	5.85	5.96

Retail trade	41.12	15.57	15.53	15.51	15.46	15.42	15.40	15.38	15.33	15.28	15.22	15.13	15.04	15.35
Information	26.16	3.02	3.03	3.02	3.02	3.01	3.01	3.00	2.99	2.99	2.98	2.97	2.94	3.00
Financial activities	41.88	8.23	8.21	8.20	8.19	8.18	8.16	8.15	8.14	8.12	8.09	8.04	8.01	8.14
Professional and business services	43.88	18.07	18.02	17.95	17.95	17.89	17.82	17.79	17.73	17.68	17.61	17.49	17.36	17.78
Education and health services	47.84	18.61	18.66	18.70	18.75	18.80	18.84	18.89	18.95	18.96	18.98	19.04	19.08	18.86
Leisure and hospitality	60.89	13.53	13.53	13.53	13.51	13.50	13.49	13.47	13.45	13.43	13.40	13.34	13.30	13.46
Other services	85.57	5.52	5.53	5.54	5.54	5.54	5.54	5.54	5.53	5.53	5.54	5.51	5.48	5.53
Government	0.00	22.39	22.42	22.44	22.45	22.49	22.52	22.54	22.56	22.54	22.54	22.54	22.53	22.50

Notes: Seasonally adjusted. See www.bls.gov/ces/cessuper.htm for NAICS code equivalents for each sector. The small business percentage by sector is based on 2006 firm size data; leisure and hospitality uses 2005 information because of 2006 data suppressions. See www.sba.gov/advo/research/us06_n6.pdf.

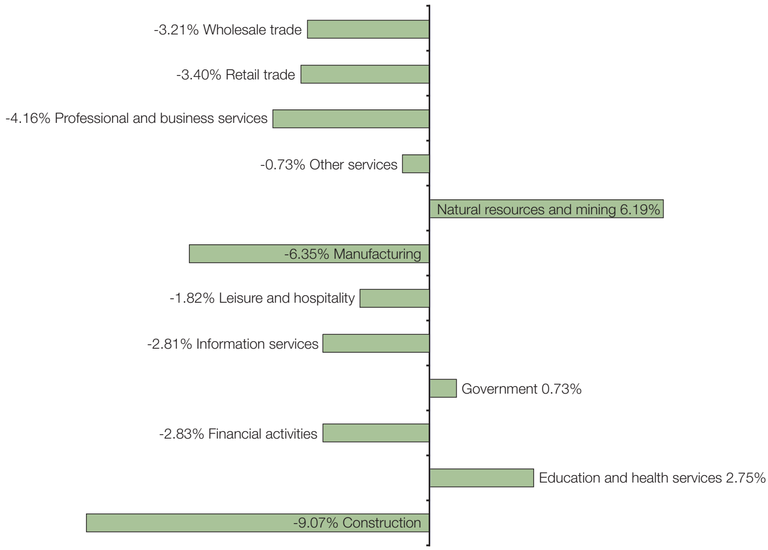
Sources: U.S. Small Business Administration, Office of Advocacy, using data from the U.S. Department of Commerce, Bureau of the Census; U.S. Department of Labor, Bureau of Labor Statistics.

Table 1.4 Annual Employment on Nonfarm Payrolls by Major Sector (millions), 1998–2008

	Annual averages											Percent change		
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	1998-2008 (10 yrs.)	2003-2008 (5 yrs.)	2007-2008 (1 yr.)
Nonfarm payrolls	**125.92**	**128.99**	**131.79**	**131.83**	**130.34**	**130.00**	**131.42**	**133.70**	**136.10**	**137.60**	**137.04**	**8.83**	**5.42**	**-0.41**
Goods-producing industries	**24.35**	**24.47**	**24.65**	**23.87**	**22.55**	**21.82**	**21.88**	**22.19**	**22.54**	**22.23**	**21.41**	**12.09**	**-1.87**	**-3.72**
Natural resources and mining	0.65	0.60	0.60	0.61	0.58	0.57	0.59	0.63	0.68	0.72	0.77	19.86	35.15	6.80
Construction	6.15	6.54	6.79	6.83	6.72	6.74	6.97	7.33	7.69	7.63	7.21	17.35	7.08	-5.49
Manufacturing	17.56	17.32	17.27	16.44	15.26	14.51	14.32	14.23	14.16	13.88	13.42	-23.56	-7.48	-3.29
Service-producing industries	**101.57**	**104.53**	**107.14**	**107.96**	**107.79**	**108.18**	**109.54**	**111.51**	**113.56**	**115.37**	**115.64**	**13.85**	**6.89**	**0.23**
Trade, transportation and utilities	25.19	25.77	26.23	25.99	25.50	25.29	25.53	25.96	26.28	26.63	26.38	4.75	4.33	-0.92
Wholesale trade	5.80	5.89	5.93	5.77	5.65	5.61	5.66	5.76	5.90	6.02	5.96	2.91	6.35	-0.86
Retail trade	14.61	14.97	15.28	15.24	15.03	14.92	15.06	15.28	15.36	15.52	15.35	5.10	2.93	-1.05
Information	3.22	3.42	3.63	3.63	3.39	3.19	3.12	3.06	3.04	3.03	3.00	-6.88	-6.01	-1.15
Financial activities	7.46	7.65	7.69	7.81	7.85	7.98	8.03	8.15	8.33	8.31	8.14	9.15	2.11	-1.90
Professional and business services	15.14	15.95	16.67	16.48	15.97	15.99	16.39	16.95	17.57	17.95	17.78	17.41	11.22	-0.94
Education and health services	14.45	14.79	15.11	15.64	16.20	16.59	16.95	17.37	17.82	18.32	18.86	30.53	13.67	2.92
Leisure and hospitality	11.23	11.54	11.86	12.03	11.99	12.18	12.49	12.81	13.11	13.43	13.46	19.81	10.53	0.22
Other services	4.98	5.09	5.17	5.26	5.37	5.40	5.41	5.40	5.44	5.49	5.53	11.09	2.35	0.63
Government	19.91	20.31	20.79	21.12	21.51	21.58	21.62	21.81	21.97	22.20	22.50	12.99	4.25	1.24

Notes: Seasonally adjusted. See www.bls.gov/ces/cessuper.htm for NAICS code equivalents for each sector.
Sources: U.S. Department of Labor, Bureau of Labor Statistics.

Figure 1.4 Employment Changes by Major Industry, December 2007—December 2008 (percentage changes)

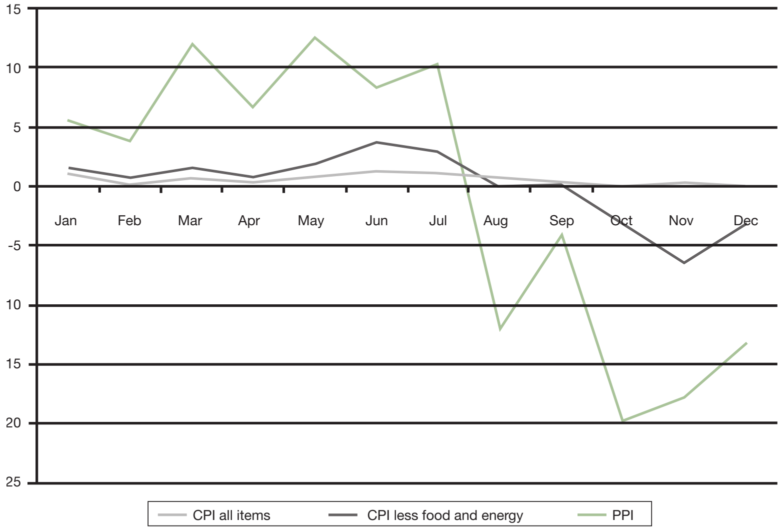


Source: Bureau of Labor Statistics.

Inflation, Followed by Deflation

A top issue in 2008 was inflation, as many small business owners felt pinched by higher prices for much of the first half of the year, followed, however, by falling prices near the end of the year. The producer price index (PPI) increased 9.9 percent between 2007 and 2008, reflecting significantly higher costs for businesses large and small *(Table 1.2)*. The growth in PPI was highly volatile, with high inflation from January through July and then marked deflation for the rest of the year *(Figure 1.5)*. Consumer price increases (CPI) were less pronounced. The overall CPI grew 3.8 percent between the averages of 2007 and 2008, but the core CPI measure, which excludes food and energy costs, rose a more acceptable 2.3 percent in the period.

Figure 1.5 Monthly Rates of Change for the Consumer and Producer Price Indices, 2008 (inflation rates in annualized percentages)



Source: Bureau of Labor Statistics.

A key reason for the rise and fall of consumer and producer prices was the price of oil *(Table 1.2)*.[25] The average price of West Texas intermediate crude, $93.00 per barrel in January 2008, increased rapidly over the next few months, peaking at around $145 per barrel in July.[26] From there, the price of oil began to plummet: in December 2008, the average price of a barrel of crude oil was $41.

Given this volatility, it should not be a surprise that Americans were anxious. The price of gasoline rose to more than $4 a gallon, straining the budgets of many individuals and businesses. According to a National Federation of Independent Business (NFIB) survey, the overriding concern by mid-year for small business owners was inflation, topping the economic worries about poor sales and the perennial concerns about taxes and regulation. Businesses were pressed by sharply higher costs, which they were

25 Another source of deflationary pressure would be a weakening of overall demand in the marketplace because of the weakened economic situation, forcing businesses to reduce prices to be able to sell their goods or services.

26 The figure for July in *Table 1.2* is the average, rather than the peak.

often unable to pass along to the consumer. By year's end, as the economic environment worsened and oil prices had fallen substantially, sales once again dominated small business owners' minds. In a quick turnabout, concerns about deflation, not inflation, permeated the conversation going into 2009. The American Express OPEN Small Business Monitor also cited cash flow concerns.[27]

Employee compensation costs rose at relatively modest rates for both private sector wages and salaries and benefits *(Table 1.5)*. Wage-and-salary costs were up 3.0 percent between 2007 and 2008. The employment cost index for benefits rose 2.6 percent in 2008, a slower rate of growth than earlier in the decade.[28] Similarly, the Kaiser Family Foundation reported that health insurance premiums rose 5 percent between 2007 and 2008.[29] Overall though, between 1999 and 2008, health insurance premiums were up 119 percent, with many years experiencing double-digit gains.[30] (Consumer prices grew 25.3 percent over the same time period.)

Financial Market Instability

Banks and other financial institutions were challenged on a number of fronts in 2008, as many struggled for capital, especially by year's end.[31] The financial crisis began with the unraveling of the housing market in late 2006. Housing values have fallen substantially since peaking in June 2006; nationally, this decline averaged 28.3 percent between June 2006 and December 2008, according to the S&P/Case-Shiller Home Price Index *(Figure 1.2)*. The price declines left many homeowners with negative equity when the price of their homes fell below the payoff value of their mortgage, making it more difficult to extricate themselves from the

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27 See http://home3.americanexpress.com/corp/pc/2009/mtr.asp.

28 Changes from the previous year in the employment cost index for private sector benefits are, for 2002, 4.5 percent; 2003, 6.1 percent; 2004, 6.8 percent; 2005, 4.6 percent; 2006, 2.9 percent; and 2007, 2.4 percent. This data series from the Bureau of Labor Statistics began in 2001.

29 See Kaiser Family Foundation (2008).

30 Ibid.

31 See Chapter 2 for more detail.

overwhelming burden of such obligations.[32] Further exacerbating the problem has been the proliferation of subprime lending practices, whereby individuals who might not have been able to afford a house had been able to do so with lower short-term or "teaser" rates, interest-only loans, and other options. The combination of a slowing economy, falling home prices, negative home equity positions, and unattractive mortgage products left many Americans with few choices, and the number of foreclosed homes began to grow. Between mid-2006 and 2008, the nonperforming loan ratio more than tripled *(Figure 1.6)*.[33]

One aspect of the current economic crisis is the proliferation of mortgages securitized well beyond the control of the originating bank or finance company. Many institutions immediately sold these mortgages into the secondary market. This, by itself, was not new. After all, government-sponsored enterprises such as Fannie Mae, the Federal National Mortgage Association, and Freddie Mac, the Federal Home Loan Mortgage Corporation, had been doing this for years, facilitating banks' increased lending.

What was different was the creation of elaborate mortgage-backed securities that were sold to various companies around the world and marketed as safe, AAA-rated investments with solid returns. The risk was not fully appreciated. The bursting of the housing bubble in mid-2006 led to greater defaults that severely challenged the credibility of these mortgage-backed securities. With greater uncertainty, especially in the pricing of these assets, the market for them disappeared, and the institutions that held them began seeing their balance sheet positions deteriorate. What began as a normal correction in the housing market eventually led to a collapse in the global financial system and the failure of some

32 According to First American CoreLogic, a real estate tracking firm, there were 8.3 million homeowners with "upside down mortgages" in 2008, or roughly 20 percent of the total. For more information on this analysis, see http://www.npr.org/templates/story/story.php?storyId=101465335.

33 Nonperforming loans are loans that are at least 90 days past due.

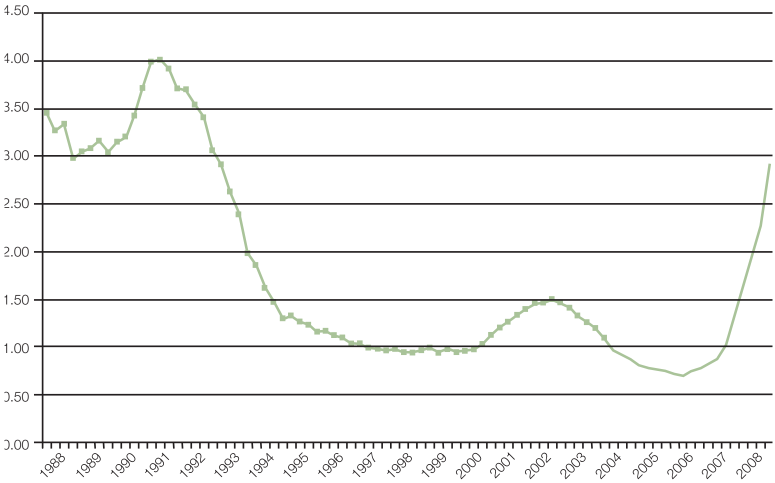
Table 1.5 Various Quarterly Macroeconomic Indicators, 2004-2008

	Last five years					Last five quarters					Percent change from 2007
	2004	2005	2006	2007	2008	Q4-07	Q1-08	Q2-08	Q3-08	Q4-08	
Business bankruptcy filings (thousands)	34.3	39.2	19.7	28.3	43.5	8.0	8.7	9.7	11.5	12.4	53.7
Proprietorship income (billions of current dollars) *	911.1	959.8	1014.7	1056.3	1073.4	1073.8	1071.7	1076.9	1080.5	1060.5	1.6
Corporate profits after tax (billions of dollars) *	923.9	1034.3	1199.6	1192.1	1109.9	1177.6	1190.6	1126.5	1121.3	1001.2	-10.7
Nonfarm business sector output per hour for all persons (1992=100)*	131.6	134.1	135.2	137.1	141.0	138.6	139.5	140.8	141.3	142.4	2.8
Employment cost index: private sector wages and salaries (2005=100)*	96.8	99.2	102.0	105.5	108.7	106.7	107.6	108.4	109.0	109.6	3.0
Employment cost index: private sector benefits (2005=100) *	94.8	99.2	102.1	104.5	107.2	105.8	106.4	106.9	107.5	107.9	2.6
Rates for the smallest loans (less than $100,000):											
Variable rate loans, repricing terms of 2 to 30 days	4.4	6.0	7.7	7.7	5.0	7.2	5.6	4.9	4.9	4.7	-35.1
Variable rate loans, repricing terms of 31 to 365 days	6.2	7.1	8.4	8.6	6.9	8.1	7.4	6.9	6.7	6.4	-19.8
Senior loan officers (percent of respondents):											
Net small firm commercial and industrial (C&I) loans (those whose standards were eased minus those tightened)	13.1	9.0	4.6	-4.3	-55.5	-9.6	-30.4	-51.8	-65.3	-74.6	—
Net small firm demand for C&I loans (those whose demand was stronger minus those weaker)	25.9	27.3	0.2	-11.0	-15.6	-7.7	-23.6	-16.1	-15.4	-7.4	-41.8

*Seasonally adjusted.

Sources: Administrative Office of the U.S. Courts; U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; Board of Governors of the Federal Reserve System.

Figure 1.6 Nonperforming Total Loans, 1988-2008 (ratio of total nonperforming loans to total loans)



Note: Nonperforming loans are those loans that bank managers classify as 90 days or more past due or nonaccrual in the Call Report.

Source: Federal Financial Institutions Examination Council (Call Report data).

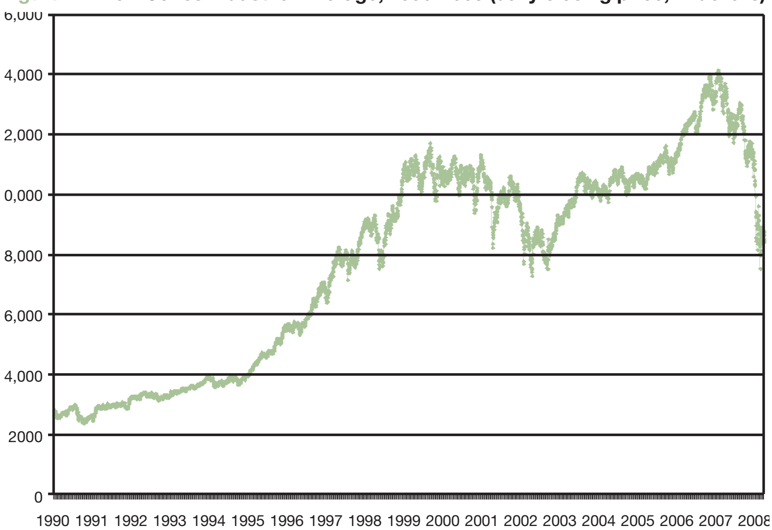
of the biggest banks in the world.[34] Ultimately, this would affect small business owners' ability to access credit.

As the financial crisis worsened, the stock market crashed as well. The daily closing price for the Dow Jones Industrial Average (DJIA) peaked on October 9, 2007, at 14,165, and then began to plummet *(Figure 1.7)*. By December 31, 2008, the DJIA had fallen to 8,776—down 38 percent from the peak.[35] The net result was a further reduction of wealth, as Americans lost both stock and retirement assets, and value in their homes. The "double-whammy" made individuals and businesses feel poorer and more anxious than before, causing a crisis in confidence as evidenced by extremely pessimistic indicators and reduced spending on consumer and investment goods and services.

34 For an excellent description of how the housing price correction eventually caused a greater financial collapse, see Shiller (2008), Zandi (2008), and a host of other books published in 2008 and 2009 to explain the current crisis.

35 The stock market continued to fall into 2009. As of this writing, the DJIA bottomed out on March 9, 2009, at 6,440.08, or down 54.5 percent from October 9, 2007. This was the lowest DJIA since December 18, 1996.

Figure 1.7 Dow Jones Industrial Average, 1990-2008 (daily closing price, in dollars)



Source: Yahoo Finance, using data from Dow Jones Indexes.

Fiscal and Monetary Policy Actions

As the economy weakened, policymakers devoted much attention to stimulating it throughout 2008. The year began with the enactment of the Economic Stimulus Act in February. By May and June, the U.S. Treasury had distributed most of the stimulus checks with the hope that Americans would spend them and stimulate the economy. The overall impact of this plan was modest, with real consumption rising an annualized 1.2 percent in the second quarter, its fastest growth rate of the year *(Table 1.2)*.

Policymakers began worrying about the overall stability of the financial sector, and by September, there was discussion about how to prevent a major collapse of the entire system. Financial institutions, many of which had made risky investments in the subprime mortgage sector, saw their capital positions severely weakened and their overall operations in jeopardy. On January 11, 2008, Bank of America announced that it was purchasing Countrywide Financial, the largest originator of mortgages in the United States, and on March 16, the Federal Reserve Board facilitated a "fire sale" of Bear

Stearns to J.P. Morgan Chase. Both transactions allowed the companies to avoid bankruptcy. On July 11, IndyMac Bank was closed by the Federal Deposit Insurance Corporation and the Office of Thrift Supervision. It was the second largest failure of a thrift in U.S. history, and one of 25 banks placed in FDIC receivership in 2008.[36]

The biggest shift in the overall psyche with respect to the financial crisis came in autumn. Both Freddie Mac and Fannie Mae, which underwrote roughly half of the $12 trillion in U.S. mortgages,[37] were taken over by the federal government on September 7, 2008. One week later, two major investment houses succumbed to new financial realities, with one (Merrill Lynch) selling itself to Bank of America and the other (Lehman Brothers) declaring bankruptcy. Then, on September 17, the Federal Reserve lent American International Group (AIG), a major global underwriter of insurance, $85 billion to keep it afloat.[38] September ended with two more major banking mergers, both of which were facilitated by policymakers—J.P. Morgan Chase acquired the assets of Washington Mutual, and Wachovia sold itself to Wells Fargo.[39]

To prevent the situation from deteriorating further, Treasury Secretary Henry Paulson and Federal Reserve Bank Chairman Ben Bernanke proposed the creation of the Troubled Asset Relief Program (TARP). The proposal was eventually enacted as the Emergency Economic Stabilization Act of 2008 and signed by President Bush on October 3, 2008. The U.S. Treasury used its $700 billion in TARP funds, which it received in two installments of $350 billion, to purchase the toxic assets of several financial institutions. The Treasury also took preferred equity stakes in a number of firms as a method of injecting capital into them. These

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36 For a complete list of failed banks and thrifts placed into FDIC receivership, see http://www.fdic.gov/bank/individual/failed/banklist.html.

37 See Duhigg (2008).

38 As of this writing, AIG had received over $150 billion in funding to be able to maintain operations. See Sorkin and Walsh (2008).

39 Wachovia announced on September 29 that it would accept an offer from Citigroup, but they would later reconsider, selling themselves to Wells Fargo. The merger of Wells Fargo and Wachovia was approved on October 12, 2008.

monies were not restricted to banks. TARP dollars have been used for assisting homeowners, small businesses, and consumers.[40] General Motors and AIG were also beneficiaries of TARP funds.[41] Meanwhile, monetary policy has been extremely aggressive. The prime rate, the interest rate banks charge their best customers, was 8.25 percent in September 2007; after a series of rate cuts designed to stimulate economic activity, it was 3.25 percent by December 2008—a sudden decrease of 5 percentage points. Moreover, the Federal Reserve lowered its target federal funds rate, the interest rate banks charge one another, to essentially zero.

The effects of this action can be seen in the variable rate for small loans of less than $100,000 *(Table 1.5)*. For loans of 2 to 30 days, the interest rate was 4.7 percent in fourth quarter 2008; it had been 7.2 percent a year earlier. In the same time frame, the rate fell from 8.1 to 6.4 percent for small loans of between 31 and 365 days in duration.

Small businesses able and willing to borrow could obtain attractive lending rates. The extent to which monetary policy was eased, however, shows the scope of the Federal Reserve's concern about the state of the economy. Federal Reserve Chairman Bernanke was willing to expand the money supply rapidly and do whatever it took to turn the economic situation around. On November 25, 2008, for example, the Federal Reserve opened up a Term Asset-backed Securities Loan Facility (TALF) to purchase asset-backed securities; among other things, this facility purchased SBA-guaranteed loans in an effort to restimulate the secondary market.[42] Moving into 2009, the Federal Reserve began purchasing U.S. Treasury securities to further boost the nation's liquidity.

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40 The U.S. Treasury has instituted a number of programs using TARP funds to improve the overall financial stability of various institutions. See http://www.ustreas.gov/initiatives/eesa/ for complete details on this program.

41 For a listing of all TARP transactions, see http://www.ustreas.gov/initiatives/eesa/transactions.shtml.

42 See http://www.federalreserve.gov/newsevents/press/monetary/20081125a.htm.

With President Obama's signing of the American Recovery and Reinvestment Act on February 17, 2009, additional dollars were allocated for infrastructure development, educational facility improvements, broadband access, scientific research, tax incentives, economic development, entrepreneurship, and SBA lending. Clearly fiscal and monetary policymakers have been very active in efforts to end the recession and support the survival and growth of small businesses and entrepreneurship.

Ongoing Small Business Issues and Challenges

Access to Capital

For small business owners, trouble in the financial markets spilled over into their ability to access credit. The Federal Reserve Board's quarterly senior loan officer survey, for example, continued to show a tightening of lending standards for small commercial and industrial loans, and it also documented weaker demand for such loans. Moreover, contrary to past recessionary experiences,[43] SBA guaranteed lending programs also experienced sharp declines because the secondary market for SBA guaranteed loans was sharply curtailed. In calendar year 2008, 7(a) lending was down 40 percent in the number of loans and 20 percent in dollar volume. While some banks did suggest a willingness and ability to lend to small businesses, others were challenged by the larger financial crisis; for many entrepreneurs, access to credit—whether real or perceived—was a serious issue by year's end.[44]

Cost and Availability of Health Insurance

Health insurance premiums have risen substantially in the first decade of the 21st century. The Kaiser Family Foundation reports

43 Past research by the Office of Advocacy found that SBA lending had a countercyclical nature in past economic downturns. When small businesses were unable to access credit in the financial sector, SBA lending helped to make up some of the difference. See PM Keypoint (2003) for more on this study.

44 See Kroszner (2008). See also Chapter 2 for a larger discussion of small business financial issues.

that the average annual cost of a family premium for employer-sponsored health insurance coverage increased 119 percent between 1999 and 2008, with a 5 percent increase in 2008 from the previous year.[45] These premium increases have forced small business owners to make changes in the coverage they offer their workers, including sharing the cost of such coverage with their employees, pursuing lower-cost options such as consumer-driven plans, or choosing not to offer such coverage at all. Recent surveys document small business owners' concerns.[46]

In 2007, some 46 million Americans did not have health insurance,[47] and many of them worked in a small business. Almost 16 million—about one in four—private sector wage-and-salary workers in small businesses with fewer than 500 employees lacked health insurance from any source *(Table 1.6)*. This compares with fewer than 13 percent of workers in large firms with 500 or more employees. In addition, 3.7 million self-employed workers were uninsured. Almost 6 million private sector uninsured workers were employed by firms with fewer than 10 workers.

About 45 percent of workers in small firms with fewer than 500 employees had employment-based health insurance coverage in their own name; as did almost 23 percent of the self-employed, compared with almost two-thirds of workers in large firms. Workers in small firms were more likely than their large firm counterparts to be covered as a dependent by another family member's health insurance plan, 18.5 percent and 13.8 percent, respectively. More than one-quarter of all self-employed workers had coverage as a dependent on a family member's plan. One in five of the self-employed purchased an individual health plan, compared with just 6.1 percent

45 Kaiser Family Foundation and the Health Research & Educational Trust (2008).

46 As entrepreneurs look to cut expenses, those that offer health insurance appear to be protecting it, according to the American Express OPEN Small Business Monitor (2009). A recent NFIB survey found that nearly half of all small business owners had shopped around for health care coverage in the previous three years, but only 1 to 2 percent had dropped coverage altogether. "The reason for stagnation or decline in the number of small businesses offering health insurance, therefore, appears to be that the owners of new firms are increasingly reluctant to offer it," the report concludes. See National Federation of Independent Business (2007).

47 DeNavas-Walt, Proctor, and Smith (2008).

of workers in small firms. Workers in large firms were least likely to purchase individual insurance (3.7 percent).

Ongoing research shows that employees at smaller firms are less likely to receive health insurance or other benefits than those at larger firms.[48] While virtually all employers with 200 or more employees offer health benefits to their workers, for example, only 62 percent of those with fewer than 200 employees offered such benefits in 2008. For very small firms with 3 to 9 employees, the offer rate was 49 percent.[49] One challenge is that it costs more per employee to administer small health plans than it does larger ones.[50] Several legislative proposals would have allowed small businesses to pool the risk in an effort to reduce such costs; none has been passed, however.[51]

The cost and availability of health insurance has long been a concern for small business owners, and prior to the current economic situation, it was a top concern. Finding ways to control the cost of providing health insurance to employees and increasing coverage will remain a priority, and policymakers will almost certainly grapple with these issues in the near term.

Attracting and Retaining a Quality Work Force

Small businesses must compete effectively for labor with their larger counterparts. This is more difficult in light of the disparity in total compensation, especially benefits, and the result is greater employee turnover. Firms that offer benefits have a 26.2 percent lower probability of having an employee leave in a given year; moreover, the provision of benefits increases the probability of the employee staying another year by 13.9 percent.[52] Firm size is a major determinant in whether a business offers such benefits.

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48 Joel Popkin and Company (2005) and Econometrica, Inc. (2007).

49 Kaiser Family Foundation and the Health Research & Educational Trust (2008).

50 Chu and Trapnell (2003).

51 The most recent example of this is the bipartisan Small Business Health Options Program Act (SHOP) (S. 2795), which promotes the "pooling" of health insurance plans for employers with fewer than 100 employees and for the self-employed.

52 Hope and Mackin (2007).

Table 1.6 Private Sector Workers Ages 18-64 With Selected Sources of Health Insurance, by Firm Size, 2007 (millions / percent as noted)

		Employment-based coverage					
	Total	Total	Own name	Dependent	Individually purchased	Public	Uninsured
Millions of workers							
Total	126.3	86.1	63.9	22.1	8.5	9.4	25.6
Self-employed[1]	14.0	6.9	3.2	3.6	2.8	1.0	3.7
Wage-and-salary workers	112.3	79.2	60.7		5.7	8.4	21.9
Firm employment size							
<10	16.9	8.2	4.5	3.7	1.6	1.7	5.8
10-24	12.8	7.5	4.9	2.6	0.8	1.0	3.7
25-99	17.3	12.0	9.0	3.0	0.9	1.2	3.6
100-499	16.9	13.0	10.5	2.5	0.6	1.1	2.6
<500	63.9	40.7	28.9	11.8	3.9	5.0	15.7
500+	48.4	38.5	31.8	6.7	1.8	3.4	6.1
Percentage within coverage category							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Self-employed[1]	11.1	8.0	5.0	16.3	32.9	10.6	14.5
Wage-and-salary workers	88.9	92.0	95.0	83.7	67.1	89.4	85.5
Firm employment size							
<10	13.4	9.5	7.0	16.7	18.8	18.1	22.7
10-24	10.1	8.7	7.7	11.8	9.4	10.6	14.5
25-99	13.7	13.9	14.1	13.6	10.6	12.8	14.1
100-499	13.4	15.1	16.4	11.3	7.1	11.7	10.2
<500	50.6	47.3	45.2	53.4	45.9	53.2	61.3
500+	38.3	44.7	49.8	30.3	21.2	36.2	23.8
Percentage within worker / firm size category							
Total	100.0	68.2	50.6	17.5	6.7	7.4	20.3
Self-employed[1]	100.0	49.3	22.9	25.7	20.0	7.1	26.4
Wage-and-salary workers	100.0	70.5	54.1	16.5	5.1	7.5	19.5
Firm employment size							
<10	100.0	48.5	26.6	21.9	9.5	10.1	34.3
10-24	100.0	58.6	38.3	20.3	6.3	7.8	28.9
25-99	100.0	69.4	52.0	17.3	5.2	6.9	20.8
100-499	100.0	76.9	62.1	14.8	3.6	6.5	15.4
<500	100.0	63.7	45.2	18.5	6.1	7.8	24.6
500+	100.0	79.5	65.7	13.8	3.7	7.0	12.6

[1] Includes unincorporated and incorporated self-employed.

Note: Details might not add to totals because individuals may receive coverage from more than one source. Figures may not match EBRI figures because of rounding.

Source: Adapted from Employee Benefits Research Institute (EBRI) estimates of the Current Population Survey, March 2008 Supplement, EBRI Issue Brief No. 321, September 2008, *Figure 11*.

Demographic trends in the coming years may exacerbate the challenges for small businesses in employee recruitment and retention. The Baby Boom generation comprises 78.2 million Americans born between 1946 and 1964,[53] and the first wave of this group has already begun to retire, a process that will accelerate over the next decade. These retirements pose two problems for businesses large and small. First, firms will see a mass exodus of institutional knowledge that will be hard to replace in certain fields. Many businesses have contemplated ways to entice more of these retirees to delay their departure, if possible, as their retirements will pose challenges for firms to effectively train others to step into these roles. Second, the departure of this large generation from the work force could lead to labor shortages in some industries, particularly in technological and health occupations. Labor shortages mean that firms may need to compete for skilled workers, and small businesses are sometimes at a competitive disadvantage in outbidding larger firms. When these positions go unfilled, small businesses are forced to seek other alternatives, such as having existing employees work more hours, leaving positions vacant, or turning down work.[54]

Businesses also hire talented foreign workers, especially in math, science, and engineering. The United States benefits from a skilled work force that is both native and foreign born. Evidence suggests that immigrants are extremely entrepreneurial; according to one study, 25 percent of new engineering and technology companies were started by immigrants.[55] Given the current difficulty experienced by both small and large firms in hiring and retaining these high-skilled workers, policymakers may need to find new ways to encourage their legal immigration.[56]

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53 U.S. Census Bureau (2006).

54 National Federation of Independent Business (2001).

55 Wadhwa et al. (2007).

56 Schramm and Litan (2008).

Global Competition and Pursuing New Markets

American businesses have long sought opportunities where they could find them. For those able to sell their goods and services to new markets, international trade can be an excellent opportunity. One of the strengths in the economy in recent years has been the export sector. Real exports have risen steadily since 2005, outpacing the growth in imports; the value of real exports increased 6.2 percent in 2008. Collectively, 256,381 small businesses are known to have been involved in the export business in 2007, the most recent year that data by firm size were reported by the U.S. Census Bureau. These companies constituted 97.3 percent of all known exporters, and they engaged in $311.7 billion in known transactions—30.2 percent of the total.[57]

Overseas markets can provide new customers for small business owners, but entrepreneurs have yet to tap their full potential for growth in the export arena. Where demand for their products and services was sufficient in local markets, there was no need to introduce the complications of trading with foreign customers. And size has often been a barrier to exporting for small firm owners who could not afford to devote an employee's time to pursuing foreign deals. Businesses that did engage in international trade often did so based on inquiries instead of a strategic initiative, or by becoming subcontractors with larger firms that were engaged internationally.[58] Meanwhile, as Friedman (2005) notes, the world is growing "flatter" and Americans face competitors on a number of fronts, both at home and abroad. Much has been written on this topic, as the debate over globalization continues to garner attention. The U.S. government has worked to increase the ability of Americans to compete overseas by lowering trade barriers.[59] Government can also help ensure that trade laws are enforced.

57 See http://www.census.gov/foreign-trade/Press-Release/edb/2007/edbrel.pdf.

58 Palmetto Consulting (2004).

59 For more information on small business opportunities and exports, see Moutray and Tobias (2008).

The National Association of Manufacturers (NAM) released studies in 2003 and 2006 on the structural costs of manufacturing in the United States compared with its trading partners. They found that U.S. manufacturers pay 31.7 percent more in nonproduction costs relative to the nation's nine largest trading partners. Much of the difference is accounted for in higher tax and regulatory compliance costs, energy expenditures, health and retirement benefits, and tort litigation.[60] U.S. businesses can effectively compete if they continue to meet the needs of their customers, rely on cutting-edge technology and innovation, and keep their businesses flexible and entrepreneurial (including exploring new markets through exporting).[61]

One way American companies have been able to reduce their costs is by outsourcing some processes and tasks abroad. By producing some inputs elsewhere at lower cost, firms can more effectively compete on price while focusing domestic production efforts in other areas. To the extent that this practice may be seen as "outsourcing jobs," it is controversial and not without real costs. But arguments can be made on both sides: foreign companies often outsource work to the United States as well—a practice known as "insourcing"—and proponents of "offshoring"—the relocation of business processes from one country to another—suggest that it is a necessary strategy for firm survival in a global marketplace.[62]

Taxes and Regulation

Business conditions have impacts on entrepreneurial activity, and small business owners frequently cite tax and regulatory policies as a concern. Research has shown that state-level policies that promote business creation lead to higher employment, gross state product, and personal incomes.[63] Small businesses face

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60 Leonard (2003, 2006).

61 RSM McGladrey (2006).

62 StratEdge (2008).

63 See Bruce et al. (2007).

disproportionately higher costs per employee than their larger counterparts in complying with federal regulations,[64] and the federal government and a majority of states have aggressively pushed regulatory flexibility protections for small businesses when drafting new rules.[65] Other nations are also pushing to reduce business regulatory barriers, as documented each year by the World Bank, and overall business activity in these countries has likely increased as a result.[66]

Small business owners continue to pay close attention to tax and regulatory initiatives under consideration. At the federal level, several tax provisions of 2001 and 2003 are set to expire after fiscal year (FY) 2010, and there will be considerable debate over which will be extended and which allowed to expire. Policymakers will also need to address the alternative minimum tax, which continues to affect more and more small businesses each year, and state governments continue to grapple with fiscal pressures that affect their tax policies.[67] On the regulatory front, it is anticipated that there will be a significant influx of new regulations at the federal level on issues ranging from homeland security to finance. As these rule changes are reviewed, small business interests will need to be thoroughly considered.

Procurement

Small businesses obtained $83.3 billion in direct prime federal government contracts in FY 2007, according to the most recent data available. This figure amounts to 22 percent of the $378.5 billion spent on federal procurement, and is up from $77.7 billion spent with small firms in FY 2006.[68] In addition to direct contracts, small businesses were awarded $64 billion in subcontracts, for a total of more than $147 billion in prime and subcontracting

64 See Crain (2005).
65 See McGibbon (2009).
66 See World Bank Group (2008).
67 See Bruce (2009).
68 See Clark and Saade (2009).

dollars.[69] Despite the gains in dollar totals, federal agencies again missed the total procurement goal of 23 percent; the challenge to reach out to small business partners remains.

Procurement developments in 2008 should serve as a strong signal to the business community that the government will demand accountability through enforcement of the laws, rules, and regulations governing the use of public funds. It is very important for small businesses to pay close attention to the latest changes in the Federal Acquisition Regulation.[70] Many of these regulations will require, for the first time, "flowdown" compliance from subcontractors. Small business subcontractors must develop a keener awareness of the origin of their contracts with a prime contractor, as they too will be held accountable for contract violations of their subcontracts. Specifically, small businesses should closely follow three developments:

1. **E-verify for Federal Contractors.** Executive Order 13465 of June 6, 2008, currently directs the agency heads of the General Services Administration, the Department of Defense, and the National Aeronautics and Space Administration (lead agencies on the Federal Acquisition Regulation, or FAR Council) to promulgate a rule requiring federal contractors to use an electronic employment eligibility verification system (e-verify).[71] To comply with this executive order, on June 12, 2009, the FAR Council published for public comment in the *Federal Register* a proposed regulation, FAR Case 2008-0001.[72] On November 14, 2008, the FAR Council published the final regulations to implement e-verify.[73] The regulations were to go into effect on January 15, 2009; however, the new administration placed a hold until June 2009 on most regulations to seek a full review before implementation.

69 Ibid.

70 See http://www.acquisition.gov/far/.

71 See http://edocket.access.gpo.gov/2008/pdf/08-1348.pdf.

72 See the *Federal Register,* 73(114), page 33374, June 12, 2008.

73 See the *Federal Register,* 73(221), page 67651, November 14, 2008.

2. **Contractor Code of Ethics and Business Conduct and Contractor Compliance Program and Integrity Reporting.** On February 16, 2007, the FAR Council published a proposed regulation, FAR Case 2006-007, that would, among other things, create government uniformity in corporate accountability by requiring all federal contractors awarded contracts in excess of $5 million to implement a formal code of ethics and to provide an employee ethics and business conduct training program.[74] On May 21, 2007, the Office of Advocacy submitted a formal comment letter on behalf of small businesses expressing concern about the regulatory costs of compliance.[75] On November 23, 2007, the FAR Council issued a final rule requiring contractors awarded contracts that exceed $5 million and that are to be performed in 120 days or more to establish and maintain a code of conduct and compliance program and to display appropriate hotline posters within 30 days of the contract award.[76] The rule exempts contractors that are small businesses from certain formal training and control system requirements. Exempted from the code of conduct are display, training, and control system contracts that will be performed entirely outside of the United States, as well as those that constitute commercial acquisitions under FAR Part 12.

   In addition to this new rule, at the request of the Department of Justice, a new FAR case was published for comment on November 14, 2007. FAR Case 2007-006, Contractor Compliance Program and Integrity Reporting, proposes additional requirements for ethics programs and standards of conduct on contracts and compulsory disclosure of suspected violations.[77] Comments on this proposed rule were due on January 14, 2008. Far Case 2007-006,

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74 See http://edocket.access.gpo.gov/2007/pdf/07-698.pdf.

75 See http://www.sba.gov/advo/laws/comments/gsa07_0521.pdf.

76 The rule says that "When requested by the Department of Homeland Security, agencies shall ensure that contracts funded with disaster assistance funds require display of any fraud hotline poster applicable to the specific contract."

77 See http://edocket.access.gpo.gov/2007/pdf/07-5670.pdf.

among other things, facilitates the timely discovery of improper conduct in connection with government contracts. This means that the government must be notified if any contractor or subcontractor employee is observed committing criminal activity, such as falsifying records under a federal contract or substituting materials in place of what was agreed upon in the contract. In addition, it requires the contractor to ensure that corrective measures are promptly instituted and carried out. The rule provides several conditions for suspension or debarment, among them, violation of federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations; and significant overpayment on the contract. On November 12, 2008, the FAR Council promulgated the final regulation for FAR Case 2007-006 with an effective date of December 12, 2008.[78]

3. **Federal Funding Accountability and Transparency Acts, 2006 and 2008.** The Federal Funding Accountability and Transparency Act (FFATA) was signed on September 26, 2006. The FFATA legislation requires that information about federal awards (federal financial assistance and expenditures) be made available to the public through a single searchable website. Federal awards include grants, subgrants, loans, awards, cooperative agreements, and other forms of financial assistance, as well as contracts, subcontracts, purchase orders, task orders, and delivery orders. The legislation does not require inclusion of individual transactions below $25,000 or credit card transactions before October 1, 2008. Not later than January 1, 2008, the Office of Management and Budget must, in accordance with section 204 of the E-Government Act of 2002 (Public Law 107–347; 44 U.S.C. § 3501 note),[79] and the Office of Federal Procurement Policy Act (41 U.S.C. § 403 et seq.), ensure the existence and operation of a single searchable

78 See the *Federal Register,* 73(219), 67064, November 12, 2008.

79 See http://frwebgate.access.gpo.gov/cgi-bin getdoccgi?dbname=107_cong_public_laws&docid=f:publ347.107.

website, accessible by the public at no cost, that includes for each federal award—

(A) the name of the entity receiving the award;

(B) the amount of the award;

(C) information on the award including transaction type, funding agency, the North American Industry Classification System code or *Catalog of Federal Domestic Assistance* number (where applicable), program source, and an award title descriptive of the purpose of each funding action;

(D) the location of the entity receiving the award and the primary location of performance under the award, including the city, state, congressional district, and country;

(E) a unique identifier of the entity receiving the award and of the parent entity of the recipient, should the entity be owned by another entity; and

(F) any other relevant information specified by the Office of Management and Budget.[80]

This law was amended in 2008 by section 6202 of Public Law 110-252, making appropriations for military construction, the Department of Veterans Affairs, and related agencies for the fiscal year ending September 30, 2008. Section 6202 of Public Law 110-252, dated June 30, 2008, amended FFATA to require the director of the Office of Management and Budget (OMB) to include additional reporting elements by contractors: information on the names and total compensation of the five most highly compensated officers of a contractor, if

(i) the entity in the preceding fiscal year received

(A) 80 percent or more of its annual gross revenues in federal contracts, loans and grants; and

(B) $25,000,000 or more in annual gross revenues from federal contracts, loans and grants; and

80 Ibid.

(ii) the public does not have access to information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. § 78m(a), § 78o(d)) or section 6104 of the Internal Revenue Code of 1986.

The Way Ahead: Entrepreneurial Contributions to Growth and Economic Development

Even as small businesses face challenges in the current economy, entrepreneurship will be vital in the nation's recovery. Small businesses play an important role in generating new jobs and driving innovations that will keep the U.S. economy competitive and vibrant.

The Small Business Role in Job Creation

The fact that small businesses have a key role in job creation has been documented in numerous studies over the years. Exactly what that role is has been the subject of much debate.

Data show that the smallest nonemployer firms often create the most jobs in recessionary times. Indeed, in 1991 and 2001, two recessionary years, while larger firms were shedding jobs, enterprises with fewer than 20 employees saw net job creation, largely through expansions of existing firms *(*see *Table A.10)*. Anecdotal stories in the business media suggest that laid off workers are starting new businesses. A survey by American Express conducted in February-March 2009 found that 37 percent of respondents felt the current economic environment creates opportunities for their firms.[81] That said, Business Employment Dynamics data through the third quarter of 2008 show that net job losses occurred in businesses of all sizes *(Table A.12)*.

81 American Express OPEN Small Business Monitor (2009).

A healthy economy is one that promotes a high degree of business dynamism. Bruce et al. (2007) found that a state's ability to generate new establishments has the largest impact on gross state product, state personal income, and total state employment, relative to other policy options. Likewise, Haltiwanger, Jarmin, and Miranda (2009) noted that, in a number of western and southwestern states, "young" firms less than three years old account for a high percentage of employment. At least 10 percent of employment in Nevada, Idaho, Wyoming, Montana, and Utah stems from such young firms; in Arizona, California, Florida, Colorado, and Texas, the share is at least 9 percent. This measure of dynamism is one method of ascertaining overall entrepreneurial activity in a state.[82] In fact, many of these states have experienced significant economic growth in recent years, and various state-by-state rankings have shown them to be highly entrepreneurial.[83]

The Kauffman Index of Entrepreneurial Activity also ranks states for their entrepreneurship rates and found that these rates increased overall in 2008, especially for lower- and middle-income types of businesses.[84]

Small Businesses and Innovation

Other researchers cite other indicators of success—for example, being globally focused, technology-savvy, and innovation-driven. Acs, Parsons, and Tracy (2008) found that firms with fast-growing revenue and employment tend to be older: the average age of "high-impact" firms is 25 years.[85] High-impact firms account for between 2 and 3 percent all firms, but virtually all of the growth in private sector employment can be attributed to

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82 The real intent of this "briefing" document was to highlight the potential of a new data set from the U.S. Census Bureau. For more information on Business Dynamic Statistics, which was partially funded by the Kauffman Foundation, see http://www.ces.census.gov/index.php/bds/bds_home.

83 See Camp (2005) and others.

84 Fairlie (2009).

85 The authors define a "high-impact" firm as an enterprise with sales that doubled over the most recent four-year period and an employment growth quantifier of two or more over the same period.

them. Furthermore, on the annual State New Economy Index rankings,[86] "dynamic churn" is only one factor, and perceived business conditions matter less. In assessments of states on a number of criteria—often including entrepreneurship and innovation—states that are known for generating more knowledge-intensive jobs tend to score better. The top ten "new economy" states in 2008, for instance, are Massachusetts, Washington, Maryland, Delaware, New Jersey, Connecticut, Virginia, California, New York, and Colorado. These states tend to do well in generating high-tech and/or "gazelle" employment, patents, and venture capital. Washington is also ranked first in the index as a state positioned to move toward a "green" economy, based on reductions in energy consumption and increased reliance on renewable sources.

Universities that invest heavily in research and development tend to inspire new firm formation in the areas that surround them,[87] and governments now regularly promote technology transfer as an important component of economic development.[88] Furthermore, regions with greater entrepreneurial growth have been associated with higher levels of innovation and technology use,[89] and states that promote new firm formation are more likely to experience higher employment, incomes, and overall output.[90] Policymakers understand that risk-taking entrepreneurs have a positive impact on regional economic development.[91]

Entrepreneurial ventures, especially university spinoffs, depend on new inventions. One way to track the propensity to invent is through patent filings. A study released by the U.S. Small Business Administration's Office of Advocacy shows that

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86 See Atkinson and Andes (2008).

87 Kirchoff and Armington (2002).

88 Shane (2004).

89 Camp (2005).

90 Bruce et al. (2007).

91 See Moutray (February 2007) for a summary of Office of Advocacy research linking entrepreneurship with regional economic development.

40 percent of the companies that issued at least 15 patents over a five-year period were small businesses. These small firms produced significantly more patents per employee than the larger firms in the sample.[92] This and other studies show that small businesses are more likely to develop emerging technologies than their larger counterparts. Thus, small firms are actively engaged in the cutting-edge technologies that will shape the nation's future growth.[93] Another study found that industries that heavily employ scientists and engineers are "more accommodating to small fast-growing private firms" whereas production-focused industries tend to have more large firms.[94]

Innovation and entrepreneurship have provided a strong foundation for economic growth in the United States, and the Office of Advocacy has been committed to studying this relationship. Among Advocacy's first reports was a 1979 study by a task force on small business and innovation, which offered a fundamental principle:

> Innovation is an essential ingredient for creating jobs, controlling inflation, and for economic and social growth. Small businesses make a disproportionately large contribution to innovation. There is something fundamental about this unusual ability of small firms to innovate that must be preserved for the sake of healthy economic and social growth.[95]

Nearly 30 years later, innovation is still vital to economic growth, and continues to make the U.S. economy more competitive in an increasingly globalized marketplace. Risk-taking entrepreneurs are often the generators of the innovations that drive the American economy forward.

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92 Breitzman et al. (2008), 6-7.

93 These findings are not new, as they have been documented before in Office of Advocacy research. See, for instance, CHI Research, Inc. (2003) and Baumol (2005).

94 Eckhardt and Shane (2006).

95 Stewart (1979).

Conclusion

Small businesses have struggled mightily over the past year. Recession has forced many of them to scale back their businesses, to "sit on the sidelines" and wait for the economy to improve, or unfortunately for some of them, to close their doors. For many individuals, though, an economic downturn represents an opportunity to start their own business, to move in a new direction, to jump into markets their larger counterparts might have exited, or by creating an innovative response to an unmet need, even to start entire new markets. Entrepreneurship will be a crucial means of moving out of the current recession. Schramm and Litan (2009) observed:

> Time and again, entrepreneurs have led the way out of past economic downturns. Current business legends like Microsoft, Federal Express, Intel, Charles Schwab, and Southwest Airlines started in recessions or down markets. Indeed, 18 of the 30 companies that make up the Dow Jones Industrial Average were launched in recessions or in bear stock markets. As Vivek Wadhwa of Duke University and Harvard Law School has pointed out, the pioneers who launched these firms (and others) during the darkest of times realized the following advantages of starting a business in a recession: less competition, lower costs, ease of recruiting employees, and less pressure to expand.[96]

Such a message is inspiring in that it provides hope to Americans who have become accustomed to bad economic news on an almost daily basis. They have seen the value of their homes fall sharply, with many currently in an "upside-down" mortgage or otherwise unable to pay off their mortgages. They have seen their stocks and retirement portfolios cut severely in a relatively short period of time. And, as if this were not enough, many have lost their jobs.

96 The authors reference an article by Wadhwa (2008).

But the economy will rebound at some point. And if history is an indication, many small businesses will lead the way. Although data are not yet available to quantify how entrepreneurs are responding in the current recession, stories are beginning to surface in the business press of recently unemployed workers starting their own firms.[97]

Established businesses and entrepreneurs can use this time to re-evaluate their business models and opt for new strategies that might serve as possible revenue streams in an economic recovery. Technology and innovation are one source of new venture creation that will continue to keep the U.S. economy revitalized and competitive globally.[98] International trade is another avenue for small business owners to explore, with export markets ripe for small firms to sell their goods and services.[99] Creative entrepreneurs will spot opportunities in the changing demographics and needs of consumers, or in other entrepreneurial / environmental trends. Business opportunities are especially compelling and high-impact results especially needed in economic hard times. It is likely that a significant number of new groundbreaking businesses will be started in this recessionary period.

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97 See, for example, http://images.businessweek.com/ss/09/03/0313_rebounders/index.htm.

98 In fact, this publication has chronicled linkages between innovation and entrepreneurship in past editions, including Shane (2004) and Baumol (2005). Other Office of Advocacy studies on the topic can be found at http://www.sba.gov/advo/research/technology.html.

99 See Moutray and Tobias (2009).

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2 Small Business Financing *in* 2008

Synopsis

Small firms faced difficult challenges in the extremely distressed economic and financial environment of late 2008. Added to the depressed housing market and declining economic activity was a financial market characterized by doubts about the survivability of many major financial institutions. Drastic action by the federal government meant that the Treasury and the Federal Reserve Board (FRB) temporarily became the dominant lenders and investors in the markets.

The financial markets' troubles and the credit freeze in the short-term funding market had a devastating effect on the economy. By late 2008, the normal production of goods and services had stalled.

Although interest rates paid by small business owners followed a pattern similar to movements in the prime rate, which declined throughout the year, most small business owners faced a less accommodating credit market, especially in the second half of 2008. Lenders exhibited widening rate spreads and tightening terms of small business lending. Business borrowing plunged in the fourth quarter of 2008 to a low annual rate comparable to the levels experienced in the 2001 recession.

Data for June 2007-June 2008 from financial institutions' "Call Reports" to their regulators indicate that developments in the financial markets had a limited impact on small business lending in the first half of 2008. Loans were available at satisfactory levels over that period, according to an FRB survey of lenders. Despite the lack of current data, a number of indicators suggest that the flow of funds to small firms was much curtailed by the fourth quarter of 2008.

Ongoing studies based on the FRB's Survey of Small Business Finances provide detail on how small businesses and entrepreneurs participate in financial markets.

Economic and Credit Conditions in 2008

By the beginning of 2008, the U.S. economy faced difficult challenges in both the real or "Main Street" economy and the financial markets. A severely depressed housing market, pessimistic consumers, and rapidly decelerating economic activity characterized the economy as the year began. Commodity prices had risen worldwide—oil prices since 2005-2006 and prices for food and raw materials since mid-2007. An increasingly turbulent financial market was burdened with persistent doubts and fears about the survivability of major financial institutions—major investment banks as well as securities dealers at home and in Europe. The U.S. financial markets struggled, but failed by September 2008 to gain the confidence of market participants sufficient to restore market functioning in late 2008, despite extraordinary efforts by the Treasury Department and the Federal Reserve Board (FRB).[1]

Actions taken by the FRB in late 2008, especially after September, have been unprecedented in the history of the Federal Reserve System. In addition to expanding the policy of reducing interest rates and injecting liquidity into the banking sector, the FRB took steps to increase credit by lengthening the terms of loans from mostly short- to longer-term options; expanding the field of recipients of FRB assistance to include primary dealers in securities, commercial paper issuers, and other institutions such as the insurance giant AIG; and broadening the types of collateral used as pledges for FRB assistance to include investment-grade

1 See Chapter 1 for a detailed account of developments in the U.S. economy in 2008.

debt securities.[2] Just as extraordinary were actions taken by the Treasury. The Congress authorized the Treasury to inject capital directly into several major financial institutions as well as to purchase the so-called "toxic assets" on the balance sheets of these institutions.[3]

The total assets held by the Federal Reserve System increased from less than $1 trillion before January 2008 to more than $2 trillion by the end of 2008[4] because of the FRB's direct participation in the capital and credit markets as the lender, investor, and guarantor of debt or equity issued by the private sector. In fact, the Treasury and the FRB temporarily prevented the complete collapse of the credit and capital markets in the United States by becoming the dominant lenders and investors in the markets.

The collapse of the financial markets, especially the credit freeze in short-term funding, has had a devastating effect on markets for interlender financing as well as on working capital for nonfinancial corporate businesses. Constriction in the flows of interlender credit to small lenders and working capital to

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2 For example, the FRB provided loans to Maiden Lane III LLC (with collateral from assets held by Bear Stearns to be sold to the LLC) to facilitate the sale of Bear Stearns to JPMorgan Chase, and conducted a weekly auction of Treasury securities in exchange for other securities with collateral provided by primary dealers in relatively illiquid securities, in spring 2008. Additional policy initiatives have been introduced since September of 2008 with the establishment of programs in support of important market segments including the Asset-backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), the Commercial Paper Funding Facility (CPFF), the Money Market Investor Funding Facility, and the Term Asset-backed Securities Loan Facility (TALF). TALF was designed to help market participants meet the credit needs of households and small businesses by supporting the issuance of asset-backed securities (ABS) collateralized by student loans, auto loans, credit card loans, and loans guaranteed by the U.S. Small Business Administration. For a complete list of all the policy initiatives, see the monetary policy section of the website, http://www.federalreserve.gov/. See also Federal Reserve Bank of Minneapolis, Actions to restore financial stability, *The Region*, December 2008, 13.

3 The Congress passed TARP (the Troubled Assets Relief Program) on October 3, 2008, to enable the Treasury to provide capital to financial institutions.

4 The increase was the result of the massive volume of loans extended by the Federal Reserve to both traditional and nontraditional borrowers in the short-term funding markets, including loans to domestic banks through the AMLF, loans through the Primary Dealers Credit Facility, loans to Maiden Lane III LLC (to facilitate the sale of Bear Stearns to JPMorgan Chase), loans to Maiden Lane, LLC, to facilitate purchases of residential mortgage-backed securities and collaterized debt obligations (CDOs) from the portfolios of various subsidiaries of AIG, as well as loans to the Commercial Paper Funding Facility, LLC. See the Flow of Funds Accounts, fourth quarter 2008, March 2009, Table F.108, Monetary Authority (level of assets and liabilities). The account includes some of the currency operations of the Treasury Department, 68.

industries and businesses stalled the normal conduct of business and the production of goods and services in the U.S. economy. The extent of the collapse in the working capital markets was unmistakable, as indicated by a 6.3 percent plunge in real gross domestic product (GDP) in fourth quarter 2008. Disruptions in the functioning of the U.S. financial markets, especially severe distress in the short-term funding markets, were observed in the exceptionally wide rate spreads between risky and riskless securities, as well as the fall-off in the volume of transactions or deals in these markets.[5] For example,

- Rate spreads between the 3-month LIBOR[6] and 3-month Treasury bills reached highs of 400 basis points and higher in October 2008, compared with an average of less than 50 basis points before May 2007, and 100 to 200 basis points between mid-2007 and August 2008.[7]
- The LIBOR rate spread over the overnight index swap rate was 325 basis points in September 2008 compared with an average of less than 25 basis points before 2007 and 50 basis points in the more normal months in 2008.
- Spreads in credit default swaps reached highs of 225-275 basis points in some weeks in April 2008, and in several weeks after September 15, 2008, compared with less than 50 basis points in 2007.
- Spreads on asset-backed commercial paper (ABCP) and on lower-rated unsecured commercial paper over AA nonfinancial rates rose to 200 and 400 basis points, respectively, in October, compared with an average spread of 0 to 25 basis

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5 For example, the net outflow of prime funds to government funds by the money market mutual fund industry in September and October 2008 was exceptional. The market for corporate bonds could not escape the disaster either. See Board of Governors of the Federal Reserve System, *Monetary Policy Report to the Congress*, Charts 3 through 8, 6-10. See also Federal Reserve Bank of Minneapolis, *The Region*, December 2008, 11.

6 The LIBOR or London Interbank Offered Rate is a daily reference rate based on the interest rates at which banks borrow unsecured funds from other banks in the London wholesale money markets. It is roughly comparable to the U.S. federal funds rate.

7 A basis point is equal to one one-hundredth of 1 percent.

points in mid-2007 and less than 100 basis points before September 2008.

For the first three quarters of 2008, credit conditions were supportive for most small business financing, despite uncertainty and low confidence in the capital and credit markets. Real gross domestic product grew at an annual rate of 1.1 percent in 2008, compared with 2.2 percent the previous year.

Interest Rate Movements

In a distressed market suffering a significant fall-off in market activity, it is difficult to interpret the movements of prices—that is, a lower price may not be the result of increased supply or falling demand. Interest rate movements in the second half of 2008 should be viewed in the context of a dysfunctioning financial market where borrowers and lenders/investors lost confidence in the quality of the credit instruments and their suppliers and where the central bank, the Federal Reserve Board, had to inject funds into the private markets.[8] Only the highest quality borrowers were able to obtain financing.

Market interest rates continued to decline in the United States in 2008. The Federal Open Market Committee's (FOMC) effort to ease monetary policy, which began in September 2007, accelerated in early 2008 when distress in the short-term funding markets for financial institutions increased significantly. Mounting losses of major investment banks and securities dealers had resulted in a loss of confidence in the capital and credit markets in the United States and Europe. Short-term interest rates declined dramatically in the first three months of 2008, then paused and rose slightly during the summer, and plunged again close to zero by the end of December. The federal funds rate declined from 3.94 percent in January to a range of 0 to .25 percent by the end of December

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8 The turmoil in the financial markets in August-October 2008 does not appear in Figure 2.1. The monthly average for the price of a product (such as interbank loans or seven-day commercial paper) did not reflect the day-to-day fluctuations of the price as market activity almost disappeared when participants lost confidence. The direct participation in the markets by the Federal Reserve through its purchases also contributed to the meager volume of transactions finalized.

2008. The financial market meltdown brought with it one of the worst quarterly declines in GDP, of more than 6 percent in the fourth quarter of 2008.

Corporate bond rates, which remained high throughout most of 2008, increased suddenly during the market meltdown in September, then declined to a level slightly below the rate at the beginning of the year. Reduced demand by institutional investors, caused by increased uncertainty in the markets and flights to safety in Treasury bonds, together with reduced supplies of corporate bonds as a result of lower business investment, caused higher interest rates, especially relative to those for risk-free Treasury bonds, and large declines in net borrowing in the corporate bond markets.[9] Rates for AAA-rated corporate bonds increased slightly before September, from 5.33 percent to 5.65 percent, jumped as high as 6.28 percent in October during the market crisis, then declined to 5.05 percent by year's end as U.S. economic conditions plunged downward *(Figure 2.1)*.

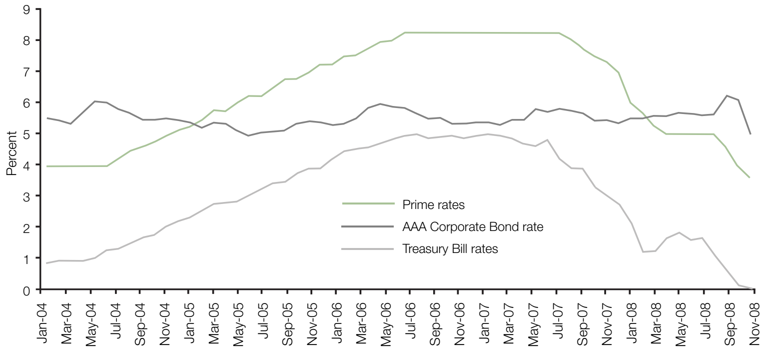
The prime rate, the index rate on which most small business loans with variable-rate provisions are based, declined parallel to declines in rates for short-term funding, from 6.98 percent at the beginning of 2008 to 3.61 percent by year's end *(Figure 2.1)*. However, steadily declining short-term funding rates for private borrowers, as observed in average monthly prime and corporate bond rates (as well as LIBOR and commercial paper rates), may be misleading. As noted, the variability in day-to-day rates and even weekly average rates, especially in the short-term funding markets, has been exceptionally wide.

Movements in Small Business Loan Rates

Rates paid by small business owners followed a pattern similar to movements in the prime rate, which declined throughout the

9 Net borrowing in the corporate bond markets by domestic nonfinancial corporations declined from an annual rate of $311 billion in 2007 to $205 billion in 2008. See Federal Reserve Board, Flow of Funds Accounts, fourth quarter 2008, Table F.212.

Figure 2.1. Movements in Interest Rates, 2004–2008



Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, various issues.

year. Except in the case of the smallest loans under $100,000, rates for small business loans declined by 150 to 200 basis points between November 2007 and November 2008 *(Table 2.1)*.[10] (See Appendix A for more extended periods.)

Caution should be exercised, however, in drawing inferences about the availability of bank loans to small businesses from observed declines in interest rates paid by small firms during this period of distress in the U.S. financial markets.[11] Most lenders indicated increasing rate spreads on new loans throughout 2008, as well as tightening terms of small business lending (as reported in the FRB Senior Loan Officer Opinion Survey). Thus, the smaller group of successful borrowers in 2008 had to have higher credit quality and lower risk than the successful borrowers of 2007. The lower rates charged to small businesses in 2008 should not be interpreted as an indication of an adequate supply of credit to small firms. Rather, lower small business loan rates in 2008 are related to lack of information about the rate spreads or premiums charged by lenders for adjustable-rate loans. It is likely, therefore,

10 Board of Governors of the Federal Reserve System, Statistical Release E.2, Survey of Business Loan Rates; November 2008, commercial and industrial loans made by all commercial banks. Special tabulations by the Federal Reserve Board for the Office of Advocacy. See Table 2.1 for rates for this loan size for February 2007, February 2008, and November 2008.

11 The Surveys of Terms of Bank Lending are conducted by the Federal Reserve in the first weeks of February, May, August, and November each year.

Table 2.1 Loan Rates Charged by Banks by Loan Size, February 2005–November 2008 (percent)

	Loan size (thousands of dollars)	Fixed-rate term loans	Variable-rate loans (2-30 days)	Variable-rate loans (31-365 days)
November 2008	Less than 9*	8.39	5.42	6.81
	10-99*	6.76	4.65	6.38
	100-499	6.00	4.63	5.79
	500-999	5.34	4.28	5.00
	Minimum-risk loans	2.43	3.21	3.88
August 2008	1.0-99	6.87	4.88	6.69
	100-499	6.27	4.60	5.36
	500-999	5.67	4.55	4.76
	Minimum-risk loans	6.31	2.88	3.75
May 2008	1.0-99	6.98	4.91	6.85
	100-499	6.04	4.82	5.59
	500-999	5.62	4.53	5.03
	Minimum-risk loans	4.72	3.35	3.59
February 2008	Less than 9*	8.34	6.56	8.14
	10-99*	7.64	5.59	7.35
	100-499	6.65	5.66	6.56
	500-999	5.86	4.88	5.51
	Minimum-risk loans	4.69	4.05	3.99
November 2007	1.0-99	8.12	7.22	8.09
	100-499	7.58	7.03	7.66
	500-999	7.19	6.69	6.95
	Minimum-risk loans	5.72	5.69	5.23
August 2007	1.0-99	8.70	7.81	8.61
	100-499	7.98	7.60	8.09
	500-999	7.71	7.37	7.52
	Minimum-risk loans	6.86	6.03	6.03
May 2007	1.0-99	8.11	7.96	8.69
	100-499	8.08	7.57	8.12
	500-999	7.65	7.51	7.62
	Minimum-risk loans	8.21	5.84	5.85
February 2007	1.0-99	8.68	7.82	8.81
	100-499	8.17	7.69	8.01
	500-999	7.91	7.32	7.69
	Minimum-risk loans	7.32	5.89	6.64
November 2006	1.0-99	8.76	7.92	8.61
	100-499	8.06	7.67	8.00
	500-999	7.77	7.40	7.91
	Minimum-risk loans	6.90	5.89	6.27
August 2006	1.0-99	8.97	7.96	8.69
	100-499	8.28	7.81	7.77
	500-999	7.62	7.64	7.53
	Minimum-risk loans	7.57	5.93	6.35
May 2006	1.0-99	8.38	7.71	8.14
	100-499	8.00	7.38	7.61
	500-999	7.61	7.25	7.35
	Minimum-risk loans	5.65	4.54	5.77

Table 2.1 Loan Rates Charged by Banks by Loan Size, February 2005–November 2008 (percent)—continued

	Loan size (thousands of dollars)	Fixed-rate term loans	Variable-rate loans (2-30 days)	Variable-rate loans (31-365 days)
February 2006	1.0-99	8.43	7.19	8.28
	100-499	7.64	7.10	7.31
	500-999	7.34	6.83	7.36
	Minimum-risk loans	6.94	5.09	6.22
November 2005	1.0-99	8.07	6.69	7.72
	100-499	7.48	6.65	7.41
	500-999	6.70	6.38	7.00
	Minimum-risk loans	4.98	4.51	4.88
August 2005	1.0-99	7.90	6.09	7.09
	100-499	6.89	6.23	6.52
	500-999	6.39	5.82	5.65
	Minimum-risk loans	4.24	4.12	4.15
May 2005	1.0-99	7.48	5.74	7.13
	100-499	6.44	5.71	6.27
	500-999	5.74	5.49	5.27
	Minimum-risk loans	3.90	3.79	3.83
February 2005	1.0-99	7.05	5.25	6.61
	100-499	6.38	5.08	6.09
	500-999	5.82	4.52	5.05
	Minimum-risk loans	6.58	3.24	4.42

*New rates for the smallest loans under $10,000 provided by the Federal Reserve Board.

Note: Banks report loans to the Federal Reserve Board, providing information on risk categories that take into account both the characteristics of the borrower and the protections provided in the loan contract. Loans designated “minimum risk” in banks’ responses to the FRB survey have virtually no chance of resulting in a loss based on various characteristics.

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.

that the rate declines observed in 2008 reflected declines in the index rate that exceeded increases in the rate premiums charged by lenders.[12] In fact, the rate spreads between the smallest loans ($10,000 to $99,000) and minimal-risk loans increased significantly for fixed-rate loans, to 4.33 percent compared with a range of 2 to 3 percent reported in the surveys for February, May, and August 2008. Moreover, new estimates of rates for loans under $10,000 show that rates for this group were much higher than for the next larger loan size ($10,000 to under $100,000) *(Table 2.1)*.[13]

The Nonfinancial Sector's Use of Funds in the Capital Markets

In the first two quarters of 2008, net borrowing by the nonfinancial sector (except the federal government) declined significantly from the extremely high levels of net borrowing in 2007. Decelerating economic activity and related declines in tax revenues and corporate earnings, combined with uncertainty in the financial markets, reduced both demand for credit and its supply. Disruptions in the functioning of the financial markets and rescue efforts by the Treasury and the FRB dominated developments in the U.S. financial markets in the second half of 2008. Federal government borrowing soared to historic highs in the second half of 2008, when the Treasury was authorized under the Troubled Asset Relief Program (TARP) to borrow money to inject capital into troubled financial institutions through direct loans and/or equity ownerships, as well as loan/securities guarantees. The Treasury was the *only* net borrower in the fourth quarter, while the other three domestic sectors—state and local governments, businesses,

12 Loans to small businesses with adjustable-rate provisions should have followed the pattern of declines in the federal funds and prime market rates. However, it would be useful to know whether the rate spreads over the index rates increased in 2008, as indicated in the Senior Loan Officer Surveys.

13 The estimates were provided by the FRB for the Office of Advocacy from the November 2008 survey.

and households—reflected negative net borrowing in both the third and fourth quarters of 2008. Normal financing activities came to a standstill after September, leaving the Treasury and the Federal Reserve as the principal participants in the U.S. financial markets in the fourth quarter.[14]

For the year, net borrowing in the financial markets by the nonfinancial sectors amounted to $1.8 trillion. For all nonfinancial sectors other than the Treasury, however, net borrowing declined 75 percent, from $2.25 trillion in 2007 to $606 billion in 2008. In the fourth quarter alone, net borrowing by these three sectors was at an annual rate of negative $66.7 billion, while the Treasury borrowed $2.16 trillion *(Table 2.2)*.

Federal, State, and Local Government Borrowing

Borrowing by the federal government increased significantly in the first two quarters and soared to an unprecedented level in the second half of 2008 when the Congress took action to prevent the collapse of the financial markets—a crisis that in the fourth quarter produced one of the largest quarterly drops in GDP since the Great Depression. Borrowing by the federal government accounted for more than two-thirds (67.1 percent) of total 2008 net borrowing by the nonfinancial sector. In the first half of 2008, net borrowing by the federal government rose to an average annual rate of $400 billion, the result of the decelerating economy and concomitant decline in tax revenue which, together with the provisions of the Economic Stimulus Act of 2008, increased the budget deficit to $455 billion. Net borrowing in the second half of 2008 quadrupled the borrowing of the first half to an annual rate of $2.1 trillion.

State and local governments almost disappeared from the credit markets; their borrowing decreased by 74 percent or $138 billion, from $186 billion in 2007 to $48 billion in 2008 *(Table 2.2)*. Their share accounted for just 2.6 percent of total net borrowing.

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14 Treasury and the Federal Reserve also had to provide “guarantees” for private borrowing during this period of disruption in the capital and credit markets.

Table 2.2 Credit Market Borrowing by the Nonfinancial Sector, 1998-2008 (billions of dollars)*

	1998	1999	2000	2001	2002	2003	2004	2005*	2006*	2007*	2008*	2008 Q1	2008 Q2	2008 Q3	2008 Q4
Total domestic borrowing	**1,017.4**	**1,028.6**	**853.6**	**1,159.8**	**1,403.0**	**1,669.5**	**1,959.0**	**2,326.6**	**2,392.8**	**2,499.9**	**1,845.1**	**1,661.2**	**1,003.9**	**2,627.0**	**2,088.5**
Government															
Federal	-52.6	-71.2	295.9	-5.6	257.6	396.0	361.9	306.9	183.4	237.1	1,239.2	412.7	310.4	2,078.5	2,155.2
State and local	67.7	38.5	15.5	105.7	143.9	120.3	115.3	171.7	151.2	185.7	48.0	76.1	20.6	68.7	26.7
Business															
Farm	8.0	5.5	11.3	10.5	7.7	-1.6	6.1	12.8	10.8	16.2	11.3	29.6	25.6	-15.7	5.7
Nonfarm noncorporate	159.7	189.4	196.8	162.2	148.0	92.1	244.7	331.6	408.7	410.8	172.0	316.2	186.8	162.1	22.8
Nonfinancial corporate	408.4	371.6	341.8	215.2	12.9	82.2	167.2	332.5	469.5	801.3	323.7	417.2	416.1	304.8	156.8
Total	576.1	566.5	549.9	387.9	168.6	172.7	418.0	676.9	889.0	1 ,228.3	507.0	763.0	628.5	451.2	185.3
Households	426.2	494.8	584.1	671.8	832.9	980.5	1,063.8	1,171.1	1,169.2	848.8	50.9	409.4	44.4	28.6	-278.7
Home mortgages**	301.7	380.1	385.7	506.9	708.4	856.1	940.4	1,040.7	964.1	651.5	-46.2	251.7	-32.4	-241.3	-163.0
Nonmortgages	124.5	114.7	198.4	164.9	124.5	124.4	123.4	130.4	205.1	197.3	97.1	157.7	76.8	269.9	-115.7
Foreign borrowing in the United States	31.2	13.0	63.0	-13.7	92.9	36.9	124.8	112.6	331.3	124.3	-157.9	281.3	78.5	539.7	451.6

* Annual revision for statistics, 2005-2008.

**Includes loans made as home equity lines of credit and home equity loans secured by junior liens. Home mortgage information was obtained from the Board of Governors of the Federal Reserve System, Flow of Funds Accounts, Z1 Households and Nonprofit Organizations.

Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts, Fourth Quarter 2005: Z1, Flows and Outstandings (March 2009).

Borrowing by the Household Sector

Dramatic declines in household net worth—caused by declines in home values and in the value of stocks and bonds in retirement and investment accounts—combined with extremely high debt and insecurity in job markets and tighter credit terms by the lenders—led consumers to reduce spending drastically throughout the year. Household borrowing dropped to an historic low in 2008, down by 94 percent, from an annual rate of $849 billion in 2007 to $51 billion in 2008 *(Table 2.2)*. Home mortgage debt continued to decline in the first quarter and plunged to negative $32 billion, negative $241 billion, and negative $163 billion in the following three quarters, respectively. The 2008 annual total was negative $46 billion in net mortgage debt, compared with positive net borrowing of $651 billion in 2007. Nonmortgage debt in the household sector remained high in the first three quarters, ranging between $77 billion and $270 billion, and turned to negative $116 billion in the fourth quarter, for a net positive total of $97 billion for the year.

Business Borrowing

Business borrowing by the nonfinancial sector showed continued significant declines in the first three quarters of 2008 and plunged in the fourth quarter to a very low annual rate comparable to the levels experienced during the recession of 2001. Net borrowing by the business sector declined to an average of $695 billion in the first two quarters, to $451 billion, and then to $185 billion in the fourth quarter of 2008, compared with an annual rate of $1.2 trillion in 2007. Declining economic activity and business investment, stagnant or falling corporate profits, and uncertain capital and credit markets contributed to declines in the demand for and supply of credit to corporations and small businesses in the first three quarters *(Tables 2.2–2.4)*. The credit freeze beginning in September 2008 brought about dramatic declines in net borrowing by the business sector and other major nonfinancial sectors in the economy *(Table 2.4)*.

Table 2.3 Major Sources and Uses of Funds by Nonfarm, Nonfinancial Corporate Businesses, 1998-2008 (billions of dollars)

	1998	1999	2000	2001	2002	2003	2004	2005*	2006*	2007*	2008*	2008			
												Q1	Q2	Q3	Q4
Before-tax profit	460.1	456.7	421.9	309.9	336.4	424.3	660.1	952.7	1,125.9	1,089.8	937.9	937.3	990.9	1,004.0	819.4
Domestic undistributed profit	65.1	63.2	2.5	-45.0	-12.9	-1.4	105.7	497.8	345.3	268.5	162.5	166.8	186.1	205.2	92.0
Depreciation with inventory valuation adjustment	570.6	598.1	617.7	643.8	718.7	718.4	807.6	1,082.3	926.8	861.7	898.2	861.5	838.6	937.8	955.1
Total internal funds, on book basis	635.7	660.4	631.8	632.5	720.9	732.0	850.7	1,120.1	966.3	912.9	974.3	970.9	992.6	1,028.7	905.1
Net increase in liability	616.0	987.6	1,237.4	95.2	84.9	13.4	609.0	961.2	836.5	955.7	537.1	780.5	557.5	206.6	603.7
Funds raised in credit markets	408.4	371.6	341.8	215.2	12.9	82.2	167.2	332.5	469.5	801.3	323.7	417.2	416.1	304.8	156.8
Net new equity issues	215.5	110.4	-118.2	-48.1	-41.6	-42.0	126.6	-360.7	-602.7	-831.2	-395.1	-475.1	-262.0	-393.2	-450.0
Capital expenditures	826.5	866.7	928.5	802.6	737.1	749.9	825.7	922.0	1,059.4	1,047.3	1,068.9	1,066.7	1,120.6	1,065.7	1,022.7
Net financial investment	-46.1	-17.7	-28.2	82.4	45.2	69.2	174.1	-3.4	-123.4	118.1	-50.5	37.7	-256.4	-6.7	23.6

*Annual revision for statistics, 2005-2008.
Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts, Fourth Quarter 2004: Flows and Outstandings (March 2009).

Table 2.4 Major Sources and Uses of Funds by Nonfarm, Noncorporate Businesses, 1998-2008 (billions of dollars)

	1998	1999	2000	2001	2002	2003	2004	2005*	2006*	2007*	2008*	2008			
												Q1	Q2	Q3	Q4
Net income	656.5	710.6	767.3	820.0	817.4	836.2	925.7	971.9	1,049.3	1,073.8	1,136.4	1,090.3	1,129.1	1,153.6	1,172.7
Gross investment	125.0	148.7	168.7	149.2	151.5	161.4	176.7	211.6	196.0	208.1	216.7	211.0	214.1	227.5	214.1
Fixed capital expenditures	123.9	185.8	215.3	195.5	181.9	192.2	195.0	224.7	249.6	240.1	259.0	256.2	265.6	257.9	256.4
Changes in inventories	3.6	3.5	2.9	-1.6	0.7	0.7	2.5	2.2	2.7	-0.3	-2.2	-1.3	-3.6	-2.3	-1.5
Net financial investment	-2.5	-40.6	-49.5	-44.6	-31.1	-31.5	-20.9	-15.2	-56.2	-31.8	-40.2	-43.9	-47.9	-28.1	-40.8
Net increase in credit market debt	159.7	189.4	196.8	162.2	148.0	92.1	244.7	331.6	408.7	410.8	172.0	316.2	186.8	162.1	22.8
Mortgages	117.7	135.1	137.5	121.2	121.0	75.5	219.0	173.4	289.6	265.2	55.5	136.8	88.2	48.0	-50.8
Net investment by proprietors	-64.8	-82.3	-44.9	-16.1	-85.1	38.0	-26.3	-83.5	-10.8	-0.9	17.1	-21.5	23.6	17.2	49.3

*Annual revision for statistics, 2005-2008.
Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts, Fourth Quarter 2004: Flows and Outstandings (March 2009).

Lending by Financial Institutions to Small Businesses

The lack of current statistics prevents a detailed statistical analysis of developments in small business lending since the financial market turmoil in September 2008. Developments in the small business financial markets before June 2008 make use of available data from Call and CRA reports to federal regulatory agencies. Discussions of small business borrowing from September through December 2008 are based on findings from smaller surveys by the FRB and the Federal Reserve Bank of Minneapolis, and the National Federation of Independent Business (NFIB), observations from developments in short-term funding markets, and anecdotal observations.

Developments in Small Business Loan Markets before June 2008

Both the demand for and supply of bank loans to small business declined in the first three quarters of 2008 in response to a slowing and increasingly uncertain economy, as well as rapidly deteriorating conditions for many major U.S. financial institutions. As reported in the Federal Reserve Board's Senior Loan Officer Survey, major lenders continued, throughout the year, to report a tightening of credit standards, increasing rate spreads, and declines in the demand for commercial and industrial loans by all borrower segments—large, medium, and small businesses, as well as consumers.[15] Deterioration in the quality of loans and securities in the portfolios of financial institutions and rapidly rising loan defaults took a toll on bank earnings and thus their capital positions in 2008. Net income declined by 90 percent from $100 billion in 2007 to $10.2 billion for all institutions insured by the Federal Deposit Insurance Corporation (FDIC) in 2008. The industry's losses in the fourth quarter of 2008 amounted to $32.1 billion.[16]

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15 Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices, various issues, 2008.

16 Federal Deposit Insurance Corporation, *Quarterly Banking Profile—Fourth Quarter 2008*.

Developments in the financial markets seem to have had only limited impact on lending to small businesses in the first half of 2008.[17] A survey by the Federal Reserve Bank of Minneapolis on the lending capacity of most small business lenders indicated that loans were available at a satisfactory level.[18] Small business lending by banks and other lending institutions showed modest increases between June 2007 and June 2008, as both borrowers and lenders continued to hold off new borrowing and lending in reaction to a decelerating economy and an increasingly uncertain financial market.[19] The October 2008 Senior Loan Officers Opinion Survey stated that the demand for business loans at domestic institutions continued to weaken, on net, over the previous three months.[20] The rate of borrowing and lending in small business loan markets was slower than in the previous year. Small business loans of less than $1 million outstanding totaled $711.3 billion as of June 2008, an increase of 4.0 percent or $26.7 billion—half the 8.0 percent increase of $50.6 billion in the June 2006-June 2007 period *(Tables 2.5 and 2.6)*.

The number of small business loans under $100,000 and under $1 million both increased, while the number of loans between $100,000 and $1 million decreased by 23.3 percent, from $2.9 billion to $2.2 billion over the June 2007- June 2008 period *(Tables 2.5 and 2.7)*. The value of small business loans (loans under $1 million)

17 Coverage of depository institutions in the Office of Advocacy's annual lending study based on Call Report and CRA data was expanded in the 2004-2005 edition to include federal and state savings banks and savings and loan associations. Lending institutions covered include commercial banks (charter types 7 and 8), federal savings banks (charter types 9 through 12), and savings and loan associations (charter types 1 through 4). Credit unions are not included. See http://www.sba.gov/advo/research/lending.html.

18 Federal Reserve Bank of Minneapolis, Raising the credit bar, or getting clubbed by it? *Fedgazette: Regional Business and Economics Newspaper*, January 2009 (vol. 21, no. 1) 1-6.

19 According to Senior Loan Officer Opinion Surveys, lenders began tightening their credit standards and increasing interest rate spreads in winter 2007 and continued throughout 2008. The survey findings also confirmed the fall-off in demand.

20 The weakening demand for loans also includes loans to households. The Federal Reserve conducts the Senior Loan Officer Opinion Survey quarterly. Respondents to the survey indicated they had tightened their lending standards for C&I loans to all firms because of the less favorable economic outlook.

Table 2.5. **Dollar Amount and Number of Small Business Loans, June 2005-June 2008, by Loan Size (dollars in billions, numbers in millions)**

Loan Size		2005	2006	2007	2008	Percent change. June 2007- June 2008
Under $100,000	Dollars	138.40	146.0	159.7	170.5	6.8
	Number	19.02	19.0	21.6	25.0	15.7
$100,000 to < $1 million	Dollars	462.30	487.9	524.9	540.7	3.2
	Number	1.98	2.2	2.9	2.2	-23.3
Under $1 million	Dollars	600.80	634.0	684.6	711.3	4.0
	Number	21.00	21.3	24.5	27.3	11.1
Total business loans	Dollars	1,680.80	1,848.4	2,023.9	2,270.4	12.2

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States,* various years, and special tabulations of the June 2008 Call Reports (Consolidated Reports of Condition and Income for U.S. banks and thrift institutions prepared for the Office of Advocacy by James Kolari, Texas A&M University, College Station, Texas).

Table 2.6 **Change in the Dollar Amount of Business Loans by Loan Size, June 2003-June 2008 (percent)**

Loan Size	June 2003– June 2004	June 2004– June 2005	June 2005- June 2006	June 2006- June 2007	June 2007- June 2008
Under $100,000	-0.5	1.9	5.5	9.4	6.8
$100,000 to <$1 million	7.2	4.8	5.5	7.6	3.2
Under $1 million	5.3	4.1	5.5	8.0	4.0
Over $1 million	4.6	11.1	12.4	11.7	12.2

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various years, and special tabulations of the June 2008 Call Reports (Consolidated Reports of Condition and Income for U.S. banks and thrift institutions prepared for the Office of Advocacy by James Kolari, Texas A&M University, College Station, Texas).

in all small loan sizes increased, in a range between 3.2 percent and 6.8 percent *(Table 2.6)*. Large corporations increased their use of external funds and contributed the most to total business borrowing because of continued increases in investment and in merger and acquisition activity in 2008. Borrowing by large corporations in loan sizes over $1 million increased 12.2 percent, compared with 11.7 percent in the previous year.

Table 2.7 Change in the Number of Small Business Loans by Loan Size, June 2003-June 2008 (percent)

Loan size	June 2003-June 2004	June 2004-June 2005	June 2005-June 2006	June 2006-June 2007	June 2007-June 2008
Under $100,000	-11.1	24.8	0.0	13.7	15.7
$100,000 to <$1 million	6.6	5.0	12.8	31.8	-23.3
Under $1 million	-9.4	22.6	1.2	15.0	11.1

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States*, various years, and special tabulations of the June 2008 Call Reports (Consolidated Reports of Condition and Income for U.S. banks and thrift institutions prepared for the Office of Advocacy by James Kolari, Texas A&M University, College Station, Texas).

Increases in the smallest loan sizes under $100,000, known as micro business loans, were modest over this period. Micro business loans totaled $170.5 billion in June 2008, an increase of 6.8 percent or $10.8 billion since June 2007, compared with 9.4 percent in June 2006-June 2007. The 15.7 percent increase in the number of micro business loans accounted for the most positive change compared with other loan sizes in the June 2007-June 2008 period. Increases in both the dollar amount and volume may be attributed to major business credit card lenders' continued efforts to promote small business credit cards *(Table 2.7)*.

The significance of lending institutions of different sizes in the small business loan markets continued to be affected by bank consolidations.[21] The net number of lending institutions filling Call Reports declined by 85 between June 2007 and June 2008 *(Table 2.8*). In particular, the number of the smallest lenders with assets under $500 million was down by 150. The total number of lending institutions (financial services holding companies and

21 The landscape for small business lenders in the industry changed significantly in the second half of 2008 when several of the largest lenders, namely Wachovia and Washington Mutual, were acquired by other giants in the midst of an increasing number of bank failures. Table 2.8 is derived by combining files for reporting institutions and consolidating the members of holding companies. Because of missing ID links, noncommercial bank members of some holding companies may not have been consolidated in these data. The number of lending institutions as of June 2008 was 7,380, of which 2,373 were independent non-BHCs and 5,007 were banks and other financial services holding companies.

independent institutions) in June 2008 was 7,380. The number of multi-billion-dollar financial institutions with assets over $10 billion declined from 106 to 100, yet they accounted for 66.0 percent of total business loans and 76.5 percent of total assets in June 2008, up from the previous two years. These large lenders continued to focus their lending efforts on the market for loans under $100,000, where they represented 69.2 percent of the number and 60.9 percent of the value of loans in this period, up from 52.7 percent of the value in 2006. These giants continued to concentrate in the credit card market and accounted for 70 percent of the total number of small business loans in 2008.[22] Large lending institutions remained less active in the market for loans between $100,000 and $1 million. Their share of the dollar amount outstanding in this category increased only slightly, from 42.3 percent in June 2006 to 43.9 percent in June 2008, while their share of the number increased from 37.8 percent to 42.0 percent. It will be important to continue monitoring the tendency of multi-billion-dollar lending institutions to move toward micro business lending as banking concentration continues.

Developments in Small Business Lending in the Second Half of 2008

Dramatic changes in the lending environment developed after August 2008 as the financial health, or even the solvency, of several major financial institutions was called into question.[23] The collapse of the financial markets in September, especially the malfunctioning of interlender and working capital markets for nonfinancial corporate businesses, dramatically disrupted the flows of working capital to the small business economy. Little information is available about

22 The importance of C&I loans in the business loan portfolios of giant lending institutions is reflected in the statistics; these lenders accounted for 70 percent of total C&I loans under $100,000.

23 The potential insolvency of such giant financial institutions as Fannie Mae, Freddie Mac, Merrill Lynch, Lehman Brothers, and AIG, was rumored again on Wall Street and in world financial markets in fall 2008.

the extent to which working capital loans for small businesses were reduced. Available information on bank loans to businesses—such as C&I loans outstanding and nonresidential commercial mortgage loans (CML) for all businesses at the end of each month or quarter—offer little useful information because monthly or quarterly changes in loans outstanding are not sensitive to changes in the flows of loans over a certain time period.[24]

Nevertheless, it is fair to conclude that the flow of loan funds to small businesses was much curtailed in the last quarter of 2008, based on the following developments.

- **Observed declines in the lending capacity of small business lenders**. The lending capacity of banks and nonbank financial institutions was much reduced by the substantial losses, both actual and expected, in the portfolios of banks, bank holding companies (BHCs), and nonbank lenders. Deterioration in the balance sheets of lenders and the collapse of the short-term funding markets forced lenders to become more conservative in extending new loans and in loan renegotiations.
- **Observed decreases in funding activity in asset-based securities markets (ABS**). The lending capacity of large lenders, both large BHCs and nonbank financial services institutions, was further reduced by the disappearance of funding from the asset-based securities markets. Many of these institutions rely for funds on the securitization of their consumer and business loans and credit lines.[25]
- **Indications of disruptions in the interbank/correspondent bank lending facilities between large money center banks and small local lending institutions.** Such disruptions may have affected small lenders' ability or willingness to provide credit to small businesses (as reported in a series of surveys on

24 Net changes in loans outstanding are the result of new flows and loan payoffs, which are affected by the terms of the existing loans as well as delays in loan payoffs by borrowers.

25 Although difficult to confirm in available data, there has been a disruption in the commercial paper markets that allow large corporations to provide trade credit, as well as financing for equipment purchases, lending, and/or leasing to small businesses.

Table 2.8 Share of Total Assets and Business Loans by Size of All U.S. Depository Institutions, June 2006–June 2008 (percent, except figures for number institutions)*

		Asset size of institutions						
		Over $50 billion	$10 billion to $50 billion	Over $10 billion	$1 billion to $10 billion	$500 million to $1 billion	Under $500 million	All institutions and BHCs
June 30, 2008								
Number of institutions		34	66	100	529	657	6,094	7,380
Micro business loans (under $100,000)	Amount	48.63	12.24	60.86	13.48	5.76	19.90	100.0
	Number	56.17	13.00	69.18	19.40	6.23	5.20	100.0
Small business loans ($100,000-$1 million)	Amount	34.20	9.71	43.91	23.06	10.49	22.54	100.0
	Number	32.88	9.10	41.98	22.36	10.09	25.56	100.0
Total small business loans (under $1 million)	Amount	37.66	10.32	47.97	20.76	9.35	21.91	100.0
	Number	54.28	12.69	66.97	19.64	6.54	6.85	100.0
Total business loans	Amount	54.89	11.12	66.01	17.49	5.99	10.52	100.0
Total domestic assets	Amount	64.42	12.03	76.46	12.02	3.92	7.60	100.0
June 30, 2007								
Number of institutions		32	74	106	498	617	6,244	7,465
Micro business loans (under $100,000)	Amount	41.51	16.67	58.18	14.00	6.02	21.80	100.0
	Number	49.00	17.40	66.39	19.85	7.62	6.40	100.0
Small business loans ($100,000-$1 million)	Amount	32.48	12.17	44.65	22.27	9.98	23.10	100.0
	Number	23.57	8.75	32.32	21.71	7.24	38.70	100.0
Total small business loans (under $1 million)	Amount	34.59	13.22	47.81	20.33	9.05	22.80	100.0
	Number	46.00	16.38	62.38	20.07	7.57	10.00	100.0

Total business loans	Amount	51.31	13.90	65.21	17.57	5.90	11.30	100.0
Total domestic assets	Amount	61.31	14.27	75.58	12.29	3.99	8.14	100.0
June 30, 2006								
Number of institutions		34	74	108	473	591	6,391	7,563
Micro business loans (under $100,000)	Amount	38.98	13.67	52.65	14.55	7.07	25.63	100.0
	Number	53.11	17.74	70.85	12.44	9.47	7.23	100.0
Small business loans ($100,000-$1 million)	Amount	30.29	11.99	42.28	22.46	10.17	25.00	100.0
	Number	27.48	10.36	37.84	20.37	8.79	33.00	100.0
Total small business loans (under $1 million)	Amount	32.30	12.37	44.67	20.66	9.45	25.22	100.0
	Number	50.42	16.96	67.38	13.28	9.40	9.94	100.0
Total business loans	Amount	50.68	13.33	64.02	17.56	6.12	12.31	100.0
Total domestic assets	Amount	60.88	14.35	75.23	12.25	3.96	8.56	100.0

*All members of a holding company are consolidated to the extent the linked IDs permit. Credit unions excluded.

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Lending in the United States,* various years, and special tabulations of the June 2008 Call Reports (Consolidated Reports of Condition and Income for U.S. banks and thrift institutions prepared for the Office of Advocacy by James Kolari, Texas A&M University, College Station, Texas).

lenders and business firms by the Federal Reserve Bank of Minneapolis).[26]

- **Surveys on access to credit.** Private sector surveys report concerns about cash flow and access to credit. In particular, a survey by the National Federation of Independent Business concluded that (1) loan demand and approval rates appeared to be substantially lower than just one year previous, although "the number is not notably larger than have affected small lenders' ability or willingness to provide credit to small businesses (as reported in a series in the recent past, but because the pool of potential borrowers is smaller, the percentage is much higher" and (2) reduced credit access is a consequence of recessionary conditions as balance sheets deteriorate and immediate prospects in the economy decline. What is new are the financial turmoil and real estate problems exacerbating the severity of the economic slide.[27]
- **Loan guarantee programs (such as the 7(a) and 504 programs) administered by the U.S. Small Business Administration.** The volume of these programs, which has usually remained steady or even increased relative to private lending during a recession, declined dramatically in 2008. The volume of SBA loans securitized for sale in the secondary ABS market declined more than 30 percent. SBA's 7(a) loans also declined by 40 percent from $3.2 billion in fourth quarter 2007 to $1.9 billion in fourth quarter 2008.[28]
- **Declines in the availability of "consumer" or individual credit facilities**. Fewer new loans and lower credit line limits

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26 Federal Reserve Bank of Minneapolis, Raising the credit bar, or getting clubbed by it? *Fedgazette: Regional Business and Economics Newspaper*, January 2009 (vol. 21, no. 1) 1-6.

27 National Federation of Independent Business, National Small Business Poll—Access to Capital a report on an expanded small business poll of NFIB members on credit issues conducted in November 2008. A detailed survey was conducted of small business financing behaviors during the credit market freeze of 2008, especially on the impact of the collapse of real estate markets on the ability of small firms to obtain financing when the value of loan collateral, primarily residential and business real estate, depreciated significantly.

28 Economic uncertainty, financial difficulties faced by giant lenders, and the collapse of ABS markets contributed to the dramatic declines. U.S. Small Business Administration, Office of Financial Assistance.

to existing as well as new accounts reduce the credit available to small firms because many business owners use household or consumer credit, including home-related loans and credit lines, as well as personal credit cards and credit lines, for business purposes. A study by the NFIB in November 2008 found that some 50 percent of small businesses had credit lines and more than 85 percent had at least one credit card for business purposes. Some 10 percent had their terms changed by lenders between October and November.[29] Anecdotal stories indicate that lenders accelerated the call-ins on credit lines and credit card terms beginning in winter 2008.

- **Findings from the January 2009 Senior Loan Officer Survey**. The survey, published in February 2009, also observed continued tightening in the terms of lending by lenders and a dramatic decline in demand for business loans over the previous three months (October through December), in spite of TARP, which was enacted October 3, 2008.

Lending by Finance Companies

In 2008, business receivables outstanding from finance companies increased at an annual rate of roughly 1.0 percent and totaled $602 billion compared with $596 billion in 2007 *(Table 2.9)*. Unlike commercial banks and other depository institutions, finance companies rely primarily on the asset-based securities market as the major source of loanable funds. Turmoil in the capital markets after September is believed to have had significant impacts on finance companies' ability to extend new loans in fourth quarter 2008. In fact, total business receivables from finance companies declined at an annual rate of almost 20 percent from the

29 Some 83 to 90 percent of small businesses have at least one credit card (personal and/or business) that they use for business purposes. According to the NFIB survey, from October 22 through November 17, 2008, 10 percent of respondents said that their financial institutions changed "any aspect of the credit card," in most cases, to raise interest rates and/or lower credit limits. NFIB, Small Business Poll, op. cit., question 13.

Table 2.9 Business Loans Outstanding from Finance Companies, December 31, 1980-December 31, 2008

	Total receivables outstanding		Annual change in chain-type* price index for GDP (percent)
	Billions of dollars	Change (percent)	
December 31, 2008*	602.4	1.0	2.2
December 31, 2007*	596.4	2.9	2.7
December 31, 2006*	579.8	3.6	3.2
December 31, 2005*	559.7	2.5	3.3
December 31, 2004*	546.2	3.2	2.9
December 31, 2003	457.4	0.5	2.1
December 31, 2002	455.3	1.9	1.7
December 31, 2001	447.0	-2.5	2.4
December 31, 2000	458.4	16.3	2.2
December 31, 1999	405.2	16.6	1.4
December 31, 1998	347.5	9.1	1.1
December 31, 1997	318.5	2.9	1.7
December 31, 1996	309.5	2.6	1.9
December 31, 1995	301.6	9.7	2.0
December 31, 1994	274.9	NA	2.1
December 31, 1993	294.6	-2.3	2.3
December 31, 1992	301.3	1.9	2.3
December 31, 1991	295.8	0.9	3.5
December 31, 1990	293.6	14.6	3.9
December 31, 1989	256.0	9.1	3.8
December 31, 1988	234.6	13.9	3.4
December 31, 1987	206.0	19.7	2.7
December 31, 1986	172.1	9.3	2.2
December 31, 1985	157.5	14.3	3.0
December 31, 1984	137.8	21.9	3.8
December 31, 1983	113.4	12.9	3.9
December 31, 1982	100.4	0.0	6.1
December 31, 1981	100.3	11.1	9.4
December 31, 1980	90.3		

*Annual revision for statistics, 2004-2008, based on March 2009 release.

NA = Not available.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, Tables 1.52 or 1.51 (now G.20), various issues; U.S. Department of Commerce, Bureau of Economic Analysis, *Business Conditions Digest*, various issues; and *Survey of Current Business*, various issues.

third quarter of 2008.[30] Again, lack of current business receivables data by firm size prevents a careful analysis of the impact of the financial crisis on lending to small firms by these lenders.

Small Business Investment

Equity Borrowing in the Public Issue Markets

The bear stock market in corporate shares that began in the winter of 2007 continued during the first half of 2008 and collapsed further as the upheaval in the financial markets persisted. The U.S. public equity markets suffered one of the worst declines since the Great Depression, with the S&P 500 down by 40 percent, from around 1400 to 800. As usual, the market for initial public offerings (IPO) mirrored the turns in the equity markets with even wider fluctuations. Activity in the IPO market almost disappeared and reached record lows in 2008 *(Table 2.10)*. The total value of IPO offerings declined from \$35.8 billion in 2007 to \$6.5 billion in 2008, and the number of IPO offerings declined to only 25, from 162 the previous year.

Offerings by small issuers declined even more. IPOs for small issuers with assets of less than \$25 million declined from \$748 billion in 2007 to \$10.9 billion in 2008, and offerings by issuers with assets of \$10 million or less fell from \$92.7 billion to \$5.1 billion.

Venture Capital

In line with developments in the U.S. economy and financial markets, venture capital companies were cautious as both investors and fundraisers in 2008. The industry's fundraising decreased 21.4 percent in 2008, to a total amount of \$27.9 billion, compared with \$35.5 billion in 2007 *(Table 2.11)*.

Turmoil in the financial markets and depreciation in the asset holdings, such as pension funds, of many institutional investors

30 Federal Reserve Board, Statistical Release G.20, Finance Companies. See www.federalreserve.gov/releases/g20/.

Table 2.10 Common Stock Initial Public Offerings by All and Small Issuers, 1997-2008

	Common stock		
	Number	Amount (millions of dollars)	Average size (millions of dollars)
Offerings by all issuers			
2008*	25	6,557.3	262.3
2007*	162	35,857.2	221.3
2006*	174	35,044.0	201.4
2005*	176	32,353.7	183.8
2004*	213	41,461.6	194.7
2003	132	45,189.2	342.3
2002	86	25,716.3	299.0
2001	99	37,526.0	379.1
2000	387	60,871.0	157.3
1999	512	63,017.4	123.1
1998	366	38,075.3	104.0
1997	623	45,785.0	73.5
Offerings by issuers with assets of $25 million or less			
2008*	2	10.9	5.5
2007*	15	748.4	49.9
2006*	15	882.4	58.8
2005*	19	662.9	34.9
2004*	26	1,182.2	45.5
2003	8	532.3	66.5
2002	11	420.4	38.2
2001	14	477.2	34.1
2000	56	3,323.9	59.4
1999	207	10,531.0	50.9
1998	128	4,513.7	35.3
1997	241	5,746.1	23.8
Offerings by issuers with assets of $10 million or less			
2008*	1	5.1	5.1
2007*	5	92.7	18.5
2006*	5	307.0	61.4
2005*	10	413.9	41.4
2004*	12	458.4	38.2
2003	4	34.8	8.7
2002	5	160.9	32.2
2001	5	54.9	11.0
2000	13	407.2	31.3
1999	87	3,556.9	40.9
1998	62	2,208.0	35.6
1997	132	2,538.6	19.2

*Annual revisions for statistics from 2004-2008 exclude public offerings from foreign offerers.

Note: Excludes closed end funds. Registered offerings data from the Securities and Exchange Commission are no longer available. Data provided by Securities Data Company are not as inclusive as those registered with the SEC.

Source: Special tabulations prepared for the U.S. Small Business Administration, Office of Advocacy, by Thomson Financial Securities Data, March 2009.

figu 2.11 New Commitments, Disbursements, and Total Capital Pool of the Venture Capital Industry, 1982-2004 (billions of dollars)

	Commitments	Disbursements	Initial round	Follow-on	Capital under management
2008	27.9	28.3	6.14	NA	NA
2007	35.5	30.9	7.47	22.51	257.1
2006	31.5	26.7	6.16	20.51	278.7
2005	28.0	23.2	5.76	17.25	265.4
2004	19.1	22.5	4.86	17.64	260.7
2003	10.6	19.8	3.98	15.81	255.2
2002	9.5	22.0	4.34	17.61	256.2
2001	38.8	40.6	7.43	33.20	255.8
2000	105.2	104.8	28.88	76.16	227.8
1999	56.4	54.0	15.95	38.12	145.9
1998	29.9	21.1	7.17	13.91	91.4
1997	19.7	14.9	4.87	10.00	63.2
1996	11.8	11.3	4.33	6.95	49.3
1995	9.9	8.0	4.04	3.98	40.7
1994	8.9	4.2	1.71	2.42	36.1
1993	4.1	3.9	1.41	2.28	32.2
1992	5.3	3.6	1.32	2.25	30.2
1991	2.0	2.2	0.57	1.68	29.3
1990	3.3	2.8	0.85	1.92	31.4
1989	4.9	3.3	0.95	2.34	30.4
1988	4.4	3.3	1.09	2.22	27.0
1987	4.4	4.5	1.00	2.27	24.6
1986	3.8	4.1	0.91	2.11	20.3
1985	4.0	3.4	0.73	2.04	17.2
1984	3.0	3.3	0.87	2.14	13.9
1983	4.2	3.1	0.90	1.97	10.6
1982	2.0	1.8	0.59	1.00	6.7

NA= Not available

Source: Venture Economics, *Venture Capital Journal* (various issues) and *National Venture Capital Association Yearbook 2008*, affected new investments in venture capital funds. Venture capital funding fell from an average of $7-$9 billion per quarter in the first three quarters of 2008 to $3.3 billion in the fourth quarter. Investment in U.S companies (disbursements) decreased slightly, to $28.3 billion, a decline of 8 percent, from $30.9 billion in 2007. First-round investment declined more than follow-on: there were 168 follow-on investments compared with 43 new funds, a ratio of 4 to 1.

The value of the angel investment market was down in 2008, although the number of investments changed little, an indication that angel investors were exercising caution by committing fewer dollars, according to analysis from the Center for Venture Research.[31] Total investments were down from 2007 by 26.2 percent to $19.2 billion in 2008. The number of entrepreneurial ventures that received angel funding totaled 55,480, a decrease of 2.9 percent from the previous year. Angels continued to be the largest source of seed and startup capital in 2008, and invested 45 percent in this stage, up 6 percent from 2007.

New Research on Small Business Financing Using the 2003 SSBF

Three new research studies sponsored by the SBA's Office of Advocacy offer insight into the ways small businesses use financing, based on data from the Federal Reserve Board's 2003 Survey of Small Business Finances (SSBF).[32] The SSBF surveyed more than 4,000 firms operating in the United States in December 2003

31 Angel investors are individuals who provide capital for a business startup, usually in exchange for convertible debt or ownership equity. A small but increasing number of angel investors organize themselves into angel networks to share research and pool their investment capital.

32 All of these forthcoming studies will be found on the U.S. Small Business Administration, Office of Advocacy website at http://www.sba.gov/advo/research/chron.html. See Appendix B for a listing of additional studies released in 2008. The 2003 Survey of Small Business Finances is the latest of the NSSBF-SSBF series, which was conducted every five years beginning in 1987 by the Board of Governors of the Federal Reserve System with support from the Office of Advocacy. Although the SSBF is the most comprehensive source of information on small business finances, funding for further surveys has been discontinued. Some, but not all, of the types of information available from the SSBF may be obtained in future from the Survey of Consumer Finances conducted by the Federal Reserve Board.

and collected information on the characteristics of each business and its top three owners, the firm's income statement and balance sheet, and details of the sources and uses of financing, as well as each firm's recent borrowing experience and use of trade credit. Previous surveys conducted in 1998 and 1993 are available for many comparison purposes.

Examination of Financial Patterns Using the Survey of Small Business Finances

A study by George Haynes and James Brown compares SSBF samples from 1993, 1998, and 2003, looking at both the characteristics of the business owners sampled and what has changed in their financing patterns. The descriptive section examines the proportions of small businesses using each type of loan and lender, the number of loans, and the aggregate value by each type of loan and lender. The analytical section focuses on commercial banks and finance companies and offers a number of observations, among them:

- The study explores in detail the relative importance of banks, thrifts, and finance companies in the markets for small business lending, including small business use of mortgages.
- The percentage of small businesses using any credit increased from 79.1 percent in 1993 to 89.0 percent in 2003.
- The percentage of firms using traditional loans increased substantially over the 1993-2003 period for mortgages but remained nearly the same for all other traditional loans.
- The percentage of small businesses using commercial banks declined over the period, while the share using finance companies increased. Nevertheless, commercial banks continued to be the most important source of loans, with more than 46 percent of small business borrowers acquiring 50 percent or more of the value of their loans from commercial banks in 2003.
- The percentage of firms using nontraditional loans, particularly credit card loans, also increased considerably.

- The use of nondepository institutions increased by 28 percent and the use of nontraditional credit increased by nearly 33 percent.

How Strong is the Link between Internal Finance and Small Firm Growth?

James Brown and George Haynes find that internal funds are critically important to firm growth, in contrast to the outside capital used by publicly traded firms.

- While outside capital is often needed, internal capital is critically important for small business growth.
- Small growth firms are more likely than nongrowth firms to have lines of credit, motor vehicle loans, capital leases, equipment loans, and loans from commercial banks and finance companies.
- The relationship between internal funds and employment growth is especially important for very small and women-owned firms.
- Results highlight the importance of programs that effectively reduce the costs of borrowing and increase net profits in fostering the growth of small businesses, especially very small and women-owned businesses.

Who Needs Credit and Who Gets Credit?

Rebel Cole also uses data from the SSBF to classify small businesses into four groups based on their credit needs—nonborrowers, discouraged borrowers, denied borrowers, and approved borrowers—and to model the credit allocation process into a sequence of three steps.

- The study provides an analysis of credit availability that accounts for the inherent self-selection involved in the credit application process: who needs credit, who applies for credit conditional upon needing credit, and who receives credit conditional upon applying for credit.

- Nonborrowers—those who do not need credit—look much like approved borrowers—those who apply for and receive credit, consistent with the "pecking order" theory of capital structure.[33]
- Discouraged borrowers—those who need credit but fail to apply for fear of being turned down—resemble denied borrowers—those who apply for credit but are turned down—in many respects, but they differ significantly along a number of dimensions. This finding calls into question previous studies that have pooled together these two groups in analyzing credit allocation.
- Denied borrowers differ from approved borrowers across numerous dimensions.
- After controlling for a variety of variables, the researchers found that firms whose owners were African American were denied credit at a far higher rate than firms whose owners were White, and this percentage has increased, rather than decreased, with each successive SSBF.
- The study also provides new SSBF evidence using methodological improvements, including identification of applications to renew existing lines of credit, which allows, for the first time, differentiation between new lines of credit and renewals.

33 The pecking-order theory suggests that firms opt for funding from sources with the lowest degree of asymmetric information. That is, they use a hierarchy of financing sources beginning with internal funds, followed by debt, and then equity.

Conclusion

As it was for the economy as a whole, the financial environment for small firms was extremely challenging in 2008. Despite a lack of federal data sources reflecting the most recent developments, a number of observed indicators suggest that the flow of funds to small firms was down in late 2008. These observations included declines in the lending capacity of small business lenders and in funding activity in the asset-based securities markets, disruptions in lending facilities between large money center banks and local lenders, declines in SBA loan guarantee programs, and senior loan officer survey indications of reduced demand and tightening in lending terms. At the end of the year, policymakers were hopeful that the initiatives taken through TARP and actions by Treasury and the FRB would help to forestall further deterioration and stimulate economic activity.

APPENDIX A

Table A.1 Business Counts, 1985-2008

Year	Employer firms	Nonemployers	Establishments	Self-employment (thousands)	Nonfarm business tax returns
2008	6,145,500 e.	23,131,300 e.	NA	10,079	NA
2007	6,113,900 e.	21,395,700 e.	NA	10,413	31,947,600 e.
2006	6,022,127	20,768,555	7,601,160	10,586	30,819,400
2005	5,983,546	20,392,068	7,499,702	10,464	29,512,000
2004	5,885,784	19,523,741	7,387,724	10,431	28,335,300
2003	5,767,127	18,649,114	7,254,745	10,295	27,269,500
2002	5,697,759	17,646,062	7,200,770	9,926	26,347,100
2001	5,657,774	16,979,498	7,095,302	10,109	25,631,200
2000	5,652,544	16,529,955	7,070,048	10,215	25,106,900
1999	5,607,743	16,152,604	7,008,444	10,087	24,750,100
1998	5,579,177	15,708,727	6,941,822	10,303	24,285,900
1997	5,541,918	15,439,609	6,894,869	10,513	23,645,200
1996	5,478,047	NA	6,738,476	10,489	23,240,700
1995	5,369,068	NA	6,612,721	10,482	22,479,000
1994	5,276,964	NA	6,509,065	10,648	21,990,300
1993	5,193,642	NA	6,401,233	10,279	21,280,300
1992	5,095,356	14,325,000	6,319,300	9,960	20,849,200
1991	5,051,025	NA	6,200,859	10,274	20,517,000
1990	5,073,795	NA	6,175,559	10,097	20,052,900
1989	5,021,315	NA	6,106,922	10,008	19,560,700
1988	4,954,645	NA	6,016,367	9,917	18,619,400
1987	NA	NA	5,937,061	9,624	18,351,400
1986	NA	NA	5,806,973	9,328	17,524,600
1985	NA	NA	5,701,485	9,269	16,959,900

NA = Not available.

e. = estimated.

Sources: U.S. Small Business Administration, Office of Advocacy, from the following data sources:

Employer firms from the U.S. Census Bureau with 2007 and 2008 estimates based on U.S. Census Bureau and U.S. Department of Labor data; nonemployers from the U.S. Census Bureau with 2007 and 2008 Advocacy estimates based on IRS data; self-employment (unincorporated, primary occupation, monthly averages) from the Bureau of Labor Statistics; and nonfarm and farm business tax returns from the Internal Revenue Service.

Table A.2 Business Turnover, 1985-2008

Year	Employer births	Employer terminations	Business bankruptcies
2008	627,200 e.	595,600 e.	43,546
2007	663,100 e.	571,300 e.	28,322
2006	670,058	599,333	19,695
2005	644,122	565,745	39,201
2004	628,917	541,047	34,317
2003	612,296	540,658	35,037
2002	569,750	586,890	38,540
2001	585,140	553,291	40,099
2000	574,300	542,831	35,472
1999	579,609	544,487	37,884
1998	589,982	540,601	44,367
1997	590,644	530,003	54,027
1996	597,792	512,402	53,549
1995	594,369	497,246	51,959
1994	570,587	503,563	52,374
1993	564,504	492,651	62,304
1992	544,596	521,606	70,643
1991	541,141	546,518	71,549
1990	584,892	531,400	64,853
1989	NA	NA	62,449
1988	NA	NA	62,845
1987	NA	NA	81,463
1986	NA	NA	79,926
1985	NA	NA	70,644

NA = Not available.

e. = estimated.

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

Employer births and terminations from the U.S. Census Bureau with 2007 and 2008 estimates based on U.S. Census Bureau and Department of Labor (Employment and Training Administration) data, and bankruptcies from the Administrative Office of the U.S. Courts (business bankruptcy filings).

Table A.3 **Macroeconomic Indicators, 2000-2008**

	2004	2005	2007	2008	Percent change 2007-2008
Gross domestic product (GDP) (billions of dollars)[1]					
Current dollars	9,817.0	12,455.8	13,807.5	14,264.6	3.3
Constant dollars (billions of 2000 dollars)	9,817.0	10,989.5	11,523.9	11,652.0	1.1
Per capita constant dollars (thousands of 2000 dollars)	34.8	37.1	38.2	38.3	0.2
Sales (billions of dollars)[2]					
Manufacturing	350.7	395.2	423.4	431.9	2.0
Wholesale trade	234.5	297.9	345.9	375.1	8.4
Retail trade	249.1	307.3	336.7	334.6	-0.6
Income (billions of dollars)					
Compensation of employees[3]	5,782.7	7,030.8	7,812.3	8,055.1	3.1
Nonfarm proprietors' income	705.7	925.7	1,012.2	1,037.9	2.5
Farm proprietors' income	22.7	34.1	44.0	34.6	-21.4
Corporate profits[4]	817.9	1,447.9	1,642.4	1,476.5	-10.1
Output and productivity (business sector, 1992=100)					
Output	140.5	159.1	167.3	168.6	0.8
Hours of all persons worked	121.0	118.0	121.1	118.8	-1.9
Productivity (output per hour)	116.1	134.8	138.2	141.9	2.7
Employment and compensation					
Nonfarm private employment (millions)[3]	111.0	111.9	115.4	114.6	-0.7
Unemployment rate (percent)	4.0	5.1	4.6	5.8	26.1
Total compensation cost index (Dec.) (2005=100)	83.6	100.0	106.3	108.9	2.4
Wage-and-salary index (Dec) (2005=100)	86.7	100.0	106.6	109.4	2.6
Employee benefits cost index (Dec.) (2005=100)	76.7	100.0	105.6	107.7	2.0
Bank loans, interest rates, and yields					
Bank commercial and industrial loans (billions of dollars)	1,078.8	1,036.3	1,432.4	1,582.5	10.5
Prime rate (percent)	9.2	6.2	8.1	5.1	-36.8
U.S. Treasury 10-year bond yields (percent)	6.0	4.3	4.6	3.7	-21.0
Price indices (inflation measures)					
Consumer price index (urban) (1982-1984 = 100)	172.2	195.3	207.3	215.3	3.8
Producer price index (finished goods) (1982 = 100)	138.0	155.7	166.6	177.1	6.3
GDP implicit price deflator (2000 = 100)	100.0	113.0	119.8	122.4	2.2
Equity markets					
S&P composite	1,427.2	1,207.2	1,477.2	1,220.0	-17.4
NASDAQ	3,783.7	2,099.3	2,578.5	2,161.7	-16.2

1 The Small Business Share of GDP, 1998-2004 by Katherine Kobe of Economic Consulting Services, LLC (Office of Advocacy funded study) estimates small businesses (fewer than 500 employees) created 50.7 percent of the total nonfarm private output in 2004.

2 U.S. Bureau of the Census, Statistics of U.S. Businesses, showed that in 2002, small firms (fewer than 500 employees) accounted for 24.8 percent of manufacturing, 47.6 percent of retail, and 41.2 percent of wholesale sales.

3 U.S. Bureau of the Census, Statistics of U.S. Businesses, showed that in 2006, small firms (fewer than 500 employees) accounted for 44.4 percent of annual payroll and 50.2 percent of total nonfarm private employment.

4 With inventory valuation adjustment and capital consumption adjustments.

Source: U.S. Small Business Administration, Office of Advocacy, from the Bureau of Economic Analysis, Economic Indicators, March 2000 and March 2009.

Table A.4 Number of Businesses by State and Selected Territories, 2005-2008

State	Employer firms		Nonemployers (thousands)		Self-employment (thousands)	
	2007	2008	2005	2006	2007	2008
United States	6,113,900 e.	6,145,500 e.	20,392	20,767	16,219	15,918
Alabama	90,419	90,134	283	294	201	183
Alaska	17,260	17,445	51	51	43	42
Arizona	133,850	135,104	358	367	322	314
Arkansas	67,713	68,425	187	188	159	156
California	1,181,598	1,204,455	2,609	2,645	2,322	2,174
Colorado	160,450	158,538	401	405	366	379
Connecticut	99,365	99,084	252	254	190	177
Delaware	26,788	26,361	52	53	37	37
District of Columbia	27,831	28,253	39	40	27	27
Florida	503,489	502,192	1,473	1,523	1,152	1,094
Georgia	216,613	217,801	657	690	491	502
Hawaii	31,281	31,452	88	90	73	76
Idaho	51,212	51,053	106	109	118	112
Illinois	299,455	303,224	835	850	590	585
Indiana	130,330	131,143	364	369	280	255
Iowa	72,018	72,210	193	196	193	182
Kansas	71,209	71,779	179	179	166	170
Kentucky	86,176	86,011	264	267	197	203
Louisiana	102,089	103,564	270	294	239	201
Maine	42,657	42,627	114	115	98	97
Maryland	142,721	141,659	400	410	268	281
Massachusetts	186,000	189,123	471	454	364	329
Michigan	223,947	213,493	639	627	452	442
Minnesota	135,635	136,144	373	377	324	297
Mississippi	56,014	56,214	164	175	149	136
Missouri	139,960	138,942	375	380	321	295
Montana	37,692	37,788	81	81	91	95
Nebraska	47,997	48,324	116	117	124	131
Nevada	60,041	60,346	164	167	111	125
New Hampshire	41,304	41,483	107	106	84	82
New Jersey	244,393	245,902	573	574	419	444
New Mexico	45,600	45,896	117	118	115	122
New York	500,093	494,713	1,443	1,474	873	891
North Carolina	200,396	202,450	583	605	521	473

Table A.4 Number of Businesses by State and Selected Territories, 2005-2008—continued

	Employer firms		Nonemployers (thousands)		Self-employment (thousands)	
State	**2007**	**2008**	**2005**	**2006**	**2007**	**2008**
North Dakota	20,212	20,480	44	44	50	55
Ohio	226,744	227,876	694	697	509	495
Oklahoma	81,183	82,752	256	257	183	188
Oregon	112,634	111,746	246	248	272	268
Pennsylvania	289,289	287,417	731	742	557	575
Rhode Island	33,891	33,773	69	69	55	54
South Carolina	98,703	100,724	260	271	191	204
South Dakota	24,985	25,401	56	56	72	69
Tennessee	115,602	115,887	423	436	336	331
Texas	443,489	449,681	1,686	1,737	1,124	1,144
Utah	70,760	71,351	175	179	158	151
Vermont	22,079	22,176	60	60	52	51
Virginia	187,437	189,089	470	479	418	414
Washington	202,901	203,835	387	392	382	392
West Virginia	36,596	36,233	90	90	55	54
Wisconsin	131,003	134,248	322	324	288	320
Wyoming	21,486	22,015	42	42	41	45
Puerto Rico	69,161	71,377	NA	NA	NA	NA
Virgin Islands	3,632	3,362	NA	NA	NA	NA

NA = Not available.

Notes: State totals do not add to the U.S. figure as firms can be in more than one state. Except as shown, data are not available for U.S. territories. The 2007 and 2008 estimates are based on U.S. Census Bureau and Department of Labor, Employment and Training Administration, data. Self-employment is based on monthly averages of primary occupation, incorporated and unincorporated status. Self-employment cannot be added to the other figures.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Labor (ETA) and U.S. Census Bureau, Nonemployer Statistics, and Current Population Survey, special tabulations

Table A.5 Business Turnover by State and Selected Territories, 2007-2008

State	Quarterly establishment openings		Quarterly establishment closings		Business bankruptcies	
	FY 2007	FY 2008	FY 2007	FY 2008	2007	2008
U.S. total	1,478,157	1,477,893	1,437,799	1,494,384	28,322	43,546
Alabama	16,052	15,496	14,809	16,128	306	536
Alaska	4,457	4,438	4,467	4,628	70	81
Arizona	31,563	30,705	30,006	33,176	479	1,069
Arkansas	12,670	13,592	12,448	12,293	397	497
California	174,541	173,871	176,690	174,819	3,505	6,404
Colorado	37,525	38,585	34,853	37,869	645	965
Connecticut	12,007	11,440	12,003	12,027	264	392
Delaware	5,201	5,267	5,446	5,315	306	1,198
District of Columbia	5,042	4,593	4,906	4,926	36	47
Florida	126,919	128,589	124,580	144,263	2,029	3,923
Georgia	63,866	63,128	64,495	60,525	1,456	2,237
Hawaii	5,505	5,247	5,232	6,079	56	86
Idaho	11,932	11,386	10,620	12,391	116	215
Illinois	58,335	57,837	57,038	59,562	1,040	1,557
Indiana	25,048	23,931	24,745	26,127	608	835
Iowa	12,895	12,689	12,728	12,768	243	342
Kansas	12,978	13,339	12,427	12,657	223	252
Kentucky	18,077	16,158	16,903	16,087	311	521
Louisiana	18,540	17,975	16,772	17,170	510	607
Maine	9,052	9,236	9,109	9,603	152	180
Maryland	26,276	29,608	26,975	29,975	380	628
Massachusetts	34,258	34,278	34,534	36,082	333	440
Michigan	43,092	43,592	45,727	46,967	1,194	1,684
Minnesota	21,329	32,630	32,054	29,435	520	863
Mississippi	10,282	9,908	9,746	10,112	262	357
Missouri	22,933	22,827	21,769	23,227	384	676
Montana	8,180	8,276	7,614	8,174	55	88
Nebraska	8,626	8,666	8,190	8,490	208	259
Nevada	14,506	14,589	13,069	14,407	321	505
New Hampshire	8,640	8,347	8,490	8,816	327	393
New Jersey	43,319	44,508	43,340	41,866	864	1,067
New Mexico	9,638	9,534	9,118	9,281	142	202
New York	104,608	102,576	98,626	101,995	1,375	1,849
North Carolina	48,788	44,564	39,995	43,097	597	931

Table A.5 Business Turnover by State and Selected Territories, 2007-2008—continued

State	Quarterly establishment openings		Quarterly establishment closings		Business bankruptcies	
	FY 2007	FY 2008	FY 2007	FY 2008	2007	2008
North Dakota	3,789	3,885	3,422	3,528	59	66
Ohio	42,897	41,005	44,097	45,089	1,352	1,587
Oklahoma	15,584	15,904	16,010	13,615	353	460
Oregon	22,949	22,565	21,631	23,548	265	429
Pennsylvania	54,539	55,429	52,424	53,404	1,017	1,193
Rhode Island	7,218	6,966	7,352	7,325	105	144
South Carolina	22,676	19,173	20,171	18,740	144	268
South Dakota	4,481	4,450	4,171	4,335	90	96
Tennessee	20,368	17,946	19,540	18,108	537	888
Texas	89,051	90,958	80,160	86,926	2,480	3,124
Utah	18,880	18,059	15,628	18,001	183	419
Vermont	3,879	4,754	4,178	4,670	65	49
Virginia	38,065	39,536	34,580	38,997	594	973
Washington	32,958	33,231	31,081	32,968	477	714
West Virginia	6,352	6,306	6,584	6,777	150	178
Wisconsin	23,405	21,948	23,393	23,901	412	652
Wyoming	4,386	4,373	3,853	4,115	36	63
Puerto Rico	7,176	7,607	8,211	8,119	276	349
Virgin Islands	457	405	348	398	8	4

Notes: Establishment openings and closings represent third quarter to second quarter business turnover for new and existing establishments, which can belong to small or large firms (seasonally adjusted). The sum of quarterly openings and closings can be inflated by seasonal businesses. National bankruptcy totals include territories.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Labor (Bureau of Labor Statistics, Business Employment Dynamics), and Administrative Office of the U.S. Courts.

Table A.6 Private Firms, Establishments, Employment, Annual Payroll, and Receipts, 1988-2006

Item	Year	Nonemployers	Employers total	Employment size of firm <20	<500
Firms	2006	20,768,555	6,022,127	5,377,631	6,004,056
	2005	20,392,068	5,983,546	5,357,887	5,966,069
	2004	19,523,741	5,885,784	5,255,844	5,868,737
	2003	18,649,114	5,767,127	5,150,316	5,750,201
	2002	17,646,062	5,697,759	5,090,331	5,680,914
	2001	16,979,498	5,657,774	5,036,845	5,640,407
	2000	16,529,955	5,652,544	5,035,029	5,635,391
	1999	16,152,604	5,607,743	5,007,808	5,591,003
	1998	15,708,727	5,579,177	4,988,367	5,562,799
	1997	15,439,609	5,541,918	4,958,641	5,525,839
	1996	NA	5,478,047	4,909,983	5,462,431
	1995	NA	5,369,068	4,807,533	5,353,624
	1994	NA	5,276,964	4,736,317	5,261,967
	1993	NA	5,193,642	4,661,601	5,179,013
	1992	14,325,000	5,095,356	4,572,994	5,081,234
	1991	NA	5,051,025	4,528,899	5,037,048
	1990	NA	5,073,795	4,535,575	5,059,772
	1989	NA	5,021,315	4,493,875	5,007,442
	1988	NA	4,954,645	4,444,473	4,941,821
Establishments	2006	20,768,555	7,601,160	5,429,173	6,472,647
	2005	20,392,068	7,499,702	5,409,151	6,420,532
	2004	19,523,741	7,387,724	5,308,118	6,331,242
	2003	18,649,114	7,254,745	5,203,488	6,222,091
	2002	17,646,062	7,200,770	5,147,526	6,172,809
	2001	16,979,498	7,095,302	5,093,660	6,079,993
	2000	16,529,955	7,070,048	5,093,832	6,080,050
	1999	16,152,604	7,008,444	5,068,096	6,048,129
	1998	15,708,727	6,941,822	5,048,528	6,030,325
	1997	15,439,609	6,894,869	5,026,425	6,017,638
	1996	NA	6,738,476	4,976,014	5,892,934
	1995	NA	6,612,721	4,876,327	5,798,936
	1994	NA	6,509,065	4,809,575	5,724,681
	1993	NA	6,401,233	4,737,778	5,654,835
	1992	14,325,000	6,319,300	4,653,464	5,571,896
	1991	NA	6,200,859	4,603,523	5,457,366
	1990	NA	6,175,559	4,602,362	5,447,605
	1989	NA	6,106,922	4,563,257	5,402,086
	1988	NA	6,016,367	4,516,707	5,343,026
Employment	2006	NA	119,917,165	21,609,520	60,223,740
	2005	NA	116,317,003	21,289,196	58,644,585
	2004	NA	115,074,924	21,197,087	58,597,452
	2003	NA	113,398,043	20,830,352	57,447,570

Table A.6 Private Firms, Establishments, Employment, Annual Payroll, and Receipts, 1988-2006 —continued

Item	Year	Nonemployers	Employers total	Employment size of firm <20	Employment size of firm <500
Employment	2002	NA	112,400,654	20,583,371	56,366,292
	2001	NA	115,061,184	20,602,635	57,383,449
	2000	NA	114,064,976	20,587,385	57,124,044
	1999	NA	110,705,661	20,388,287	55,729,092
	1998	NA	108,117,731	20,275,405	55,064,409
	1997	NA	105,299,123	20,118,816	54,545,370
	1996	NA	102,187,297	19,881,502	53,174,502
	1995	NA	100,314,946	19,569,861	52,652,510
	1994	NA	96,721,594	19,195,318	51,007,688
	1993	NA	94,773,913	19,070,191	50,316,063
	1992	NA	92,825,797	18,772,644	49,200,841
	1991	NA	92,307,559	18,712,812	49,002,613
	1990	NA	93,469,275	18,911,906	50,166,797
	1989	NA	91,626,094	18,626,776	49,353,860
	1988	NA	87,844,303	18,319,642	47,914,723
Annual payroll (thousands of dollars)	2006	NA	4,792,429,911	726,060,229	2,128,793,097
	2005	NA	4,482,722,481	695,604,106	2,012,581,741
	2004	NA	4,253,995,732	659,270,002	1,917,364,605
	2003	NA	4,040,888,841	631,221,418	1,818,493,862
	2002	NA	3,943,179,606	617,583,597	1,777,049,574
	2001	NA	3,989,086,323	603,848,633	1,767,546,642
	2000	NA	3,879,430,052	591,123,880	1,727,114,941
	1999	NA	3,554,692,909	561,547,424	1,601,129,388
	1998	NA	3,309,405,533	535,184,511	1,512,769,153
	1997	NA	3,047,907,469	503,130,254	1,416,200,011
	1996	N	2,848,623,049	481,008,640	1,330,258,327
	1995	NA	2,665,921,824	454,009,065	1,252,135,244
	1994	NA	2,487,959,727	432,791,911	1,176,418,685
	1993	NA	2,363,208,106	415,254,636	1,116,443,440
	1992	NA	2,272,392,408	399,804,694	1,066,948,306
	1991	NA	2,145,015,851	381,544,608	1,013,014,303
	1990	NA	2,103,971,179	375,313,660	1,007,156,385
	1989	NA	1,989,941,554	357,259,587	954,137,110
	1988	NA	1,858,652,147	342,168,460	902,566,839
Receipts (thousands of dollars)	2002	770,032,328	22,062,528,196	3,126,610,830	8,558,731,333
	1997	586,315,756	18,242,632,687	2,786,839,570	7,468,211,700

NA = Not available.

Notes: A firm is as an aggregation of all establishments (locations with payroll in any quarter) owned by a parent company and employment is measured in March. Job growth is not shown as firms can change sizes annually.

See www.sba.gov/advo/research/data.html for more detail.

Source: U.S. Small Business Administration, Office of Advocacy, based on data provided by the U.S. Census Bureau, Statistics of U.S. Businesses, *Nonemployer Statistics*, and County Business Patterns.

Table A.7 Employer Firms and Employment by Firm Size and State, 2006

State	Employer total	Employment size of firm		Employment total	Employment size of firm	
		<20	<500		<20	<500
United States	6,022,127	5,377,631	6,004,056	119,917,165	21,609,520	60,223,740
Alabama	80,656	68,452	78,406	1,713,399	302,021	851,256
Alaska	16,713	14,700	16,184	241,621	56,277	134,406
Arizona	110,401	94,087	107,490	2,335,098	370,479	1,139,177
Arkansas	53,491	46,048	51,886	1,041,998	192,959	508,256
California	723,880	637,730	718,220	13,834,264	2,526,566	7,201,944
Colorado	129,861	114,521	126,951	2,019,125	408,950	1,044,579
Connecticut	77,637	66,314	75,626	1,585,843	281,836	786,953
Delaware	21,140	17,148	19,772	388,250	66,654	187,546
District of Columbia	17,069	12,865	15,896	446,576	56,492	215,206
Florida	430,429	390,765	426,073	7,535,515	1,329,415	3,316,676
Georgia	181,300	157,275	177,445	3,623,210	605,167	1,679,327
Hawaii	26,723	22,614	25,883	512,543	97,742	287,565
Idaho	39,664	34,826	38,596	546,251	134,836	320,120
Illinois	262,870	227,570	258,555	5,357,466	899,631	2,638,159
Indiana	118,159	100,223	115,275	2,673,010	439,886	1,300,278
Iowa	65,829	56,421	64,129	1,295,258	237,149	668,226
Kansas	61,902	52,575	60,005	1,142,680	217,564	624,119
Kentucky	72,992	61,539	70,785	1,552,012	272,157	776,416
Louisiana	81,421	69,187	79,382	1,593,033	296,484	861,192
Maine	35,687	31,360	34,771	508,163	120,456	308,156
Maryland	115,149	98,426	112,547	2,232,215	407,559	1,192,415
Massachusetts	144,873	125,045	141,961	3,044,080	519,031	1,471,428
Michigan	190,411	165,465	187,373	3,819,537	694,094	1,969,085
Minnesota	124,237	106,990	121,742	2,476,354	420,660	1,262,667
Mississippi	48,011	40,962	46,437	940,609	175,267	471,121
Missouri	124,120	106,692	121,350	2,468,035	432,276	1,227,501
Montana	32,251	28,876	31,544	342,526	109,257	238,967
Nebraska	42,649	36,512	41,288	789,231	148,011	405,538
Nevada	50,657	42,108	48,569	1,165,375	165,168	514,597
New Hampshire	33,228	28,128	32,103	577,415	117,869	316,884
New Jersey	208,465	184,083	205,321	3,645,381	713,743	1,861,971
New Mexico	37,871	31,889	36,430	628,681	133,461	358,526
New York	444,728	398,979	440,510	7,532,764	1,463,820	3,897,064
North Carolina	176,815	153,353	173,409	3,524,814	632,892	1,713,105
North Dakota	17,872	15,154	17,245	278,423	62,652	176,263
Ohio	207,768	176,899	204,035	4,825,510	790,775	2,343,233
Oklahoma	72,863	62,971	70,973	1,276,921	256,642	690,052
Oregon	92,695	80,964	90,672	1,461,664	323,532	836,079
Pennsylvania	240,636	207,235	236,775	5,189,949	894,674	2,587,286
Rhode Island	26,691	22,774	25,763	440,797	91,857	251,666
South Carolina	83,945	72,024	81,698	1,633,441	305,419	816,088
South Dakota	21,925	18,856	21,233	325,105	77,776	205,503
Tennessee	103,559	87,256	100,607	2,473,352	384,069	1,114,884
Texas	391,527	340,009	386,422	8,711,476	1,417,780	4,074,706
Utah	58,463	50,529	56,691	1,039,095	190,563	518,136
Vermont	19,558	16,995	18,937	263,838	67,795	167,499
Virginia	156,240	134,576	153,033	3,174,363	556,306	1,566,653
Washington	150,604	132,456	147,948	2,421,269	519,854	1,349,198
West Virginia	32,334	27,518	31,186	583,196	122,390	316,449
Wisconsin	117,917	100,221	115,541	2,482,281	439,645	1,324,422
Wyoming	17,749	15,458	17,144	204,153	61,962	135,197

Notes: A firm is as an aggregation of all establishments (with payroll in any quarter) owned by a parent company. See www.sba.gov/advo/research/data.html for more detail.
Source: U.S. Small Business Administration, Office of Advocacy, based on data provided by the U.S. Census Bureau.

Table A.8 Employer Firms and Employment by Firm Size and Industry, 2006

Industry	Nonemployers	Total	Employment size of firm <20	Employment size of firm <500
Firms				
Total	20,768,555	6,022,127	5,377,631	6,004,056
Agriculture, forestry, fishing, and hunting	228,775	22,888	21,394	22,797
Mining	101,891	20,583	17,233	20,249
Utilities	17,070	6,554	5,188	6,357
Construction	2,549,239	791,558	723,346	790,464
Manufacturing	311,111	286,039	210,873	281,970
Wholesale trade	387,022	334,597	286,182	331,538
Retail trade	1,857,611	725,577	656,368	723,267
Transportation and warehousing	1,001,977	171,947	150,814	169,807
Information	317,695	74,952	63,806	73,876
Finance and insurance	758,167	263,028	241,197	261,345
Real estate and rental and leasing	2,420,926	305,981	290,900	304,771
Professional, scientific, and technical services	2,904,083	772,025	721,303	769,050
Management of companies and enterprises	—	26,760	5,747	19,708
Administrative support, waste management, and remediation services	1,482,344	323,282	282,413	319,603
Educational services	482,222	73,793	56,619	72,657
Health care and social assistance	1,728,485	605,845	527,049	602,022
Arts, entertainment, and recreation	1,001,780	115,049	98,991	114,377
Accommodation and food services	287,342	467,120	372,202	465,271
Other services (except public administration)	2,930,815	672,056	624,819	670,657
Unclassified	0	27,027	26,932	27,026
Employment				
Total	—	119,917,165	21,609,520	60,223,740
Agriculture, forestry, fishing, and hunting	—	165,661	NA	NA
Mining	—	554,333	71,886	244,538
Utilities	—	614,427	21,268	109,159
Construction	—	7,338,799	2,700,949	6,264,657
Manufacturing	—	13,631,683	1,180,832	6,056,221
Wholesale trade	—	6,030,647	1,232,197	3,685,678
Retail trade	—	15,767,866	2,828,263	6,314,262
Transportation and warehousing	—	4,306,405	541,809	1,629,628
Information	—	3,396,246	250,256	894,006
Finance and insurance	—	6,647,098	788,519	2,183,865
Real estate and rental and leasing	—	2,216,803	786,053	1,521,036
Professional, scientific, and technical services	—	8,054,094	2,294,506	4,958,015
Management of companies and enterprises	—	2,915,644	14,705	351,676
Administrative support, waste management, and remediation services	—	10,003,626	1,028,979	3,732,538
Educational services	—	2,979,514	259,131	1,333,946
Health care and social assistance	—	16,451,361	2,544,976	7,946,394
Arts, entertainment, and recreation	—	1,973,655	362,172	NA
Accommodation and food services	—	11,381,226	2,055,207	6,848,906
Other services (except public administration)	—	5,458,558	2,546,723	4,663,580
Unclassified	—	29,519	NA	NA

NA= Not available because of disclosure restrictions.

Notes: Employment is measured in March; thus some firms (startups after March, closures before March, and seasonal firms) will have zero employment. Firms are an aggregation of all establishments owned by a parent company within an industry.

See www.sba.gov/advo/research/data.html for more detail.

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

Table A.9 **Employer Firm Births and Deaths by Employment Size of Firm, 1990-2006**

Period		Total	Beginning year employment size of firm <20	<500	500+
Firms					
2005-2006	Firm births	670,058	640,710	669,841	217
	Firm deaths	599,333	573,302	599,078	255
	Net change	70,725	67,408	70,763	-38
2004-2005	Firm births	644,122	616,019	643,850	272
	Firm deaths	565,745	539,061	565,482	263
	Net change	78,377	76,958	78,368	9
2003-2004	Firm births	628,917	601,927	628,655	262
	Firm deaths	541,047	515,031	540,746	301
	Net change	87,870	86,896	87,909	-39
2002-2003	Firm births	612,296	585,552	611,976	320
	Firm deaths	540,658	514,565	540,328	330
	Net change	71,638	70,987	71,648	-10
2001-2002	Firm births	569,750	541,516	568,280	1,470
	Firm deaths	586,890	557,133	586,535	355
	Net change	-17,140	-15,617	-18,255	1,115
2000-2001	Firm births	585,140	558,037	584,837	303
	Firm deaths	553,291	523,960	552,839	452
	Net change	31,849	34,077	31,998	-149
1999-2000	Firm births	574,300	548,030	574,023	277
	Firm deaths	542,831	514,242	542,374	457
	Net change	31,469	33,788	31,649	-180
1998-1999	Firm births	579,609	554,288	579,287	322
	Firm deaths	544,487	514,293	544,040	447
	Net change	35,122	39,995	35,247	-125
1997-1998	Firm births	589,982	564,804	589,706	276
	Firm deaths	540,601	511,567	540,112	489
	Net change	49,381	53,237	49,594	-213
1996-1997	Firm births	590,644	564,197	590,335	309
	Firm deaths	530,003	500,014	529,481	522
	Net change	60,641	64,183	60,854	-213
1995-1996	Firm births	597,792	572,442	597,503	289
	Firm deaths	512,402	485,509	512,024	378
	Net change	85,390	86,933	85,479	-89
1994-1995	Firm births	594,369	568,896	594,119	250
	Firm deaths	497,246	472,441	496,874	372
	Net change	97,123	96,455	97,245	-122
1993-1994	Firm births	570,587	546,437	570,337	250
	Firm deaths	503,563	476,667	503,125	438
	Net change	67,024	69,770	67,212	-188
1992-1993	Firm births	564,504	539,601	564,093	411
	Firm deaths	492,651	466,550	492,266	385
	Net change	71,853	73,051	71,827	26
1991-1992	Firm births	544,596	519,014	544,278	318
	Firm deaths	521,606	492,746	521,176	430
	Net change	22,990	26,268	23,102	-112
1990-1991	Firm births	541,141	515,870	540,889	252
	Firm deaths	546,518	516,964	546,149	369
	Net change	-5,377	-1,094	-5,260	-117

Notes: 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. Firm births are classified by their first quarter employment size. New firms represent new original establishments and deaths represent closed original establishments.

See www.sba.gov/advo/research/data.html for more detail.

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

Table A.10 Job Generation and Destruction by Employment Size of Firm, 1990-2006

Period		Total	Beginning year employment size of firm		
			<20	<500	500+
Employment					
2005-2006	Firm births	3,682,455	1,999,214	3,412,404	270,051
	Firm deaths	3,219,966	1,710,592	2,964,123	255,843
	Existing firm expansions	NA	NA	NA	NA
	Existing firm contractions	NA	NA	NA	NA
	Net change	NA	NA	NA	NA
2004-2005	Firm births	3,609,285	1,931,018	3,278,823	330,462
	Firm deaths	3,307,415	1,684,505	2,981,221	326,194
	Existing firm expansions	13,970,562	3,091,028	6,910,039	7,060,523
	Existing firm contractions	13,031,004	2,311,147	6,228,539	6,802,465
	Net change	1,241,428	1,026,394	979,102	262,326
2003-2004	Firm births	3,574,679	1,889,381	3,240,945	333,734
	Firm deaths	3,220,504	1,614,965	2,867,719	352,785
	Existing firm expansions	14,377,177	3,359,333	7,121,196	7,255,981
	Existing firm contractions	13,055,467	2,009,138	5,604,304	7,451,163
	Net change	1,675,885	1,624,611	1,890,118	-214,233
2002-2003	Firm births	3,667,154	1,855,516	3,174,129	493,025
	Firm deaths	3,324,483	1,608,299	2,879,797	444,686
	Existing firm expansions	14,677,406	3,438,778	7,641,202	7,036,204
	Existing firm contractions	14,024,418	2,112,533	5,945,208	8,079,210
	Net change	995,659	1,573,462	1,990,326	-994,667
2001-2002	Firm births	3,369,930	1,748,097	3,033,734	336,196
	Firm deaths	3,660,161	1,755,255	3,256,851	403,310
	Existing firm expansions	15,385,726	3,149,876	7,587,961	7,797,765
	Existing firm contractions	17,756,053	2,289,644	7,794,376	9,961,677
	Net change	-2,660,558	853,074	-429,532	-2,231,026
2000-2001	Firm births	3,418,369	1,821,298	3,108,501	309,868
	Firm deaths	3,261,621	1,700,677	3,049,714	211,907
	Existing firm expansions	14,939,658	3,065,106	7,033,084	7,906,574
	Existing firm contractions	14,096,436	2,074,544	5,940,996	8,155,440
	Net change	999,970	1,111,183	1,150,875	-150,905
1999-2000	Firm births	3,228,804	1,792,946	3,031,079	197,725
	Firm deaths	3,176,609	1,653,694	2,946,120	230,489
	Existing firm expansions	15,857,582	3,378,838	7,744,430	8,113,152
	Existing firm contractions	12,550,358	1,924,624	5,323,677	7,226,681
	Net change	3,359,419	1,593,466	2,505,712	853,707
1998-1999	Firm births	3,247,335	1,763,823	3,011,400	235,935
	Firm deaths	3,267,136	1,676,282	3,052,630	214,506
	Existing firm expansions	14,843,903	3,245,218	7,266,399	7,577,504
	Existing firm contractions	12,236,364	1,969,501	5,482,142	6,754,222
	Net change	2,587,738	1,363,258	1,743,027	844,711
1997-1998	Firm births	3,205,451	1,812,103	3,002,401	203,050
	Firm deaths	3,233,412	1,661,544	2,991,722	241,690
	Existing firm expansions	14,885,560	3,238,047	7,471,622	7,413,938
	Existing firm contractions	12,044,422	2,002,313	5,747,725	6,296,697
	Net change	2,813,177	1,386,293	1,734,576	1,078,601
1996-1997	Firm births	3,227,556	1,813,539	3,029,666	197,890
	Firm deaths	3,274,604	1,620,797	2,960,814	313,790
	Existing firm expansions	16,243,424	3,400,037	8,628,839	7,614,585
	Existing firm contractions	13,092,093	2,035,083	6,343,489	6,748,604
	Net change	3,104,283	1,557,696	2,354,202	750,081

Table A.10 Job Generation and Destruction by Employment Size of Firm, 1990-2006—continued

			Beginning year employment size of firm		
Period		Total	<20	<500	500+
1995-1996	Firm births	3,255,676	1,844,516	3,055,596	200,080
	Firm deaths	3,099,589	1,559,598	2,808,493	291,096
	Existing firm expansions	12,937,389	3,122,066	6,725,135	6,212,254
	Existing firm contractions	11,226,231	1,971,531	5,512,726	5,713,505
	Net change	1,867,245	1,435,453	1,459,512	407,733
1994-1995	Firm births	3,322,001	1,836,153	3,049,456	272,545
	Firm deaths	2,822,627	1,516,552	2,633,587	189,040
	Existing firm expansions	13,034,649	3,235,940	7,197,705	5,836,944
	Existing firm contractions	9,942,456	1,877,758	5,000,269	4,942,187
	Net change	3,591,567	1,677,783	2,613,305	978,262
1993-1994	Firm births	3,105,753	1,760,322	2,889,507	216,246
	Firm deaths	3,077,307	1,549,072	2,800,933	276,374
	Existing firm expansions	12,366,436	3,139,825	6,905,182	5,461,254
	Existing firm contractions	10,450,422	2,039,535	5,400,406	5,050,016
	Net change	1,944,460	1,311,540	1,593,350	351,110
1992-1993	Firm births	3,438,106	1,750,662	3,053,765	384,341
	Firm deaths	2,906,260	1,515,896	2,697,656	208,604
	Existing firm expansions	12,157,943	3,206,101	6,817,835	5,340,108
	Existing firm contractions	10,741,536	1,965,039	5,386,708	5,354,828
	Net change	1,948,253	1,475,828	1,787,236	161,017
1991-1992	Firm births	3,200,969	1,703,491	2,863,799	337,170
	Firm deaths	3,126,463	1,602,579	2,894,127	232,336
	Existing firm expansions	12,894,780	3,197,959	7,510,392	5,384,388
	Existing firm contractions	12,446,175	2,156,402	6,635,366	5,810,809
	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
	Firm deaths	3,208,099	1,723,159	3,044,470	163,629
	Existing firm expansions	11,174,786	2,855,498	6,323,224	4,851,562
	Existing firm contractions	12,233,766	2,294,270	6,893,623	5,340,143
	Net change	-1,161,716	550,925	-707,518	-454,198

NA=Not available.

Notes: 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. Firm births are classified by their first quarter employment size. New firms represent new original establishments and deaths represent closed original establishments. See www.sba.gov/advo/research/data.html for more detail.

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

Table A.11 Opening and Closing Establishments, 1992-2008 (thousands, seasonally adjusted)

		Opening establishments			Closing establishments			Net	
Year	Quarter	Number	Rate	Employment	Number	Rate	Employment	Number	Employment
2008	4	NA	NA	NA	NA	NA	NA	NA	NA
	3	NA	NA	NA	NA	NA	NA	NA	NA
	2	355	5.1	1,400	391	5.6	1,474	-36	-74
	1	357	5.1	1,399	380	5.4	1,353	-23	46
2007	4	382	5.5	1,456	360	5.2	1,356	22	100
	3	376	5.4	1,474	361	5.2	1,355	15	119
	2	360	5.2	1,415	370	5.3	1,407	-10	8
	1	368	5.3	1,399	362	5.2	1,285	6	114
2006	4	391	5.7	1,539	352	5.1	1,356	39	183
	3	356	5.2	1,436	352	5.1	1,353	4	83
	2	366	5.3	1,521	344	5.0	1,376	22	145
	1	364	5.3	1,419	344	5.0	1,275	20	144
2005	4	378	5.6	1,570	332	4.9	1,372	46	198
	3	370	5.5	1,575	334	5.0	1,448	36	127
	2	369	5.5	1,552	335	5.0	1,413	34	139
	1	351	5.3	1,472	349	5.3	1,426	2	46
2004	4	370	5.6	1,616	319	4.8	1,431	51	185
	3	350	5.3	1,573	339	5.2	1,538	11	35
	2	343	5.3	1,526	329	5.0	1,481	14	45
	1	346	5.3	1,494	329	5.1	1,434	17	60
2003	4	346	5.4	1,533	319	4.9	1,438	27	95
	3	330	5.1	1,465	315	4.9	1,361	15	104
	2	330	5.1	1,473	325	5.1	1,465	5	8
	1	333	5.2	1,522	335	5.2	1,540	-2	-18
2002	4	343	5.4	1,562	329	5.1	1,549	14	13
	3	338	5.3	1,593	321	5.0	1,531	17	62
	2	344	5.4	1,726	326	5.1	1,638	18	88
	1	343	5.4	1,790	329	5.2	1,664	14	126
2001	4	340	5.4	1,659	335	5.3	1,693	5	-34
	3	336	5.3	1,691	356	5.6	1,801	-20	-110
	2	334	5.3	1,690	334	5.3	1,751	0	-61
	1	342	5.4	1,742	336	5.3	1,875	6	-133
2000	4	339	5.4	1,698	334	5.3	1,672	5	26
	3	353	5.6	1,778	339	5.4	1,727	14	51
	2	337	5.4	1,685	319	5.1	1,620	18	65
	1	362	5.8	1,868	319	5.1	1,662	43	206
1999	4	344	5.6	1,793	327	5.3	1,668	17	125
	3	347	5.6	1,837	335	5.4	1,733	12	104
	2	339	5.5	1,878	332	5.4	1,685	7	193
	1	341	5.6	1,959	315	5.1	1,837	26	122
1998	4	322	5.3	1,738	318	5.2	1,682	4	56
	3	337	5.5	1,901	316	5.2	1,673	21	228
	2	357	5.9	2,077	296	4.9	1,795	61	282
	1	349	5.8	2,049	321	5.3	1,860	28	189
1997	4	332	5.5	1,920	332	5.5	1,885	0	35
	3	331	5.5	1,797	307	5.1	1,687	24	110
	2	319	5.4	1,725	305	5.1	1,540	14	185
	1	333	5.6	1,807	295	5.0	1,544	38	263
1996	4	325	5.5	1,810	302	5.1	1,515	23	295
	3	329	5.6	1,804	291	5.0	1,531	38	273
	2	320	5.5	1,769	299	5.1	1,517	21	252
	1	323	5.6	1,754	295	5.1	1,509	28	245

Table A.11 Opening and Closing Establishments, 1992-2008 (thousands, seasonally adjusted) —continued

Year	Quarter	Opening establishments			Closing establishments			Net	
		Number	Rate	Employment	Number	Rate	Employment	Number	Employment
1995	4	308	5.3	1,690	296	5.1	1,523	12	167
	3	307	5.3	1,642	291	5.1	1,493	16	149
	2	306	5.4	1,660	286	5.0	1,468	20	192
	1	308	5.4	1,663	274	4.8	1,377	34	286
1994	4	292	5.2	1,557	288	5.1	1,433	4	124
	3	316	5.6	1,725	269	4.8	1,288	47	437
	2	307	5.5	1,668	286	5.1	1,489	21	179
	1	293	5.3	1,581	277	5.0	1,421	16	160
1993	4	282	5.1	1,553	266	4.8	1,361	16	192
	3	305	5.5	1,613	255	4.6	1,309	50	304
	2	293	5.4	1,493	272	5.0	1,386	21	107
	1	305	5.6	1,713	271	5.0	1,465	34	248
1992	4	286	5.3	1,534	269	5.0	1,379	17	155
	3	296	5.5	1,641	270	5.0	1,422	26	219

NA = Not available.

Note: Establishments can be new ventures or new affiliates of existing ventures. The rates are openings and closings divided by the total number of establishments.

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

Table A.12 Quarterly Net Job Change by Firm Size, 1992-2008 (In thousands, seasonally adjusted)

Year	Quarter	Total	Firm size 1-19	Firm size 20-499	Firm size 500+	Percent of total 1-19	Percent of total <500
2008	4	NA	NA	NA	NA	NA	NA
	3	-932	-259	-313	-413	26	58
	2	-493	-213	-69	-194	45	59
	1	-270	-139	-19	-144	46	52
2007	4	310	-20	68	203	NA	NA
	3	-241	-79	-114	-62	31	76
	2	192	-47	219	39	NA	NA
	1	470	102	200	106	25	74
2006	4	492	82	93	277	18	39
	3	36	-13	41	-3	NA	NA
	2	410	70	251	97	17	77
	1	787	181	413	123	25	83
2005	4	516	142	88	279	28	45
	3	680	161	201	348	23	51
	2	585	156	291	114	28	80
	1	363	22	170	160	6	55
2004	4	781	201	205	359	26	53
	3	215	62	161	-13	30	106
	2	631	95	263	259	15	58
	1	450	92	228	92	22	78
2003	4	309	110	82	114	36	63
	3	204	99	55	54	48	74
	2	-104	94	-14	-218	NA	NA
	1	-412	-79	-148	-118	23	66
2002	4	-198	29	-127	-129	NA	43
	3	-171	41	-91	-123	NA	29
	2	-38	68	-8	-132	NA	NA
	1	-39	51	-77	50	NA	NA
2001	4	-960	-31	-374	-616	3	40
	3	-1,184	-164	-482	-572	13	53
	2	-792	-46	-331	-479	5	44
	1	-156	24	-156	132	NA	NA
2000	4	295	14	101	172	5	40
	3	296	36	143	137	11	57
	2	492	18	157	272	4	39
	1	789	207	359	291	24	66
1999	4	1,005	213	440	326	22	67
	3	588	92	249	270	15	56
	2	644	68	235	311	11	49
	1	353	123	73	263	27	43
1998	4	768	145	366	209	20	71
	3	742	59	230	512	7	36
	2	610	244	152	197	41	67
	1	711	101	249	508	12	41
1997	4	708	82	302	301	12	56
	3	901	128	384	442	13	54
	2	584	88	199	330	14	47
	1	784	209	322	306	25	63
1996	4	816	157	388	273	19	67
	3	704	182	287	257	25	65
	2	631	118	145	378	18	41
	1	457	118	204	194	23	62

Table A.12 Quarterly Net Job Change by Firm Size, 1992-2008 (In thousands, seasonally adjusted) —continued

Year	Quarter	Total	Firm size			Percent of total	
			1-19	20-499	500+	1-19	<500
1995	4	378	100	276	4	26	99
	3	845	134	355	407	15	55
	2	358	79	118	153	23	56
	1	758	166	326	241	23	67
1994	4	460	69	316	113	14	77
	3	1,288	356	529	432	27	67
	2	905	158	360	375	18	58
	1	559	84	261	169	16	67
1993	4	603	177	356	100	28	84
	3	965	291	428	277	29	72
	2	734	171	274	270	24	62
	1	288	49	160	52	19	80
1992	4	123	85	149	-29	41	114
	3	599	172	259	218	27	66

NA = Not available.

Notes: Size is based on dynamic sizing (see www.bls.gov/news.release/cewfs.tn.htm) and firm sizes may not add to the total as some firms do not have firm size identifiers. Percentages are based on adding the size categories, not the listed total.

More detailed firm size categories and the actual job gain and loss figures are available directly from the data source.

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

Table A.13 Characteristics of Self-employed Individuals, 2000-2007 (thousands unless noted)

Characteristic	2000	2005	2006	2007 Number	2007 Percent	2007 Rate	2000 - 2007 Percent change
Total	**13,832.4**	**15,739.0**	**15,927.0**	**15,861.1**	**100.0**	**10.0**	**14.7**
Female	4,819.6	5,226.6	5,328.1	5,286.7	33.3	7.1	9.7
Male	9,012.8	10,512.4	10,598.9	10,574.4	66.7	12.5	17.3
Asian / American Indian	759.8	879.1	856.0	915.3	5.8	10.1	20.5
Black	679.3	774.8	866.6	927.7	5.8	5.2	36.6
White	12,393.3	13,874.4	14,018.0	13,858.0	87.4	10.7	11.8
Multiple	NA	210.8	186.4	160.1	1.0	8.0	NA
Hispanic	775.6	1,368.1	1,484.1	1,626.4	10.3	7.4	109.7
Age							
<25	375.8	516.5	491.8	473.5	3.0	2.0	26.0
25-34	1,824.3	2,114.1	2,065.5	1,962.2	12.4	5.8	7.6
35-44	3,941.1	3,781.2	3,892.5	3,732.8	23.5	10.5	-5.3
45-54	3,995.0	4,624.6	4,593.7	4,563.4	28.8	12.6	14.2
55-64	2,274.6	3,245.5	3,289.3	3,470.9	21.9	15.2	52.6
65+	1,421.6	1,457.1	1,594.1	1,658.2	10.5	22.9	16.6
Educational level							
High school or less	5,485.1	5,712.9	5,986.7	5,770.7	36.4	9.1	5.2
Some college	3,822.5	4,322.9	4,256.9	4,280.7	27.0	9.2	12.0
Bachelor's degree	2,838.9	3,577.4	3,583.3	3,646.2	23.0	11.5	28.4
Masters' degree or above	1,685.9	2,125.8	2,100.0	2,163.6	13.6	13.0	28.3
Veteran status	2,029.3	1,935.9	1,790.1	1,761.4	11.1	14.4	-13.2
Disability	592.5	754.3	713.4	585.7	3.7	13.4	-1.1
Native-born	12,078.8	13,329.8	13,440.8	13,236.1	83.5	9.9	9.6
Married	10,322.4	11,169.8	11,442.1	11,180.3	70.5	12.7	8.3
Location							
Central city	2,506.2	3,762.5	3,623.4	3,601.1	22.7	8.5	43.7
Suburban	6,095.6	6,752.8	7,225.5	7,147.7	45.1	10.3	17.3
Rural	3,321.5	2,926.5	2,863.9	2,955.7	18.6	12.4	-11.0
Not identified	1,909.1	2,297.2	2,214.2	2,156.6	13.6	9.3	13.0

Notes: Self-employment (incorporated and unincorporated) as primary occupation during the year. Self-employment figures presented here differ from the published monthly annual averages. Asian / American Indian = Asian, Pacific, Hawaiian, American Indian and Aleut Eskimo. Disability consists of disabilities or health problems that restrict or prevent the amount or kind of work. The rate is the self-employment total divided by the number of individuals that had any job during the year.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census, March Supplement to the Current Population Survey.

Table A.14 Characteristics of Employees by Firm Size, 1995 and 2007 (thousands unless noted)

Characteristic	1995			2007			Percent
	<25	25-499	500+	<25	25-499	500+	<500
Total	28,959.8	32,657.2	43,940.7	32,170.4	36,128.8	50,926.9	57.3
Female	13,901.5	14,900.2	20,892.5	14,959.4	16,011.9	24,738.3	55.6
Male	15,058.3	17,757.0	23,048.2	17,211.0	20,116.9	26,188.6	58.8
Asian/ American Indian	1,273.2	1,285.6	1,870.1	1,774.8	1,978.1	3,116.0	54.6
Black	2,337.2	3,598.8	5,568.5	2,854.9	3,927.8	6,578.4	50.8
White	25,349.5	27,772.8	36,502.1	27,125.2	29,779.9	40,524.6	58.4
Multiple	NA	NA	NA	415.6	443.0	707.9	54.8
Hispanic	3,582.5	3,472.1	3,510.6	6,383.8	5,775.4	5,949.4	67.1
Age							
<25	6,833.9	5,792.3	8,463.2	6,259.6	5,640.9	8,981.9	57.0
25-34	7,561.4	9,339.8	11,588.8	7,181.1	8,402.2	11,720.5	57.1
35-44	6,905.2	8,366.4	11,484.7	6,971.2	8,262.1	11,145.5	57.7
45-54	4,078.4	5,551.1	7,773.7	6,370.1	7,832.3	11,181.4	56.0
55-64	2,277.7	2,747.3	3,799.8	3,756.5	4,708.8	6,380.4	57.0
65+	1,303.1	860.3	830.6	1,632.0	1,282.5	1,517.3	65.8
Educational level							
High school or less	16,661.7	16,711.5	19,826.5	16,724.2	16,282.1	19,151.8	63.3
Some college	7,782.1	9,248.6	13,628.1	8,898.3	10,796.5	16,194.2	54.9
Bachelor's	3,349.5	4,938.0	7,541.3	4,703.2	6,398.9	10,917.2	50.4
Master's or above	1,166.4	1,759.1	2,944.8	1,844.8	2,651.2	4,663.7	49.1
Veteran status	2,447.5	3,357.8	5,028.0	1,892.6	2,554.2	3,732.6	54.4
Disability	1,290.8	1,061.8	1,464.4	976.2	905.7	1,265.7	59.8
Native born	24,592.5	28,227.0	39,258.4	25,246.6	29,833.4	43,682.6	55.8
Married	14,721.9	17,809.6	24,356.4	16,120.7	19,225.0	26,604.8	57.1
Location							
Central city	6,839.5	8,256.7	10,594.6	8,986.1	10,050.0	14,046.4	57.5
Suburban	11,970.8	14,082.2	20,357.2	13,451.1	15,594.9	23,152.9	55.6
Rural	6,097.2	5,779.4	6,761.3	5,229.8	5,406.2	6,139.0	63.4
Not identified	4,052.3	4,538.8	6,227.6	4,503.4	5,077.6	7,588.6	55.8

NA = Not available.

Notes: Private sector employment, excluding self-employment (incorporated and unincorporated). Based on longest job during the year.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census, March Supplement to the Current Population Survey.

Table A.15 Bank Lending Information by Size of Firm, 1991-2008
(change in percent of senior loan officer responses on bank lending practices)

		Tightening loan standards		Stronger demand for loans	
Year	Quarter	Large / medium-sized firms	Small firms	Large / medium-sized firms	Small firms
2008	4	84	75	-17	-7
	3	58	65	-4	-15
	2	55	52	0	-16
	1	32	30	-16	-24
2007	4	19	10	-17	-8
	3	8	8	-19	-12
	2	-4	2	-23	-19
	1	0	5	-2	-5
2006	4	0	-2	-4	-13
	3	-9	-2	-2	0
	2	-12	-7	4	4
	1	-11	-7	16	5
2005	4	-9	-5	14	9
	3	-17	-11	41	35
	2	-24	-24	37	37
	1	-24	-13	46	30
2004	4	-21	-18	26	26
	3	-20	-4	31	39
	2	-23	-20	29	38
	1	-18	-11	11	22
2003	4	0	-2	-12	-4
	3	4	4	-23	-12
	2	9	13	-39	-22
	1	22	14	-32	-21
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	-5	-5	5	15

Table A.15 Bank Lending Information by Size of Firm, 1991-2008
(change in percent of senior loan officer responses on bank lending practices)—continued

		Tightening loan standards		Stronger demand for loans	
Year	Quarter	Large / medium-sized firms	Small firms	Large / medium-sized firms	Small firms
1996	4	-8	-12	1	4
	3	-4	-2	12	18
	2	-1	2	10	24
	1	7	4	-3	14
1995	4	-3	-2	3	7
	3	-6	-2	4	25
	2	-6	-7	29	17
	1	-7	-5	35	18
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 the respondents do represent a sizable portion of the market. Small firms are defined as having sales of less than $50 million. The survey asks the following question to gauge lending standards: "Over the past three months, how have your bank's credit standards for approving applications for C&I loans or credit lines (other than those to be used to finance mergers and acquisitions) to large and middle-market firms and to small firms changed?" The survey asks the following question to gauge lending demand: "Apart from normal seasonal variation, how has demand for C&I loans changed over the past three months?"

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

Table A.16 **Loan Rates Charged by Banks by Loan Size, 1998-2008 (loan size is in thousands of dollars)**

		Fixed-rate term				Variable-rate, 2-30 day term				Variable-rate, 31-365 day term			
		1.0-99	100-499	500-999	Min. risk	1.0-99	100-499	500-999	Min. risk	1.0-99	100-499	500-999	Min. risk
2008	Nov	6.76	6.00	5.34	2.43	4.65	4.63	4.28	3.21	6.38	5.79	5.00	3.88
	Aug	6.87	6.27	5.67	6.31	4.88	4.60	4.55	2.88	6.69	5.36	4.76	3.75
	May	6.98	6.04	5.62	4.72	4.91	4.82	4.53	3.35	6.85	5.59	5.03	3.59
	Feb	7.64	6.65	5.86	4.69	5.59	5.66	4.88	4.05	7.35	6.56	5.51	3.99
2007	Nov	8.12	7.58	7.19	5.72	7.22	7.03	6.69	5.69	8.09	7.66	6.95	5.23
	Aug	8.70	7.98	7.71	6.86	7.81	7.60	7.37	6.03	8.61	8.09	7.52	6.03
	May	8.11	8.08	7.65	8.21	7.96	7.57	7.51	5.84	8.69	8.12	7.62	5.85
	Feb	8.68	8.17	7.91	7.32	7.82	7.69	7.32	5.89	8.81	8.01	7.69	6.64
2006	Nov	8.76	8.06	7.77	6.90	7.92	7.67	7.40	5.89	8.61	8.00	7.91	6.27
	Aug	8.97	8.28	7.62	7.57	7.96	7.81	7.64	5.93	8.69	7.77	7.53	6.35
	May	8.38	8.00	7.61	5.65	7.71	7.38	7.25	4.54	8.14	7.61	7.35	5.77
	Feb	8.43	7.64	7.34	6.94	7.19	7.10	6.83	5.09	8.28	7.31	7.36	6.22
2005	Nov	8.07	7.48	6.70	4.98	6.69	6.65	6.38	4.51	7.72	7.41	7.00	4.88
	Aug	7.90	6.89	6.39	4.24	6.09	6.23	5.82	4.12	7.09	6.52	5.65	4.15
	May	7.48	6.44	5.74	3.90	5.74	5.71	5.49	3.79	7.13	6.27	5.27	3.83
	Feb	7.05	6.38	5.82	6.58	5.25	5.08	4.52	3.24	6.61	6.09	5.05	4.42
2004	Nov	6.76	6.21	4.80	4.42	4.52	4.69	4.41	2.62	6.53	5.75	5.08	2.96
	Aug	6.71	5.81	4.54	5.52	4.59	4.06	3.99	2.07	6.25	5.06	4.45	3.33
	May	6.49	5.77	5.24	5.42	4.21	3.73	3.50	1.67	6.05	4.90	3.62	2.54
	Feb	6.80	5.31	3.73	5.50	4.29	3.76	3.41	1.59	6.05	4.58	4.81	1.81
2003	Nov	6.53	5.68	4.99	5.50	4.27	3.79	3.22	1.59	6.11	5.03	3.94	1.81
	Aug	6.68	6.01	5.67	4.85	4.15	3.49	3.69	1.58	6.34	4.74	3.97	2.33
	May	6.84	6.13	5.83	5.62	4.78	3.92	3.34	1.87	6.49	5.56	4.21	2.41
	Feb	6.80	5.31	3.73	4.08	4.29	3.76	3.41	2.64	6.05	4.58	4.81	2.40
2002	Nov	7.34	6.21	5.99	2.84	5.14	4.42	3.93	3.85	7.11	5.51	4.91	3.19
	Aug	7.75	6.51	5.92	6.94	5.05	4.32	3.69	3.74	7.32	5.14	3.88	2.58
	May	7.75	6.81	6.39	4.58	5.06	4.46	3.69	3.05	7.09	6.08	5.13	2.43
	Feb	7.91	6.57	6.41	7.11	5.26	4.31	3.73	2.23	7.28	5.89	4.45	2.70
2001	Nov	7.97	6.83	6.30	5.71	5.53	4.79	4.29	2.59	7.59	6.23	4.56	3.20
	Aug	8.73	7.72	6.63	7.47	7.15	6.46	6.81	4.34	8.60	7.29	6.06	4.83
	May	9.12	8.34	7.40	7.23	7.91	7.25	6.55	5.20	8.87	8.06	6.24	5.24
	Feb	9.84	8.88	8.08	8.13	9.10	8.24	7.51	6.18	9.89	9.11	7.75	6.63
2000	Nov	10.33	9.96	8.66	9.25	9.95	9.24	8.63	7.12	10.18	9.77	8.68	7.82
	Aug	10.44	9.70	8.87	9.23	9.98	9.45	9.31	7.07	10.18	9.32	8.52	7.56
	May	10.01	9.24	8.77	7.90	9.66	9.04	8.68	7.16	9.68	8.90	8.24	7.17
	Feb	9.64	8.81	9.24	7.80	9.31	8.44	7.88	6.88	9.41	8.70	7.88	7.70
1999	Nov	9.44	8.84	8.41	6.51	8.90	8.03	7.50	6.19	9.32	8.38	7.50	7.01
	Aug	9.19	8.71	7.86	6.74	8.79	7.91	7.55	5.76	9.15	8.00	7.55	6.48
	May	8.90	8.28	7.62	6.33	8.36	7.70	7.20	5.26	9.03	8.23	7.77	5.91
	Feb	8.99	8.41	7.90	5.62	8.77	7.68	6.90	6.12	9.05	8.12	6.97	5.83
1998	Nov	9.45	8.51	7.81	5.90	9.15	8.01	7.10	5.69	9.21	8.28	7.04	6.16
	Aug	9.62	8.29	7.97	6.77	9.62	8.66	7.82	6.25	9.60	8.29	7.28	7.06
	May	9.88	8.77	8.57	7.77	9.81	8.78	7.72	6.27	9.76	8.58	7.64	6.20
	Feb	9.81	8.92	8.08	8.96	9.83	8.44	7.47	5.97	9.77	8.72	7.78	6.38

Notes: Minimum risk loans ar designated by banks as having virtually no chance of resulting in a loss based on various characteristics. For fixed-rate minimum risk loans in November 2001, the prime rate was used because of a reporting issue.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the Federal Reserve Board, Survey of Terms of Lending, Statistical Release E.2, various issues, and special tablulations prepared by the Federal Reserve Board.

Table A.17 Capital Expenditures for Employer and Nonemployer Businesses, 1996-2007 (millions of current dollars)

			Structures		Equipment		Capital
		Total	New	Used	New	Used	leases
Total	2007	1,361,633	484,083	45,224	792,399	39,928	20,210
	2006	1,309,939	448,861	39,840	777,059	44,179	24,442
	2005	1,144,783	365,938	35,715	701,247	41,884	18,103
	2004	1,042,060	324,680	44,028	628,591	44,762	17,996
	2003	975,015	305,291	39,350	579,414	50,960	15,641
	2002	997,894	321,191	37,293	598,668	40,741	15,334
	2001	1,109,004	335,538	28,210	706,617	38,639	15,529
	2000	1,161,029	329,525	34,882	750,626	45,996	19,545
	1999	1,046,951	296,496	23,582	689,553	37,320	17,140
	1998	970,898	284,491	44,620	606,210	35,577	16,533
	1997	871,766	254,451	18,849	562,019	36,447	16,066
	1996	807,068	223,588	19,839	526,016	37,625	15,675
Employers	2007	1,277,428	460,477	34,335	752,345	30,271	19,432
	2006	1,217,107	420,090	33,802	734,160	29,055	23,923
	2005	1,062,536	341,223	27,568	664,648	29,096	17,640
	2004	953,171	300,371	35,034	588,110	29,656	17,526
	2003	886,846	281,892	32,128	540,611	32,214	15,137
	2002	917,490	299,941	25,227	564,218	28,103	15,092
	2001	1,052,344	323,871	22,349	679,090	27,033	15,500
	2000	1,089,862	309,541	28,579	718,227	33,515	19,184
	1999	974,630	276,094	17,693	656,344	24,499	16,594
	1998	896,453	260,008	40,275	570,397	25,773	15,631
	1997	772,344	225,107	11,060	515,965	20,212	14,549
	1996	707,107	191,867	12,478	481,785	20,977	13,023
Nonemployers	2007	84,205	23,606	10,888	40,054	9,657	778
	2006	92,832	28,771	6,038	42,899	15,124	519
	2005	82,247	24,715	8,146	36,598	12,787	463
	2004	88,889	24,309	8,993	40,481	15,106	469
	2003	88,169	23,399	7,222	38,803	18,746	504
	2002	80,404	21,250	12,066	34,450	12,638	242
	2001	56,660	11,667	5,860	27,528	11,605	29
	2000	71,168	19,984	6,303	32,399	12,481	361
	1999	72,321	20,402	5,889	33,209	12,821	546
	1998	74,445	24,483	4,345	35,813	9,804	902
	1997	99,422	29,344	7,789	46,054	16,235	1,517
	1996	99,961	31,721	7,361	44,231	16,648	2,652

Notes: Capital leases are included in structures and equipment data. Industry detail for employers can be found at www.census.gov/csd/ace/.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Census Bureau, Annual Capital Expenditures Survey.

APPENDIX B

Research Published by the Office of Economic Research, 2008

Each year, the Office of Advocacy of the U.S. Small Business Administration is tasked with documenting the importance of entrepreneurship to the American economy and with highlighting policy issues of relevance to small firms. This report summarizes the publications produced by the Office of Advocacy's Office of Economic Research in 2008.

Banking and Financial Issues

Uncovering Knowledge Structures of Venture Capital Investment Decision Making

Pankaj Patel and Rodney D'Souza, a working paper released January 2008. United States Association for Small Business and Entrepreneurship (USASBE) Advocacy Best Student Paper Award

www.sba.gov/advo/research/rs315tot.pdf

Entrepreneurs constantly seek capital for new and existing ventures, although they face considerable constraints in obtaining financing. Venture capital from outside investors has been considered an important driver in the startup and growth of entrepreneurial firms. Understanding the specific investment criteria for venture capital funding is of foremost importance, since this may substantially improve these firms' chances of acquiring funding. The authors have chosen to predict funding by measuring the decisions on both funded and unfunded business plans. Overall, the study posits that venture capitalists (VCs) may be willing to fund a marginal team with better venture potential than a good venture team with limited venture potential. In other words, entrepreneurs need not only to assemble an effective team, but also to clearly demonstrate the venture potential of their proposed business. This finding contrasts with most prior studies, which identify the venture team as the key funding criterion.

Small Business and Micro Business Lending in the United States

Victoria Williams and Charles Ou

For data years 2005-2006, released February 2008:

www.sba.gov/advo/research/sbl_06study.pdf

For data years 2006-2007, released June 2008:

www.sba.gov/advo/research/sbl_07study.pdf

See **http://www.sba.gov/advo/research/lending.html** for earlier and later editions.

The Office of Advocacy prepares an annual study of lending to small firms, using the most recent data available on small and micro business loans to small firms and on the lending institutions that serve them. This study provides a brief review of the lending activities based on two types of data reported by banks to their regulating agencies—Consolidated Reports of Condition and Income, often referred to as "Call Reports," and reports required by the Community Reinvestment Act (CRA). Because data are available only by the size of the loan, small business loans are defined as business loans under $1 million, and microbusiness loans are those under $100,000.

The Tax Debts of Small Business Owners in Bankruptcy

Rafael Efrat, released February 2008

www.sba.gov/advo/research/rs317tot.pdf

The objective of this study is to investigate the burden tax obligations impose on small business owners (both individuals and entities) at the time of their bankruptcy filing. This is an important area to study given the existing documentation of the adverse impact tax debts have on the financial viability of petitioners both before and after bankruptcy filing. Overall, this study documents the pervasiveness and the magnitude of the tax burden among small business owners in bankruptcy. The data suggest that the tax burden is more pervasive among small business owners in bankruptcy than among consumer petitioners. While less than a quarter of all consumers in the bankruptcy sample reported tax debts, more than half of individual small business owners reported owing some tax debts. Individual small business owners in bankruptcy proceedings who are encumbered with high tax debts are generally in a precarious financial condition and are worse off financially than small business owners who have low or no tax debt.

What Do We Know About the Capital Structure of Privately Held Firms? Evidence from the Surveys of Small Business Finances

Rebel A. Cole, released May 2008

www.sba.gov/advo/research/rs324tot.pdf

This paper seeks to shed light on what factors determine the capital structure at privately held firms. The capital structure decision—a fundamental issue facing financial managers—is, in its simplest form, the selection of a ratio of debt to equity for the firm. This study contributes to the capital structure literature in at least three important ways. First, it provides results from the first test of two major competing hypotheses—the "pecking order theory" and the "tradeoff theory"—based upon data from small privately held U.S. firms. Second, the study provides new evidence of the degree of leverage used by small privately held companies and how their use of leverage differs from small publicly traded firms. Samples of data on small privately held firms are compared with data on small publicly traded firms taken from the Compustat database. Third, the study presents new evidence on how the use of financial institutions influences capital structure, testing whether firms that obtain financial services from a larger pool of financial institutions are able to employ more leverage.

The Importance of Angel Investing in Financing the Growth of Entrepreneurial Ventures

Scott Shane, a working paper released September 2008

www.sba.gov/advo/research/rs331tot.pdf

Many observers consider angel investments to be one of the key drivers behind the startup and the growth of new businesses, despite a paucity of information to confirm whether or not this is true. Unlike venture capital investments, angel investments are made by individual investors who do not make up a known population. Therefore, much of what is reported about angel investing comes from anecdotes and surveys of convenience samples, which are prone to biases and inaccuracies. Moreover, research on angel investment is plagued by definitional confusion, in which different investigators conflate informal investors, friends and family who invest in startups, accredited and unaccredited angel investors, and individual and group investing. The variation makes it difficult to compare findings across studies. As a result, this paper finds that the angel capital market is smaller than is generally believed. Few companies are appropriate for angel financing, a fact that limits demand for this source of financing. Angel investments are smaller and less sophisticated and include more debt than is commonly thought. And the companies that receive angel financing are more similar to typical startups.

Energy

Characterization and Analysis of Small Business Energy Costs

Andy Bollman, E.H. Pechan and Associates, Inc., released April 2008

www.sba.gov/advo/research/rs322tot.pdf

To add to the state of knowledge on small entity impacts of energy price increases, this report compiles available information to characterize the potential impact of energy price increases on small entities in individual industry sectors and to identify whether, and to what extent, small entities face higher energy prices by major economic sector. Overall, this study finds that small entities in the manufacturing and construction sectors pay higher prices for most, but not all, fuels. These price disparities are most pronounced for electricity and natural gas, with electricity in the manufacturing sector responsible for the greatest price differential. The smallest size establishment category (under 50 employees) pays 35 percent more for electricity than the sector average, while the largest establishment category (1,000 or more employees) pays 17 percent less than the sector average. Therefore, small manufacturing sector entities that use substantial amounts of electricity face a significant competitive disadvantage.

General Small Business and Entrepreneurship

Quarterly Indicators: The Economy and Small Business

Chad Moutray
Fourth quarter 2007, released February 2008:
www.sba.gov/advo/research/sbqei0704.pdf
First quarter 2008, released May 2008:
www.sba.gov/advo/research/sbqei0801.pdf
Second quarter 2008, released August 2008:
www.sba.gov/advo/research/sbqei0802.pdf
Third quarter 2008, released November 2008:
www.sba.gov/advo/research/sbqei0803.pdf

This regular publication pulls together data from a variety of sources to highlight quarterly economic trends relevant to small businesses.

Rural and Urban Establishment Births and Deaths Using the U.S. Census Bureau's Business Information Tracking Series

Lawrence A. Plummer and Brian Headd, a working paper released February 2008

www.sba.gov/advo/research/rs316tot.pdf

This paper has two objectives focusing on local business dynamics. First, it documents a set of establishment birth and death tabulations now available from the U.S. Census Bureau's Company Statistics Division. These tabulations report establishment births and deaths by industry classification for every county in the United States from 1990 to 2003. In particular, tabulations report the total, single-unit, and multi-unit births and deaths. Second, it presents preliminary descriptive analysis of the establishment birth and death rates by rural and urban counties. The rural-urban analysis gives a surprising result.

When measured by either of two analytical methods (ecological or labor force) the differences in the average rates of establishment births and deaths for urban and rural areas are extremely small. While the difference is statistically significant, on average, the general dynamic of economic activities is not a function of rural versus urban conditions. This result has implications for the setting and study of economic development policy for both rural and urban areas, especially where such policies hinge on stimulating and supporting local entrepreneurial activity (i.e., "economic gardening").

High-Impact Firms: Gazelles Revisited

Zoltan Acs, William Parsons, and Spencer Tracy, released June 2008

www.sba.gov/advo/research/rs328tot.pdf

This study revisits and expands upon some of the conclusions on rapidly growing firms made by the small business research pioneer, David Birch, in the 1980s. Birch found that rapidly growing firms, which he termed "gazelles," are responsible for most employment growth. While Birch's definition of gazelles was based on their revenue growth, this study examines firms with significant revenue growth and expanding employment. These are termed "high-impact firms" to distinguish them from gazelles. The research offers summary statistics helping to define the scope and characteristics of high-impact firms. Overall, it finds that high-impact firms are relatively old and rare, and that they contribute to the majority of overall economic growth. On average, they are 25 years old, they represent between 2 and 3 percent of all firms, and they account for almost all of the private sector employment and revenue growth in the economy.

Do Business Definition Decisions Distort Small Business Research Results?

Brian Headd and Radwan Saade, a working paper released August 2008

www.sba.gov/advo/research/rs330tot.pdf

One of the most basic assumptions underpinning research on small business status and performance (as well as the impact of other factors on small business) is the definition of a small business, or the choice of a business unit. This paper shows that mixing data on different kinds of businesses can distort research results. It accomplishes this by showing that differences exist among business types and emphasizing that the choice of business type at the outset of research is significant. Overall, the authors find that the typical nonemployer firm and employer firm differ. The most immediately obvious difference is their size and number. Employers are larger operations, but nonemployers outnumber employer firms by a three-to-one ratio. Pooling data on both groups creates hazards in results and interpretation. And using one group to deduce results for the other group or the group as a whole also poses logical problems. With nonemployers representing three out of four businesses, researchers should be aware that results of business studies that include nonemployers will tend to reflect trends among nonemployers because of their overwhelming number. On the other hand, the results of research focusing just on employers will most likely not apply to nonemployers.

Frequently Asked Questions

Chad Moutray, released September 2008

www.sba.gov/advo/stats/sbfaq.pdf

This document serves as a summary of other research materials and provides a series of quick, easy-to-recite facts for an external audience to recognize the importance of small business to the economy. As such, it is an excellent "introductory" publication for individuals to acquaint themselves with Office of Advocacy research and data.

Looking Ahead: Opportunities and Challenges for Entrepreneurship and Small Business Owners

Chad Moutray, a working paper released October 2008

www.sba.gov/advo/research/rs332tot.pdf

This paper was prepared for presentation at "Entrepreneurship in a Global Economy," a conference sponsored by the Western New England College's Law and Business Center for Advancing Entrepreneurship, held in Springfield, Massachusetts, on October 17, 2008. It outlines some of the most important issues and opportunities facing small business owners and entrepreneurs in 2008. While it does not delve into policy solutions, the incoming administration will almost certainly need to address many of them.

Small Business Profiles for the States and Territories

Brian Headd and Victoria Williams, released November 2008

http://www.sba.gov/advo/research/profiles/

The economic condition of small businesses in the United States overall and in each of the 50 states, the District of Columbia, and the U.S. territories is illustrated. Each state profile contains sections on the following topics: the number of firms, industry composition, small business income, banking, women's and minority business ownership, and employment.

Human Capital and Employment Benefits

Changes in Family Health Insurance Coverage for Small and Large Firm Workers and Dependents: Evidence from 1995 to 2005

Eric E. Seiber and Curtis S. Florence, released March 2008

www.sba.gov/advo/research/rs321tot.pdf

Access to and affordability of health insurance offered by business owners to employees continue to be of great concern. The cost of employer-sponsored health insurance is often cited as one of the most pressing problems affecting the provision of health insurance for small business owners. The objective of this study is to determine whether the decline in family health insurance coverage at large firms has increased financial pressure on plans sponsored by small firms. The study addresses family health insurance coverage from the worker's perspective. Overall, this study finds that family health insurance coverage for workers in both small and large firms is decreasing, and that firm size plays a role in the type of dependent coverage children have. Access to coverage through a large firm as a dependent remains very important to small firm employees.

Human Capital and Women's Business Ownership

Darrene Hackler, Ellen Harpel, and Heike Mayer, released April 2008

www.sba.gov/advo/research/rs323tot.pdf

This analysis shows that self-employed women differ on most human capital variables compared with women who are wage-and-salary earners. The study finds that self-employed women have more education and increase their educational attainment at a faster rate than other working women. The percentage of self-employed women in managerial occupations consistently exceeds the rate for other working women, and self-employed women participate in different industries than other working women. Self-employed women are also more likely to be self-employed in the previous year, are older than wage-and-salary-earning women, and have greater income diversity.

Self-employed men and women differ little in education, experience, and preparedness—at least by the end of the study period. Important differences remain in occupational and industry experience. A lower percentage of self-employed women than of self-employed men hold managerial occupations, and women have lower rates of self-employment in industries where there is less overall female participation (such as communications, transportation, wholesale trade, manufacturing, and construction).

Baccalaureate Education and the Employment Decision: Self-Employment and the Class of 1993

Chad Moutray, a working paper released October 2008
www.sba.gov/advo/research/rs333tot.pdf

This paper delves into the relationship of collegiate education to the employment decision. Specific characteristics are identified for individuals who are self-employed versus those who opt to work for a for-profit business, a not-for-profit entity, or the government (including the military). Specifically, this research utilizes the U.S. Department of Education's Baccalaureate & Beyond (B&B) data series, which tracks college and university graduates in the class of 1993. This longitudinal survey asks a number of questions to a nationally representative sample of college and university students who were seniors in the 1992-1993 academic year. The same students answer follow-up questions periodically. In the case of the B&B data, there is information from subsequent questionnaires in 1994, 1997, and 2003. Much of the analysis in this paper focuses on employment in 2003, i.e., 10 years after graduation. Overall, this study shows that the self-employed closely resemble the larger population in many ways. Unlike others who pursue wage-and-salary occupations in the not-for-profit or government sectors, students in the class of 1993 who were self-employed in 2003 were less likely to have earned or be currently enrolled in graduate education. Graduates with social science and "other" majors were more likely to be self-employed. In addition, individuals who chose self-employment had shorter job tenures than others, such as those who now work for government or the military.

International Trade

The Impact of International Competition on Small-firm Exit in U.S. Manufacturing

Robert M. Feinberg, released March 2008

www.sba.gov/advo/research/rs320tot.pdf

This econometric study uses Statistics of U.S. Businesses (SUSB) data to examine the impact of trade on small manufacturers. As global trade increases and currency exchange rates fluctuate, concerns about their impact on small U.S. manufacturers increase. Small manufacturers, by the nature of their scale of operations, are less able to insulate themselves from foreign competition than large manufacturers. Large manufacturers have greater leeway in managing the effects of international competition: they can move production offshore, sign long-term commodity contracts in foreign currencies, or use other tactics to weather global shifts. Overall, this study finds that increased international pressures in the form of currency exchange rates lead to increased exit rates among very small manufacturers (those with fewer than 20 employees). Slightly bigger manufacturers (20-499 employees) are less sensitive to changing conditions in the international marketplace. High-tech industries are more insulated from international pressures than low-tech industries.

Offshoring and U.S. Small Manufacturers

StratEdge, a working paper released December 2008

www.sba.gov/advo/research/rs336tot.pdf

At present, little is known about the effects of outsourcing, insourcing, or offshoring on small business, or for that matter, what role small firms play in the phenomenon. This study finds that offshoring, outsourcing, and insourcing do not follow any constant pattern across small firms, but vary greatly by industry, just as with larger firms. Results of empirical tests of changes in small firm employment do not yield significant results with respect to the effects of outsourcing, offshoring, or insourcing. The preliminary results in this paper should not be taken as the final word on how changes in the alignment of global production capacity have affected small American businesses. It would be more accurate to say that these results show that there is no simple answer to this difficult puzzle. This paper can at least lay to rest any claim that globalization is either universally detrimental or beneficial to small firms. It appears that a more accurate statement would be that both large and small firms located in the United States have benefited and suffered from outsourcing. The case studies in the second part of the paper drive home this fact.

Innovation and Technology

High-Impact Firms: Gazelles Revisited

Zoltan Acs, William Parsons and Spencer Tracy, released June 2008

www.sba.gov/advo/research/rs328tot.pdf

See entry description under General Small Business and Entrepreneurship.

An Analysis of Small Business Patents by Industry and Firm Size

Anthony Breitzman and Diana Hicks, released November 2008

www.sba.gov/advo/research/rs335tot.pdf

This study is the third in a series that examines small business patent activity. The authors find that small firms are a significant source of innovation and patent activity. Small businesses develop more patents per employee than larger businesses, with the smallest firms, those with fewer than 25 employees, producing the greatest number of patents per employee. Furthermore, small firm patents tend to be more significant than large firm patents, outperforming them in a number of categories including growth, citation impact, and originality. Finally, small firms tend to specialize in high tech, high growth industries, such as biotechnology, pharmaceuticals, information technology, and semiconductors.

Owner Demographics

Human Capital and Women's Business Ownership

Darrene Hackler, Ellen Harpel, and Heike Mayer, released April 2008

www.sba.gov/advo/research/rs323tot.pdf

See the entry description under Human Capital and Employment Benefits.

Estimating the Contribution of Immigrant Small Business Owners to the U.S. Economy

Robert W. Fairlie, released November 2008

www.sba.gov/advo/research/rs334tot.pdf

The objective of this study is to provide a set of estimates of immigrant business owners in the U.S. economy. Using data from three large nationally representative government datasets—the 2000 Census 5 Percent Public Use Microdata Sample

(PUMS), the 1996-2007 Current Population Survey (CPS), and the 1992 Characteristics of Business Owners (CBO)—this study also examines the contribution of immigrant businesses to the U.S. economy. The author finds that according to Census 2000, immigrants constitute 12.2 percent of the total U.S. work force and 12.5 percent of the total population of U.S. business owners. The total business income generated by immigrant business owners is $67 billion, representing 11.6 percent of all business income in the United States. Immigrant business ownership is geographically concentrated in a few states.

Procurement

The HUBZone Program Report

Henry Beale and Nicola Deas, Microeconomic Applications, Inc., released May 2008

www.sba.gov/advo/research/rs325tot.pdf

Public Law 108-447 directed the Office of Advocacy to conduct a study measuring the effectiveness of the definitions under Section 3(p)(4) of the Small Business Act (15 U.S.C. 632(p)(4) for the purposes of economic impact on small business development and job creation. This section of the law is commonly referred to as the HUBZone program. This study examines the impact of the definitional changes to the HUBZone program.

Regional Economic Development

Rural and Urban Establishment Births and Deaths using the U.S. Census Bureau's Business Information Tracking Series

Lawrence A. Plummer and Brian Headd, a working paper released February 2008

www.sba.gov/advo/research/rs316tot.pdf

See entry description under General Small Business and Entrepreneurship.

Regulation and Law

Entrepreneurship and the Barrier to Exit: How Does a Bankruptcy-friendly Law Affect Entrepreneurship Development at a Societal Level?

Seung-Hyun Lee, Yasuhiro Yamakawa, and Mike W. Peng, a working paper released June 2008, Babson Entrepreneurship Research Conference Advocacy Best Paper Award

www.sba.gov/advo/research/rs326tot.pdf

How a society's formal institutions, such as bankruptcy laws, govern bankrupt entrepreneurs and firms is an important component of the institutional framework within which entrepreneurs and firms operate. The authors examine the relationship between bankruptcy law and the value-creating activities in a society associated with risk-taking behaviors by entrepreneurial firms. They find that a lenient, entrepreneur-friendly bankruptcy law encourages entrepreneurs to take risks and thus lets entrepreneurship prosper. This risk-taking can generate variety in the economy by increasing the number of firms with high growth potential, which may lead to more entrepreneurship and economic development—in short, failure may be good for the economy. The study supports a more informed understanding of how formal institutions governing bankruptcy influence entrepreneurial behavior and outcomes. It emphasizes that a society not willing to absorb the "pain" of having a large number of entrepreneurial failures, via an entrepreneur-friendly bankruptcy law, is not likely to reap the "gain" of vibrant entrepreneurship development and economic growth.

Analyzing the Impacts of Antitrust Laws and Enforcement on Small Business

Innovation and Information Consultants, Inc., released July 2008
www.sba.gov/advo/research/rs329tot.pdf

The study investigates how antitrust laws and enforcement in the retail grocery and timber industries affect small firms. Looking at two industries (retail grocery and timber), the researchers find that, independent of the type of enforcement activity, the number of small grocery retailers declined over time. In the timber industry, the vertically integrated dominant firm hoarded the input of its small competitors downstream, forcing their exit.

Taxation

The Tax Debts of Small Business Owners in Bankruptcy

Rafael Efrat, released February 2008
www.sba.gov/advo/research/rs317tot.pdf

See entry description under Banking and Financial Issues.

Other Office of Advocacy Publications

Report on the Regulatory Flexibility Act, FY 2007

Cheryl Johns, released February 2008
www.sba.gov/advo/laws/flex/07regflx.pdf

The Regulatory Flexibility Act (5 U.S.C. 601-612) requires federal agencies to consider the effects of their regulatory actions on small businesses and other small entities and to minimize any undue disproportionate burden. The chief counsel for advocacy of the U.S. Small Business Administration is charged with monitoring federal agencies' compliance with the act and with submitting an annual report to Congress. This annual report illustrates the regulatory flexibility accomplishments of FY 2007.

Background Paper on the Office of Advocacy, 2001–2008

Joseph Sobota, editor, released November 2008

www.sba.gov/advo/backgr08.pdf

This report summarizes the mission, activities, and accomplishments of the Office of Advocacy from 2001 to 2008.

CONTENTS OF PREVIOUS EDITIONS

The Small Business Economy: A Report to the President, 2001–2008

The State of Small Business: A Report of the President, 1982–2000

Editions of *The Small Business Economy* and *The State of Small Business* for 1996 through the present are available on the Office of Advocacy website at http://www.sba.gov/advo/research/ or by contacting the Office of Advocacy at 202 205-6933. Earlier editions of *The State of Small Business* may be accessed through the National Technical Information Service at www.ntis.gov or National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22161, (800) 553-6847 or (703) 605-6000, TDD (703) 487-4639.

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A REPORT OF THE PRESIDENT

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