

# Office of Economic Research

## **Research Publications 2002-2003**

September 2004

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# Office of Economic Research

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**Office of Advocacy**  
U.S. Small Business Administration  
Washington, D.C.  
September 2004

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# Foreword

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

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

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

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

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

2 Acs, Zoltan J. and Catherine Armington. "Endogenous Growth and the Entrepreneurial Activity of Cities." , U.S. Census Bureau, Center for Economic Studies, Working Paper #CES-WP-03-02, January 2003.

3 Joel Popkin and Company. Small Business Share of Economic Growth. U.S. Small Business Administration. Office of Advocacy, Contract #SBAHQ-00-C-0001, January 2002.

4 Joel Popkin and Company. Small Business Share of NAICS Industries. U.S. Small Business Administration, Office of Advocacy, Contract #SBAHQ-01-M-0156, September 2002.

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

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

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

All of the studies described in this document are available on the Internet at <http://www.sba.gov/advo/stats>. Those interested in receiving email notifications regarding economic research or other information from the Office of Advocacy should join the Listserv at <http://web.sba.gov/list>.



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<sup>5</sup> Headd, Brian. "Redefining Business Success: Distinguishing Between Closure and Failure." *Small Business Economics*, 21 (1), August 2003, 51-61.

<sup>6</sup> Boden, Richard J.. "Analyses of Business Dissolution by Demographic Category and Business Ownership." Office of Advocacy, U.S. Small Business Administration. Contract #SBAHQ-00-M-0497, March 2001.

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# Office of Economic Research

## Research Publications 2002-2003

Banking/Finance

Small Business and Micro Business Lending in the United States, 2002 Edition

Charles Ou, Economist, Office of Advocacy; Advocacy Report, September 2003

[http://www.sba.gov/advo/stats/lending/2002/sbl\\_study.pdf](http://www.sba.gov/advo/stats/lending/2002/sbl_study.pdf)

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

### **Financing Patterns of Small Firms: Findings from the 1998 Survey of Small Business Finance**

Charles Ou, Economist, Office of Advocacy; Advocacy Report, September 2003

[http://www.sba.gov/advo/stats/ssbf\\_98.pdf](http://www.sba.gov/advo/stats/ssbf_98.pdf)

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



**Impact of Tight Money and/or Recessions on Small Business**

PM Keypoint LLC; Research Summary #230, June 2003

<http://www.sba.gov/advo/research/rs230tot.pdf>

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

**Assessing the Profitability and Riskiness of Small Business Lenders in the Banking Industry**

James W. Kolari; Research Summary #229, May 2003

<http://www.sba.gov/advo/research/rs229tot.pdf>

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

**An Exploration of a Secondary Market for Small Business Loans**

Kenneth Temkin and Roger C. Kormendi, Gardner Partners

Research Summary #227, April 2003;

[http://www.sba.gov/advo/research/rs227\\_tot.pdf](http://www.sba.gov/advo/research/rs227_tot.pdf)

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

**A Profile of Owners and Investors of Privately Held Businesses in the United States, 1989-1998**

George W. Haynes, Associate Professor, Montana State University, and Charles Ou, Economist, Office of Advocacy; Advocacy Working Paper, November 2002

<http://www.sba.gov/advo/stats/wkp02co.pdf>

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

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

Jonathon Zinman, MIT dissertation chapters 1 and 2

Research Summary #223, November 2002;

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

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

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

Charles Ou, Economist, Office of Advocacy; Advocacy Report, November 2002

[http://www.sba.gov/advo/stats/lending/2001/sbl\\_study.pdf](http://www.sba.gov/advo/stats/lending/2001/sbl_study.pdf)

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

**Estimation of Small Business Wealth**

Joel Popkin and Company; Research Summary #217, September 2002

<http://www.sba.gov/advo/research/rs217tot.pdf>

In this study, wealth was measured by an equity-based market value of the business. Total small business wealth grew from \$3.4 trillion in 1990 to \$8.3 trillion in 2000. Total business wealth was \$19.4 trillion in 2000. Meanwhile, corporate wealth quadrupled over the same period as the value of the stock market skyrocketed. Small firms, often privately held, were not as affected by the stock market valuation increases. Hence, small businesses' share of total wealth declined from 59.3 percent to 42.8 percent of the total from 1990 to 2000.

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

Banking/Finance

Charles Ou, Economist, Office of Advocacy; Advocacy Report, August 2002

[http://www.sba.gov/advo/stats/02micro\\_study.pdf](http://www.sba.gov/advo/stats/02micro_study.pdf)

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

### **Emission Trading for Small Business**

Environmental  
Issues

Jack Faucett Associates; Research Summary #216, March 2002

<http://www.sba.gov/advo/research/rs216tot.pdf>

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

### **Expected Costs of Startup Ventures**

General Small  
Business

Blade Consulting Company, Research Summary #232, November 2003

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

Using the Panel Study of Entrepreneurial Dynamics, this study explores the expected startup costs of nascent entrepreneurs. These "would-be" entrepreneurs felt that they needed little in the way of startup funds to begin a venture, on average \$6,000 for solo

## General Small Business

ventures. Their income expectations were in line with the equivalent of high wages, on average \$90,000 by the fifth year of existence for solo ventures. Team ventures, by contrast, had higher expectations in terms of initial funds needed, fifth-year wages, and fifth-year income projections. This makes team ventures more likely to develop into employer firms. Policies that encourage team-owned businesses or networking among entrepreneurs might help foster "growth startups."

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

Brian Headd, Economist, Office of Advocacy; Small Business Economics (journal), August 2003

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

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

### **Small Business during the Business Cycle**

Joel Popkin and Company; Research Summary #231, July 2003

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

Firm size differences related to the economic cycle are differentiated here from differences that might be related to longer term economic trends. The study also looks at various quarterly indicators produced by small business surveys to determine what, if any, insights they provide into where small businesses are in relation to the economic business cycle. The study finds that industries react differently to changes in the business cycle. Within some industries, primarily those that produce goods, there are noticeable differences between small and large business activities related to cyclical changes. In the construction industry, small business gross domestic product (GDP)

fluctuates much more than large business GDP. The service industry reflects little difference between small and large firms in response to the business cycle. An assessment of the National Federation of Independent Business's (NFIB) optimism index found that a value above 103 indicates an expansionary mode for small business GDP.

#### **Small Business Economic Indicators**

2002 Edition (June 2003), 2001 Edition (February 2003), 2000 Edition (January 2002)

Brian Headd, Economist, Office of Advocacy; 2002:

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

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

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

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

Chad Moutray, Chief Economist, and Brian Headd, Economist, Office of Advocacy

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

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

#### **A Longitudinal Analysis of Industry, Enterprise, and Behavioral Predictors of SME Inter-Firm Cooperation**

Robert Hartl, Research Fellow, DePaul University, and Doctoral Student, University of St. Gallen, Switzerland; Advocacy Working Paper, January 2003

<http://www.sba.gov/advo/stats/wkp03rh.pdf>

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

## General Small Business

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

Released by the White House November 2002

[http://www.sba.gov/stateofsb99\\_00](http://www.sba.gov/stateofsb99_00)

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

### **Small Business Share of NAICS Industries**

Joel Popkin and Company; Research Summary #218, September 2002

<http://www.sba.gov/advo/research/rs218tot.pdf>

The United States adopted the North American Industrial Classification System (NAICS) in 1997 to replace the Standard Industrial Classification (SIC) system. This new system unified the classifications used by the United States, Canada, and Mexico. This study estimated the small business shares of industries using the new system. Changes from SIC to NAICS affected the overall shares from sector to sector. This research concluded that the industries with the highest concentration of small businesses were construction (90 percent); arts, entertainment, and recreational services (76 percent); real estate, rental, and leasing (74 percent); other services (71 percent); professional and technical, administrative, support, and waste management (65 percent); and wholesale and retail trade (64 percent). Other shares included educational services (43 percent); finance and insurance (29 percent); health and social services (57 percent); and mining and manufacturing (30 percent).

### **Small Business State Profiles**

2003 Edition (August 2003), 2002 Edition (August 2002)

Vicky Williams, Economist, Office of Advocacy

<http://www.sba.gov/advo/stats/profiles/>

Building on information gathered from the Small Business Economic Indicators report, these profiles provided an overview of the important role small businesses play in each

state. They include baseline statistics on each state's small business economy-number of firms, small business income, industrial composition, job growth and data on minority- and women-owned businesses.

## General Small Business

### **Small Business Share of Economic Growth**

Joel Popkin and Company; Research Summary #211, January 2002

<http://www.sba.gov/advo/research/rs211tot.pdf>

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

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

Mary Ellen Mogee; Research Summary #228, April 2003

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

## Innovation and Technology

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



**Self-Employment and Technology**

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

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

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

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

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

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

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

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

## **Innovation and Technology**

BJK Associates; Research Summary #222, October 2002

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

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

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

Joanne H. Pratt; Research Summary #220, October 2002

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

Electronic commerce has allowed small business owners to rethink their business strategies. Technological improvements have made the cost of setting up an Internet site relatively low; thus, small businesses could capitalize in a niche market with little start-up investment, without the traditional "brick and mortar" structures, and without being in a central location for distribution purposes. In addition, the ability to do a keyword search meant that businesses could successfully market their niche without expensive mass mailings. The researchers found that the smallest firms (with fewer than 10 employees) benefited the most from being online: 35 percent gained 10 to 99 percent of their current sales directly or indirectly from their websites.

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

Jack Faucett Associates; Research Summary #212, January 2002

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

This study explored the impact of the Internet in the automobile retail sector. Eighty percent of U.S. new car dealers were small businesses, and new vehicle sales accounted for approximately 19 percent of total U.S. retail sales. In 2000, 83 percent of dealerships had a website, and on average dealers completed 6.2 percent of sales exclusively over the Internet. Twelve percent of dealers used the Internet for business-to-business transactions with their suppliers. Dealerships that used the Internet longer tended

## Information and Technology

to experience greater results than those with a shorter experience in e-commerce. Meanwhile, state franchise laws, while favoring small business interests, also tended to make it more difficult to enter the online auto market.

## Labor Market

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

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

Research Summary #224, January 2003

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

This study looks at the non-care costs to insurers of small firm health policies and compares the value of the health care products that small and large firms buy. It finds that the prices that small and large firms paid for health insurance and the value of the products purchased are more similar than expected. However, insurers of small health plans have higher administrative expenses than those who insure larger companies. Sales, underwriting, and operating expenses are all higher for small health plans. Considering these expenses, it is unclear why small firms' insurance prices appear to be similar to what large firms pay. At least part of the explanation may be that small firms received slightly less generous health insurance benefits, according to calculations of actuarial value. Legislation has been proposed to exempt association health plans (AHPs) from rate regulation and state benefit mandates. The researchers' analysis indicates that AHPs have the potential to lower insurance premiums for small firms by freeing employers from direct and indirect state taxation, some mandated benefits, and the cost of compliance with multiple state regulations.

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

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

Research Summary #213, January 2002;

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

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

firms were less likely to provide any form of training to their employees. That said, firms that did use the government training programs were generally pleased with them.

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

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

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

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

### **The Impact of Contract Bundling on Small Business, FY 1992 - FY 2001**

Eagle Eye Publishers, Inc.; Research Summary #221, October 2002

<http://www.sba.gov/advo/research/rs221tot.pdf>

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

## Procurement

## Regulation

### **Analysis of State Efforts to Mitigate Regulatory Burdens on Small Business**

Management Research and Planning Corporation; Research Summary #219,  
September 2002

*<http://www.sba.gov/advo/research/rs221tot.pdf>*

This report explored the extent of efforts at the state level to protect the interests of small businesses in the regulatory process. In particular, it assessed whether states have an entity similar to the Office of Advocacy at the federal level. For instance, did they have similar legislative authorities such as the Regulatory Flexibility Act (RFA) of 1980 and the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, or did they have similar executive orders such as 12866 (concerning regulatory planning and review) of 1993 or 13272 (on proper consideration of small entities in agency rulemaking) of 2002. Efforts of each of the states were detailed, but the authors cited five states that were more effective than others in considering the small business economic effects of their rules-Arizona, California, Illinois, New York, and Virginia.

### **An Evaluation of Compliance with the Regulatory Flexibility Act by Federal Agencies**

Consad Research Corporation; Research Summary #215, March 2002

*<http://www.sba.gov/advo/research/rs215tot.pdf>*

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

### **Rules Versus Discretion in Tax Policy**

Tax

Radwan Saade, Economist, Office of Advocacy; Advocacy Working Paper, November 2002

<http://www.sba.gov/advo/stats/wkp02rs.pdf>

The research suggested that the rules-versus-discretion debate is relevant to tax policy, and dealt with issues not related to arguments about the appropriate size of government. The study extended the Barro Gordon (1983a) framework to evaluate the proper role for rules in fiscal policy. The method suggested in this study emphasized the importance of the unexpected changes in tax rates, and recognized that they are a direct consequence of discretionary fiscal policy. A theoretical model was developed to demonstrate that an "infinitely lived" policymaker would favor rules that resist unforeseen changes in future tax rates. Rules were proven sustainable. Upon introducing discount rates (e.g., a finite term for the policymaker), the study demonstrated that it is rational for the tax authority to favor a discretionary regime over rules. In that setting, the rule's equilibrium was no longer inherently sustainable, hence the call for explicit binding constraints.

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

Women and  
Minorities

Ying Lowrey, Economist, Office of Advocacy; Advocacy Report, March 2003

[http://www.sba.gov/advo/stats/rwosp\\_03.pdf](http://www.sba.gov/advo/stats/rwosp_03.pdf)

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

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

Richard J. Boden, Associate Professor, University of Toledo, and Brian Headd, Economist, Office of Advocacy; *Business Economics* (journal), October 2002

This paper added to the limited literature on owner demographics for business survival. Using hazard models, the authors found differences across race and gender of ownership in business dissolution rates and factors related to dissolution.

Unconditionally, white non-Hispanic owners had their highest survival rates in goods-producing industries, while the other owner groups fared better in services. In fact, industries largely differed with respect to survival factors for the different owner groups, making economy-wide generalizations for owner groups problematic. The findings largely corroborated what other researchers have found, but did so with the most robust data source to date, a matched U.S. Census Bureau database of employers and owner demographics.

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

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

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

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