

**Background Paper
on the
Office of Economic Research**

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Contents

Section I Introduction	1
Section II Developing Usable Statistical Information from Existing Databases	3
Bank Lending and Small Business State-by-State Bank Rankings	3
Bank Merger Impacts on Small Business	4
Small Business Credit Needs and Borrowing Patterns	4
Assets of Privately Owned Businesses: The Consumer Finance Survey	4
Procurement Studies	5
Section III Develop Databases	5
Databases under Development	6
Census-Based Data	6
IRS-Based Data	7
Entrepreneurial Research Consortium-Based Data	7
Reports Using the Databases	8
The State of Small Business	8
Small Business Economic Indicators	8
State Small Business Profiles	8
Measuring Regulatory Impacts	9
Section IV Initiate Research	9
Internal Research	9
Women- and Minority-Owned Firms	10
Mergers and Acquisitions	10
Employment Generation and Firm Startup and Closure	10
E-commerce	11
Equity Capital Financing	12
External Research	12
Small Business Survival with Large Multi-Unit Retail Firms	13
Home-Based Business	13
Joint Funding of Large Studies	13
Conferences as Research Vehicles	13
Section V Disseminate Research	14
Stakeholders of Economic Data	14
Changing Technology for Increasing the Impact of Information	15
Conferences as Information Vehicles	15
Special Handling	15
A Variety of Avenues for Reaching Stakeholders	16

Section VI What Remains to be Done	16
Database Development	17
Develop a New BITS File for Non-Employer Firms	17
Develop Databases that Contrast Rural with Urban Areas	17
Fund a New Characteristics of Business Owners Survey	17
Research Topics	18
Develop Estimates of the Importance of Small Business in the Creation of Wealth	18
Update the Innovation Study	18
Develop Estimates of the Share of Productivity Gains by Small Business	19
Appendices	
A. Current Structure and Future Needs	20
B. Office of Advocacy Research Reports and Publications, 1994-2000	21
C. Advocacy-Sponsored Research Still Pending	27

Section I Introduction

This document describes the role and efforts of the Office of Economic Research (OER) in the Office of Advocacy of the U.S. Small Business Administration. Given the coming change of administrations, it is a logical time to take stock of where we are today. Understanding the now means also looking at where we have been and where we need to go to ensure the continued growth in our understanding of the importance of small business in our economy and the impacts that government regulation has on it.

With the passage of Public Law 94-305, the Congress established the Office of Advocacy in 1976 to be an independent voice for small business. It is the only entity within the federal government mandated to measure the contribution of small firms. Upon the appointment of the first chief counsel for advocacy in 1978, the Office of Economic Research (OER) was created.¹ At that time, both the chief economist and the director of economic research were appointed, with the director of economic research managing the staff, the research budget, and the request for proposal (RFP) process.

The mission of OER was and remains:

To conduct, sponsor, and report on economic research to ensure that federal legislative, executive and judicial branches of government are supportive of the health and growth of small business.

The basic problem in accomplishing this mission was that there were almost no national data on small business activity from the governmental statistical agencies, and therefore no empirical research beyond some small samples of entrepreneurial behavior. Therefore, the staff of economists—more than 20 in the early 1980s—specialized in unique topic areas that were important to understanding small businesses—such as innovative activity; the availability of finance; regulatory impacts; and employee training, benefits, and payrolls. Originally, staff economists were primarily managers of research projects prepared under the RFP process, where some \$5 million was spent annually to fill the data and knowledge gaps.

However, researchers in economics departments at major universities were not interested in doing research on small business because of the lack of data and the fact that no journals were interested in publishing their research results. Consequently, the first task was to develop or find data that could be used to measure what was happening to small businesses.

From 1979 to 1990, Dun and Bradstreet (D&B) data were used, with the database preparation handled initially by the Brookings Institution and computer analysis carried out at the National Institutes of Health computer center.² Because the D&B database was the only one available, the Office of Advocacy continued to invest some \$1 million per year on data and database preparation. Various governmental units and other research organizations used the Advocacy-sponsored database in more than 30 studies to

¹ Initially, both economists were from the academic community and were hired under Intergovernmental Personnel Agreements. Eventually the director of economic research was converted to a civil service position.

² Groundbreaking research by David Birch at the Massachusetts Institute of Technology and now of Cognetics, Inc., also relied on D&B data.

understand firm and employment growth by firms of various sizes in various regions of the country. Concerns about the quality of the data existed since the data were not prepared by the Census Bureau and because of a perceived bias in collecting data on new firms and updating data on existing firms. In the end, contracts with the U.S. Census Bureau were developed to prepare a database that would aggregate the available Census establishment data into firm size data and then track these businesses over time.³

Over the last 22 years, significant progress has been made in database development and research using the data, even with declining budgets (now about \$1 million per year) and manpower (now seven economists) in OER. Much of the progress has been the result of relationship building with the academic community, government data collection agencies, and the associations representing small businesses.

Recently, for example, Josh Learner of the Harvard Business School forwarded the announcement of a workshop for researchers interested in the entrepreneurial process. Researchers from Stanford, MIT, Columbia University, the University of Chicago, New York University, the Brookings Institution, and the University of Pennsylvania will present papers at the workshop. The Office of Advocacy has been asked to help fund a similar program at the Maxwell School of the Syracuse University, where the staff has established a program on research in entrepreneurship and public policy. This conference will include researchers from many of the same academic institutions and the Federal Reserve Bank of New York, Yale University, Ohio State University, the University of California-Santa Cruz, Princeton University, the George Washington University, and the Urban Institute. Unsolicited proposals are beginning to come from researchers located in the same set of universities. All of this represents a turnaround in the academic community, reflecting new interest in small business and entrepreneurial growth.

OER's research has illustrated the role entrepreneurs play in developing innovations that generate the Schumpeterian "creative destruction" that has been occurring in our economy over the last decade, as well as the role small businesses play in creating jobs and making the U.S. economy more competitive.⁴

The research also provides the background data on how government regulatory policy may create barriers to entry. The databases give federal agency analysts and regulation writers the ability to analyze the impacts, by firm size, of any proposed new or revised regulations. The office works with government regulators and assists Advocacy's own in-house attorneys on a case-by-case basis in understanding regulatory impacts.

To summarize, OER's goals are a) identifying and using other data sources to measure the performance of small firms; b) developing new databases, c) initiating internal and external research projects on small business; d) raising the level of acceptance and the awareness of small business research in the research community; and e) disseminating research findings to other researchers as well as various stakeholders through publications, workshops, and conferences.

The media are an important link to small business stakeholders. They need to understand how small businesses contribute to the economy in order to inform their

³An establishment is where the actual business activity takes place; an enterprise or firm is where the business decisions are made. In a single-establishment firm, the enterprise and establishment are identical, but a large multi-establishment firm may have many small establishments. It would be erroneous to call the small establishments of a large enterprise small businesses.

⁴"Creative destruction" implies that the new innovative firm pushes out old firms. Today it is called "churning" as new firms start up and old firms leave the marketplace.

readership or audiences, as well as conduct their own independent reporting and analysis. The press carry messages to stakeholders about the importance of small businesses in the economy, the importance of maintaining competitive markets by maintaining a level playing field for small firms and entrepreneurs, and the importance of ensuring that different demographic groups of business owners are treated equitably.

The value of Advocacy's research activities is measured, not by publications in scholarly journals, but by how the information is used by other researchers, opinion and policy makers, and small business owners to make more informed decisions.

The remainder of this document describes in more detail the data sources being used, the research being undertaken, and how the research results are being disseminated.

Section II Developing Usable Statistical Information from Existing Databases

Bank Lending and Small Business: State-by-State Bank Rankings

Over the past five years, the Office of Advocacy has had an impact on the bank lending markets by ranking banks in different markets with respect to their small firm lending. The data sources for these reports are the Consolidated Reports of Condition and Income, better known as "call reports" and the Community Reinvestment Act (CRA) reports. While other researchers have used aggregations of these data, OER has been the only institution to rank all the commercial banks and major bank holding companies on their lending behavior toward small business. The rankings based on the analysis in these studies indicate which banks on a state-by-state basis are most likely to provide debt financing. The reports enable small firms to shop for credit at the banks most likely to make loans to small businesses. The studies provide lending information about banking behavior on a number of levels:

- the overall lending behavior of all commercial banks in the United States, state by state,
- the largest bank holding companies' national lending behavior,
- the micro lending behavior of commercial banks,
- the farm lending behavior of all commercial banks, state by state,
- the farm lending behavior of the largest bank holding companies, and, most recently,
- rural small business lending by CRA reporting banks.

The greatest value of the bank lending studies is the growth of competition in the bank lending markets. Banks highly ranked by the Office of Advocacy can use that fact in their advertising. These studies encourage banks to obtain better rankings—which means the banks become more small-business-friendly. The rankings from Advocacy's bank lending studies are published in an annual edition of *Entrepreneur* and have been featured in *Inc.*, *The New York Times*, *The Los Angeles Times*, *The Dallas Morning News*, and many other dailies and business periodicals that reproduce relevant regional and local statistics.

Bank Merger Impacts on Small Business

On June 15, 2000, the OER held its second conference on the “The Changing Banking Structure and Its Impact on Small Firms” in cooperation with the Milken Institute and the National Commission on Entrepreneurship. The conference, which brought together leading scholars in the field from universities and bank regulatory agencies, was convened to determine whether the recent round of mega-mergers and the increased use of credit scoring techniques were hurting the ability of small firms to secure loans. Among the 100 participants were two members of Congress. Representative John LaFalce, ranking minority member of the House Banking Committee, presented opening remarks. Representative James Leach, chair of the House Banking Committee, delivered the keynote address. Many of the conference participants expressed concern about lending based on credit scoring—especially in rural areas—but agreed that community banks will survive because they serve very different markets from those served by large lenders. Participants also expressed reservations about the deteriorating quality of service in banking. The proceedings and papers from this conference are on the Advocacy website at sba.gov/advo/.

Small Business Credit Needs and Borrowing Patterns

In addition to examining bank lending patterns, the OER works closely with the Federal Reserve Board on a series of surveys that detail the financial transactions of small firms, titled the National Survey of Small Business Finances (NSSBF). Surveys of approximately 4,000 nationally representative firms have been conducted in 1987, 1992, and 1997. The NSSBF contains the most detailed information available about how small firms actually conduct their business. For example, the survey allows an examination of credit card debt to determine the types of firms that use business and personal credit cards for their business financing. It also shows, by race and gender, the amounts borrowed and the balances carried and indicates the kinds of financial institutions doing the lending.

This detailed information is invaluable in providing a picture of the “customers” of each financial institution and enabling regulatory institutions to determine how to meet the credit needs of small firms by race and gender. Publicly available summary files are produced, and they have been used by hundreds of academic and policy researchers to understand how policy can improve the availability of credit to small firms, especially minority and women entrepreneurs.

Assets of Privately Owned Businesses: The Consumer Finance Survey

Business owners are both the entrepreneurs and the investors in privately held businesses. Understanding these business owners is critical to an understanding of business formation and investors’ participation in the equity capital markets. The Survey of Consumer Finance (SCF) surveys the personal finances of American families every three to four years, most recently in 1998. Holdings of all forms of assets (including the ownership of private businesses) and liabilities of the families are identified. The sample of some 4,000

families includes a large subsample of high-income and high-net-worth families. Many of these individuals are owners and investors in businesses that are not publicly held. Some 50 percent or more of these high-net-worth families are business owner-managers and/or angel investors. In addition, self-employed spouses of the family are identified.

SCF is the only data source for this type of information, now that the Characteristics of Business Owners (CBO) survey has been discontinued. OER has used the SCF for information on the wealth and net worth position of business owners and for defining and identifying accredited investors. The database is currently being used by Professor George Haynes of Montana State University to study the characteristics of business owners and the self-employed.

Procurement Studies

As charged by Congress in Public Law 94-305, the Office of Advocacy analyzes available procurement data to determine the share of federal contract dollars received by the small firm sector.

In the last three years, the Office of Advocacy has published several major studies analyzing contract bundling—the tendency of federal agencies to group related tasks into one very large contract. These studies show that bundling is effectively eliminating the ability of many small firms to bid on these large procurements without involving other small business partners. Advocacy has documented the increased tendency to use contract bundling and its harm to small firms. The chief counsel has testified on this issue several times, and Congress has introduced new legislation, based partly on OER reports, that requires greater justification for bundled contracts.

In addition to the studies on contract bundling, the office has also analyzed procurement patterns by federal agency and congressional district. These studies compare the average share of federal dollars directed to small firms in each area to a baseline in order to determine whether small firms are receiving an adequate share of federal contract dollars. The study is not perfect because not all monies are spent locally; some are “transhipped” from one state to many others. For example, a military base located in one area may purchase goods and services from all over the country. Nonetheless, this was the first study of its kind, and based upon congressional reaction, will be refined as data and financial constraints permit. The results are published on the Internet on the Office of Advocacy’s website.

Section III Develop Databases

Accurate data are the basis for all sound research and policy analysis, and data on small businesses in the United States have been scarce. This scarcity contrasts with the more plentiful data on publicly held corporations because of the Securities and Exchange Commission’s filing requirements. This is the primary reason most research had been focused on the large business sector.

Countering this long-term trend, the Office of Advocacy has worked with the Bureau of the Census to develop the Business Information Tracking Series (BITS)—probably the most significant advance in small business research in the past decade.

Databases under Development

It has been the Office of Advocacy’s particular challenge over its 20-year history to attempt to locate—and often to create—usable databases on small business. In developing databases, the OER works with other federal agencies, especially the Bureau of the Census, the Federal Reserve Board, the Statistics of Income Division of the Internal Revenue Service, and private sources like Dun and Bradstreet, to generate data on small firms. The staff of OER uses its limited financial resources as seed money to support the creation of new databases and to research existing databases using business size variables.

The two main institutional sources of economy-wide business data are the Bureau of the Census within the U.S. Department of Commerce and the Bureau of Labor Statistics (BLS) within the U.S. Department of Labor. The Census Bureau’s Economic Census, which is taken every five years, with data appearing some five years later, has firm size data. BLS data are more current but are limited to establishment data rather than firm data.

The Office of Economic Research has recently been working with data from the Census Bureau, the Internal Revenue Service, and the Entrepreneurial Research Consortium.

Census-Based Data: To study issues like job creation or the effect of mergers on small firm markets, the Office of Advocacy has funded, with the Bureau of the Census, a firm size database called the Statistics of U.S. Businesses (SUSB).⁵ These data are currently available for 1988 to 1997 and can be used to provide Congress and other interested parties information on the number of small firms by state, county, and industry. The data also indicate the relative importance of small firms in different sectors and markets. Because the SUSB business data can be shown for many different size classes, the database has been used to measure the number of small firms affected by proposed changes in regulations—such as the recently proposed ergonomics regulations of the Occupational Safety and Health Administration. It was also used to determine how many small firms would be affected by changes in the minimum wage rate and how many were affected during the debate on the Americans with Disabilities Act during the early 1990s. The significant value of the SUSB database is its flexibility and accuracy in measuring the number of firms and employees affected by any particular proposed regulation.

Recognizing the value of tracking firms through time, the Office of Advocacy began contracting with the Census Bureau in 1990 to develop the Business Information Tracking Series using the SUSB database, at a cost of some \$250,000 per year.⁶

⁵ The Census Bureau uses establishment data from County Business Patterns and then aggregates establishments to the parent company to develop firm size data. For more details see “Statistics of U.S. Businesses: Microdata and Tables” at www.sba.gov/advo/research/#business.

⁶ See “New Data for Dynamic Analysis, Business Information Tracking Series (BITS)” at www.sba.gov/advo/stats/#firm.

Understanding dynamics is important to understanding with some degree of accuracy which types of jobs come from new small firms and how long they last. In addition, if public policy is to be effective in helping firms grow and thrive—especially in new market areas—it is imperative to understand how both existing and new small firms contribute to the growth of particular areas. This has been especially true in rural areas—in which almost all firms are small businesses. The BITS database, which spans the 1989-1997 period, has shown that during the 1990s more than three-quarters of new jobs came from small firms with fewer than 500 employees. The development of the BITS—and its growing use by outside researchers—have been the most important advances in small business research in the recent past.

The Census SUSB database is available on the Advocacy website at sba.gov/advo/stats/#firms. This public availability of detailed information has allowed trade associations, individual researchers, and the general public access to a wealth of information about the growth and contributions of small firms at no cost. Technology has further increased the wide availability of OER's information, which formerly had to be faxed or mailed. It can now be downloaded electronically in a matter of seconds.

IRS-Based Data: OER has long received tables on sole proprietorships by gender from the Statistics of Income Division of the Internal Revenue Service, with information on the number of proprietorships, receipts, net income, and broad industry and regional breakdowns. Recently, the office expanded its data request to include separate tables on women's and men's "sole props" by the most common lines of business, most populous states, several size classes for receipts and net income, and filing status. In addition, the office has been analyzing 1982-1997 trends in female- and male-operated sole props.

Entrepreneurial Research Consortium-Based Data: The Entrepreneurial Research Consortium (ERC) is a voluntary association of universities, research organizations and foundations, 20 of which are located in the United States and 10 abroad. The Office of Advocacy has been the only federal government member of the ERC since its founding in 1995.

The ERC is gathering the most detailed set of information about "nascent entrepreneurs"—those in the process of starting a business. Some 100 researchers are beginning to examine the data to see why people start businesses, both in the United States and abroad, as it is the successful entrepreneur that is creating most of the new jobs, providing the innovative spirit and the competitive zeal that keeps economies healthy. The ERC is managed by Paul Reynolds of Babson College, while data collection and processing are carried out by the University of Michigan's Survey Research Center (SRC). Preliminary findings from Advocacy's modest investment have established that the startup rate for Hispanic- and African-American-owned businesses is rising. In one test, the startup rate for these groups was observed to be higher than that of businesses owned by whites. Further, initial ERC tests indicated that the U.S. business startup rate was the highest in the world as a result of higher labor force participation rates for women and U.S. leadership in science and technology.

The Office of Advocacy is just beginning to analyze these interview observations to determine whether gaps exist in equity capital funding and to identify the number of firms started by business angels. This database will eventually trace the success rates of

the firms started by minorities and women, providing the most comprehensive private sector data ever developed on these subjects in the United States.

Reports Using the Databases

OER's economists and editors generate a number of reports using the Census and other existing databases. A few of many examples are *The State of Small Business: A Report of the President*; *Small Business Economic Indicators*; and *State Small Business Profiles*.

The State of Small Business: *The State of Small Business* is an annual report from the President to the Congress mandated by Public Law 96-302, The Small Business Economic Policy Act of 1980. The Office of Advocacy has prepared this volume for the Office of the President annually since 1982, and it has developed an international reputation for its depth of information, statistical appendices on federal procurement and minority- and women-owned firms, and selected topics based upon new congressional initiatives. For example, recent issues of *The State of Small Business* have included chapters on the provision of health care by small firms, self-employment and business startups, and the contributions of small firms to the growth of the high technology sector. The report, which is also posted on Advocacy's website after White House clearance, is frequently translated into other languages and serves as a model for other countries producing an annual report on small firms.

Small Business Economic Indicators: State information by firm size is very difficult to find. Therefore, beginning in 1985, the Office of Advocacy created a publication called *Small Business Economic Indicators*. This booklet brings together all of the available information on small business formation and dissolution, income, and self-employment, as well as the number of firms by state. Virtually anyone with an interest in state small firm data will find value in the SBEI. It is particularly useful to state and local economic development officials, marketing departments, demographers, and nearly every congressional office concerned with developing an index of the small business health of their state. With the aid of the Internet, the Office of Advocacy has been able to reach an ever-wider audience with this publication.

State Small Business Profiles: People turn to Advocacy's *State Small Business Profiles* when they want a very brief document showing the importance of small business in a particular state. These three-page summaries of the latest small business data, available on the Advocacy website, provide a concise summary of the leading small business job-creating sectors by state. They are reprinted in hundreds of journals and newspapers each year and are distributed to all members of Congress and the executive branch. In addition, they contain the latest information on women- and minority-owned firms by state, as well as detailed data on the banks that Advocacy has judged to be the most small-business-friendly. The profiles cover the five sectors that contain the most small business jobs in each state, and also provide the latest details on small business income growth.

Measuring Regulatory Impacts

The SUSB and other existing databases are also critical in OER's effort to study how small businesses are affected by different regulations. Regulations often have scale economies associated with them—that is, the more a firm produces, the lower the regulatory cost per unit of output. Thus, small firms have a built-in competitive disadvantage when complying with regulations unless the regulations take into account the disparate impacts. This office has helped supply information to measure and then alleviate the disproportionate impact of regulations on small firms—without compromising the regulations' public policy objectives. Agencies such as the Environmental Protection Agency, the Occupational Safety and Health Administration, the Federal Communications Commission, and the Department of Health and Human Services, among others, have modified regulations to minimize the inequitable burden on small business. When the Small Business Regulatory Enforcement Fairness Act (SBREFA) was passed in 1996, all federal regulating agencies were required to analyze the impact of their regulations on small firms and to consider equally effective alternatives.

Section IV Initiate Research

Because of the lead time necessary to do quality policy-oriented research, it is necessary for OER to attempt to determine a year or so in advance the important political issues that will be affecting small firms. The Office of Advocacy must attempt to forecast what knowledge policy makers will need in the future, then initiate either an internal research project or a request for proposals (RFP) to find experienced researchers who can analyze potential areas of policy interest. The RFP process is often used to leverage the work of Advocacy's economic staff and obtain information on a more diverse range of issues.

Internal Research

OER currently has six professional economists and one research assistant who conduct the internal economic research. One research position in recent years has been devoted to regulatory matters and one to financial issues. The regulatory economist, and other economists as needed, work directly with the attorneys in Advocacy's Office of Interagency Affairs, ensuring that the regulatory agencies comply with the Regulatory Flexibility Act (RFA) as amended by SBREFA. The economists help examine the adequacy of the federal agency's efforts to measure whether proposed regulations will have a "significant economic impact on a substantial number of small entities." If so, the economists determine whether the regulatory agency has done an adequate analysis in preparing the initial and final regulatory flexibility analysis. Knowledge of the IRS and Census databases is important for this task. Several important topic areas have been the focus of in-house research:

Women- and Minority-Owned Firms: The Census data on women- and minority-owned firms are often outdated. Consequently, the OER estimated the 1997 statistics on the number of women and minority entrepreneurs using actual 1982, 1987, and 1992 Census data. The OER received numerous requests for this kind of information, and has updated the older Census information in an attempt to respond to the many requests for information on the “new entrepreneurs.” The reports, *Women in Business and Minorities in Business*, are available on the Advocacy website at www.sba.gov/advo/stats. The first was originally released by the administrator of the SBA at a conference on women-owned businesses held at the University of Maryland during the fall of 1998.

The importance of the research is reflected in its use in the recent (October 2000) Milken Institute Report titled *Economic Prosperity, Women and Access to Credit: Best Practices in the Financial Markets*. Data from the *Minorities in Business* report were also used extensively in a recent report (September 2000) of the Milken Institute, titled *The Minority Business Challenge*. The BITS file has been used to study the survival rates of women- and minority-owned firms.⁷ After controlling for relevant variables, the studies generally find that the survival rates of African-American-owned businesses are lowest, while those of women-owned firms are slightly below those of male-owned firms. (This same result was obtained for 1992 using Census’ CBO data set, published in 1997). Clearly, the BITS file has enormous potential in offering researchers a greater understanding of the dynamics of the U.S. economy.

Mergers and Acquisitions: One of the more useful applications from the BITS file has been to understand the effect of mergers on the economy (see *Mergers and Acquisitions in the United States: 1990-1994* at sba.gov/advo/stats/m_a.pdf). This study showed that the merger of two small firms frequently results in the creation of new jobs, while the merger of two larger firms frequently has the opposite effect. When large firms acquire small firms, jobs may or may not be created, depending upon a number of other factors.

As the economy evolves—and with more mergers either completed or proposed thus far in 2000 than at any time in the nation’s history—it is vital to be able to measure the likely employment effects of the mergers. Thus, the BITS file could easily be of value to the FTC and the Justice Department’s antitrust division in deciding whether or not to approve large mergers and the mergers of “larger” small firms.

Employment Generation and Firm Startup and Closure: OER research has provided accurate information to answer the question, “What percentage of new jobs are created by small firms?” The assumption has always been that since the industrial revolution, large firms in manufacturing were the creators of most of the new jobs. About the time the Office of Advocacy was created, an emerging authority in small business job creation research, David Birch, using Dun and Bradstreet (D&B) data, calculated that it was really small firms that were creating most of the new jobs. OER, using D&B data for over a decade, came to the same conclusion. The conclusions were not well accepted on the grounds of imperfections in the data.

⁷ Alicia Robb, *The Role of Race, Ethnicity, and Discrimination on Business Survival* (Office of Advocacy, May 2000), website forthcoming; Brian Headd, “Small Business Closure Analysis Using CBO and BITS Data,” draft, May 2000.

Finally, under an agreement with the Bureau of the Census, the BITS database was developed. The answer from the government database was essentially the same as that from D&B data: small firms are the primary job generators. In fact, an analysis of the data using the new database showed that three-quarters (75 to 80 percent) of new jobs over four- or five-year time periods came from small firms.⁸ Clearly, the precise percentage will vary over time, depending upon the measurement period and the stage of the business cycle. About 30-40 percent of these new jobs come from the births of new firms, and the remainder come from rapidly expanding firms (also called “gazelles”).⁹

How long do these firms last? This is the precise way to word the question since most firms do not fail, but leave the market for voluntary reasons. About 16 percent of firms are new each year and about 14 percent cease operations, for a turnover rate of 30 percent—among the highest in the world. While many firms shut down voluntarily (about half within four to five years), most do not fail but simply rechannel resources into a potentially more profitable endeavor. Only about one in seven firms leaving the market actually fails—that is, leaves unpaid debts.¹⁰

With these new longitudinal databases, research has finally refuted the idea that small firm jobs are low-paying jobs. Advocacy studies have shown that, when the data are adjusted for the industry of the firm and the age and education of the employee, small firms pay about 10-15 percent less, on average, than large firms, but this is true primarily in the retail trade and construction industries. It is frequently not true in growing technology fields.

Nor are small firms the only employers of minimum wage workers. While about 55 percent of minimum wage workers are employed in small firms, the remaining 45 percent work in large hospitality firms, restaurants, hospitals, and other large businesses. Advocacy research has demonstrated that the minimum wage debate is not a small business debate at all, since a large share of these workers are in large firms.¹¹

E-commerce: Small firms are helping change the ways in which business is conducted. The increasing flexibility of the U.S. business community is reflected in the proliferation of home-based firms, electronic commerce firms, changing models of business growth, and increased participation by new female and minority entrepreneurs in the economic mainstream. Through both its contracting and database activities, the OER is contributing to an increased understanding of these trends.

⁸ “Alicia Robb, “New Data for Analysis of Small Firm Job Creation,” forthcoming in *The State of Small Business: A Report of the President:1999*. See also Zoltan J. Acs, Catherine Armington, and Alicia Robb, “Measures of Job Flow Dynamics in the U.S. Economy,” prepared under contract for the U.S. Small Business Administration, Office of Advocacy (Springfield, Va.: National Technical Information Service, 1999).

⁹ It has been estimated that 72 percent of new information technology jobs came from firms with fewer than 500 employees between 1992 and 1996, using the BITS file. See Richard J. Boden, *Establishment Employment: Change and Survival, 1992-1996*, prepared under contract for the U.S. Small Business Administration, Office of Advocacy, (Springfield, Va.: National Technical Information Service, 2000).

¹⁰ Bruce D. Phillips, “The Influence of Industry and Location on Small Firm Failure Rates,” *Frontiers of Entrepreneurship Research*, Babson College, 1993, 286-301.

¹¹ Carolyn Loeff and Associates, *Firm Size and Wage Structure: Small Businesses and the Employment of Low-Wage Workers*, prepared under contract for the U.S. Small Business Administration, Office of Advocacy (Springfield, Va.: National Technical Information Service, 1999).

During the past two years, the OER has published two papers on e-commerce, and one paper on how electronic commerce is affecting the retail booksellers industry. One survey found that more than 70 percent of small firms are now connected to the Internet, one-half of the 5.5 million small firm employers maintain websites, and one-quarter of all small firms process credit card transactions.¹² Of greater importance, small firms using the Internet tend to grow faster and survive longer than those that do not.¹³ These numbers and percentages change, and the OER will continue to monitor and publish the trends.

The Office of Advocacy has just funded two additional industry studies analyzing how single and multi-unit retailers are adapting to e-commerce and e-tailing.

Equity Capital Financing: About five years ago, as an outgrowth of the White House Conference on Small Business, the Office of Advocacy began an experimental project. Advocacy research had documented that the equity marketplace was not meeting the needs of small firms, which had difficulty raising equity capital in amounts between \$250,000 and \$5 million. The existing institutional venture capital fund market was not investing at these levels. The equity funding gap was aggravated by the fact that the average investment in a company by venture capital firms was approaching \$14 million. “Angel” investors (private accredited individuals), an alternative investment source, were and are not easily identifiable. After receiving a “no-action letter from Securities and Exchange Commission (SEC) staff and support from the North American Securities Administrators Association, Advocacy began a business angel information service on the Internet. OER’s research funds were used for software and website development to address the equity capital gap that exists for small businesses. Today, the Access to Capital Electronic Network (ace-net.org) project has advanced to the stage where almost every state has accepted an accredited investor exemption, thus reducing some of the states’ regulatory hurdles for accredited investment in small firms. This is government at its best: devoting the necessary resources to create a new national market structure that facilitates the exchange of information between angel investors and small firm entrepreneurs—and then turns it over to a private board of directors. The project will soon be moved to the private sector to be underwritten and managed. Privatization of Ace-Net is expected to be completed by the end of 2000.

External Research

When research funds are available after database development projects are funded, a request for proposals is issued following discussions among Office of Advocacy, congressional, and small business association staffs about the most important topics for research. What follows is a description of some of the most recent research projects.

¹² Victoria Williams, *E-Commerce: Small Business Ventures Online*. (U.S. Small Business Administration, Office of Advocacy, July 1999); Victoria Williams, *Small Business Expansions in Electronic Commerce* (U.S. Small Business Administration, Office of Advocacy, June 2000).

¹³ V. Williams, *Small Business Expansions*.

Small Business Survival with Large Multi-Unit Retail Firms: It is clear that in many industries, the old models of doing business are changing. It will require many industry studies to understand this phenomenon. The OER, while just beginning to study this area, has already completed several studies and participated in several conferences that will increase the understanding of these changes. A recently completed study, *Small Business Survival in Competition with Large Multi-Unit Retail Firms*, indicated that while many traditional “brick and mortar” bookstores are being hurt by the Internet giants, some others that sell rare and other unique books have seen increases in market share.¹⁴ OER research in this area continues.

Home-Based Business: In the new business model, many entrepreneurs start firms from their homes—and stay there. In 1992, nearly 20,000 entrepreneurs grossed more than \$1 million operating from a home-based environment. It may no longer be necessary to leave the home environment to be a successful small firm. Why? In a word, technology. With the use of computers, high-speed Internet access, copiers, and faxes, small firms may no longer need to move to a traditional office environment.¹⁵ In fact, more than 9 percent of home-based firms have employees. The home may be the business technology incubator of the future.¹⁶

Joint Funding of Large Studies

The OER also makes judicious use of its limited funds by “investing” a small amount of funds (generally less than \$25,000) in much larger studies. Frequently, these small investments have a large return. The OER provided funds to the University of Texas at Austin Law School for a major study of firms that declared bankruptcy between 1994 and 1998. By studying the characteristics of these firms and their owners, OER was able to provide valuable input into recent debates on proposed changes in the bankruptcy laws.

The Office of Advocacy is the only U.S. government participant in a 30-nation study of business startups by the Entrepreneurial Research Consortium (ERC).

Conferences as Research Vehicles

One way of generating new information on a topic is through a research conference. For example, the OER sponsored a conference on industrial organization on January 21, 2000 to examine whether market behavior in selected industries was becoming anti-competitive and preventing small firms from starting up or remaining in business. The results of this conference, available on the Advocacy website, indicate a general unease

¹⁴ Jack Faucett Associates, *Small Business Survival in Competition with Large Multi-Unit Retail Firms*, prepared under contract with the U.S. Small Business Administration, Office of Advocacy (Springfield, Va.: National Technical Information Service, 2000). See sba.gov/advo/stats.

¹⁵ Joanne H. Pratt, *Homebased Business: the Hidden Economy*, Prepared under contract with the U.S. Small Business Administration, Office of Advocacy (Springfield, Va.: National Technical Information Service, 2000). See sba.gov/advo/stats.

¹⁶ Bruce D. Phillips, “Home-Based Firms, E-Commerce, and High Technology Firms—Are They Related?” Office of Advocacy in-house working paper, prepared May 2000.

with mergers of large conglomerate firms. Many of the papers presented by the leading researchers in the field demonstrated just how difficult it has become to measure actual market concentration when alternate products or services are available. The conference materials were so important in advancing the knowledge of these issues that the editor of *Small Business Economics* is publishing a special issue with the chief counsel and a senior economist serving as guest editors.

Section V Disseminate Research

Advocacy's research is utilized by the Congress, the media, other federal and state agencies, and the general small business community. The chief economist and the director of economic research spend at least one-third of their time answering e-mail and telephone requests and doing media interviews. OER's staff members are asked to speak at major meetings on entrepreneurship and small business group meetings around the nation. The White House regularly requests Advocacy's research information. OER's data are used in the chief counsel's presentations at congressional hearings and before regular briefings to the small business trade associations across the country. The chief counsel is quoted on a regular basis in major dailies such as the *Wall Street Journal*.

The OER disseminates research in a variety of ways: through press releases, website releases, chief counsel briefings, Hill briefings, scholarly papers and chapters in books, direct mailings and targeted e-mails, newsletters like the *Small Business Advocate*, and mandated reports like *The State of Small Business*.

Stakeholders of Economic Data

Each research project is evaluated to determine to whom it is relevant. The objective is to get the information into the hands of those who need it and who are making decisions. If the research is on a policy-relevant "hot topic," the chief counsel or the administrator may release it at a meeting or a major conference. For example, in December 1999, Advocacy completed a study on labor shortages that was released at Advocacy's annual conference for state and local officials, Vision 2000. The national press in attendance gave the data the kind of publicity that would help policymakers find ways to use it.

Traditional methods of publishing the data are also used, including press releases, research summaries, website postings, direct mailings to appropriate officials on a limited basis, and, depending upon the relevance, a press conference or conference call.

Other networks can multiply the exposure of information. For example, during a Women's Business Summit at the University of Maryland in October 1998, the SBA administrator released research updating the information on women business owners and their contributions to the economy. This release was published by national news media. Simultaneously, the report, *Women in Business*, was posted at sba.gov/advo/stats. The data have relevance to decisionmakers and bankers considering loan applications from women entrepreneurs. The Office of the Vice President has expressed considerable interest in Advocacy studies on e-commerce. The office has played a major role in

encouraging government's use of technology to increase productivity and has turned its attention to the changes in the market that technology is stimulating.

Changing Technology for Increasing the Impact of Information

Because OER serves such diverse audiences, it is imperative to get the information distributed as effectively, efficiently, accurately, and quickly as possible. For these reasons, Advocacy's website development program—a continuous work in progress—has been a success. OER now reaches new groups and individuals both in the United States and abroad.

OER's website is the only source of small business information in the federal government. It is available 24 hours a day at www.sba.gov/advo/stats. Hotlinks to other significant research in the areas covered are now being added. The goal is to make Advocacy's website a one-stop distribution center for small business research.

Two documents, *The Small Business Answer Card* and *The Facts about Small Business* provide often-needed information. Staff may also be contacted by e-mail or phone for additional information not available on site. The public, the media and Congress are beginning to realize that Advocacy's website is the first place to check for small business data. If it is not on this website, it is probably not available.

Conferences as Information Vehicles

During the past year, OER has held two major conferences, the first on industrial organization and the changing markets facing small firms, the second on bank mergers and technological innovations in banking. By holding both conferences on Capitol Hill and attracting business, academic, and congressional attendees, OER generates demand for its publications and the conference proceedings.

Special Handling

While many documents have obvious or standard outlets for dissemination, others require special handling to ensure they get to individuals and policy makers who will benefit from them. A recent example is the report, *Developing High-Technology Communities: San Diego*, prepared for the Office of Advocacy by Innovation Associates to document the reasons for San Diego's recent turnaround. From an economy formerly dependent on defense manufacturers, San Diego has become a community with numerous "clusters" of mostly small, local, high tech businesses that have added more jobs, often at better pay, than the jobs that were lost.

The principal investigator met with Advocacy's entrepreneur in residence, who had detailed knowledge of the topic and specific objectives for the report. When the report was ready, the staff prepared a research summary and press release as usual. Instead of just mass mailing the release, however, Advocacy offered the *Wall Street Journal* a chance to cover the story in its "Entrepreneurship" column. In addition,

Advocacy's entrepreneur in residence took the report to current and former leaders in San Diego and to state officials in Sacramento, arranged visits and interviews for the chief counsel for advocacy, and spoke at length to local reporters. A senior economist e-mailed the report to a large list and contacted the National Governors' Association, which covered the report in its print and electronic newsletter. The principal investigator sent the report to the U.S. Conference of Mayors—which also covered it in its online and print publications—and spoke about it at the National Conference on Urban Economic Development. The report has also been covered by the States Science and Technology Institute and McGraw Hill's *Federal Technology Report*. The targeted dissemination efforts for this study have paid off.

A Variety of Avenues for Reaching Stakeholders

In the BITS, OER has a well accepted database that is attracting the attention of scholars at leading universities. Recently, a Ph.D. graduate student completed a study using BITS data at Harvard University. Research projects are being started by Ph.D. candidates at Northwestern and MIT. Increasingly, top quality universities are interested in conducting small business research. For example, OER has been discussing the possibilities of contracts with researchers at Stanford, Princeton, and the Center for Policy Research in the Maxwell School of Syracuse University.

An e-mail list of several thousand makes possible vastly improved dissemination of OER information about conferences and completed research reports that are all available on the Web. Exposure of the new BITS database has been extended to thousands of researchers. Other methods of dissemination are making Advocacy's research products widely available:

- Advocacy reports regularly to members of Congress and their staffs through briefings and regular meetings and roundtables.
- Advocacy reports are regularly mailed to industry trade representatives.
- Conferences provide venues to disseminate to a large cross-section the research of visiting scholars and OER staff.
- Media releases focusing on specific research or activities of OER are regularly distributed.
- Research materials are provided to the National Technical Information Service for greater availability to the public.

Section VI What Remains to be Done

The OER has been successful in the past few years in networking with other economists in government and in the academic community. This means that more researchers are aware of the quality work that OER is doing and are therefore more interested in proposing research topics, attending OER research conferences and sharing OER's research with others. The office needs to keep meeting with the leading economists in the Washington, D.C., area and in the nation as in the past few years, to raise the level of

interest in research on small business issues and to encourage more partnerships with the Office of Economic Research.

Database Development

Despite OER's past successes in working with the Bureau of the Census to develop the SUSB and the BITS databases, current and reliable statistics on small business remain scarce. Federal regulatory agencies trying to determine whether there is a "significant economic impact on a substantial number of small entities" as required by the Regulatory Flexibility Act, still have inadequate data available. The Office of Advocacy needs to continue looking for and negotiating with federal data collection agencies to create databases and to improve the quality and accessibility of existing databases. Several initiatives are being pursued

Develop a New BITS File for Non-Employer Firms: The Census Bureau is expected soon to release its first compilation on non-employer firms—sole proprietorships, partnerships, and corporations with no reported payroll. Non-employer firms are the smallest and the most numerous of small businesses. Very little data about them have been available, despite the fact that non-employer firms are important as the seedbed for developing entrepreneurial skills and ideas. Regulatory or statutory changes are likely to have a heavy impact on these small firms. OER has held preliminary discussions with the Bureau of the Census about producing tabulations that would be useful for analysis of regulations and policy, and about developing a time series file for research.

Develop Databases that Contrast Rural with Urban Areas: Small Business Lending in Rural America was the first attempt by the Office of Advocacy to measure the additional problems small firms have in obtaining bank credit in rural America. The study, *Rural and Urban Areas by Firm Size, 1990-1995*, measured different growth patterns for the first time. While some progress has been made in treating women and minority business owners more equitably, it is unclear whether progress has been made in treating urban, rural, and central city business owners equally. The office needs to develop data sets that can analyze the problems and progress of these sub-groups of the small business population.

Fund a New Characteristics of Business Owners Survey: An invaluable source of business data was lost when the Characteristics of Business Owners (CBO) survey was discontinued: this important data source needs to be replaced. The Census Bureau collected data for the last CBO survey in 1996, and asked questions about the firms that were in existence from 1992 to 1996. The SBA and the Minority Business Development Agency of the U.S. Department of Commerce cofunded the research. The CBO survey gathered detailed data on the characteristics of firms owned by African Americans, Hispanics, Asians and Pacific Islanders, females, veterans, and non-minority males for a total survey of more than 125,000 owners. For more details, see the Census website at www.census.gov (click on business).

Research Topics

In addition to developing quality data to allow research on small business issues and the analysis of regulatory impacts, it is OER's ongoing mission to be the primary source of information on small business issues and research. The goal is to maintain updated bibliographies of all the important research on issues confronting small business (for example, small business financing; health care availability and financing; and equity issues related to businesses owned by women, minorities, veterans, and rural small business owners).

A useful model is provided by a conference in which leading researchers on a topic present their ideas, as OER has done twice this year, focusing on the topic areas of industrial organization and the banking industry. In the first conference, papers were funded and presented. In the second, most of the participants were federal bank regulatory economists, and the papers had particular value. In both, conference proceedings were prepared, posted on Advocacy's website and distributed to the Congress and regulators.

Another model has been for OER to release a study, then invite the author, along with others conducting similar research, to present their findings, ending with a discussion of the next steps needed in research or to define the needed policy changes. For example, OER convened a meeting of researchers using CRA data to discuss problems of using the database, and several "brown-bag" lunches have been held on improving regulatory impact analysis.

In addition, regular funding and appropriate timing of requests for proposals are crucial to encourage more researchers from the academic community, particularly graduate students working on PhD dissertations, to participate in OER's research efforts. Much of the past funding has come at the end of fiscal years, making it difficult for the university community to have the time to develop and submit proposals.

The funding of the following new research topics will add to the knowledge of the importance of small business in the economy:

Develop Estimates of the Importance of Small Business in the Creation of Wealth: The Office of Advocacy funded the original research and several updates on the importance of small business in creating U.S. gross domestic product—statistics widely used by almost every speaker talking about small business. However, no statistics are available on the creation of wealth by small businesses. After contacting numerous researchers that analyze statistics on wealth, the Office of Advocacy has awarded a contract to obtain the first estimates of this important information.

Update the Innovation Study: Speakers on the importance of small business continue to quote Advocacy statistics on small firm productivity in producing the innovations that are so important in the growth of the United States and its global competitiveness. Given the widely acknowledged contribution that innovations make to this growth and competitiveness, it is important to have more current information on small firms' share of innovations. This need is even greater in light of the attention being focused on small firm high tech innovations. Because the last major study on the topic was done in 1984, a new study is warranted.

Develop Estimates of the Share of Productivity Gains by Small Business: The next step in understanding the importance of small business in the economy is to estimate the share of productivity gains that result from innovations developed by small businesses.

See Appendix C for a list of outstanding research contracts as of November 2000.

Appendix A The Current Structure and Future Needs

Currently, research is being conducted in house by seven staff economists using the databases that have been developed, as well as through the management of some \$1 million in research contracts. Given the increasing demand for regulatory impact analyses with the passage of SBREFA, another professional economist concentrating in this area is probably necessary. Another research assistant would help the professional economists' productivity.

In 1999, four Advocacy editorial staff members were reassigned to OER. The economists are Advocacy's primary producers of published documents in need of editing and dissemination. Getting the authors involved with the editors during the writing, publication, and dissemination phases of the project adds to the timely release of quality materials to the people that need them. Given the quantity of the publications being produced and the quality that is desired, another editor is needed.

Recently, the director of economic research retired, and the chief economist is temporarily taking on the responsibility of both positions, testing a new management model for the office. Given the current size of OER and its productivity, as well as the different skill sets needed to manage the office effectively, it is probably desirable to maintain both positions.

Appendix B Office of Advocacy Research Reports and Publications, 1994-2000

1994

The Small Business Advocate monthly newsletter

The State of Small Business: A Report of the President

*The Annual Report of the Chief Counsel for Advocacy on Implementation of the
Regulatory Flexibility Act, Calendar Year 1993*

Handbook of Small Business Data

*Small Business Guide to Procurement Reform: Reinventing How the Government Does
Business*

Small Business Economic Indicators, January-December 1993

Small Business Lending in the United States

Small Business Profiles 1994

Research Summaries:

142 *Small Business' Involvement in Societal Causes: An Empirical Investigation
of Social Responsibility Self-Interest Perspectives*

143 *Technological and Organizational Diversity and Technical Advance in the
Early History of the American Semiconductor Industry*

144 *The Function of Failure*

145 *Small Businesses and Large Banks*

146 *Measuring the Uninsured by Firm Size and Employment Status: Variation in
Health Insurance Coverage Rates (Part I)*

147 *Pollution Regulation as a Barrier to the Formation of Small Manufacturing
Establishments: A Longitudinal Analysis*

148 *Estimating the Local Effects of Defense Cuts on Small Business, 1992-1999*

149 *How Small Businesses Learn*

150 *Environmental Financial Responsibility*

1995

The Small Business Advocate monthly newsletter

The State of Small Business: A Report of the President

*The Annual Report of the Chief Counsel for Advocacy on Implementation of the
Regulatory Flexibility Act, Calendar Year 1994*

Catalog of Small Business Research

Small Business Answer Card

The Facts about Small Business

The Third Millennium: Small Business and Entrepreneurship in the 21st Century

Small Business Lending in the United States

Micro Business Lending in the United States

The Small Business Share of Federal Financial Support for Business

The Changing Burden of Regulation, Paperwork, and Tax Compliance on Small Business

The White House Conference on Small Business Issue Handbook

The White House Conference on Small Business State Profiles

The 1995 White House Conference on Small Business Implementation Network

Building the Foundation for a New Century: A Progress Report to the President
The 60 Recommendations of the 1995 White House Conference on Small Business
The Small Business Share of Federal Financial Support for Business, 1995
Small Business in the 21st Century: The 13th National Legislative Conference on Small Business Issues, conference notebook and related publications
1996 Guidelines for Small Business Award Nominations
Small Business Share of Federal Financial Support of Business
The Changing Burden of Regulation, Paperwork, and Tax Compliance on Small Business: A Report to Congress

Research Summaries:

- 151 Business Ownership as an Employment Opportunity for Women*
- 152 Entrepreneurial Origins: A Longitudinal Inquiry*
- 153 Pension Funds and Small Firm Financing*
- 154 Taxes and the Choice of Entity for Small Business*
- 155 Workers' Compensation by State: Assessing the Burden of Workers' Compensation by Business Size*
- 156 The Effect of Computer Use on the Earnings of Workers by Firm Size*
- 157 Measuring the Uninsured by Firm Size and Employment Status (Part II)*
- 158 Differences between Successful and Unsuccessful Franchisors*
- 159 Impact of Electronic Data Interchange on Small Firms*
- 160 Finance Companies and Small Business Borrowers*

1996

The Small Business Advocate monthly newsletter
The State of Small Business: A Report of the President
The Annual Report of the Chief Counsel for Advocacy on Implementation of the Regulatory Flexibility Act, Calendar Year 1995
Small Business Answer Card
State Profiles, 1996
Small Business Lending in the United States, 1995 Edition
The Top Small Business Lending Banks in the United States, 1995 Edition
The Bank Holding Company Study
Micro Business Lending in the United States, 1995 Edition
The Effect of Small Business Lending on Bank Profits and Risk
Procurement Opportunities: A Small Business Guide to Procurement Reform
A Guide to the Regulatory Flexibility Act, May 1996
Creating New Capital Markets for Emerging Ventures, June 1996
The Process and Analysis Behind ACE-Net, October 1996
Building the Foundation for a New Century: First Annual Report on Implementation of the Recommendations of the 1995 White House Conference on Small Business, 1996
Foreign Patenting Behavior of Small and Large Firms, March 1996
The 1996 Tibbetts Award Winners: Models of Excellence for the SBIR Program at the State and Local Level, June 1996
Small Business Economic Indicators, January-December 1995
Public Policy Initiatives of Interest to Women in Business

The Facts about Small Business 1996

Research Summaries:

- 161 Electric Utility Restructuring: Issues for Small Business*
- 162 Technology Transfer to Small Manufacturers: A Literature Review*
- 163 A Survey of Regulatory Burden*
- 164 Pension Funds and Small Firm Financing: Models of Successful Small Business Investment Programs*
- 165 Survival Programs Among Franchise and Nonfranchise Firms Started in 1986 and 1987*
- 166 The Differential Impact of State-Local Tax Incentives on Small versus Large Firms*
- 167 Foreign Patenting Behavior in Small and Large Firms*
- 168 The Costs of Financing Exports for Small Business*
- 169 The Role of Small Firms in the Upward Mobility of New Immigrants*
- 170 Cross Firm Size Variation in Subnational Taxation under Federal Consumption-Based Taxation: Impact and Implications*
- 171 State Unemployment Compensation and Workers' Compensation Programs: A Review of Major Legislative Changes, Program Costs and Suggested Reforms*
- 172 Lilliputian Strategies: Small Business Responses to Big Business Entry*
- 173 The Role of Social Relationships in Financial Intermediation: Empirical Evidence from the United States Small Business Credit Market*
- 174 Job and Worker Attributes by Firm Employment Size, 1983-1993*
- 175 The Impact of Environmental Liability on Access to Capital for Small Business*

1997

The Small Business Advocate newsletter

The State of Small Business: A Report of the President

The Annual Report of the Chief Counsel for Advocacy on Implementation of the Regulatory Flexibility Act, Calendar Year 1996

Small Business Lending in the United States

The Bank Holding Company Study

Micro-Business-Friendly Banks in the United States

Small Business Economic Indicators, January-December 1996

Trends in Venture Capital Funding in the 1990s

Building the Foundation for a New Century: Second Annual Report on Implementation of the Recommendations of the 1995 White House Conference on Small Business

The Angel-Seed Capital Connection: Conference Report

ACE-Net: The Access to Capital Electronic Network

Small Business Answer Card 1997

Research Summaries:

- 176 Small Businesses, Big Burdens: The Nature and Incidence of Crime within and against Small Business and Its Customers and Employees, their Causes, their Effects, and their Prevention*

- 177 *Bundled Contract Study, FY 91-FY 95*
- 178 *Why New Franchisors Succeed*
- 179 *The Effects of Interstate Banking on Small Business Lending*
- 180 *The Impact of Structural Change in the Banking Industry on Small Business Lending*
- 181 *Small Business Share of Private, Nonfarm Gross Domestic Product*
- 182 *Small Firm Innovative Success: External Resources and Barriers*

1998

- The Small Business Advocate newsletter*
- The State of Small Business: A Report of the President*
- The Annual Report of the Chief Counsel for Advocacy on Implementation of the Regulatory Flexibility Act, Calendar Year 1997*
- Small Business Economic Indicators January-December 1997*
- Small Business Profiles 1997*
- The Impact of Bank Mergers and Acquisitions on Small Business*
- Characteristics of Small Business Owners and Employees*
- Advocating for Small Business: the Chief Counsel's Report*
- Small Business Lending in the United States*
- The Bank Holding Company Study*
- Micro-Business-Friendly Banks*
- Small-Farm-Friendly Banks in the United States*
- Exporting by Small Firms*
- The New American Evolution: The Role and Impact of Small Firms*
- Mergers and Acquisitions in the United States, 1990-1994*
- Women in Business*
- Vision 2000: The States an Small Business Conference, Models of Excellence Awards*
- Small Business Growth by Major Industry, 1988-1995*
- The Regulatory Flexibility Act: An Implementation Guide for Federal Agencies*
- Small Business Finance in Rural And Urban Areas*
- An Analysis of the Distribution of SBIR Awards by States, 1983-1996*
- Advocating for Small Business*
- Research Summaries:*
 - 183 *U.S. Summary Corporate Change Tables*
 - 184 *The Profitability of Small Business Lending by Small Banks*
 - 185 *Changing Characteristics of the Self-Employed*
 - 186 *Impacts of Federal Regulations, Paperwork, and Tax Requirements on Small Business*

1999

- The Small Business Advocate newsletter*
- The State of Small Business: A Report of the President*
- The Annual Report of the Chief Counsel for Advocacy on Implementation of the Regulatory Flexibility Act, Calendar Year 1998*

Small Business Lending in the United States
The Bank Holding Company Study
Micro-Business-Friendly Banks in the United States
Small Farm Lending in the United States
Small Farm Lending by Bank Holding Companies
The Office of Advocacy: A Voice for Small Business
ACE-Net Investors Brochure
Vision 2000: The States and Small Business Conference Report
Vision 2000: The States and Small Business Conference, Models of Excellence Awards
Minorities in Business
Models for Success: State Small Business Programs and Policies
E-Commerce: Small Business Ventures On-Line
Are Small Firms Important? Their Role and Impact
Federal Procurement from Small Firms: State-by-State Rankings of Federal
Procurement Centers on their Procurement from Small Firms in 1998
New Sources of Equity Capital for Women Entrepreneurs
Rural and Urban Areas by Firm Size, 1990-1995
The Third Millennium: Small Business and Entrepreneurship in the 21st Century
Research Summaries:
 187 *Impact of Firm Size on Dollar Amount of Penalties Assessed by Government*
 Agencies
 188 *Financial Difficulties of Small Businesses and Reasons for their Failure*
 189 *Survey of High Technology Firms*
 190 *Statistics of U.S. Businesses: Microdata and Tables*
 191 *Measuring Contribution of Small Business to Industry Job Growth by Data in*
 Association Directories
 192 *Measures of Job Flow Dynamics in the U.S. Economy*
 193 *Women and Minorities in Franchising and Financing Practices*

2000

The Small Business Advocate newsletter
The State of Small Business: A Report of the President
The Annual Report of the Chief Counsel for Advocacy on Implementation of the
 Regulatory Flexibility Act, Calendar Year 1999
Small Business Lending in the United States
The Bank Holding Company Study
Micro-Business-Friendly Banks in the United States
Small Farm Lending in the United States
Small Farm Lending by Bank Holding Companies
Small Business Lending in Rural America
Building the Foundation for a New Century: Final Report on Implementation of the
 Recommendations of the 1995 White House Conference on Small Business
Developing High-Technology Communities: San Diego
Small Business Expansions in Electronic Commerce
Small Business Profiles, 1999

New Data for Dynamic Analysis: The Business Information Tracking Series
A New View of Government, University, and Industry Partnerships
The Invisible Part of the Iceberg: Research Issues in Industrial Organization and Small Business. Proceedings of a Conference held January 21, 2000
The Changing Banking Structure and its Impact on Small Business: Proceedings of a Conference held June 15, 2000
Procurement Opportunities: A Small Business Guide to Procurement Reform
Facts about Small Business 2000
Background Paper on the Office of Advocacy, 1994-2000
20 Years of the Regulatory Flexibility Act: Rulemaking in a Dynamic Economy
Research Summaries:
 194 *Homebased Business: The Hidden Economy*
 195 *Labor Shortages, Needs, Related Issues in Small and Large Businesses*
 196 *Distribution of Low-Wage Workers by Firm Size in the United States*
 197 *Small Business Survival in Competition with Large Multi-Unit Retail Firms*
 198 *Developing High-Technology Communities: San Diego*
 199 *Analysis of Hispanic-Owned Companies*
 200 *Establishment Employment Change and Survival, 1992-1996: Analyses Based on a New, Longitudinal Data Base with Special Focus on Information Technology Industries*
 201 *The High-Tech Rural Renaissance? Information Technology, Firm Size, and Rural Employment Growth*
 202 *Small Business and Access to Health Insurers, Particularly HMOs*
 203 *The Impact of Contract Bundling on Small Business: FY 1992- FY 1999*

ADVOCACY SPONSORED RESEARCH STILL PENDING

Research Topic	Researcher	Final Report Due
The Impact of Regulatory Costs on Small Firms	Crain-Hopkins Research Services	09/30/01
Federal Government Efforts to Assist Firms Owned by Veterans and Disabled Veterans	Clifford Waldman - Waldman Associates	09/30/01
The Cost of State Regulations on Small Firms	Management Research & Planning Corporation	09/30/01
Impact of Electronic Commerce on Selected Multi-Unit Retailers and Service Sectors	Heartland Information Research, Inc.	09/30/01
Impact of Electronic Commerce on Selected Multi-Unit Retailers and Service Sectors	Jack Faucett Associates	09/30/01
The Generation of Wealth by Small Business	Joel Popkin and Company	09/30/01
Small Business Share of Economic Growth	Joel Popkin and Company	03/01
Earnings Growth Among Less Educated Business Owners	Dr. Robert W. Fairlie	09/30/01
Growth Contributions of New Technology Firms	BJK Associates	07/30/01

Does a Rising Tide of Small Business Jobs Lift All Boats?	David C. Ribar, Economic and Statistical Consulting	09/30/01
The Determinants of Regional Innovation: An Analysis of the U.S. Biotechnology Industry	Dr. Andrew A. Toole	09/30/01
Study of the Characteristics of Business Owners Using the Survey of Consumer Finances	Dr. George Haynes	09/30/01
Estimating a Dynamic Structural Model of Entry, Product Choice and Model Competition	Dr. Michael J. Mazzeo	09/30/01
An Investigation of Venture Capital in Women and Minority-Owned Firms	CB Associates	09/30/01
The Small Business Share of High Technology Commerce and Electronic Commerce: Projection 2010	Joanne H. Pratt	09/30/01
Evaluation of Compliance with the Regulatory Flexibility Act by Federal Agencies	CONSAD Research Corporation	09/30/01
		09/30/01
The Value of Worker Training Programs to Small Business	Carolyn Loeff Associates	

Contract Bundling and Small Firm Procurement	Eagle Eye Publishers	03/01
Generate Tables for Banking Study 2000	Dr. James W. Kolari	09/30/01
Entrepreneurial Research Consortium	Babson College	08/01
Ace-Net	University of New Hampshire	09/30/01
Task Orders on the Analysis of Telecommunications Regulations	Plexis Scientific Corporation	09/30/01
SBREFA Task Order Contract to Assist the Office of Advocacy with Environmental and Safety and Health Regulations, and Other Regulations, Excluding Telecommunications	Penchan – Avanti Group	09/30/01
Task Order - Review of EPA and OSHA Rules	Policy, Planning and Evaluation	06/30/01
Interagency Agreement – Analyses Based on Census Data Sets	Census/Center for Economic Studies	09/30/01
Interagency Agreement	Census Bureau	09/30/01
Interagency Agreement	Internal Revenue Service	09/30/01