MEASUREMENT AND EVALUATION OF THE POPULATIONS OF
FAMILY-OWNED AND HOME-BASED BUSINESSES

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EXECUTIVE SUMMARY

This report documents a ten-month study to determine the best approaches for counting, describing, and measuring the economic contributions of family-owned businesses and home-based businesses. A family-owned business is one in which a single family exercises ownership control over the firm, and can decide such important matters as who to hire, fire, and promote; what investments to make; and in what markets to do business. While the small business and family-owned business sectors overlap considerably, there are also many large family-owned businesses and many small companies not owned or managed by a single family. According to the 1984 The State of Small Business, over 99 percent of all businesses are small (have fewer than 500 employees), and that small business employs 48 percent of all non-government, non-farm employees, and contributes 38 percent of the U.S. Gross National Product.

Family-owned businesses including farms are believed to comprise over 90 percent of all businesses in this country and account for at least half of the U.S. Gross National Product and employment. Family-owned businesses dominate many key industries in the U.S. and many of our industry leaders and exemplary companies are family-owned. Family-owned businesses are also thought to provide much leadership to their communities: they are prime contributors to charities and family company managers often lead community activities.

A home-based business is an enterprise producing goods or services that is operated in or from the home. Business owners represent only one of several categories of home-based workers. Employees also may work in or from their homes full time, part time, intermittently, or overtime. Some moonlighting employees operate home-based businesses. Individual "contractors" are not easily categorized. The Department of Labor applies strict criteria to define an individual as either an employee or as an independent business operator. These workers themselves may define their activities as a home-based business.

The numbers of home workers are growing, but we do not know how rapidly. Because the different surveys of this population do not use the same definitions of home-based work we do not know precisely even their current numbers. The Bureau of Census reports approximately one and one-half million home-based business operators and about three quarter million people working at home as employees. Persons who work part-time or moonlight are not included.

An A T & T study estimated 23 million individuals by counting everyone who does any work at home including those taking work home from a full time job such as teachers, employees and volunteers. Seven million of those are the "business at home" sector which includes moonlighters. Recent estimates from a Bureau of Census Current Population Survey indicate that over 15 million individuals do some of their work at home. Most of those do not have home-based businesses.
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Home-based businesses offer several contributions to the economy which have not been well documented. First, the home serves as an incubator for many new businesses. Often business ideas which are too expensive to test in a formal business organization can be more economically evaluated when the operation is carried out from the home. In addition, home-based businesses account for a large and growing number of the companies operating in the service sector. Because the service sector is growing so rapidly and is so fundamental to our economic health, home-based businesses become a critical component of our economy to watch. Finally, home-based businesses provide jobs to those who otherwise might be unable to work because of personal handicaps, household responsibilities, or the need to supervise children or elderly members of the household.

To carry out this study the authors met with representatives of the demographic, population, and business divisions of the Bureau of Census and Department of Labor and Bureau of Labor Statistics staff members.

For the home-based business part of the project, Pratt also met with representatives of other federal and state agencies interested in home-based business. Altogether, participation was solicited from about 100 researchers and spokespersons for agencies and trade associations, one third of whom responded to requests for information by suggesting research questions and hypotheses, and sending their research in progress on this topic.

These project participants provided the following view of work at home:

1. Work at home blurs the boundaries between work and leisure.
2. Work at home changes the culture in which one works.
3. Home-based businesses have unique characteristics.
4. Most home-based businesses are continuations of previous freelance activities.
5. Technology induces much work at home.
6. Work at home raises questions of costs and benefits for both employer and employee.
7. Telecommuting can invite or lead to "sweatshop" conditions.
8. There are many motivations to work at home.

For the family-owned business part of the study, Davis first reviewed the literature and his own extensive research on these firms and interviewed 25 researchers, staff members of government agencies, family business executives, and trade association representatives to elicit their views on the important research questions for these organizations.
Executive Summary

This work provided the following view of family-owned business:

1. They have characteristics and business practices distinct from non-family-owned and managed companies.

2. They are as often exemplary performers as they are poor performers in their industries.

3. We have too little data and inaccurate estimates currently on the number, industry participation, business characteristics and economic contributions of family-owned businesses. There is much enthusiasm for having an economic data base on these companies.

4. There are varying definitions of a family-owned and managed firm but most definitions would lead to the sampling of the same companies.

5. There is a growing interest in learning more about these businesses by researchers, consultants, managers, and government agencies.

References concerning family-owned businesses and home-based businesses were compiled and annotated through June 1985. A computer search identified home-based business references; a clipping service also gathered current periodical literature on home-based business and telecommuting. For the family-owned business bibliography, journals, magazines, books, and newspapers were combed to update an already extensive reference list. The bibliography was then reviewed and annotated by members of the Advisory Panel and other experts on these businesses. The comprehensive bibliographies produced on home-based business and family-owned business will be published as a separate document.

At the midpoint of the study the members of Advisory Panel and an econometrician met for a two-day discussion and critique of draft materials (bibliographies, draft questionnaires, sampling and survey plans). Two representatives of the Office of Advocacy also attended this meeting. As a result of this conference, the authors were able to draft and begin field-testing questionnaires for each of the two types of firms.

Much is known about the behavioral characteristics of home-based businesses and family-owned businesses but little can be said with certainty about their business practices, or how they compare with nonfamily companies and businesses out of the home. The surveys proposed in this report address these information needs. The data base generated by our proposed surveys will be useful to policy makers, trade associations, researchers, and business executives.

The most pressing need for information on family-owned businesses is to know their numbers and business characteristics. The same core information is also the priority need for home-based businesses. In addition, we need to look at the broader category of all income-producing persons who work at home, for many entrepreneurs emerge out of this pool of employees, moonlighters, and hobbyists. Of lesser interest to the Small Business Administration but of vital concern to other policy makers, union leaders, and researchers are issues
Executive Summary

raised when "work" is moved from the corporate to the family context. Thus, researchers want data on the impact of a remote work force at home on the culture of the corporation and on the family; unions need statistics on pay rates and benefits; the Congress and other federal policy makers need information to carry out their respective mandates. It makes economic sense to capture data that everyone can use.

There is a good conceptual basis for considering home-based businesses and family-owned businesses together in this study. Most home-based businesses will be owned by a member of the household in which the business is based, and, by definition, it is assumed that most sole proprietorships are family-owned businesses. Examples of home-based businesses that are not family-owned would be partnerships or corporations of nonrelatives that are operated in a home.

While most family-owned businesses are not home-based, because of the large number of family businesses in our economy and the increasing importance of the home-based business sector, the overlap of these two sectors of our economy is potentially very large. However, because of the complexity of surveying each of these business types, and because of the different sampling frames required by home-based businesses and family-owned businesses, they must be surveyed separately. The two surveys have been overlapped by asking questions in each that refer to the other sector. In this way it will be possible to measure the overlap of these sectors and monitor its growth.

The Advisory Panel concluded that the best way to measure family-owned businesses was to survey a randomly chosen sample from the Small Business Administration’s Small Business Data Base. The Small Business Data Base (SBDB) has the clear advantages of containing almost all family-owned businesses and providing detailed business information for all firms except sole proprietorships with no employees. The surveying of companies in the SBDB would be done in two stages:

1. A short questionnaire consisting of seven questions would be sent to approximately 240,000 randomly selected companies. A previous SBA survey of this size sample in 1983 elicited a response of around 10 percent. After correcting for response bias, this sample (of about 24,000 firms) would provide enough business units to allow comparison of family and nonfamily companies with respect to several important questions: industries in which family companies operate, how many people they employ, and the influence of the family on the firm.

2. In the second round survey, additional information about family companies will be gathered. Questions will be designed based on the results of the first round survey and on the information needs of interested researchers, associations and agencies. These information needs have been largely revealed in this report.

For the home-based business sector we need cross-sectional data that provides snapshots of work at home. We also need longitudinal data that detect the lifecycles of both the nebulous home businesses that slowly lapse or the viable home-based businesses that expand to a size that launches them beyond.
the home. A cost estimated in the millions precludes constructing a large, longitudinal sample frame rich in home-based workers that would allow asking all of the questions that need to be asked. Our strategy, therefore, is to gather information from more than one source. We recommend, in order of priority, the following actions:

1. Tabulate the October 1984 and May 1985 Current Population Survey (CPS) Supplements to glean all of the information about work at home that they provide including job- or business-related computer use and the number of hours per week worked at home.

2. Commission a special CPS Supplement focused specifically on home-based businesses. A draft questionnaire, presented as part of this study, embodies questions that will provide core financial, ownership, and behavioral characteristics of home-based businesses.

3. Piggyback onto existing surveys wherever the SBA's interests in a topic overlap with those of the survey sponsor. An additional tag or short series of questions that identify home-based work will enable tabulation of data sets. A variety of detailed information can be generated by specific surveys such as the American Housing Survey Journey to Work Supplement, the 1990 Census, CPS Supplements, and the National Longitudinal Surveys.


Costs for carrying out these recommendations range from an estimated $13,000 to tabulate an existing CPS Survey to $350,000 to commission a special CPS Supplement.

A data base collected under the sponsorship of the SBA will serve many disparate interests. Home-based work appears to be an increasing trend, but statistical data are lacking to substantiate the growth. Those who may want to use the data base include several government agencies. The Bureau of Labor Statistics must track new employment trends. The Department of Labor, Wage and Hour Division is concerned with issues of contract labor; its Women's Bureau has responsibility for women's issues. The Bureau of Census and the Department of Transportation monitor travel to work and thus must understand the impact of telecommuting.

The Congress must provide legislation if it is deemed desirable to stimulate or control work at home. Some states offer a service to home workers in the form of information or legislation and one state government is planning optional telecommuting for state employees. Local governments need data as a basis for updating zoning codes in order to respond to changes in the nature and extent of home-based work.

In the private sector, business schools want to examine technology's impact on management, corporate culture and information transfer. In the humanities, sociologists focus on the home worker and family relationships; psychologists, on work at home and isolation. Futurists anticipate telecommuting trends.
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Trade associations want to know what is happening in their industries. Labor unions want statistics on home "sweatshops." A data base could be used to address all of these specific interests. It could also build a fuller picture of prototype workers: educated white collar, professional and managerial people—whose work at home ranges from intermittent use of an electronic briefcase to full-time employee status or proprietors of a home-based business; clerical white collar employees or contract workers; and craft workers engaged in piece work.

Much interest exists in learning more about family-owned businesses as organizations. Business researchers would like to know how family companies compare with non-family companies and also how they vary across industries.

Government agencies are interested in these questions and also in understanding the economic contributions of these firms. Trade associations and family business executives are interested in publicizing the contributions of these firms to get more favorable tax treatment.

There are serious and growing public policy issues relating to home-based and family-owned businesses. Joint efforts are needed to acquire the data necessary to address those concerns.

The home-based business and family-owned business sectors are covered in separate sections within the body of this report. For a fuller analysis of what is known about the numbers of home-based businesses, turn to Section II.A. Measurement problems in counting them are covered in Section II.B. Representatives from the public and private sector contributed to a listing of hypotheses about work at home (Section II.D) and current research studies (Section II.E). An evaluation of the benefits and costs of possible survey methods can be found in Section IV.B.

Strategies have been recommended to acquire information about home-based work both indirectly, by drawing from existing data collections and by building on existing surveys; and directly, by commissioned surveys (Section IV.D). A recommended questionnaire follows in Section IV.E. The home-based business section of this report concludes with the author's theory of home business inceptions emphasizing those that stem from the microcomputer revolution (Section IV.F).

For an in-depth review of what has been learned about family-owned businesses, turn to Section III. Section III.A summarizes current notions (based mostly on anecdotal evidence) about family business characteristics, practices and contributions. Section III.B describes a survey the authors conducted of individuals interested in family-owned businesses to gauge the most popular research needs on this topic.

Section III.C derives a research agenda for family-owned businesses based on what has been learned from the review of the literature and our discussions with others. Section V discusses a proposal for surveying family-owned businesses. Section VA explains the authors' choice of using the Small Business Administration's Small Business Data Base. In parts B and C,
respectively, the proposed first and second round surveys are described. Section V concludes with recommendations for assembling a research consortium on family-owned businesses.

A by-product of this study has been to create a network of persons both within the government and throughout the academic and private communities who are working on the topics of family-owned businesses and home-based businesses.

The authors hope that a significant benefit of their ten-month effort has been to generate interest, understanding, and enthusiasm for learning more about family-owned businesses and home-based businesses. Even as they close this study, they find it is curious that so little is known about organizations that mean so much to our economy and to our society.
I. SCOPE OF STUDY

A. OBJECTIVES OF THIS STUDY AND ITS IMPORTANCE

This report documents a ten-month study to determine the best approaches for counting, describing, and measuring the economic contributions of family-owned businesses and home-based businesses. According to the evidence gathered, family-owned businesses and home-based businesses comprise important and growing sectors of our economy, but little systematic research has been done either to measure their contribution to our society or to understand their unique characteristics.

Such research is critically important to develop policies to aid these distinctive organizations. Relatively little is known about either family-owned businesses or home-based businesses. These companies' unique features must be understood and the magnitude of their economic influence should be measured to develop conditions to encourage their vitality.

Although the Small Business Administration (SBA) has a strong interest in learning more about family-owned and home-based businesses, these organizations are not identified in the Small Business Data Base (SBDB). Other economic data bases also do not identify these firms. Home-based businesses are seen as a means to a more competitive economy as they would increase output, reduce price, and therefore improve the economy. These businesses bring new and unique perspectives in the delivery of goods and services and they serve new and small markets that are uninteresting and unprofitable for larger firms. But most home-based businesses are too small to be contained in any business data base, such as the SBDB or Dun and Bradstreet's. An important purpose of this study for the SBA is to add to its data base on these firms: "to fill out its 'universe file' that [encompasses] virtually all of the employees in the nonfarm sectors of the economy."

A family-owned business is one in which a single family exercises "ownership control" over the firm and can decide such important matters as who to hire, fire, and promote, what investments to make, and in what markets to do business. Ownership control for companies usually implies over 50 percent stock ownership, but it need not. A company well under 500 employees may be controlled by a family owning less than 50 percent of its stock. Many large corporations are still controlled by a single family which owns less than a third of its stock. This is possible because the by-laws of the corporation are written in such a way as to permit the election of a slate of directors with less than a majority of the stock. Researchers will differ to some small extent on which organizations they will label as family-owned businesses. Careful consideration has been given to what information on companies should be collected to allow firms to be categorized according to various family-owned business definitions.
Section I: Scope of Study

Reliable data on the numbers and characteristics of family-owned businesses and their economic contributions simply do not exist. Most of what is known about these firms is derived from anecdotal evidence, from trade association reports and from making assumptions about published economic data — for example, "most small corporations and all sole proprietorships are family-owned businesses." The authors' guess is that between 90 and 98 percent of all businesses are owned by a single family and that most of these family-owned businesses are also managed by someone from the family. It is believed that family-owned businesses account for about half of the U.S. Gross National Product and half of the nation's employment. We know that many vital industries in our economy — such as construction, shipping, trucking, publishing, and printing — are dominated by family-owned businesses. We can identify many industry leaders which are family-owned and managed. In fact, most of the "excellent" companies identified by management scholars are family-owned or were family businesses which have maintained many family business practices. We even see examples of companies, like Levi-Strauss and Mary Kay Cosmetics, which are trying to regain a family-owned status.

Anecdotal evidence on family businesses, discussed in Section III, helps us to speculate how family businesses behave as compared to non-family-owned and managed firms. Still, no large-scale comparisons of these two types of organizations have been attempted, and fundamental differences are still to be explored. This study is an important step to gain needed insights into the characteristics of family companies.

A home-based business is one that is based in one's place of residence and may be a full-time or part-time enterprise. A business service or product may be supplied in or from the home. Thus, painters, plumbers, and electricians who work from their homes as well as graphic artists, consultants, and beauticians who work in their homes are included in this definition.

It is important to distinguish clearly between business operators and business units. A home-based business unit has a minimum of one worker, typically, its owner. It also may have family members and/or unrelated employees working in the home. Furthermore, anecdotal evidence suggests that the same home-based business' sole proprietor often operates several part-time activities and thus has more than one business unit. Therefore, a count of home business operators undercounts the number of home-based businesses.

Those who work in a home-based business form a subset of all those who work at home. We know from Pratt's exploratory research that the work-at-home population includes full- and part-time independent contractors, but it also includes salaried employees working intermittently or full-time in their homes and "moonlighters" earning both wage and self-employment income.

Of particular importance to the SBA and the Department of Labor (DOL) are the individual contractors who happen to fall into a gray area. The DOL applies strict criteria to define an individual as either an employee or as an independent business operator. These workers, however, may have their own firmly held convictions that define their activities as a home-based business. The tenor of the articles on this subject listed in the bibliography reflects the intense controversy on this issue. It is important to clarify these defi-
Section I: Scope of Study

nitional issues that arise from evolving work patterns. How do we classify the employee who works three days at the firm and two days in his home writing computer programs? He earns a salary, but he also sells his own software. What is the threshold for being considered a bona fide business? What questions do we ask to identify this individual in a survey? This study attempts to answer these questions.

One important reason why all categories of work at home should be closely examined is that intermittent or part-time work in the home by employees or moonlighting can lead to the birth of a new business. The dynamics of business birth and growth are not well understood. We have anecdotal evidence that trying new business ideas using the home as a base of operation is a commonly used start-up strategy. New products and services can be evaluated in this way with minimal cost. Those that do not succeed can be easily dropped and those with promise can be expanded. Longitudinal data are badly needed to track these life cycles of nascent businesses. Research is also needed to understand to what extent home-based businesses contribute to new business formation.

The size and impact of the work-at-home movement have been largely overlooked, possibly because cottage industries have been lumped together with other small businesses. As a result, their importance to the economy has been mistakenly viewed as insignificant. We know, however, that over 300 types of jobs are currently being done from the home. Consider also that business services is one of the country's fastest growing industries. Some part of this growth can be attributed to new businesses started by individuals shifting from salary or wage to self-employment. We need to know what portion of the business service sector is being operated out of the home.

New types of computer-related jobs have also accelerated the work-at-home movement. Because the computer can make a task independent of time and location, workers are taking advantage of a flexibility that enables them to work at home.

The numbers of home workers are growing, but we do not know how rapidly. Estimates range from one and one-half million farm and nonfarm home business operators to seven million persons who operate their own businesses. If we count everyone who does any work at home including those taking work home from a full-time job, the estimates range as high as 23 million individuals. Recent estimates from a Current Population Survey indicate that over 15 million persons do some work at home. These results need to be synthesized to find out how many of those persons have home-based businesses. A difficult problem in reconciling these numbers is that different phrasing of survey questions have tagged different subsets of the total work-at-home population.

An April 1985 tabulation by the Bureau of the Census broke out "home-based workers of their own incorporated businesses" into industrial and occupational categories. (No equivalent tabulation has been done for unincorporated home-based businesses.) Their occupations cluster into the Managerial and Professional Specialties; and Technical, Sales, and Administrative Support. They are represented in every industrial category except public administration.
Section I: Scope of Study

All evidence indicates that further study of work at home, in general, and home-based businesses, in particular, is vital to understanding this increasingly important sector of our economy. As with family-owned businesses, more must be learned about the general nature of these work organizations, how they compare to other organizational settings, in what industries they operate and what they contribute to our economy and society.

To advance this effort, the SBA has asked the authors to reference what has been written on family-owned businesses and home-based businesses, identify the important research topics on these organizations and propose survey methods to learn more about these firms.

B. METHODOLOGY OF THE STUDY

To begin the study of ways to characterize family-owned and home-based businesses, Pratt and Davis met one full day (October 13, 1984) with several staff members of the Bureau of Census (Journey to Work, Current Population Survey, Annual Housing Survey, Surveys of Business) to discuss their data collection methods. Several surveys in progress were found that would give estimates of home telecommuters and some limited information on family company activity.

On October 14, a meeting with representatives of the Wage and Hour Division of the Department of Labor and the Bureau of Labor Statistics revealed that both groups were feeling pressure to investigate work at home because of inquiries from outside sources. Both groups had surveys in progress that would help in estimating suitable sample sizes for future SBA surveys.

Preparation of bibliographies on home-based businesses and family-owned businesses was begun first by conducting a computer search to update Pratt’s home-based business references. To expand the bibliography of home-based business, major data bases were computer-searched for the keywords "cottage industry," "work at home," "telecommuting," and "moonlighting." Although the keywords picked up articles with the descriptor "home-based business," almost no references were found concerning businesses that did not involve telework. An additional search checked "self-employment" crossed with "work at home." A clipping service also gathered current periodical literature on home-based business and telecommuting for the period late October 1984 through early March 1985.

Davis’ bibliography on family-owned business was largely complete at the beginning of this study. Journals, magazines, books and newspapers were combed thoroughly during the past year to update this reference list, and the bibliography was sectioned into topical areas.

In November 1984, an inquiry was mailed to fifty persons interested in work at home asking for their publications, hypotheses, and suggested questions for a survey instrument. In view of the over 30 percent response to the mailing to researchers, a second invitation to participate in the project was sent to executive directors of an additional forty organizations. During this period Davis also contacted by telephone and in person several of the country’s
Section I: Scope of Study

leading experts on family-owned business to discuss their views on how to identify a family-owned business as well as the important research topics on family-owned businesses.

On November 26, the authors met at the University of Southern California with statistical consultant Dennis Aigner to discuss sample sizes and survey methods for both home-based businesses and family-owned businesses. At the same time, definitional issues were examined to aid in the designing of questionnaires.

On February 1st and 2nd, 1985 the Advisory Panel for the study met at the University of Southern California. Attendees at this conference were:

Joanne H. Pratt
John Davis
Thomas Gray, Director, Office of Economic Research, Office of Advocacy, Small Business Administration (SBA)
Alice Cullen, Contract Technical Representative, Office of Advocacy, SBA
Dennis Aigner, Econometrician, University of Southern California (USC)
Jack Nilles, Center for Futures Research, USC
Chris Pearson, Graduate School of Business Administration, USC
Robert Kraut, Bell Communications Research
Thierry Pauchant, Graduate School of Business Administration, USC
Beth Rogers, Business Owner, also at UCIA
John Ward, Loyola University of Chicago
Tammara Wolfgram, National Association for the Cottage Industry

Discussion during the conference addressed the following topics:

State of existing knowledge about home-based businesses and family-owned business
Current hypotheses regarding home-based businesses and family-owned business
Definitional issues in designing surveys of the two populations
Survey questions
Survey methods
Survey-testing procedures
Combining the home-based businesses and family-owned business surveys
Institutions interested in the study
Critique of the draft bibliographies
Final report format

The Advisory Panel members concluded that the Small Business Data Base (SBD) was the logical choice for surveying family-owned businesses. As a sole source of data, the SBD would satisfy most information needs on family-owned businesses. The Advisory Panel recommended that a sample be selected from the data base and surveyed by mail to identify family-owned businesses. A second round survey would be conducted to learn more about these firms.

Following the Advisory Panel Conference, Davis wrote with two members of the Advisory Panel the first draft of a questionnaire on family companies (to be applied to the Small Business Data Base). Pratt drafted the home-based
Section I: Scope of Study

business questionnaire guided by the topic priorities established at the Advisory Panel meeting. Successive drafts were tested and reviewed by several members of the panel.

In April, a cross tabulation of "Selected Characteristics of Workers Who Worked at Home for a Private Company for Wages, Salaries, Tips, and Commissions" was received from the Department of Labor. These were the first data that included all home-based workers identified in the 1980 Census. Furthermore, breakouts were included for industrial and occupational categories of incorporated (but not unincorporated) home-based businesses. (See Table II-1) Pratt then reviewed those data, the Current Population Survey, and other established surveys to analyze the conceptual differences underlying widely differing estimates of the numbers of home workers. In essence, it was clear that different questions were being asked of overlapping subsets of the work-at-home population. Davis received comments on the family-owned business questionnaire from several researchers and incorporated those remarks in a revised version. Pratt revised the home-based business questionnaire through many iterations in response to suggestions by Gray and Cullen of the Office of Advocacy and others.

Pratt spent three days in Washington during the week of April 15 meeting with staffs of the Statistics of Income Division of the IRS and the Bureau of Census discussing methodology for obtaining data about home-based businesses that might be captured. Based on the data available at that time (that is, the 1980 Census figure of 1.4 million home-based business operators), Bureau of Census staff judged the representation of home-based proprietors in a CPS sample of 66,000 households would be too small to justify a Current Population Survey Supplement. They also considered the 1980 Census too "stale" to use for constructing a special sample frame.

Profit or loss from a business or professional Sole Proprietorship is reported on Schedule C of the annual income tax return (Form 1040) to the Internal Revenue Service. Tabulations of Schedule C data or generation of a sample frame from Schedule C's appeared to be the best methodology for obtaining a sample rich in home-based workers, although incorporated businesses (which file on a different tax form) would be excluded.

Pratt also met with representatives of Health and Human Services, Department of Transportation, Department of Agriculture, Women's Bureau of the Department of Labor, and the Office of Technology Assessment to learn what studies of home-based businesses they had conducted and to gauge their interest in the SBA's study. Davis, with the assistance of Thierry Pauchant, began conducting telephone interviews to gauge institutional interest in the topic of family-owned business. They contacted researchers, trade associations, family company executives, and government agencies.

Pratt mailed copies of the revised home-based business questionnaire for review by the fifty persons who had previously submitted questions, bibliographic references, and their hypotheses concerning trends in home-based work. She formatted the questionnaire as a CPS Supplement and field-tested it.

Davis spent two days in Washington during the week of May 27th reviewing the
Section I: Scope of Study

first round family-owned business questionnaire. He met with staffs in the statistical survey unit and economic research unit of the Department of Agriculture and found interest in the overlapping sets of home-based and family-owned businesses, many of which would be located on farms. He later reviewed the family-owned business questionnaire with a representative from the Bureau of the Census.

In July, Davis completed the survey of researchers and institutions interested in family-owned businesses and revised and field tested the first-round family-owned business questionnaire. In July, a preliminary estimate of job-related work at home became available from the May CPS Supplement. Over fifteen million persons were found to perform some work at home in connection with their primary jobs. Even though the subset of home-based business operators has not yet been tabulated, such a large verified number of home workers brought the CPS Supplement back into consideration as a methodology for studying the population of home-based businesses. Of the several methods uncovered during the study, each had both merits and drawbacks. Pratt has drawn her own assessment of the relative merits of each, which has been informally reviewed in draft by several members of the Advisory Panel and staffs of the Bureaus of Census and Labor Statistics.

The work products and recommendations presented here have been reviewed by members of the Advisory Panel. The authors, however, take all responsibility for the content of this report and their recommendations.

C. SEPARATION OF HOME-BASED BUSINESSES AND FAMILY-OWNED BUSINESSES

There is a good conceptual basis for considering home-based businesses and family-owned businesses together in this study. Most home-based businesses will be owned by a member of the household in which the business is based, and by definition, we assume that most sole proprietorships are family-owned businesses. Chief among the home-based businesses that are family-owned businesses are farms. Examples of home-based businesses that are not family-owned businesses would be partnerships or corporations of non-relatives that are operated in a home. While most family-owned businesses are not home-based, still, because of the large number of family businesses in our economy, and the increasing importance of the home-based business sector, the number of businesses represented by the overlap of these two sectors of our economy is potentially very large (See Figure I-1).

However, there are three compelling reasons to separate the family-owned business and home-based business surveys:

1. It became clear during the study that too many topics need detailed investigation to survey both family-owned and home-based businesses with one instrument.
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Figure I-1

The Overlap of the Family-Owned Business and Home-Based Business Sectors
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2. Family-owned businesses are captured in compilations of business units; home-based businesses are not. An income-producing activity in the home may not have a formal "birth" date that classifies it as a business unit. It may never show up in tallies of companies such as the Yellow Pages and Dun and Bradstreet. Whereas family-owned businesses can be found in samples drawn from most, if not all, major business data bases, these resources will not contain many home-based businesses. Home-based businesses can only be found by home interviews and these are an inefficient method to learn about family-owned businesses. Household samples that will contain enough home-based businesses for a study, will not contain enough family-owned businesses (identified through the household) for a study.

3. At the February 1985 Advisory Panel meeting, one methodology crystallized from the discussions as the obvious way to collect information about family-owned businesses: sample the existing SBA Small Business Data Base (SDB). Since identifying a business located in a home is impossible using the SDB, Pratt had to turn to alternate sampling frames. From that point in the study, Davis concentrated on developing appropriate survey instruments for the SDB (See Section V.). Pratt explored multiple options to track home-based work. Because no single survey method could do the whole job, she developed a questionnaire modeled as a CPS Supplement as a primary survey instrument. (See Section IV.) It contains questions of high priority to the SBA for understanding home-based businesses. Pratt has also suggested questions that would elicit information about home-based businesses if added to existing periodic surveys and the 1990 Census. We have recommended pursuing all of these options which will provide an economical data base of complementary information that can be segregated for everyone's needs.

D. ORGANIZATION OF REPORT

The remainder of this report is organized into five sections. Sections II and III describe what is known about home-based businesses and family-owned businesses. Sections IV and V describe proposed methods for surveying home-based businesses and family-owned businesses. Section VI discusses the conclusions the authors have drawn from this study.

The home-based business and family-owned business sections of this report are not entirely parallel. Section II examines home-based businesses using information gathered by various recent surveys. Section IV assesses survey methods in terms of their suitability for collecting additional home-based business data. Most of these are government surveys whose methodologies and reliabilities have been well-documented elsewhere. This report cites the pertinent highlights of these surveys.

A detailed description of the characteristics of family-owned businesses is provided in Section III, followed by a discussion of the most relevant research questions on these organizations. Section V discusses the preferred survey method for family-owned businesses and its rationale.
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The appendices to this report include a collection of definitions on the two topics, the authors' acknowledgments to those who counseled them, the questionnaire used to collect issues for research on family-owned and managed businesses, an approach to surveying individuals working at home by a private consulting firm, and the bibliographies.
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ENDNOTES


7. News Release, AT&T Consumer Products 111083

8. Kenneth Riccini, Bureau of Census, personal communication
II. HOME-BASED BUSINESS

A. WHAT WE KNOW ABOUT THE NUMBERS OF HOME-BASED BUSINESSES

A1. Introduction

Although the operation of businesses in homes was never completely abandoned, the practice dropped from notice when industrialization attracted a majority of workers from their home-based farms and shops into factory and office congregations. Recent attention to home-based businesses has been stimulated by the potential of new opportunities for work at home related to the personal computer.

Work at home has been tagged in the Decennial Census and the Journey to Work portions of the Annual Housing Survey since the seventies. But the inquiry was not directed towards understanding work at home; it was focused on energy requirements and transportation systems that allowed people to leave their homes to "go to" work. Tagging work at home filled in the "other" response category to give a total accounting of all workers.

The ability to work at home appears to stimulate the growth of self-employment and multiple jobholding. Self-employment and multiple jobholding have long been recognized as important. For those concerned with labor issues, self-employment is critical to characterize because it represents such a large category of the total labor force. Non-agricultural self-employment is growing rapidly. (See Figure II-1) But little thought has been given to collecting data on the work-at-home population in survey series such as the Current Population Survey monthly tracking of unemployment.

Thus data on work at home does exist, but the rich characterization of work at home is lacking. Because they appear to be growing in size, home-based subgroups of the workforce are important to differentiate and monitor over time.

A2. Data Sources on Work at Home

In this section, several different survey methods are compared to give the reader an idea of how estimates of home-based work have been derived. The name of the survey or source of the data is listed first. Next, the count, or estimate derived from the survey is reported. The sample size refers to the total number of persons sampled by this survey. The universe is the total population from which the sample was drawn. Finally, the qualifying criteria by which a member of the total population was included in the sample are listed. In comparing data from different sources notice that commonly used terms may have specific meanings. For example, in the Annual Housing Survey

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Section II: Home-Based Business

"householder" refers only to the "head of the household" and "worker," only to someone who had a job the week prior to the interview. Note also the phrasing of the actual survey question or screening formula that was used to obtain each estimate of home-based workers below.

Taxpayer Usage Study of Internal Revenue Service Income Tax Returns (Forms 1040 and 1040A) Filed with Nonfarm Proprietorship Profit or Loss (Schedule C)

<table>
<thead>
<tr>
<th>Estimate:</th>
<th>Total nonfarm proprietorships located at home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1.49 million</td>
</tr>
<tr>
<td>Male</td>
<td>3.34 million</td>
</tr>
<tr>
<td>Male/female + undetermined</td>
<td>0.31 million</td>
</tr>
</tbody>
</table>

The last category gives an estimate of the overlap of home-based businesses with family-owned businesses.

Sample Size: 7,800 Schedule C's (rate of 1:13,000)

Universe: 98% of Tax Year 1980 individual returns
96% of Tax Year 1980 individual returns, nonfarm proprietorships

Note: "If you had more than one business, or if you and your spouse had separate businesses, you must complete a Schedule C for each business."

Qualifying Criteria: If the business address on Schedule C was the same as the taxpayer address, page 1 of Form 1040, the business was classified as conducted "at home."

1980 Journey to Work Supplement, Annual Housing Survey

<table>
<thead>
<tr>
<th>Estimate:</th>
<th>Total nonfarm plus farm work at home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.7 million</td>
</tr>
</tbody>
</table>

Sample Size: Persons 16 years and older with a job the week prior to interview; 70,000 households, but different from CPS sample

Universe: 96,753,000

Qualifying Criteria: Response to the question "What is ___'s principal means of transportation to work?" was "___ works at home."
Section II: Home-Based Business

1980 Census Public Use Micro Sample A^2

Estimate: Total nonfarm work at home 1.2 million

Sample Size: Nonfarm persons 16 years and older with a job the week prior to interview
5% sample of home workers
0.1% sample of all workers

Universe: 96,617,296

Qualifying Criteria: Response to question "How did this person usually get to work last week?" was "Worked at home."

1980 Census, Special Tabulation for Workers who Worked at Home

Data: Workers Who Worked at Home

Total Workers 2,179,863

Private Wage and Salary
employee of own company 731,660
Federal Government 111,175
State Government 30,194
Local Government 27,176
Self-employed 33,531
in agriculture 1,230,106
Unpaid family worker 560,508
in agriculture 127,196

(For various subtotals, see Section II.A.4.)

Sample Size: Based on a sample of 90% of all persons 16 years and older with a job the week prior to interview

Universe: 96,617,296

Qualifying Criteria: Response to question "How did this person usually get to work last week?" was "Worked at home."
Section II: Home-Based Business


Data:  
Job or business-related work at home 2,860,000  
Wordprocessing 2,549,000

Sample Size:  Persons aged 18 and over in approximately 66,000 Households

Universe:  84 million households

Qualifying Criteria:  Response to question "At home does...use the computer for:" was "Job or business related activities" and/or "Wordprocessing." (Six alternatives and "other..." were possible choices. Respondents were instructed to check "all that apply.")

AT&T Residence Market Research Group 4

Estimate:  Business-at-home sector 7 million

A "workforce that works at home" estimated in a press release as 23 million apparently is composed of the categories: 5

Work-at-home customers who represent 26 percent of all residential customers  
Business-at home 13 percent  
Job-at-home customers 16 percent  
Multiple jobholders account for 3 percent overlap

Customers who do volunteer or school work at home

Sample Size:  225 work-at-home interviews  
293 no-work-at-home interviews  
Selected from a 1981 Needs Study national probability sample that yielded 1,853 completed interviews.

Universe:  Bell residence customers (absolute number not reported)

Qualifying Criteria:  Business-at-home sector:  Response to question "Do you have any income-producing job or business that you do from home? This could be your main income-producing work or something you do in addition to another job or business."  
Job-at-home sector:  Response to questions "First, are you employed in an income-producing job outside the home?" "Do you do any job-related work at home in connection with this employment?"

Volunteer work-at-home customers  
School work-at-home customers
Section II: Home-Based Business

National Longitudinal Surveys

Comprehensive surveys of present and past work experience of mature men and women

Estimate: None. Location of work was neither included nor indirectly tagged, but could be determined in future surveys of job histories.

Sample Size: 5,000 per cohort, national probability sample
Men(45-59), Women(30-44), Boys(14-24), Girls(14-24)
(The cohorts of men and boys have been dropped from the continuing surveys.)

A3. Disagreement among Counts from Different Surveys

We can conclude from these surveys that the number of people doing some work at home may be as high as "23 million households." But that "sector of the workforce that works at home" apparently includes employees, volunteers, and school teachers. How many home-based businesses are there? Estimates range from 0.83 million nonfarm home business operators and unpaid family members (1980 Census data, pp. II-12 and II-13) to seven million persons in the business-at-home sector of Bell residential customers (AT&T data). The Taxpayer Usage Study estimates 5.1 million nonfarm sole proprietorships.

Setting aside the AT&T study which is difficult to evaluate because the sample universe is not reported and the size of the surveyed sample is small, the highest estimate of home-based businesses in 1980 was derived from analysis of income tax returns.

Why do two reliable government sources—the Internal Revenue Service and the Bureau of Census show such discrepancies? According to an analysis of income tax returns, in 1980 the number of nonfarm proprietorships located at home (5.1 million) was over four times higher than the total non-farm work-at-home population (1.2 million) and six times greater than the number of home-based business operators (0.83 million).

1. The IRS count of 5.1 million businesses located at home—and operated in or from the home—is a count of business units, not business operators. (See Note, Taxpayer Usage Study, Section II.A.2.) The Taxpayer Usage Study sample frame includes home-based businesses operated by moonlighters who work also for wage or salary. More than one business may be operated by a tax filer. The analysis excludes home-based businesses which were not recorded on Schedule C as having the same address as reported on Form 1040. The tabulation also excludes businesses that did not file a Schedule C, although net income may have been reported on Form 1040. The tabulation does not identify separate businesses that the taxpayer (counter to instructions) has merged onto one Schedule C form.
Section II: Home-Based Business

2. Although the "underground economy" by definition, does not report income to the IRS, there are several incentives for self-employed individuals to file a Schedule C. The social security benefits that are generated by filing are a positive inducement. A less reputable reason is the reporting of a hobby that claims the home as a business deduction.

3. The Journey to Work series tags a group that overlaps with the set of persons who file Schedule C returns. The Journey to Work question on the Decennial Census refers to the location "where he or she worked most [sic] last week." Therefore persons who moonlight at home are not counted, nor are the total number of business units.

4. The Journey to Work series has another problem in that nonfarm work has not been broken out from farm work at home during the course of the series. Figure II-1 on the following page shows a rising trend in numbers of the nonagricultural self-employed (including those who are home-based). But because the groups are not disaggregated in routine tabulations, any increase in nonfarm home-based work has been, to date, obscured by the declining farm population, as Salopek has pointed out:

According to the 1980 Census, the incidence of working at home is positively related to the number of farmers living in an area, undoubtedly because farmers make up a significant proportion of the work at home group.

The preponderance of farmers among persons who work at home also accounts for the decline evidenced at the national level in the work at home rate. According to the 1970 Census, 3.5 percent of the nation worked at home that year. Data from the 1980 Census show that this proportion declined during the decade and now stands at 2.3 percent.

This decline occurs at a time when many people have expected the work at home rate to increase as a result of technological advances in electronics, telecommunications, and small computer systems; advances which allow people to carry out their job-related duties without commuting to work each day. However, the data show no such increase in the overall incidence of working at home because the growth due to technological advances in these industries has not been numerically large enough to offset the continued decline in the number of persons working at home on farms.

A3a. Undercount by Definition of Part-time Work

Categories of workers are strictly drawn in the Decennial Census and Current Population Surveys. To be classified as an "unpaid family worker" one must "work without pay for 15 or more hours per week in a family business or on a family farm...." 9

1. Both paid and unpaid home-based workers are uncounted by the number who report less than a defined standard time of 15 hours worked "last week." One day a week devoted to a home-based business and seasonal work
Chart 1. Self-employed workers by major industry group, 1948-84

NOTE. Shaded areas denote recessions.

The sharp decline in 1967 is the result of no longer including a large number of incorporated self-employed workers in these tabulations.

Section II: Home-Based Business

not conducted during the week before the survey would not be captured in the Census. A person may operate a valid business working less than 15 hours per week or be unaware that he has worked as many as 15 hours.

2. In a home, business activity may be part-time because the worker's primary time commitment is to household and family care duties. It is only counted as "work" if it is acknowledged by a survey respondent as occupying a minimum of 15 hours each week. In an office, breaks and socialization are included in the part-time hours whereas in a home it is likely that only productive time is counted. Persons who do not realize they are devoting as much as 15 hours per week to business would not be captured. For example, business trips to the post office made in the course of doing household errands and business telephone calls received in the evening are likely to be unrecorded even by entrepreneurs who keep time logs.

A3b. Undercount by Number of Incorporated Home-Based Businesses

Special cross-tabulations of the Decennial Census must be made to count all self-employed persons. Self-employed persons who have incorporated their own businesses draw a wage or salary from their business and therefore, again by definition, are counted as wage and salary workers.10

1. In the tabulation of home-based business operators reported in Section II.A2, there are 1.23 million self-employed to whom should be added the 111,175 salaried employees of their own companies, bringing the estimate of farm and nonfarm business owners to 1.34 million.

2. In 1981 men accounted for almost seventy percent of the self-employed in the non-agricultural sector. The vast majority (seventy-three percent) of unpaid female family workers were not teenagers, but women aged 25-54, suggesting that in a family-owned business "mom" considers himself as self-employed and "mom," as an unpaid family worker. In these family businesses women worked as bookkeepers, clerks or secretaries, and as retail sales clerks.11 If unpaid family workers are also considered as home-business operators, the 1980 farm and nonfarm self-employed total 1.47 million.

A3c. Distribution of Work at Home by Occupation and Industry

A special tabulation of 1980 Census data subdivided incorporated, but not unincorporated, home-based business persons into occupational and industrial categories. The types of occupations conducted at home by employees of their own companies (that is, they receive wage or salary) are concentrated in the Managerial and Professional Specialties (003-199) and Technical, Sales, and Administrative Support (Table II-1).12

1. Workers are scattered through every industrial category except Public Administration (900-932). Very few homeworkers, however, are found in the Entertainment and Recreation Services.
# TABLE II-1: WORK AT HOME BY INDUSTRY AND OCCUPATION, 1980

## Work at Home by Industry

All Industries Except Agriculture, Forestry, and Fisheries (010-031)

<table>
<thead>
<tr>
<th>Industry Description</th>
<th>Employee of Own Company</th>
<th>% of Non-FOB</th>
<th>Rank</th>
<th>Not Employ. % of Non-FOB</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>040-050 Mining</td>
<td>749</td>
<td>0.8</td>
<td>11</td>
<td>3,427</td>
<td>0.6</td>
</tr>
<tr>
<td>06 Construction</td>
<td>14,972</td>
<td>16.9</td>
<td>6</td>
<td>72,893</td>
<td>13.6</td>
</tr>
<tr>
<td>100-392 Manufacturing</td>
<td>8,337</td>
<td>9.4</td>
<td>1</td>
<td>19,210</td>
<td>3.6</td>
</tr>
<tr>
<td>400-472 Transportation, Commun., UTILS.</td>
<td>4,561</td>
<td>5.1</td>
<td>5</td>
<td>23,185</td>
<td>4.3</td>
</tr>
<tr>
<td>500-571 Wholesale Trade</td>
<td>8,445</td>
<td>9.5</td>
<td>6</td>
<td>64,714</td>
<td>12.1</td>
</tr>
<tr>
<td>580-691 Retail Trade</td>
<td>12,371</td>
<td>14.0</td>
<td>2</td>
<td>65,229</td>
<td>12.2</td>
</tr>
<tr>
<td>700-712 Finance, Insur., Real Estate</td>
<td>6,728</td>
<td>7.6</td>
<td>8</td>
<td>31,183</td>
<td>5.8</td>
</tr>
<tr>
<td>721-760 Business &amp; Repair</td>
<td>12,149</td>
<td>13.7</td>
<td>3</td>
<td>108,418</td>
<td>20.2</td>
</tr>
<tr>
<td>761-791 Personal Services</td>
<td>7,007</td>
<td>7.9</td>
<td>7</td>
<td>9,230</td>
<td>1.3</td>
</tr>
<tr>
<td>800-802 Entertainment, Recreation</td>
<td>2,314</td>
<td>2.6</td>
<td>10</td>
<td>109,782</td>
<td>20.4</td>
</tr>
<tr>
<td>812-892 Professional &amp; Related Servs.</td>
<td>10,973</td>
<td>12.4</td>
<td>4</td>
<td>536,855</td>
<td>100.0</td>
</tr>
<tr>
<td>900-932 Public Administration</td>
<td>88,606</td>
<td>99.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>536,855</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Work at Home by Occupation

Farm, Forestry, Fishing (473-499) Excluded

<table>
<thead>
<tr>
<th>Occupation Description</th>
<th>Employee of Own Company</th>
<th>% of Non-FOB</th>
<th>Rank</th>
<th>Not Employ. % of Non-FOB</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>003-199 Managerial and Professional</td>
<td>40,700</td>
<td>44.6</td>
<td>1</td>
<td>146,034</td>
<td>27.0</td>
</tr>
<tr>
<td>203-399 Technical, Sales, and Admin.</td>
<td>34,002</td>
<td>37.4</td>
<td>2</td>
<td>171,844</td>
<td>31.7</td>
</tr>
<tr>
<td>403-469 Service</td>
<td>4,172</td>
<td>4.6</td>
<td>4</td>
<td>135,427</td>
<td>25.0</td>
</tr>
<tr>
<td>503-699 Precision Prod'n, Craft, Rep.</td>
<td>9,081</td>
<td>9.9</td>
<td>3</td>
<td>33,200</td>
<td>6.1</td>
</tr>
<tr>
<td>703-889 Operators, Fabricators, Labor.</td>
<td>3,351</td>
<td>3.7</td>
<td>5</td>
<td>55,133</td>
<td>10.2</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>91,306</strong></td>
<td><strong>100.2</strong></td>
<td></td>
<td><strong>541,638</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**NOTE:** Not included in the above figures are 669,598 non-agriculture self-employed workers who do not receive wage and salary.

* Family-Owned Businesses
Section II: Home-Based Business

2. Occupations in the Service category are performed at home by employees, but not to any great extent by employees of their own companies. Most of the service workers identified in this tabulation were Hairdressers and Cosmetologists (458).

3. Those working in their own companies, are found in greatest numbers in the Construction industry, followed by Retail Trade, Business and Repair, and Professional and Related Services.

4. Those persons working at home as employees, are most likely to be working in the Professional and Related Services or Personal Services, followed by Manufacturing, then Finance, Insurance and Real Estate or the Retail Trade.

5. Certain types of home-based businesses fit into the overlap with family-owned businesses. The most likely occupation for a home-based family-owned business is a Managerial or Professional Specialty, such as a designer (185) or Technical, Sales, and Administrative Support engaged in real estate sales (254). Workers who are not employees of their own companies, however, are likely to be occupied in Technical, Sales, and Administrative Support, for example, as typists (315); in a Managerial or Professional Specialty working as editors or reporters (195); or in a Service occupation working as hairdressers or Cosmetologists (458).

M. What We Need to Know

If there are a "large" number of persons working at home, who are they? Home-based business operators fall within the total workforce of persons doing some job-related work at home. In trying to estimate the numbers of home-based businesses we must examine the entire work-at-home population. First, home-based entrepreneurs either have not been broken out at all or have not been clearly defined in employment surveys. Secondly, although home-based business units are a priority concern of the SBA, other public and private agencies need information on home-based employees.

We have developed a conceptual model illustrated in Table II-2 that disaggregates the total workforce into business and non-business categories:

- **Business Owner** - self-employed or wage or salaried employee of own incorporated business
- **Business Moonlighter** - employee who operates one or more businesses
- **Multijob Moonlighter** - employee having two or more jobs
- **Employee** - wage or salaried worker holding one job
- **No Paid Work** - person unemployed or working without pay
TABLE 11-2: CONCEPTUAL MODEL OF THE WORKFORCE DISAGGREGATED INTO BUSINESS OWNER AND EMPLOYEE CATEGORIES

CELLS 1 THROUGH 18 ACCOUNT FOR ALL PERSONS AGE 14+ AND OLDER
Section II: Home-Based Business

Each of these categories can be subdivided as to whether the individual does "work at home" or "no work at home" and subdivided again to indicate "computer" or "no computer" use.

Such a model becomes useful when attempting to interpret data from surveys that differ in their classification of work-related activities. Each survey counts different subsets of the disaggregated work-at-home population. (See Section II.A.2.)

1. The October 1984 CPS Supplement found that over seven million persons aged eighteen and over directly use a computer in the home. Those individuals are distributed throughout cells 1, 3, 5, 7, 9, 11, 13, 15, and 17 in the model. Of that same group nearly three million use a computer at home for job- or business-related activities. Those persons are distributed throughout cells 1, 5, 9, and 13.

2. Similarly, the 2.2 million 1980 Census respondents who work at home "most of time" fall into cells 1, 2, 13, and 14, that is, no moonlighters are counted.

3. The May CPS Supplement counted over 15 million persons doing some work at home for their primary work. Distributing them in cells 1, 2, 13, and 14 clarifies that this study has counted the same group as the Census tabulation above. But the survey was taken five years later and respondents were asked a very different question: "As part of your regularly scheduled work, do you do any of your work [for your primary job] at home?"

4. Journey-to-Work questions refer only to one's primary job. Thus neither category of moonlighting can be tabulated from either the Annual Housing Survey or the Census. The AT&T study included moonlighting activities aggregated with one's "main income producing work." The AT&T business-at-home sector therefore is divided between the business owner and business moonlighter categories in the model but the numbers in each cannot be determined from the data because of the wording of the survey questions. AT&T also tabulated volunteer home-based workers who can be placed in the "no paid work" category in order to get a total accounting from that survey.

5. The special tabulation of Workers Who Worked at Home from 1980 Census data provides a count of persons working in home-based businesses if the following Census classifications are assigned to the business owner category:

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-employed including agriculture</td>
<td>1.2 million</td>
</tr>
<tr>
<td>Wage or salaried employees of own company</td>
<td>0.11 million</td>
</tr>
<tr>
<td>Unpaid family members</td>
<td>0.13 million</td>
</tr>
<tr>
<td>Total working in own home-based businesses</td>
<td>1.47 million</td>
</tr>
</tbody>
</table>

II-12

23
Section II: Home-Based Business

If self-employed persons and family members working in agriculture are excluded, the total number working in home-based nonfarm businesses is 834,335 or 0.83 million.

Home-based employees also can be totaled from those data:

<table>
<thead>
<tr>
<th>Work at home as employees of</th>
<th>0.62 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>private company</td>
<td>0.03 million</td>
</tr>
<tr>
<td>federal government</td>
<td>0.027 million</td>
</tr>
<tr>
<td>state government</td>
<td>0.034 million</td>
</tr>
<tr>
<td>local government</td>
<td>0.711 million</td>
</tr>
</tbody>
</table>

Total working at home as employees

Note as we did in Section II.A.b that unpaid family members could be assigned to the "employee" category (or to the "no paid work category") rather than the home business category. The initial classifications are tied to the end use that prompted obtaining the data. To apply the numbers in other contexts, the original meaning of the numbers must be understood.

II. Recap of Estimates of Persons Working at Home

In this section of the report we are still trying to answer the question "If there are a 'large' number of persons working at home, what categories of the labor force do they represent?"

Recapping the survey data examined in Section II.A.2 and above, we know, for example, that in 1980:

1. Those working at home did not consist only of farm or non-agricultural primary jobholders or business owners. There were only about 3/4 million home-based employees and about 1 1/2 million home-based business operators.

2. They were not just moonlighters. We do not have a breakout of home-based moonlighting, but there were only 4.7 million multiple jobholders all together.12

3. They were not just home-based business proprietors. There were only 5 million nonfarm, non-incorporated home-based business units. (AT&T estimated 7 million business-at-home workers including moonlighters.)

Even the aggregate of these overlapping groups does not represent a large segment of the labor force. However, anecdotal evidence from a wide variety of sources suggests that these are vast undercounts of home-based workers.
Section II: Home-Based Business

There are factors that explain a possible undercount.

1. Some work-at-home activity was not captured in Census surveys, including: Part-time or intermittent non-computer job- or business-related work at home; unreported home-based businesses; and school work and volunteer work done at home (which represented 74 percent of AT&T's sample of Bell households).

2. There may have been substantial growth in work at home since 1980. In late 1984 nearly three million people were using a computer in their home on job- or business-related activities. Very preliminary estimates from the Current Population Survey show over 15 million people doing some job-related work at home in 1985. Fifteen million is a very sizable number of people working at home. In this population there is bound to be a large number of home-based businesses that remain to be identified by tabulation of the May 1985 Supplement.

Since existing surveys cannot provide unambiguous counts of home-based businesses, or their unique characteristics, a special survey will be necessary to obtain clearcut information about home-based businesses.

The next section examines some measurement problems in capturing the total work-at-home population and identifying within it, home-based business units.

B. MEASUREMENT PROBLEMS

I. INTRODUCTION

Counting and characterizing the various segments of the labor force is difficult:

1. Many businesses appear to have their genesis in the home. In effect, the home functions as an incubator for new businesses. As businesses grow they reach a stage at which they can function more smoothly out of the home. At the same time the home may remain the location of the smallest business, that is, the one person business. Of the total nonfarm proprietorships, 5.1 million were located at home and only 3.1 million away from home in 1980.

2. The actual number of businesses per household is underestimated for a number of reasons. First, questionnaires impose definitions that make it difficult to understand if a respondent is an owner or not. Appendix A illustrates the variety of definitions that have been used. Surveys also exclude reporting of a second business. Most ask questions about one's primary work. If one worked "most [of the time] last week" at his or her
unincorporated business he or she would be counted as self-employed. If the business is incorporated, the respondent falls in the "employee of a private company" category and only can be identified as having ownership in that company by non-routine tabulation.

3. In surveys of multiple jobholding, if the primary work is a business, a second job is counted only if it is a wage and salary job. A second business is not recorded. Thus, if a Schedule C is filed for each business, tabulation of those returns would produce a higher count for the number of businesses per individual than analysis of Census data.

4. On the other hand, some enterprises may have shared ownership; others not. Household members may work in one or more of the businesses but not necessarily in direct proportion to their ownership. An example illustrates the problem.

A professional works full time at his incorporated practice downtown which he began in his home. Evenings and weekends he makes financial projections on his computer for the retail store in another state that he owns with his brother-in-law and their wives. His wife works at her profession in their home part time (because of scarcity of clients) and also is the buyer for the retail store which requires some travel out of state. The couple manages a rental unit that they own. What questions will allow us to classify those activities so that we can then track the contribution of this family to the economy? We cannot dismiss their contribution as insignificant considering that the "role model" store for their business has expanded to five stores.

5. Another cause of undercounts occurs because many home businesses evolve over a period of time and do not have a "day" of birth. Women, particularly, do not always think of their business as a business when the income they derive or the time they work seems incidental relative to their other activities as an household administrator. If we are interested in the genesis of small businesses, we must examine the total number of active, dormant, dropped, and failed attempts that lead to a successful enterprise.

What we need to track is the gestation, birth, and expansion of a new business out of the home that can only be achieved with longitudinal surveys. "Official" snapshots taken during this process include registration of the name of a business, purchase of a local license, sales tax permit, and perhaps incorporation. Activities denoting business formation that may occur earlier in time such as ordering letterhead, equipment, and supplies are less readily captured.
Section II: Home-Based Business

II. Multiple Job Holding

The annual May CPS Supplement, prepared for the Bureau of Labor Statistics (BLS), tracks part of the labor force working at more than one job. In 1982 the majority of all multiple jobholders, (home-based work not having been tagged) were employed in two "private wage and salary" jobs. Two-fifths of all dual jobholders were self-employed: Seven percent were self-employed as their primary job and 34 percent on a second job. 15

The May 1985 supplement for the first time included a question on work at home. Because by BLS definition, "dual jobholders" must hold at least one wage and salary job, that is, they cannot be self-employed at two jobs, entrepreneurs simultaneously engaged in more than one business are not revealed by that labor count. Nor are those with a home-based business on the side identified because at-home work is asked only with respect to the primary job.

III. Nonresponsive Interviews

The home-based business population as a category may be severely underreported because people do not want to let the government know what they are doing. A small study employing "Creative Approaches to Identifying the Elusive Home Business" tried posting appeals for interviewees on television, in classified ads, flyers, libraries, and banks. 16 In two years only 32 questionnaires were completed. Those were obtained largely from talking to people at craft shows, that is, through personal appeal and assurances.

The study found that the barriers to conducting the survey were difficult to overcome: 1) the potential respondents wanted to know if the interviewer was from the IRS and 2) they referred to their work at home as a "hobby," rather than as a business.

If these responses are widespread, as they may very well be, it can be argued that the CPS household sample would give a lower nonresponse rate than a specially constructed sample. A Current Population Survey, because of its methods, offers an answer to the nonresponse problem that home-based business surveys encounter. The CPS interviews each dwelling unit eight times over a sixteen-month period. Thus, the respondents are conditioned to answering questions, for all but the first interview.

C. Focus of Current Research on Home Telecommuting

Very little study has been made of home-based businesses per se. Enormous interest in home telecommuters has resulted from (or been produced by) an outpouring of articles describing the romance or liabilities of working at home. Some descriptions include self-employed telecommuters. The personal computer has spurred interest in working at home, as well as making it technically feasible. And thus a possible new trend has brought attention to all home-based businesses such as crafts, professional services, and consulting while spotlighting computer-related work at home.
Section II: Home-Based Business

The publicity centered on employee telecommuting has alerted potential entrepreneurs to the opportunity of starting a business in one's home. It is also creating a climate of acceptability and credibility for home-based businesses. Thus, the anecdotal evidence suggests that computer-related telecommuting is an important cause of new business formation.

The length and content of the sections on home-based business and home telecommuting of the accompanying bibliography provide a rough measure of the interest in the self-employed worker relative to a home-based employee. Problems of potential exploitation, isolation, low pay, hazardous working conditions and so on are centered on the employee, not the self-employed owner who may be subject to a similar array of negative conditions. The definition of who qualifies as an "independent contractor" is arguable, as a perusal of the many news stories on home knitting illustrates. (See Bibliography, Appendix G.)

D. CURRENT HYPOTHESES REFLECT THE LACK OF KNOWLEDGE ON HOME-BASED BUSINESSES

III. Introduction

To identify the data needed for research and policy making with regard to home-based work, participation was invited from the following three sources:

Advisory Panel

A small panel of experts on family-owned business and home-based business counseled the authors during the study and met in Los Angeles to discuss trends, methodology, and content for the proposed questionnaire.

Industry Associations

A letter and questionnaire were sent to forty-nine associations which are listed in Home Businesses, SBA Small Business Bibliography No. 2 and other resources. The fifteen persons (thirty-one percent) who responded represented primarily associations of home business owners or publishers of home business newsletters (Appendix B).

Researchers and Consultants

A similar invitation to participate in this study was sent to fifty-three researchers and consultants known to be interested in work at home. Nineteen persons (thirty-six percent) responded with lists of their own published and current research, hypotheses concerning work at home, and questions they would like to have included on the questionnaire.

The views of trends and issues concerning work at home submitted by both groups follow below. Their interest in the subject ranged from advocacy of banned home work, to writing zoning codes that would permit home-based business. Their suggested questions all need asking, but would be difficult, if not impossible, to cover in a single survey.
Section II: Home-Based Business

D2. A 1985 View of Work at Home

The Advisory Panel members, researchers and consultants, members of trade associations and union leaders submitted hypotheses, predictions, and their questions regarding home-based work. These have been collected under the authors' own generalized headings, but the original wording of each item has been kept as nearly as possible. The statements are presented as research hypotheses. In no case does adequate data exist to confirm these statements as proven. The authors do not subscribe to all of these views. But these are the kinds of issues that require substantial testing.

All of the submitted questions were not possible to include in a single questionnaire. From this list of topics questions have been distilled that seem vital to the Small Business Administration (Section IV.E2)

Work at home blurs the boundaries between work and leisure.

1. Blurring of work-home boundaries in time and space results in lack of balance between the two activities. (It is easier to become a workaholic when the work is always waiting in the next room.)

Work at home changes the culture in which one works.

1. Our society's new values about what constitutes a good life together with the technology of the information society are encouraging a significant increase in work from home.

2. The individual freedom and lack of supervision is enjoyed but at the same time, corporate culture (values, social interactions) is weakened by having people dispersed. Finding ways to maintain the corporate culture is a vital issue.

Home-based businesses have unique characteristics.

1. Home-based businesses probably:

   Have fewer employees, smaller gross revenues
   Are suburban and rural, not urban (?)
   Have middle-aged proprietors and older, not younger owners
   Are of short duration, possibly one to two years average(?)

   (Note: question marks by the respondent.)

2. Most home-based businesses tend to be part-time operations because of time management problems caused by constant interruptions from "life."

3. People do not understand that people are actually WORKING when they are at home.
Section II: Home-Based Business

4. There are two distinct groups of home entrepreneurs:

Those with low sales and low net worth; and, those with high sales and large net worth.

5. Home entrepreneurs provide slightly more services, rather than products.

6. Home entrepreneurs have problems that are different from those that other small businesses have, including: zoning and other codes; marketing; obtaining small amounts of financing; purchasing in small lots; obtaining insurance and benefits; complying with labor standards; complying with Aid for Dependent Children requirements.

7. Home-based businesses almost always start with a very small amount of capital which is insufficient to get the business off to a good start. Thus, it may take a home-based business twice or three times as long to really get moving, compared to other kinds of businesses.

8. Home-based business people are isolated from the business community.

9. Many home-based business people have good products and/or services to offer, but do not have the business know-how they need. These people need help in cutting costs, marketing and business techniques.

10. Family and friends can wonder whether the home-based business is an excuse for unemployment; personal contact with clients and the public is minimal, etc. Along with regular small business problems, these factors can lead to serious personal depression of the proprietor.

11. Rural people have a hard time finding the services and information they need to set up a small business.

12. Cooperatives can provide social and consciousness-raising opportunities as well as aid with marketing and other problems.

13. Home-based industry is often less destructive of the rural environment than factories/businesses and provides more opportunity for self expression.

14. Home-based businesses are, of necessity, more low-profile than their traditional business counterparts. This is due to state, federal, and local regulations which often work to the advantage of traditional business, but tend to discriminate against home businesses.
Section II: Home-Based Businesses

15. The growth of home-based businesses as a concept is
16. the professionals working at home have little
17. Home-based businesses will influence work at home by:

(a) They will accentuate a trend towards paying for results.
(b) They will accentuate a trend towards job-sharing and part-
(c) They will accelerate a trend towards job-elasticity and part-

18. If a person's skills are in demand and the person has few

19. Work at home is a less than ideal choice, as attractive and
representative flexibility, autonomy, and probably success.

20. Representing the depression, unemployment, and probably success,
nonwork constraints, then setting up a business at home

21. In fact, the person's skills is not in demand and he is one
of labor.

22. With "independent contractors", as defined by the Department

23. Home-based businesses will influence work at home in

24. Home-based businesses will benefit young children

25. Home-based businesses will increase employment opportunities

26. For "homebound" persons, including workers or young children

27. Home-based businesses can be a mother's day gift


29. The economic growth in the southwestern quadrant, export of a major energy

30. Telecommuting will grow gradually, except in major energy or

31. Within the covenant, as are the handcrafted or otherwise.

32. The technology has made it possible to work at home, even if people to work at home are not used to the

33. It is a transition to full-time work at a home.
Section II: Home-Based Business

4. Approximately one-third of the workforce will work from home within the next 20 years. This will result in a reduction of crime (because the neighborhoods will be less deserted during the day), and a revitalization of local community.

5. Technology is leading to increased opportunities that allow more and more people to turn to home-based businesses.

Work at home by employees raises questions of costs and benefits for both employer and employee.

1. The experience of working at home is quite different for employed women versus those self-employed.

2. How are home workers paid? How is the work output measured? Are they paid for work incidental to the time covered by the Fair Labor Standards Act?

3. What pension, vacation, health care, and life insurance benefits are paid by the employer, and if they are not paid, how do employees meet these needs?

4. The cost/benefits for employees on site must be reevaluated for those working off site. Should the determination of cost/benefits include intangibles not considered for on-site employees? For example: for the employer, retention of valued employees; for the employee, the ability to do two things at once.

5. Should employees be compensated for tangibles they provide? (For example, car, telephone, and electricity.) Should employers provide equivalent services and goods to their home-based workers such as a workstation and subsidized food and drink?

Telecommuting can invite or lead to "sweatshop" conditions.

1. The experience of working at home (in all of its aspects) is quite different for employed women versus those self-employed.

2. Important characteristics of employer-run home work programs are determined by the basic employer objective in instituting the program. For managers and professional workers (mostly male), this objective is to increase the satisfaction and commitment of valued employees; for clerical workers (mostly women), the objective is to reduce costs for the most routine parts of the work.
In the latter case, organizations can save money by cutting benefits and/or wages and by shifting overhead costs to workers. These jobs will nevertheless be attractive to mothers of young children whose options for combining paid work and family responsibilities are greatly constrained.

3. The rising cost of telephone use will reduce the benefits of home work on computers for clericals.

There are many motivations to work at home.

1. Most home-business people choose to work from home because it gives them a certain amount of flexibility and independence in their work which is not often available in traditional jobs.

2. People work at home, as entrepreneurs or as employees, because of freedom, flexibility, home responsibilities, and low start-up costs.

3. People work at home to be with children, to reduce commuting, or because they are handicapped or elderly.

4. We still know very little about why people choose to work at home, and the reasons are probably more varied than most of us imagine. For entrepreneurs, are there key factors that affect decisions to stay at home over time? For example, are there certain issues such as production volume, the numbers of years in business, or whether the business produces goods or services?

E. SPONSORS OF CURRENT RESEARCH AND DATA SOURCES

EL. Research Focus

We know very little about home-based business. The notions expressed above suggest a broad range of research topics—many of them important to pursue. Some studies are going on currently but researchers are limited by the lack of samples representative of the population as a whole.

Surveys of populations reflect the interests of the sponsoring group. Some data on work at home can be squeezed from surveys that were not well designed for that purpose. All journey-to-work questions were grafted to the decennial Census and Annual Housing Survey to use in formulating transportation-related energy policies as a reaction to concern about depletion of fossil fuels. The Department of Transportation had minimal interest in the category "works at home" other than to account for the transportation requirements of the total population.

Other surveys that address work at home may not emphasize home-based businesses. The divergent research and policy interests of those investigating work at home preclude gathering all needed information in the survey proposed
by the SBA. However, much can be gained from a mutual awareness of on-going surveys and proposed studies. Sometimes modifying or adding just one question can make a data set valuable to other users.

The sponsors of surveys that currently include tagging of some type of work at home together with their primary research topics include:

<table>
<thead>
<tr>
<th>Sponsorship and Data Source</th>
<th>Research or Policy Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government Surveys</strong></td>
<td></td>
</tr>
<tr>
<td>Decennial Census</td>
<td>Journey to work</td>
</tr>
<tr>
<td>CPS and some supplements</td>
<td>Employment, computer use</td>
</tr>
<tr>
<td>IRS Schedule C analysis</td>
<td>Unincorporated businesses</td>
</tr>
<tr>
<td>National Personal Transportation Study</td>
<td>Transportation</td>
</tr>
<tr>
<td>Annual Housing Survey</td>
<td>Journey to work</td>
</tr>
<tr>
<td><strong>Academic Studies</strong></td>
<td></td>
</tr>
<tr>
<td>Small sample studies conducted</td>
<td>Home telework, telecommuting</td>
</tr>
<tr>
<td>within such disciplines as psychology, science, sociology, communications, and organizational management and culture</td>
<td></td>
</tr>
<tr>
<td><strong>Advocacy Group Research</strong></td>
<td>Women's issues</td>
</tr>
<tr>
<td>Magazine readership or membership surveys</td>
<td>Child care</td>
</tr>
<tr>
<td></td>
<td>Computer users</td>
</tr>
<tr>
<td><strong>Commercial Surveys</strong></td>
<td>Sales of services or products</td>
</tr>
<tr>
<td>Market research</td>
<td>Stimulation of cottage industry</td>
</tr>
<tr>
<td><strong>Trade Association Surveys</strong></td>
<td>Needs of home-based workforce</td>
</tr>
<tr>
<td>Small business associations</td>
<td></td>
</tr>
<tr>
<td>Home business associations</td>
<td></td>
</tr>
<tr>
<td>Electronic cottage networks</td>
<td></td>
</tr>
</tbody>
</table>

### E2. Federal and State Agency Sponsors of Studies Related to Home-Based Work

#### E2a. Federal Agencies

A broad variety of people interested in home-based work was revealed by responses to the mailed inquiry. Divisions within the federal government have also begun to give some attention to work at home. Pratt personally met with staffs of agencies listed below. She believes this to be a comprehensive, but probably not exhaustive, summary of activity addressed to work at home.
Section II: Home-Based Business

Department of Health and Human Services

The Department of Health and Human Services (HHS) funded two projects completed in 1985 entitled "Home Occupation Ordinances" and the "Impacts of Computer-Mediated Home-based Work on Women and Their Families." HHS is stressing interagency agreements so there might be a basis for their co-sponsoring a survey. Their missions are to Aging, Youth, Family, Head Start, Developmental Disabilities (usually meaning from birth or very early age), and Native Americans.

Department of Transportation

The National Personal Transportation Survey (NPTS) conducted in 1977 (16,000 households) and 1983 (17,379 persons in about 8,000 households) by the Bureau of the Census queried all actual travel in complete detail. Work at home was also tagged.

In 1983, 273 of the 7,576 workers, that is, 3.6 percent answered that they work at home. The weighted numbers are not yet available.

Four agencies co-sponsored the highway information study. They are planning now for 1987.

The Transportation Research Board of the National Research Council sponsored a National Conference on Decennial Census Data for Transportation Planning to revise the journey-to-work questions for the 1990 Census.

Office of Technology Assessment

The Office of Technology Assessment (OTA) released a major report for Congress in 1985 entitled Automation of America's Offices. Section II of Chapter 5 covers "Home-based Automated Office Work." OTA has no current plans for further research in those areas.

Wage and Hour Division, Department of Labor

Wage and Hour has responded to advocates for and against home-based work by commissioning a special cross tabulation of work at home from 1980 Census data. Some occupational and industrial breakouts were included. (See Section II.A.1)

Their interest in future work will depend on pressures to regulate or deregulate home work. If the trend towards home-based work increases there probably will be testing of the definition of contract labor. The interests of SBA and DOL overlap on that segment of workers who fall in the gray area between employees and entrepreneurs.
Section II: Home-Based Business

Women's Bureau, Department of Labor

A one-year study on Women and Office Automation: Issues for the Decade Ahead was published in 1985. The Department of Labor (DOL) has also funded a National Academy of Science project on office automation.

DOL has no money for future work. If the new commissioner likes technology, then they may give it priority.

U. S. Office of Education, Office of Vocational and Adult Education

The Office of Education has not planned any followup studies to the University of Tennessee project that they funded, entitled "High Technology Education: a Program of Work." 23

Bureau of Labor Statistics

For the first time the Bureau of Labor Statistics (BLS) has tagged work at home relating to primary employment in their May 1985 CPS Supplement. The supplement is one of a series that looks at multiple job holding. If the work-at-home labor force is proven to be as large as the 15 million preliminary estimate, the BLS may want to learn more about that segment.

Department of Agriculture

The Department of Agriculture funded a study of "Telecommuting: Working at Home Electronically." 24

The Home Economics Extension Service is actively stimulating people to shape their home-based work into viable home-based businesses. Workshops such as "Sewing for Profit" are organized on the local level through the land grant colleges. Some locales use the SBA-affiliated SCORE members and other local experts.

A national workshop held in May 1985 gave an overview of home-based business to state specialists. Topics covered included "What is the state of the art of Home-based Businesses?" "What is the role for the Extension Service?" and "What are the Pros and Cons of Coops?"

The Extension Service is also conducting a National Impact Study that includes what each state has accomplished towards home-based business objectives. Responses include descriptions of local workshops, attendance, and evaluations.
Section II: Home-Based Business

E2b. State Agency

Minnesota Department of Economic Security

The State funded a detailed study that included a survey, profile of home-based businesses, recommendations, and bibliography published under the title "Home Enterprise in Minnesota: Minnesota's Role in the Growth and Development of Home-Based and Cottage Industries."25

F. BIBLIOGRAPHY ON HOME-BASED BUSINESS (See Appendix G)

References for the bibliography that accompanies this study have been selected to provide a comprehensive but not totally inclusive overview of everything published on work at home. Many newspaper columns, for example, are essentially identical syndicated releases. A range and quantity of those have been included to give the flavor of what interests people about work at home: new employment opportunities, concerns for potential exploitation, and a fascination with the implications of changing ways to work.

Neither the scholarly nor the media articles limit their attention to one topic. Most research and popular articles address overlapping issues such as women and work, leisure and work, and home-based work studied from the point of view of psychology, anthropology, economics, business, and sociology. Any one category of the bibliography should not be taken as a sole source of information; for convenience the references have been loosely divided into the following major topics:

Home-Based Business

Many popular articles and monographs describe how to earn money at home. A small number have been listed to suggest the range of available resources. Few articles in the professional literature have more than touched on the subject of home-based business.

Homework Regulations

Since 1981 a lively debate on work at home has centered on homework regulations for the knitting industry. Three pages of news articles debate two points of view: labor unions see the home as a potential sweatshop; the worker considers himself or herself as an independent contractor operating a home business.

Moonlighting

The microcomputer has opened new opportunities for employees to moonlight. That additional job or business activity has raised concerns for employers.
Section II: Home-Based Business

Organization of the Home Office Environment

The introduction of the personal computer into homes has prompted attention to the problem of creating space in a household for a functional office.

Self-Employed Workers

Trends in self-employment, in or out of the home, are being followed in government and business periodicals. In the popular media, use of a personal computer for business activities in the home tends to be highlighted without differentiating the status of the worker as self-employed or employee.

Tax Considerations for the Home Office

Published interpretations of the Internal Revenue Service code regulating the deductibility of home offices have become essential as the home is used in new varied ways for income-producing activities.

Telecommuting

Over fifteen pages of articles on telecommuting are only a part of what is being published on this "hot" topic. The public is fascinated by it. Researchers are few now but their numbers are rapidly increasing as graduate students elect to study the phenomenon as a thesis topic.

The references have been roughly collected under subheadings that indicate their primary concern: Handicapped Telecommuters; Home Business Owners and Telecommuters; Telecommuting Trends; and Telecommuting and Women.

Work at Home

Collected under the heading Work at Home are the more historical and philosophical examinations of the home as the location for income-producing work.

Zoning Considerations for Work at Home

Most residential areas are not now zoned to allow for income-producing work in the home. Zoning regulations reflect a community value system that may be changing as more people opt to work at home. Both popular media and professional planning journals are addressing public policy questions of what types of home-based work should be legalized.
ENDNOTES


5. News Release, AT&T Consumer Products 111083

6. Sponsored by the Center for Human Resource Research, Ohio State University

7. Personal communication from Phillip Salopek, Population Division, Bureau of the Census


10. Ibid, p. 1

11. Daly, op. cit. p. 4


14. Grayson, op. cit. p. 39


16. Judith Leonard, personal communication


19. Reports published by the U. S. Department of Transportation

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Section II: Home-Based Business


III. FAMILY-OWNED BUSINESS

A. OVERVIEW OF WRITING ON THE FAMILY-OWNED BUSINESS

In this section, which was co-authored with Renato Tagiuri, a review of what has been written about family-owned businesses is given to provide the reader with an understanding of the research issues proposed in section III.C.

Most research on the family-owned business has been qualitative and the better part of it has been anecdotal. Most of what is known about family-owned businesses comes from case analyses of small and medium-sized family-owned and managed firms that employ two or more relatives. Very little is known about the business practices and behavioral dynamics of large family firms, especially those which are publicly-held. There is an increasing amount of research that attempts to lay out a conceptual scheme for understanding the behavior of individuals in the family firm. Most writing on family-owned businesses, however, focuses on certain problems that occur in these companies and offers advice for addressing these concerns. The family business literature generally speaks about males in these firms and so the pronoun "he" is used in the discussion here.

Relatively little of the writing on family-owned businesses examines the financial characteristics or business practices of these companies and those articles that do, again, generally rely on anecdotal evidence. There are just a few studies that present arguments based on quantitative data and only a couple that quantitatively compare family-owned businesses with non-family-owned businesses. The lack of comparative empirical studies of family-owned businesses constitutes the biggest shortcoming in the literature.

The literature on family businesses is organized below into eleven (11) categories. The bibliography on family businesses can also be found in Appendix G.

- Economic, Social, Political, and Demographic Importance of the Family Business
- The Life Cycle of the Family Business
- General Descriptions, Organization Theory, and Management Advice on Family Business
- Conflict and Conflict Management in the Family Business
- Case Studies on the Family Business
- Family Relationships in the Family Business
- Entrepreneurship
- Nepotism
- Management Succession in the Family Business
- Estate Planning, Financial and Legal Issues in the Family Business
- Family Theory, Family Therapy and Interpersonal Issues
Section III: Family-Owned Business

A1. Definition of the Family-Owned Business

A family business is one in which two or more extended family members influence the direction of the business through the exercise of kinship ties, management roles or ownership rights. This definition allows for the exercise of family influence by way of being in the same family, having management responsibility in the company or being an owner. For example, the founder's wife, who does not work in the company and is not an owner, can still shape how money is invested in the firm and who gets hired and promoted. Being a manager or an owner in the provides relatives with additional influence in the company. The name of the family may or may not appear in the name of the company.

A family business can be family-owned with the family having no significant influence on the day-to-day running of the company, or it can be family-owned and managed with the family influencing both the investment and strategic decisions of the company and the daily operational decisions of the business. Family businesses refer to both family-owned companies and to family-owned and managed businesses. In other words, all family businesses are at least family-owned. A slightly smaller number of companies would be both family-owned and managed. Businesses which are just family-managed but not family-owned (e.g., sharecroppers) are not defined as family businesses or considered here.

A family-owned business is one where a single family has ownership control over the firm. In smaller family firms, ownership control requires having 51 percent of the voting stock. In larger companies, however, ownership control can be maintained with a far smaller percentage of stock, depending on how directors are elected to the board.

A2. The Use of Family Employees

In a typical family business one would generally see many, if not all, of the top management positions filled by members of the controlling family. By hiring family members, the business looks after its needs as well as the family's. Hiring a relative helps to ensure continuity in the management team, allows for more secrecy in decision-making, and hopefully, adds a competent individual to the staff. Since families are usually interested in their children finding promising careers, placing them in the family business can be a way of looking after them.

A family member is more likely to remain with the family company than would a non-family executive and this probably represents an important reason why he or she is preferred in employment. Management turnover, which is very costly to large corporations, can be disastrous to smaller companies. When a manager leaves a small company, the firm loses the cost of training him. If he joins or starts a competitive firm, the costs to the former employer can be very great.
Section III: Family-Owned Business

For a person whose family owns a company, the firm is probably a very powerful entity - even during his childhood. He listens to discussions of company problems over dinner and sees his relatives go off to work there. He will visit the company and even work in it during school vacations. Because they have grown up hearing about and, probably, working in the family company, relatives may have a lot of valuable experience in company operations before they begin to manage. Family members will probably be given more responsibility earlier in their careers, have more immediate access to top management, and have more security than if they went to work for a company other than their family's. It is not clear from the research literature if family managers are generally paid more in the family business than they would earn elsewhere. But the reasons family members are attracted to their family's business are, nonetheless, substantial.

One would also expect to see the Board of Directors of the company, if one exists, dominated (usually completely) by relatives from the same family. The family members who manage the firm and those who vote stock need not be the same people. Often, however, there tends to be considerable overlap between the two groups.

A crucial difference between family and non-family businesses is readily apparent: while the managers of the non-family business each has his or her own family to provide for, the related managers of the family business all provide for the same extended family. It is primarily this fundamental difference which accounts for most of the strengths and weaknesses of the family business.

The financing of the typical family company's operations and the financing of the family are often so intertwined as to be indistinguishable. This is because the family business generally represents most of a family's total assets. One result of having company assets mean so much to both the business and the family is that financial planning for the firm and estate planning for the family must be considered jointly. It also means that, unlike investors in many public companies, shareholders in a family business usually take a very active interest in its operation.

By aligning their interests so closely with the company's, shareholders have effectively put all their eggs in one basket. This is a risky investment strategy, unless the business is quite secure, since it limits the personal liquidity of the shareholders and even then the return on the investment may not be very great. Of course, the motivation of family members for holding the company stock is more than purely financial. Association with the business probably benefits the family in terms of its status in the community.

There are significant advantages to the family firm of having such an interested group of shareholders. Donnelly writes in The Family Business:

When the family equates its long-term best interest with that of the company, more harmony is achieved between the normally competing values within the individual and the organization. Reinforced and perpetuated
Section III: Family-Owned Business

by family pride, identification, and tradition, this unity of purpose has been a fundamental, though intangible, factor in the success of many family firms.7

At the top of the list of advantages for the firm are the financial sacrifices the family can make for it. Donnelly argues that because of the family's reluctance to sell its stock, managers are less constrained to achieve short-term performance goals and can concentrate, instead, on longer term objectives. Such an attitude would allow a company to invest in capital improvements and research and development even if that meant lower profits (and dividends) for a while. "Many family companies," Donnelly writes, have been built on the tradition of minimal dividends and personal sacrifices, and family pride and loyalty have been responsible for continued operation through periods of hardship when considerations of profit and loss might well have dictated closing down.8

Sacrifice often involves dipping into personal savings as well as foregoing dividends. A case in point is the Weyerhauser Company. Its early families sustained 40 years of losses so that it could grow.

Not all families identify their own interests with the long-term interests of the company, however, and this puts considerable financial pressure on the business. Even if the family sacrifices for the company, there are only so many family funds and because management is often discouraged or prevented from "going public" to raise capital, the company may find itself capital short.9 Miller and Rice claim that one of the two major problems facing the "average" family firm is that it needs more capital than the family can provide.10 Beyond restricting the amount of capital the firm can raise outside itself, the family can also reduce internally generated capital (in the form of retained earnings) by demanding excessive dividends.

During the first generation of a family company, the owner is compensated largely through his salary. When he retires, his future income from the company is in the form of dividends. Later generations in the family will inherit stock in the company and many of these relatives will not work in the company.

What makes this issue less than objective in the family firm is that family living standards and aspirations are usually formed at a time when most of the income to the owner-manager is in the form of salary. When the founder passes away, his widow or children are likely to become major stockholders, desiring the same income level, but now in the form of dividends.11
Section III: Family-Owned Business

The liquidity of the firm is affected by the rate of growth in the number of family claimants to dividends compared to the rate of growth of earnings after taxes. If the number of claimants is growing faster than the growth of earnings, the family business can be drained of needed capital. In addition to the number of claimants growing, their connection to the firm also wanes with time and they become more concerned with their own financial gains than the company's.12

The manager's intimate knowledge of the shareholders' needs makes him more vulnerable to demands by shareholders for more immediate income.13 No doubt, the family sanctions that can be imposed on the family managers for not being "considerate of the family" are also influential.

Given our definition of a family business, the family has controlling interest in the firm. This, of course, leaves room for investors who are not members of the family. The relationship between these individuals and the managers of the family company is surely an interesting one to explore but investigators have not done so. In all of the writings reviewed here, the only shareholders discussed are family members.

A3. Family Influence on the Business

The family firm is influenced by family and business considerations. For such an organization, one can observe a person's position in the family influencing his position in the company and his position in the company influencing his standing in the family.14 Rank and reputation in both organizations is important and they can be mutually reinforcing. The eldest son often inherits the top management slot because of his position in the family. His leadership position in the company, in turn, makes him a more influential family member. Such mutual reinforcement need not occur, however. Donnelly points out that family ties can outrank company position in decision-making for the firm:

Tradition and company identification, as well as proprietary interest, cause each family member to view himself as a spokesman for the business, with a right to decide corporate policy equal to that of other family members.15

Having membership in two social systems can make it difficult for the management of the company to stick to the needs of the business. To begin with, the management of the company may not be obliged to use annual reports, stockholders' meetings, and boards of directors which help insure objectivity in non-family enterprises. Moreover, family concerns and needs may dominate company goals. Since the firm is ultimately tested by economic criteria, non-economic goals may be less than "objective". Corporate planning in such firms can be difficult.16
Section III: Family-Owned Business

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M. The Business Performance of the Family-Owned Business

Although there are a number of well-known family companies and many lesser-known family firms which are strong competitors and even dominant forces in their industries, the performance of the family businesses is often criticized.

Donald, for example, writes that families which have not developed a sense of company responsibility can abuse their businesses. When company needs are thwarted by family considerations, one can see capital shortages, misguided financial secrecy, ingrown company policies, a lack of profit discipline, ineffective utilization of non-related management talent, a shortage of highly skilled managers and family conflicts. The result of these practices are poor profit performance, a lack of investment for growth, and a failure to meet new marketing challenges.

Family firms are suspected by many researchers of having lower profits than do firms which are not closely held. If true, this might be due to family firms' more conservative accounting practices or high perquisites. It might also be because family enterprises are concentrated in less risky industries where returns are lower. But it could also be that stronger competitors drive down the profits of family-owned and managed businesses.

Many family companies go out of business after the first generation; Poe claims that only 30 percent of family firms survive to the second generation. Danco says their average life span is 24 years. Much research needs to be done to better understand how family businesses do perform, how they compare to non-family ones, and why family companies perform as they do.

A5. The Incidence and Contribution of Family-Owned Businesses

When Alexis de Tocqueville, a French aristocrat, visited the United States in the early 1800's, he was amazed with our single-minded pursuit of wealth and how our institutions encouraged the entrepreneurial spirit. When de Tocqueville scanned urban and rural areas on his journey he saw many shops, ships, and farms, and very few factories. Small, family businesses were the order of the day in early America.

In the 1930's, Gardener Means and Adolph Perle stated that the ownership of large companies in the United States was becoming more diffuse and they forecast the ascendance of the "professional manager". This professional manager would own little, if any, of the company he ran. We have come to call him a technocrat. The technocratic image of U. S. industry is very widespread today. John Kenneth Galbraith's popular books talk about the "technostructure" of the American economy and about the separation of ownership and
Section III: Family-Owned Business

management in corporations. The news coverage of business has also encouraged our view that the typical businessperson of today is the dispassionate technocrat and the typical business organization is the large bureaucratic organization.

Are family businesses really such a rarity? Not according to the following evidence: Reporting on a 1952 Fortune survey of 175 of the largest U. S. corporations, Donnelly states that 52% of them had "close relatives or in-laws holding management jobs in the same firm". In 1955, Warner and Abegglen discovered that of 8000 executives surveyed: 1) two of every five men whose fathers were top-ranking executives had positions in their fathers' companies; and 2) three out of every five men whose fathers were owners of large businesses had positions in their fathers' companies. And significantly, they claimed that the proportion of sons working in firms where their fathers were major owners was increasing.

Over the last decade there has been a surge in the number of women entering their family's business and a recognized increase in the number of women taking over their fathers' firms. Family companies might be an important avenue for women to break into upper management. More research must be done to track and understand this trend.

A 1976 paper by Barnes and Hershon at the Harvard Business School claims that nearly 98% of all businesses in the United States are "family dominated" including many of the largest. They cite a 1972 study of 450 large companies by Burch which found that between 42 and 59% of the largest publicly held corporations were controlled by one person or one family. In many privately held companies (with fewer than 500 shareholders), "the rather pervasive family control exercised is, for the most part, very direct and enduring".

Other estimates of the numbers of family businesses are that 90% of America's 15 million businesses are family-owned, that there are 10 million family owned businesses and that around 96% of U. S. corporations are "controlled" by families. It is known that many industries in the U. S. are dominated by family-owned companies (such as textiles, brewing, trucking, newspapers, construction and distribution) and many high performance businesses are family-owned or family-owned and managed (see Table III-1). If the above estimates are even approximately accurate, it is safe to say that family-owned businesses would dominate most data series on business units.

No data exists on the distribution of industries, geographical location, or the size of the communities where family firms are involved. It could be that many or most family businesses have no competition of any consequence because their markets are so small. This might be especially true for family firms such as local groceries, hardware stores, and other service operations. It is less likely that light industry companies have captive local markets. The larger family businesses such as Cargill, Bechtel and others face competitors in an international market.
### Section III: Family-Owned Business

#### Table III-1: EXAMPLES OF FAMILY-OWNED BUSINESSES

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<thead>
<tr>
<th>Family-Owned Business</th>
<th>Family-Owned Business</th>
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<tbody>
<tr>
<td>Chun King</td>
<td>Dupont</td>
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<tr>
<td>Jeno's</td>
<td>Swift</td>
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<tr>
<td>Amerada-Hess</td>
<td>Grace</td>
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<tr>
<td>Gallo Wineries</td>
<td>Olin Chemical</td>
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<tr>
<td>Metromedia</td>
<td>Dow</td>
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<tr>
<td>Sinclair-Altex</td>
<td>Kohler</td>
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<tr>
<td>U-Haul</td>
<td>Days Inn of America</td>
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<tr>
<td>Hearst Publishing</td>
<td>Gold Bond Trading Stamps</td>
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<tr>
<td>Hilton</td>
<td>Hallmark</td>
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<tr>
<td>Superior Oil</td>
<td>Readers' Digest</td>
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<tr>
<td>General Nutrition Corp.</td>
<td>Gates Corp.</td>
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<tr>
<td>Russell Stover</td>
<td>Newhouse Publishing</td>
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<tr>
<td>Commerce Clearing House</td>
<td>Estee Lauder</td>
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<tr>
<td>G. D. Searle</td>
<td>Clinique</td>
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<tr>
<td>Skaggs-Albertson</td>
<td>Ronzoni Pasta</td>
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<tr>
<td>Dominoes Pizza</td>
<td>Hubbard Broadcasting</td>
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<tr>
<td>Ford Motor Co.</td>
<td>Jeannie-O Foods</td>
</tr>
<tr>
<td>Firestone</td>
<td>Armour</td>
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<tr>
<td>Oscar Meyer</td>
<td>Walmart Stores</td>
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<tr>
<td>Schmidt's Beer</td>
<td>Electronic Data Systems</td>
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<tr>
<td>Kaiser Industries</td>
<td>Hunt Energy</td>
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<tr>
<td>Maidenform</td>
<td>Placid Oil</td>
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<tr>
<td>Ethyl Corp.</td>
<td>Wang Labs</td>
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<tr>
<td>New York Times</td>
<td>Seagrams</td>
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<tr>
<td>Chase Manhattan Bank</td>
<td>Petrie Stores</td>
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<tr>
<td>Milton-Bradley</td>
<td>Bechtel</td>
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<tr>
<td>American Service Corp.</td>
<td>Johnson Wax</td>
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<tr>
<td>W. Virginia Pulp and Paper Co.</td>
<td>Mars Candy</td>
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<tr>
<td>Armco Steel</td>
<td>Trailways</td>
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<tr>
<td>Campbell Soup</td>
<td>Rollins Communications</td>
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<tr>
<td>Borg-Warner</td>
<td>Gulfstream Aerospace</td>
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<tr>
<td>Glidden Paint Co.</td>
<td>McLean Trucking</td>
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<tr>
<td>Turner Broadcasting</td>
<td>Milliken and Co.</td>
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<tr>
<td>Valueline</td>
<td>H. J. Heinz</td>
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<tr>
<td>MEI Corp.</td>
<td>Anheuser-Busch</td>
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</tbody>
</table>

III-8
Beyond their surprising numbers, family companies have other important attributes. Family businesses are said to symbolize the entrepreneurial spirit in America. Indeed, one might argue that the family business is the backbone of the free enterprise system. Owner-managers personify such traditional and highly valued American traits as independence, ambition, and a willingness to take risks and to work hard. Danco calls the independent business owner-manager the "embodiment of the American dream".

As with statistics on the numbers of family businesses, estimates on their contribution to the U.S. economy and society are only rough guesses. Estimates are that family businesses produce between 40 and 60 percent of U.S. GNP, possess 40% of the U.S.'s productive assets and are a prime source of innovation in products and services. Danco claims that 90% of all distributors are family-owned and that they provide a vital link in our economic system.

Family firms contribute to the welfare of their communities by employing area residents, paying taxes, supporting charities, and through the involvement of family members in local government (town councils, school boards, etc.). The reasons for this sense of obligation to the community might be historical (because Grandfather thought such relations were important), economic or social. Tilles and Contas report:

As a group, family firms demonstrate an unusual sense of obligation to the communities in which they are located. This is particularly true of the firms located outside metropolitan areas. In fact, it appears to be a direct function of the relationship between the size of the company and the size of the town. Where the company is large and the town is small, there will be a particularly strong sense of civic responsibility.
Section III: Family-Owned Business


Perhaps the most obvious policies of the family business are the two which define the organization: 1. The company is to remain the property of "the" family, (which is part of its investment policy) and 2. The top management of the firm is to be selected (primarily) from within the ranks of "the" family.

A very important influence on many of the family company's business policies is its relationship with its own history, or, as Donnelly (1964) calls it, its "deeply felt corporate purpose." In some family firms the emphasis is not on running a business but on continuing a tradition. Barry (1975) cites the printing industry as an example where the pride taken in the craft, itself, resulted in standards of work higher than was appreciated by customers. Non-family firms may also have traditional values but the link to the past in family companies is through blood ties and tends to be stronger.

By dedicating the company to a particular product or mode of production or service, the pursuit of the organization becomes "perfection" rather than satisfaction of customer needs. This pursuit of perfection can play havoc with costs and, in other ways, be ruinous for the firm. Again, this can occur in any kind of company; our suspicion is it occurs more often in family businesses.

Tilles and Contas have observed that "in spite of the founding father's intuitive genius for serving the needs of the marketplace," a disconcern for customers' real needs and non-response to competitors' actions often results during the first generation of the company. A firm may become enamored of a particular way of doing business and lose sight of the appropriateness of its policies. The early history of the Ford Motor Company is a good example of just this.

Traditional values can influence four major business policy categories: marketing (what the firm sells), manufacturing (how they make it), investment (how they raise capital and in what they invest), and labor (who they hire). Not only can these traditionally-oriented family firms concentrate on perfecting one product or service, they will often resist diversification into other lines and new technologies. Since the firm's market niche is prescribed by tradition, other marketing decisions involving pricing, distribution, and promotion may also be dictated by prior practice.

An over-concern with tradition may limit the industries in which a family business can be successful. Indeed, Miller and Rice, writing in the early 1970's, argued that the areas in which family firms could be successful were diminishing. Possibilities that remained, they said, were small shops, farms, hotels, or restaurants—enterprises which have relatively stable technologies, low capital requirements, and where a lack of technical skill can be compensated for by personal service. A few writers make the point that firms with such a love of tradition are unlikely to be found in industries that experience rapid technological change. This does not mean, however, that traditional family businesses may not grow and be profitable.
Section III: Family-Owned Business

Donnelly explains:

When a firm is founded on the value of personal service (which often is linked to the activities of the original proprietor), its possibilities for expansion are limited. Yet, the use of other family members may allow the firm to expand beyond one man’s capabilities while still retaining the company’s unique competitive ability. Such thinking underlies a well-known New England restaurant’s stress on family management in its advertising.

Only an empirical investigation of family business activity can carry us beyond this speculation and allow us to understand if these firms gravitate toward certain industries.

It is clear that the sense of obligation that family firms often feel toward their communities significantly influences the business policies of these companies. Fear of a scandal that might damage the reputation of the company could very well keep a family from price fixing or making other arrangements with its competitors. A company’s sense of obligation to its community could also keep it from doing certain things which are in its competitive self-interest such as moving to areas with lower labor costs. A firm’s sense of obligation to customers in its community may lead it to do work for which it is not suited.

The extent to which the family identifies its interest with the long-term interests of the company will either encourage or discourage investment. The more the family cares about the long-term welfare of the company, the more the firm can invest. Family needs can also curtail needed investment. Family members may find it difficult to accept the risks associated with investing in the business. Because the company managers know the shareholders so well, they may adjust company policy to meet their needs and jeopardize the long-term future of the firm.

Because the family fears the loss of control of its enterprise, it also dislikes selling stock to non-relatives and is quite suspicious of mergers and acquisitions. Conflicts among family members about what is to be done in the firm usually result in an inadequate investment program. It is suspected, then, that a conservative investment policy by family businesses is due to the competition of business and family needs and the risk averse culture of the family.

The distinctive characteristics of the family business organization also create an emotional climate in which the employees work. A picture of this environment can be pieced together from the literature. The resulting image shows the family firm to have an overriding desire for unity and peace and often tense with the fear of dissent and conflict. It is a place of both intense loyalty and intense conflict. Finally, it is generally a conservative and secretive environment and one that is often not very objective.
Edison claims that important suppliers, customers, bankers, and others with whom a family company does business are impressed when they "meet, deal with, or are entertained by a member of the family whose name is part of the company name". When the family firm becomes a respected member of the community, banks are more willing to loan it needed funds. Banks believe that the risk associated with loaning a family business money is diminished because of their past experience with the family. Since many family businesses are not able to go outside the family to sell stock (for fear of diluting the ownership), there is a strong incentive to play the "good citizen" and be in a bank's good favor.

A valuable reputation also helps to establish the trust necessary to do business with other firms, especially where the stakes are high, the results uncertain, and the parties relatively unprotected against loss. In addition to the importance of reputation, the involvement of family executives in community affairs can increase business contacts for the firm.

Society can benefit from the presence of a strong stockholder group in these companies. Because ownership is concentrated in the hands of a few people who can make their voices heard, management must think about its responsibility to them. And when civic responsibility is important to the family, these values can be transferred to the management of the firm.

Little has been written about the perspective of non-relatives in these businesses. The relationships between non-family employees and the family business are thought to be strong, in general. Family firms are said to have a sincere and unselfish interest in their employees' welfare. Tilles and Contas and Donnelly report that this interest is reciprocated. Although non-family members are considered very loyal, some writers express doubts about the competence of non-family managers. Sofer, for instance, claims that when recruiting managers from the "outside", standards are kept low "to maintain the feeling of unambiguous superiority on the part of family members".

This concludes the review of the literature on the family firm, which itself, suggests topics for further research. It was also important to hear from individuals who are knowledgeable about these firms to create a research agenda. The next section summarizes a survey conducted to elicit views on important areas of research on the family firm.
Section III: Family-Owned Business

B. SURVEY OF RESEARCH INTEREST IN FAMILY-OWNED BUSINESSES

To gauge what family-owned business research topics are most popular and useful, a mail survey was conducted followed by a telephone interview of 25 individuals whose work makes them knowledgeable about this subject. Each of them was asked: (1) What topics on family-owned businesses they have researched; (2) What family-owned business topics they want to investigate in the future; (3) What topics they think the federal government should investigate to ensure effective policies for this sector of our economy; and (4) How useful it is for them to understand more about several topics that we posed to them. The instrument used in this survey is found in Appendix C.

The 25 individuals interviewed work in the diverse fields of academia, law, consulting, business and government. Their views represent a cross-section of experts on family-owned businesses and have helped to define the proposed research questions listed in III.C.

II. Past and Current Interests

As Table III-2 indicates, the most popular past and current research interests focus on management succession, followed by three topics on the family and firm's mutual influence, family-owned business' effectiveness and efficiency, their developmental stages, the characteristics of the entrepreneur, the increasingly important role of women in these firms, boards of directors, and the relationship of the family business to its community. These topics are described more specifically below:

1. Succession Planning
   Many facets of this topic are now being studied: Importance of and methods for the preservation of the business within the family over generations, economic and behavioral factors related to successful multi-generation perpetuation of the business, problems related to succession, differences between male and female succession, methods for succession planning, education on succession planning. This research has been case-based.

2. Work Relationships Between Relatives
   This area examines which relatives work together in the family business, the characteristics of effective and ineffective work relationships between relatives, what can be done to improve these relationships, and their influence on the family. Case and survey research methods have been used here.

3. Human Resource Management
   This topic considers the selection, appraisal, compensation and training of relatives and non-relatives in the business. It considers the differences in norms between the family and the business and the stress this condition creates for managers in the firm. Case research has been used for this topic.
Section III: Family-Owned Business

4. Family Influence
This subject examines the influence of family values and relationships, on the culture, business practices, and performance of the family-owned business. This work has all been case-based research.

5. Effectiveness/Efficiency
This little-researched category considers the productivity, profitability, innovativeness and ownership and financial characteristics of family businesses. It also investigates the economic contributions of these firms. Some small-scale empirical studies have been attempted.

6. Developmental Stages
This topic examines how family businesses evolve from entrepreneurial ventures to established firms to dynastic companies, and also how they dissolve. This work has been case-based and conceptual.

7. Entrepreneur
This category examines the background and behavior of the founder of the firm, how he manages the organization and how he relates to others in it. An enormous amount of case and empirical research exists on the entrepreneur; little exists on the entrepreneur in the family firm. This research is case-based.

8. Strategic Planning
This category investigates how family business, with their distinctive needs and objectives, position themselves in their industries and plan for the future. This is conceptual and mostly case research; some empirical work is forthcoming.

9. Women
This label covers the role of women in family-owned businesses, particularly the role of daughters in succession, and the potential for further involvement of women in the family business. There is a great deal of interest in this topic in the research community although few are actually studying this issue. Some case and survey work is emerging.

10. Boards of Directors
This area includes the role and impact of the board of directors on the family-owned business, and the creation and use of an outside board. Case research methods are used here.

11. Community
This topic examines the contribution the family firm makes to the local community and how the community, in turn, influences the firm. Case research methods are used for this topic.
Section III: Family-Owned Business

TABLE III-2: PAST AND CURRENT RESEARCH INVOLVEMENT IN FAMILY BUSINESSES

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>NUMBER OF RESPONDENTS INDICATING INVOLVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Succession: preservation of the business within the family</td>
<td>13</td>
</tr>
<tr>
<td>Work relationships between relatives and the effect of working together on the family</td>
<td>6</td>
</tr>
<tr>
<td>Human resource management: managing family and non-family employees</td>
<td>6</td>
</tr>
<tr>
<td>Influence of the family on business practices and performance</td>
<td>5</td>
</tr>
<tr>
<td>Effectiveness/efficiency of the family business</td>
<td>5</td>
</tr>
<tr>
<td>Developmental stages of the family and of the business</td>
<td>4</td>
</tr>
<tr>
<td>Entrepreneur's characteristics</td>
<td>4</td>
</tr>
<tr>
<td>Issues involved in strategic planning for the family business</td>
<td>3</td>
</tr>
<tr>
<td>Role of women in the business</td>
<td>3</td>
</tr>
<tr>
<td>Role and impact of a Board of Directors on the business</td>
<td>3</td>
</tr>
<tr>
<td>Relationship of the family-owned business to its community</td>
<td>2</td>
</tr>
</tbody>
</table>
Section III: Family-Owned Business

B2. Future Research Interests

The future research interests of the respondents are listed in Table III-3. While management succession remains the most popular research interest, establishing a data base on family-owned businesses is a clear, perceived future need by the research community and others. Researchers especially want to examine the characteristics of large numbers of family firms in a variety of industries and to compare these companies to non-family-owned businesses.

The role of women in these organizations is rising in its research popularity, reflecting — in part — owner-managers' interest in hiring their daughters. Researchers are interested in learning, among other things, if women are experiencing a faster rise to senior management positions in family firms, what are women's issues in these companies and how do women cope with these organizational settings.

Learning more about the impact of government regulations on family-owned businesses is a new interest. There is a strong interest among interviewees to learn how tax policies and inheritance tax laws, in particular, affect business decisions and family continuity. Only a few respondents are committed to investigating this topic. Studying the developmental stages and business failures of family firms are growing interests of our respondents.

An interesting research topic on the horizon concerns the involvement of various ethnic groups in family-owned businesses. Researchers and policy-makers are curious if there are ethnic influences on the kind of business that is started and how it is managed. Do family firms serve an important role to integrate recent immigrants into our economy?

B3. Federal Government Involvement

The interviewees proposed that the Federal Government support research on a range of topics, from tax policy to building awareness of family-owned businesses. The majority of those interviewed felt that the Federal Government should be more involved in generating effective policies to support family-owned businesses. Only two of the twenty-five proposed that the government should not be involved in learning more about these companies. Respondents would most like the government to support work on:

1. Examining Federal Policies
   This topic would examine inheritance tax laws and the effect of tax policy on family business practices and continuity.

2. Creating a Data Base
   This work would involve creating an empirical data base that could examine the number of family firms in the U.S., the impact of family businesses on the economy, characteristics of successful and unsuccessful family firms and family business industry involvement.
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3. Building Awareness
This activity would build awareness of the importance of family-owned businesses to our society and increase the understanding of their particular issues by supporting research studies and helping to publish research findings.

Table III-4 lists in more detail the preferences for government involvement expressed by those surveyed.

B4. Respondents' Ratings of Suggested Research Topics

The respondents were asked to rate the usefulness (for themselves) of learning more about several topics on family-owned businesses. Table III-5 summarizes their responses, rank ordering the mean usefulness scores to more easily compare the respondents' preferences. Notice that the topics in this table would all be placed in the effectiveness/efficiency category described earlier. Respondents consider this category to be a moderately high priority for their own research efforts and a high priority for research the government should support. Table III-5, therefore, indicates a priority listing for government-sponsored research.

This table shows that the strongest preferences of the respondents are for better understanding the economic contributions of family businesses and the ownership characteristics of these firms.

B5. Summary of Survey on Research Interests

It is clear from the research topics suggested by these respondents that a data base containing performance and structural information on family firms would help to answer pressing questions about these organizations. While much sound behavioral research on these firms is underway, an understanding of firm characteristics, how they perform and how they compare to other kinds of organizations lags behind. Researchers and policy-makers would benefit from a greater understanding of the economics of this sector. Such knowledge-building would be expensive, however, and requires the support of the federal government.
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TABLE III-3: FUTURE RESEARCH INTERESTS IN FAMILY-OWNED BUSINESSES

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>NUMBER OF RESPONDENTS INDICATING INTEREST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Succession: preservation of the business within the family</td>
<td>10</td>
</tr>
<tr>
<td>Establishment of an empirical data base on the structural, financial and performance characteristics of family-owned businesses</td>
<td>6</td>
</tr>
<tr>
<td>Developmental stages of the family and of the business</td>
<td>5</td>
</tr>
<tr>
<td>Role of women in the business</td>
<td>4</td>
</tr>
<tr>
<td>Influence of the family on business practices and performance</td>
<td>4</td>
</tr>
<tr>
<td>Work relationships between relatives and effect of working together on the family</td>
<td>4</td>
</tr>
<tr>
<td>Effectiveness/efficiency of family businesses</td>
<td>4</td>
</tr>
<tr>
<td>Impact of state and federal regulations on family businesses</td>
<td>3</td>
</tr>
<tr>
<td>Family-owned businesses in American ethnic groups</td>
<td>3</td>
</tr>
<tr>
<td>Human resource management in family-owned firms</td>
<td>3</td>
</tr>
<tr>
<td>The role and training of consultants to family-owned businesses</td>
<td>2</td>
</tr>
<tr>
<td>Entrepreneur's characteristics</td>
<td>2</td>
</tr>
<tr>
<td>Role and impact of Boards of Directors on the business</td>
<td>2</td>
</tr>
<tr>
<td>Future trends in family-owned business practices</td>
<td>2</td>
</tr>
<tr>
<td>Issues involved in strategic planning for the family firm</td>
<td>2</td>
</tr>
<tr>
<td>Regional differences among family-owned businesses</td>
<td>1</td>
</tr>
<tr>
<td>Relationship of the family-owned business to its community</td>
<td>1</td>
</tr>
</tbody>
</table>
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C. PROPOSED RESEARCH AGENDA FOR FAMILY-OWNED BUSINESSES

The following research questions were derived through the survey of research interest on family-owned businesses and from the critique of the family-owned business literature. Whenever possible, it is proposed that the information on family-owned businesses be compared to data gathered on non-family-owned businesses. Topics denoted by a (1) are those addressed in the proposed first-round questionnaire, and those denoted by a (2) are those that deserve special attention in the second-round survey.

Numbers of Family-Owned and Managed Businesses

1. How many companies in the U.S. are ownership controlled by a single family? (Ownership control can occur with less than 50 percent ownership; ownership control simply means that a family has a decisive influence on the company's investment and strategic decisions.) (1)

2. How does family stock ownership vary with the size of the company? (1)

3. How many companies in the U.S. are ownership controlled and managed by a single family? (1)

4. In what industries do family-owned businesses operate? (1)

5. In what industries do family-owned and managed businesses operate? (1)

6. What are the characteristics of the industries dominated by family-owned businesses and those lacking family-owned business involvement? (1)

7. Which ethnic groups are involved in what kinds of family-owned businesses? (2)

8. In which geographical areas do family-owned businesses operate? (1)

9. In what sized communities do family-owned businesses operate?
Section III: Family-Owned Business

Importance of Family-Owned Businesses

1. How many people are employed by family-owned businesses? (1)

2. To what extent are women moving into top management positions in family-owned businesses? (2)

3. Do family-owned businesses pay their fair share of taxes? (2)

4. In what ways, and to what extent, do family-owned businesses contribute to their communities?

5. In what ways, if any, is it useful for the economy to have businesses owned or owned and managed by a single family?

6. What are the economic advantages and disadvantages of dynastic family-owned businesses (those large companies which are controlled by a single family for three generations or longer)?

Business Practices of Family-Owned Businesses

1. To what extent are these relatives of the founder employed in the family-owned business: spouse, children, siblings, parents, grandchildren, other extended family members and in-laws? (2)

2. How are relatives in family-owned businesses compensated as compared to non-relatives in family-owned businesses and as compared to managers in non-family-owned businesses?

3. What business strategies are used by family-owned businesses?

4. To what extent do family-owned businesses diversify their operations? (2)

5. To what extent do family-owned businesses use annual reports, stockholder meetings and boards of directors (with outside members) to aid objective decision-making? (2)

6. To what extent do family-owned businesses use professional managers?
Section III: Family-Owned Business

7. What are the accounting practices of family-owned businesses?

8. What are the capital-raising practices of family-owned businesses?

9. What are the investment practices of family-owned businesses? To what extent do family-owned businesses invest in capital equipment given tax incentives?

10. To what extent do family-owned businesses experience capital shortages? (2)

11. What are the dividend practices and perquisite practices of family-owned businesses? (2)

12. How does the federal income tax affect the growth of family-owned businesses? (2)

13. How do estate taxes affect the continuity of family-owned businesses? (2)

14. Do incentives for new business formation hurt family-owned businesses?

Business Performance of Family-Owned Businesses

1. How well do family-owned businesses perform on sales, sales growth, profit and return on investment? (2)

2. How well do family-owned businesses perform on minority business employment programs? (2)

3. How quickly and soundly do family-owned businesses grow?

4. How innovative are family-owned businesses in terms of new product and new process introductions?

5. What is the life span of the family-owned business? (1)
Section III: Family-Owned Business

6. How many family-owned businesses make a successful transition within the family to the second generation? the third generation? (2)

7. What are the reasons for family-owned business failures?

Family Influence on the Family-Owned Business

1. What strengths and weaknesses does a family's culture bring to a family-owned business?

2. To what extent, and under what conditions, do family needs and concerns compete with those of the family-owned business?

3. Under what circumstances, if any, does a family's interest in and commitment to the family-owned business wane?

4. How important to the wealth accumulation of the family is family-owned business?

5. What are the social and economic reasons a family will begin a business rather than seek other employment? (2)
Section III: Family-Owned Business

ENDNOTES


4. Ibid.


6. Ibid.

7. Ibid.

8. Ibid.


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15. Ibid.


28. Ibid.
Section III: Family-Owned Business


39. Ibid.


Section III: Family-Owned Business


43. Ibid.


Lansberg, I. Managing Human Resources in Family Firms. Organizational Dynamics, Summer 1983.


48. Ibid.

49. Ibid.


IV. SURVEYING HOME-BASED BUSINESSES

A. INTRODUCTION

No existing vehicle meets the necessary criteria of adequate sample size, timeliness, and inclusion of the target populations, to count and fully characterize the at-home workforce. Drawing information from more than one survey may be the best strategy. A short series of questions relating to home-based work can feasibly be added to established periodic survey instruments.

Federal agencies have developed a growing interest in work at home since the 1980 Census. (See Section II.2) The Bureau of Labor Statistics (BLS) has done some preliminary thinking about home-based businesses, and even more encouraging, there are tentative plans to include some characterization of home-based business in future census surveys.

These tactics fall short of a custom designed survey based on a special sample frame rich in home-based businesses. More information is needed than can be gained from piggyback methods. However, there are enormous potential benefits to be gained from acting now: Data that will be collected in 1986 will be obtained from instruments now being refined. Preparation for the 1990 Census is well underway. This section of the study will evaluate the potential of cooperating with a number of surveys as well as commissioning a survey from a special sample frame.

B. BENEFITS AND COSTS OF SEVERAL SURVEY METHODS

B1. 1990 Decennial Census

The Decennial Census is five years distant, but the Small Business Administration (SBA) should do all that it can to ensure that the data collected has maximum value and minimum ambiguity for its needs.

The 1970 and 1980 Decennial Census records of the journey to work include those persons who work at home. The 1980 data have been analyzed for distribution into some selected Standard Industrial Classifications (SIC) and Standard Occupational Classifications (SOC) as a first step in characterizing the home-based worker. The tabulation distinguishes the incorporated subset of home-based businesses. (See Table II-1, Section II.) Occupational and industrial classification breakouts were not done for the unincorporated home-based businesses. Although the numbers of home-based self-employed persons were counted, the count excludes persons who did not work the prior week and those who worked part time, overtime, multiple jobs, or intermittently at home.
Section IV: Surveying Home-Based Businesses

Ten-year tracking of work at home is the essential base to which all other data must be related:

1. Although the number of persons now working at home may not be a large fraction of the labor force, there is formal recognition that planning for future population needs must take account of their characteristics, for their numbers are expected to increase. The National Conference on Decennial Census Data for Transportation Planning held by the Transportation Research Board in 1984, recommended that "multiple-job holders, working at home, decentralized workplaces, and flextime work schedules...must be recognized and accounted for in decennial census design to meet transportation and other needs."

Many of the concerns about existing weaknesses in the utility of census data related to the treatment of atypical work situations. Given the wording and structure of current questions, workers commuting at odd hours, workers with more than one job, and workers who work at home some of the time cannot be identified. This is seen as a growing problem of importance to those concerned with employment, economic development, and labor issues, as well as transportation. It is expected that these atypical patterns will be increasingly typical in the 1990s. The lack of ability to identify these cases now impedes transportation planning and employment analyses. It was the conference consensus that the problem will increase with time.1

The conference also fully supports the adoption of a coding system for individual residence and business location based on the computerized mapping system known as TIGER. If carried out, that will make possible collating data by any desired geographic array.

2. It is important to recognize that "Our [transportation planners] questions regarding working at home...are the only available data on a growing phenomenon of substantial social and economic implications" means exactly that. The journey-to-work questions were added to the census in 1960 (three questions) and included in the 1980 Census (eight questions) because transportation planners put them there. Transportation planners are aware that the resulting data has value for non-transportation uses as well and they support cooperative planning of the census. However, they are not formally aware of the SBA's particular interest in home-based business. Transportation planners already influence the number and wording of the questions used in the census, but SBA support would strengthen the rationale for giving space on the census questionnaire to acquire data relating to work at home.

3. To ensure that the 1990 Census will have the maximum potential value for the SBA, now is the time to make its interests and knowledge about home-based work known to the Transportation Research Board and to the Census Bureau. Contacts were initiated by Pratt during the course of this study, but they should be formalized. (See Appendix B.)
Section IV: Surveying Home-Based Businesses

Of special interest to the SBA are the employment items recommended by the conference for inclusion in the questionnaire:

- Obtain number of jobs per individual
- Obtain days per week travel to work
- Obtain days per week at home
- Obtain hours worked per week per job

4. The Census Bureau staff has the final responsibility for wording questions. However, the SBA during this study has developed expert knowledge about home-based employment which could help in refining that section of the questionnaire. Although no specific wording was incorporated into the conference proceedings, we can comment, for example, on the following series of questions proposed by the Private-Sector Applications in Planning and Marketing panel:

- How many days last week did you work at home?
- How many days last week did you work elsewhere?
- Where was your place of work last Thursday?
- Was that the usual place?
- What mode [of travel] did you use last Thursday?

Although the first three questions would give unambiguous data for the most part (some people, e.g. university professors, work more than one place per day), the fourth question is bothersome. It doesn't relate the answer to any particular timespan—last month, last year—so that we don't know whether seasonal work, taking just one example, is included or not.

Particularly when we have evidence that work at home is often a temporary location relative to work years, we need to understand the period to which "usual" refers.

Pretests of new items and revised wording for the 1990 Census (National Content Test) will occur in 1986. By April 1, 1988 Congress must be informed of the final wording of all census questions. The SBA would likely have less influence on the wording than would the Department of Transportation which has planning of the entire transportation network at stake, but it should contribute its expertise where possible.

Recommendation:

The number and wording of the 1990 Census questions will make a tremendous difference in the value of the data collected to the SBA. Therefore, the Office of Advocacy should immediately formalize its interest and input to the extent possible.
Section IV: Surveying Home-Based Businesses

IV. Current Population Survey Supplements

The Current Population Survey (CPS) is a monthly survey of samples constructed from the Decennial Census. It has a methodology of known reliability and an historical data base.

At first glance, the CPS is the answer both to survey individuals who work in their homes and to be able to identify family-owned businesses but it has drawbacks as well as benefits:

1. The CPS sample size (59,500 households interviewed with a 4-5 percent non-interview rate and additional non-sampling errors) plus its relatively high cost of about $350,000 are serious limitations for surveying disaggregated subgroups.

2. Other sources of error in the CPS include (1) severe underreporting of income, (2) rotation group bias, (3) bias from respondent misinterpretation of questions, (4) refusals which may be exaggerated by interviewees preoccupied with their own businesses and (4) definition of a family as must "reside together" which may omit many family-owned businesses.

Since the CPS compensates for noninterviews on the basis of age, sex, and race, no adjustments will be made for a subgroup of importance to this study: those operating their own home-based business who exercise their right not to disclose even its existence to the "feds." In the view of one experienced in collecting labor statistics, "the most likely reason for the under-reporting of home-based businesses, or home-based work will be the reluctance to make this known to the Washington authorities who will then want to exact their toll in the form of taxes."

The noninterview rate for the group may also be higher simply because its members are too busy working at home to bother with interviews.

3. On the positive side, CPS studies are well suited to monitoring the net movement of persons in and out of home teleworking. One-half of the CPS sample is common with the same month of the previous year. Each "rotation group" is interviewed for four consecutive months, dropped for eight months, and reinterviewed for the same four calendar months the following year." Interviewers are highly trained to ensure quality data over repeated contacts.

4. Many CPS supplements commissioned for a different purpose could provide data on home-based businesses.

Research on home-based work has begun so recently that all of the points at which it ties into on-going surveys are not yet clear. For example, we know that there are home-based subsets of self-employees, part- and full-time employees, mothers, and so forth which are tagged in some supplements but not in others. In some cases hand-written identification of a home business (March Income Supplements) makes any tabulation very costly.
Section IV: Surveying Home-Based Businesses

As advocate for all small businesses, the SBA should make itself aware of all scheduled CPS Supplements in time to support tagging of work at home. Questions are refined six to seven months in advance of the survey month. By learning of the May 1985 multiple jobholding supplement while questions were being selected, Pratt and Davis were able to strongly endorse and add rationale for including two proposed work-at-home questions for the first time.

The SBA should be available to CPS staff to comment on the wording of CPS Supplements. Because of its knowledge of home-based and other small businesses developed during this and other SBA-sponsored research, the Office of Advocacy might suggest changes that could make the data more valuable not only to the SBA but to other users. The October 1984 supplement on computer use, for example, could have been written to give unambiguous data on the number of persons working at home on computers. That information would have been invaluable to researchers who have no way except through Census to get at those data, because of the cost and difficulty of obtaining a sample that is representative of the U.S. population.

5. A CPS supplement centered on home-based employment would produce a comprehensive profile of home-based businesses. It must be scheduled about nine months in advance.

Although the total work-at-home population counted by the 1980 Census was only two percent, a May 1985 CPS shows a very preliminary estimate of over 15 million or 15 percent of the 97 million total workforce who do some work at home for their primary employment. The estimate is based on the number of "Yes" responses to the question:

As part of ___'s regularly scheduled work, does ___ do any of his/her work for (Entries in 23A to D) at home?

A follow-up question asked the amount of time worked in the home:

LAST week approximately how many hours of ___'s work did he/she do at home?

The May supplement needs to be tabulated in order to estimate how many of those 15 million persons operate a home-based business.

The May CPS sample was 57,000 households or approximately 66,000-67,000 employed people 14+ years and older. Thus the sample size representing the work-at-home population is about 11,000. The sample excludes home-based moonlighting. It includes the self-employed of incorporated and non-incorporated businesses, contractors who list themselves as employees, and employees who work part-time, full-time, intermittently, and overtime at home.
Section IV: Surveying Home-Based Businesses

Recommendation:

The SBA should 1) support tagging of work at home on appropriate CPS supplements, and 2) commission a home-based business supplement.

B3. Annual Housing Survey

Journey-to-work questions were first added to the Annual Housing Survey in 1975 prompted by concern about nonrenewable energy sources. If expanded by several additional questions, the survey could collect data on use of the home for income-producing work.

Past surveys could be tabulated for work at home but little useful information would be gained. The work-at-home population defined in this survey as those who do not journey to work has remained virtually flat at two to three percent since 1975. As discussed above (Section II.A.3), any increase in numbers of home-based workers fostered by technology has not yet offset the decreasing population of agricultural workers.

Beginning in 1985, a renamed "American Housing Survey" will be conducted in odd-numbered years. Tabulations of the Journey-to-Work Supplements of future surveys would generate valuable longitudinal data on a sample of about 70,000 households. Two items recorded are, "use of any part of the property as a commercial establishment" and "net income from a business, professional practice, or partnership." Once a dwelling unit has been entered in the sample, it is retained until the entire survey is redesigned. Mobility of the population would, however, reduce the effective size of the longitudinal sample of persons interviewed.

With its emphasis on housing, the American Housing Survey would provide insights rich in detail about how the dwelling is adapted to foster income-producing work. For example, if the age of a home-based business were queried, expansion of the business could be traced: Liquid Paper Corporation began in a kitchen, expanded into a temporary metal building located in the back yard, and moved to rented space before finally building a corporate headquarters.

Recommendation:

Longitudinal data from the ongoing American Housing Survey series should be tabulated to monitor home-based business formation and lapse. The research community would benefit from the collection of such data as would a number of federal agencies and trade associations.
Section IV: Surveying Home-Based Businesses

B4. National Longitudinal Surveys (NLS)

The NLS provide a wealth of detail about women in the context of what they do, how and when they do it, and their own and their husbands' attitudes toward their activities.

The NLS, described in Section II.A.2, have been cut to two female cohorts. The next Bureau of Census survey of the work experience of Mature Women and Young Women will be conducted by telephone in April 1986 and in January 1987, respectively.

1. Pratt has had telephone discussions with representatives of the cooperating groups who direct the NLS. (See Appendix B for contacts.) They have expressed preliminary agreement with the rationale for tagging home-based work in the survey of mature women and the NLS staff have drafted the following series of questions:

1. Check item for self-employed, wage or salary, or other

2. Do you primarily work at home? Yes No

3. If "no" and interviewee is private or government employee (i.e. wage or salary), Do you ever do any work at home? Yes No

4. If "yes," How often? Frequently occasionally rarely How many hours/week?

5. If the self-employed persons respond "no" to "primarily work at home" they could then be asked "Do you do any work at home?" Yes No

6. If "yes," How often? Frequently occasionally rarely

If both the Center for Human Resource Research which designs the survey and the Bureau of Labor Statistics agree with their relevance, the questions will probably added to the survey.

2. Drawbacks to obtaining data through the NLS are that the 5,000 cohort will produce a very small sample size and the public tapes will not be available for two years (1988) because the project has such low priority at the Bureau of Census.

3. The advantages of tagging the NLS are first, that it is the largest true longitudinal sample, and second, that in the years that interviews are conducted by home visits, complete job histories are obtained. This raises the possibility of retroactively tagging home-based work and gaining a life history of work at home for two samples: women aged 30-44 when first surveyed, who will be 50-64 in 1986; and women first surveyed at ages 14-24, who will be aged 34-44 in 1987.

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Section IV: Surveying Home-Based Businesses

Recommendation:

The SBA should maintain the contacts initiated with the co-sponsors of the National Longitudinal Surveys and urge 1) adding questions on home-based work to the April 1986 Mature Women and the January 1987 Young Women surveys; and 2) retroactive identification of home-based work in future in-home interviews of both female cohorts.

B5. Nationwide Personal Transportation Study (NPTS)

The personal travel studies to date have been conducted by the Bureau of Census which reinterviews a household sample that has completed its eight Current Population Survey rotations. The NPTS provides minutely detailed information about the travel behavior of individuals. Since work at home is tagged, correlations are possible between the type of business and nature of trips made. The total sample size in 1983 was 17,379 persons and the number who said that they work at home for their primary occupation was 273. Thus very detailed travel information can be learned about a very small home-based sample.

Recommendation:

This survey would probably be less useful to the SBA than the others listed in this section.

B6. Internal Revenue Service (IRS)

Schedule C Forms

The IRS has two Statistics of Income (SOI) samplings drawn from the total 9.73 million (1980 tax year) Schedule C filings. The smaller sample of approximately 7,000 was the basis for the tabulation of home-based businesses in Section II.A2.

A second, larger sample of 55,000 returns would provide a home-based sample of roughly 28,000 stratified for income.

There are limitations, but positive trade-offs on the use of the Statistics of Income to gather data on what we believe to be a growing population of home-based workers:

1. An accurate, detailed financial picture of home-based, unincorporated sole proprietorships can be obtained from SOI tabulations. But it does not give the whole picture. The SOI is an ineffective monitor of short-term trends, reporting two to four years past the current year. Tax data underreport the population of home businesses, first by an overstrict definition of the term that restricts home office deductions, and second by exclusion of low income persons from filing.
Section IV: Surveying Home-Based Businesses

2. Using a data base constructed from Schedule C returns excludes all home-based businesses that have been incorporated or organized as partnerships. Corporations and partnerships file on tax forms that do not contain any information permitting identification of businesses as being home-based.

3. SOI tabulations may overreport the number of home-based individuals if business units, the total number of Schedule C's filed, rather than the number of persons filing Schedule C's, are counted. (Routinely, returns with two or more Schedule C's are classified according to the major activity which obscures the existence of multiple businesses.)

4. For a fee, the SOI staff will tag two items in addition to the data they normally edit:

   1. Schedule C forms that have the same address as the accompanying 1040 form and
   2. The home office deduction, if any.

The SOI staff estimates that the cost of including those items would be $35,000.

The data needed for tabulating the characteristics of home-based businesses are already supplied from the SOI Master File. With home-based businesses identified, we will be able to perform multivariate analyses of the following items:

   1. numbers of Schedule C's filed per person
   2. sex of proprietor and filing status
   3. industry code
   4. deduction for home office
   5. adjusted gross income
   6. gross receipts on sales
   7. cost of goods sold
   8. wages
   9. legal and professional services
   10. employee benefit programs
   11. car and truck expenses
   12. interest on business indebtedness
   13. rent on business property
   14. net profit or loss
   15. cost of labor
   16. number of children who lived with filer

Information analogous to some of these items can also be obtained from one or more surveys. The parallel questions are starred with an asterisk on the draft questionnaire below.

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Section IV: Surveying Home-Based Businesses

Recommendation:

Although lack of SBA funds has precluded tagging Schedule
C's filed in 1984, we recommend that this be done on 1985
returns.

B7. Special Sample Frames

To obtain valid statistical estimates of the number and characteristics of the
population that does some work at home the sampling frame must meet the
following requirements:

1. Households in which one or more persons do some work at home in
   connection with a job or business must be over-represented in
   the sample.

2. The sample must be constructed so that the data can be related
to standardized data collection series such as the
Decennial Census and CPS. If the work-at-home population
grows in numbers, it thus could be tracked routinely rather
than with costly specially constructed surveys.

The difficulty of constructing a new sample frame was brought out in meetings
with Bureau of Census staff:

1. A sample frame derived from the general population of the United
   States must be constructed from the 1980 Census. The source for
constructing a special frame of residents is stale. Because the census
tracks household locations, not residents, there will be a significant
proportion of bad addresses. The population has about a 13 % per
year migration so that even were the effort to begin at once it is
questionable whether a valid sample frame could be generated from that
source. From the viewpoint of Census, a 1980 sample would be "too
costly" and "too inefficient." What is needed is a sample frame rich in
home-based businesses.

2. The Statistics of Income (SOI) has been described above as a source
for tabulations of Schedule C (sole proprietorship) returns. Another
alternative is the construction of a special sample frame from all
corporate, partnership, and sole proprietorship business tax returns.
Practical and legal restrictions do not prohibit this approach but
neither do they make it easy to accomplish.

The process requires that IRS make available its files to the Bureau of
Census which then constructs the sample frame. The permission, the time
for sample frame construction, data collection, and costs can only be
determined by a formal request from the SBA based on a clear intention to
proceed. It very likely would cost millions. A study published in 1969
illustrates what might be involved.
Section IV: Surveying Home-Based Businesses

Senate Resolution 1675 required the SBA to submit a "Crime Against Small Business" report. To fulfill that mandate it was felt necessary to include all U. S. businesses in the sampling universe. This is how they proceeded:

The most inclusive list of all business is that of the Interest Revenue Service where a business is defined as one reporting business income. Through the cooperation of the IRS and assistance of the Bureau of the Census and the Social Security Administration, a sample was designed and selected from the corporate and business tax returns for fiscal years ending July 1, 1965, to June 30, 1966.

The sampling frame included 8,039,657 tax returns, excluding all returns filed for agriculture, forestry, and fishery businesses. It was stratified by type of business ownership (corporations, sole proprietorships, and active partnerships) and by size of business receipts in dollars. The sample was designed to select one of every 1,400 tax returns, by applying a variable sampling fraction to each of the strata.

Interviewing for the survey was carried out by the personnel made available through the 62 regional offices of the Small Business Administration.

The sample showed a high rate of attrition. Businesses identified by 1966 returns filed on 1965 operations were interviewed in 1968.

Further, the non-interview rate was high. Of particular concern are the rates found for sole proprietorships without employees, the population of greatest interest in the proposed survey of home-based businesses.

Compared with other types of business organizations, sole proprietorships without employees had the highest rates of "approp. respondent away or closed temporarily" and of "no visible business at address"; the lowest rate of "respondent refused interview."

The group had a high rate of "respondent reached; out of business." A separate questionnaire directed to this subset of home-based businesses might reveal causes of business failures and abandonments.

Recommendation:

If timeliness and cost were not at issue, construction of a special sample frame from IRS business tax returns might be the method of choice. Other less custom-designed surveys are more realistic options for obtaining urgently needed data.
Section IV: Surveying Home-Based Businesses

B3. Survey Conducted by Private Contractor

To compare data collection by government surveys, which are usually carried out by the Bureau of Census with contracted surveys, a private consulting firm, referred to us by Census personnel, was invited to submit an outline and cost estimate. The survey methodology and estimated cost are included in this report as Appendix D.

C. ESTABLISHED SURVEYS INAPPROPRIATE FOR CHARACTERIZING HOME-BASED BUSINESSES

1. The Survey of Income and Program Participation (SIPP) conducted by the Department of Health and Human Services and the Bureau of Census does not now identify work at home and has a smaller sample size than the CPS.10

2. The Bureau of Economic Analysis (BEA) Personal Income Series, excludes the sole proprietors we are trying to measure. Family-owned businesses that are included may be difficult to identify.

3. A Bureau of Labor Statistics (BLS) Supplement to Employment and Earnings, the "largest monthly sampling operation in the field of economic statistics," is not an appropriate candidate.11 The survey excludes proprietary self-employed workers, unpaid family workers, and farm workers. Known as the payroll or establishment series, the data are funneled through state agencies, and are not always forwarded to the BLS in a complete and timely manner.

4. The Economics, Statistics and Cooperative Service (ESCS) of the Department of Agriculture surveys agricultural employment.12 The sample is disaggregated by geographical area and differentiates between living and working at the farm, and working at the farm but living elsewhere. The small farm family-owned farm should be well represented in their sampling.

5. The Social Security Continuous Work History Sample, a data base of self-employed workers derived from income tax Schedule SE, allows monitoring trends in small business formation and survival, but is not an available vehicle for grafting on supplementary questions."13

D. RECOMMENDED PLAN INCLUDING HOW TO IMPLEMENT PLAN

The information we need to gather in a survey can be categorized as a) cross-sectional data that describes work at home at a moment in time, and b) longitudinal surveys of a fixed sample at periodic intervals.

A large, longitudinal sample frame rich in home-based workers would be ideal. A cost in the millions precludes this choice. The following recommendations are listed in order of priorities based on the information about home-based businesses that would be gained at moderate cost. However, Item Number 3 should be acted on immediately for several reasons. First, on-going surveys are planned far in advance, and secondly, there is no cost involved to initiate the contacts needed to add questions to existing surveys.
Section IV: Surveying Home-Based Businesses

Recommended Strategy


2. Commission a CPS Supplement based on the draft questionnaire that accompanies this study.

3. Formalize SBA advocacy of the home-based employment topic on the 1990 Census.

Cooperate with DOL, EIS, and other agencies sponsoring CPS Supplements to guide the collection of data on home-based employment. Specifically, support the continued tagging of the May multiple jobholding questionnaires, and any others such as surveys of computer use.

Follow up on contacts with the co-sponsors of the National Longitudinal Surveys.

4. Commission an SOI cross-tabulation of home-based businesses from Schedule C filings. This would provide information equivalent to the items starred on the draft questionnaire with maximum attainable accuracy.

DL Recommended Frequency of Survey

Futurists represented in the accompanying bibliography see home-based work as a rapidly growing trend. Until that growth levels off, annual counts of those workers would be desirable. That data could be achieved most easily by continuing the two work-at-home questions that were first included in the May CPS:

As part of ___'s regularly scheduled work, does ___ do any of his/her work for (Entries in 23A to D) at home? and

LAST week approximately how many hours of ___'s work did he/she do at home?

Asking a third question "Does ___ operate a home-based business?" would minimize any remaining ambiguity.

The multiple job-holding supplement is a logical context for tracking home-based work. Tagging of home-based moonlighting would be a helpful addition.

The character as well as the quantity of home-based businesses will also change, but more slowly. A commissioned CPS supplement would be desirable.
Section IV: Surveying Home-Based Businesses

every five years. Supplementing those efforts should be a continuing monitoring of the home-based labor force by keeping tabs on all related surveys.

The Decennial Censuses will continue to be critical in providing the most detailed classification of industries.

D2. Trade-offs of Recommended Plan

As discussed above, each of the proposed methods to gain information about home-based businesses have their advantages and limitations. The nature of the information surveyed, the probability of questions the SBA wants asked being added to other sponsors' surveys, the timeliness with which collected data can be obtained for tabulation, and cost are all considerations. Table IV-1 summarizes such factors for the methods recommended.

E. Questionnaire Design

E1. Assumptions Underlying the Questionnaire

A number of assumptions have been made in developing the draft questionnaire:

1. The number of questions that can be asked on any survey is limited. (The CPS Supplement maximum is 35-50 questions that must fit within a limited space on the questionnaire.)

2. A benchmark of quantitative data appears to be the most needed information for further research and policy making. The proposed survey has been designed to reveal facts about the characteristics of individuals' present home-based employment, rather than people's value judgments about their activities. The latter can be explored in surveys of smaller samples that allow greater depth of questioning.

3. In order to be captured, the interviewee must think of his or her home work as a business. Selling a hand knitted sweater occasionally would be counted only if the "housewife" looked at, or was prompted to label that activity as a business.

4. The home-based business person is likely to be in the home. Data provided by proxy for other members of the household are less accurate than information pertaining to oneself. Proxy responses may be minimal from the home-based business population because the proprietor is available in the home to be interviewed.

5. The wording of questions has been matched to other surveys wherever possible to permit referencing past and future studies.

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### TABLE IV-1 TRADE-OFFS OF SURVEYS AND RECOMMENDED PRIORITIES

<table>
<thead>
<tr>
<th>SURVEY</th>
<th>COST (estimated)</th>
<th>SAMPLE SIZE</th>
<th>INFORMATION</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990 Census</td>
<td>NA</td>
<td>96 million</td>
<td>SIC distribution for home-based business (HBB) operators</td>
<td>1992-5(7)</td>
</tr>
<tr>
<td>Statistics of Income</td>
<td>35,000+1</td>
<td>28,000</td>
<td>financial data for sole proprietorship HBB</td>
<td>1988-90</td>
</tr>
<tr>
<td>Current Population Survey Oct. 1984</td>
<td>13,000</td>
<td>66,000 HH's</td>
<td>business-or job-related computer use in home</td>
<td>1986</td>
</tr>
<tr>
<td>Current Population Survey May 1985</td>
<td>13,000</td>
<td>66,000 HH's</td>
<td>count of HBB operators</td>
<td>1986</td>
</tr>
<tr>
<td>CPS Supplement</td>
<td>350,000</td>
<td>66,000 HH's</td>
<td>financial data and characteristics of 2+ HBB units/operator</td>
<td>1987</td>
</tr>
<tr>
<td>American Housing Survey</td>
<td>NA</td>
<td>70,000 HH's</td>
<td>longitudinal</td>
<td>NA</td>
</tr>
<tr>
<td>National Longitudinal Survey April 1986</td>
<td>NA</td>
<td>5,000 women</td>
<td>longitudinal</td>
<td>1988(7)</td>
</tr>
<tr>
<td>National Longitudinal Survey January 1987</td>
<td>NA</td>
<td>5,000 women</td>
<td>longitudinal</td>
<td>1989(7)</td>
</tr>
<tr>
<td>Nationwide Personal Transportation Study</td>
<td>NA</td>
<td>8,000 HH's</td>
<td>travel characteristics of HBB operators</td>
<td>1986</td>
</tr>
<tr>
<td>Multi-stage Telephone²</td>
<td>500,000</td>
<td>100,000 HH's</td>
<td>characteristics of work-at-home HH's</td>
<td>NA</td>
</tr>
<tr>
<td>Special Sample Frame</td>
<td>millions</td>
<td>NA</td>
<td>financial data and characteristics of HBB</td>
<td>NA</td>
</tr>
</tbody>
</table>

### RECOMMENDED ACTION

#### 1
Tabulate October and May CPS Supplements  
(quick return of data at low cost)

#### 2
Commission a CPS Supplement  
(best source of characteristics of HBB's for the money; much cheaper than a special sample frame)

#### 3
Add questions to existing surveys: 1990 Census, American Housing Survey, National Longitudinal Surveys, National Personal Transportation Survey  
(slow data return, but essentially "free")

#### 4
Tag SOI 1985 Schedule C returns  
(source of accurate financial data at moderate cost)

#### KEY
- Current Population Survey  
- CPS  
- home-based business  
- HBB  
- household  
- HH  
- not applicable  
- NA  
- Standard Industry Classification  
- SIC  
- Statistics of Income  
- SOI

1 $35,000 is the cost to determine if the IRS 1040 form address is the same as the Schedule C address (indicating a home business) and to obtain information on the home office deduction.

2 Methodology and estimate prepared by ICF Incorporated
Section IV: Surveying Home-Based Businesses

6. The CPS is the logical available survey series by which to track an increasing home-based workforce. Therefore the draft questionnaire of this study is written in the format of a supplement for a CPS. The CPS is an ongoing survey that is reliable in its methodology, sample frame construction, and relation to the decennial census.

7. If the questionnaire were used as a CPS supplement both Census and the Bureau of Labor Statistics would have to approve the questions. The questions cannot bias future surveys of the same households and they must be logical to ask within the context of that series. The final questions must also meet Census criteria for information that can be elicited by proxy; for example, does the interviewee really know the dollars invested in a spouse’s business? Such issues would need to be worked out with Census staff as part of the formal development of a CPS supplement.

On the other hand, if used with special sample frames, the wording and number of questions included must be reexamined and refined for the particular methodology selected.

The questionnaire will generate the information we think most crucial for the SBA to obtain concerning home-based businesses; it will also produce data on out-of-home businesses and work-at-home employees.

Ideally, questionnaires of the detail of the Department of Transportation’s travel series, the NFIS, should be asked of each aspect of home-based work. Cost and the necessity of using a large enough sample to obtain standard industrial code (SIC) breakouts preclude that approach. To best serve the data needs of the SBA we have abstracted a core list of questions that focuses on the economic facts of the very smallest business.

E2. Draft Questionnaire

A repeat cycle of questions is asked of persons who have a second business.

Questions marked with an asterisk obtain information similar to what can be tabulated from Schedule C tax forms.

Part-time and intermittent work must be defined in the interviewer’s manual.

If BLS rules the desired questions as potentially damaging to the CPS sample, the possibility of using an outgoing rotation of the sample should be explored.

NOTE:

One respondent is interviewed for his or her own data and, by proxy, for information on all other household members. “__” refers to the household member concerning whom the question is being asked. “You” is supplied by the interviewer for questions pertaining to the respondent.
Section IV: Surveying Home-Based Businesses

Questions to be asked of respondent for all members of the household aged 14+ and older.

HOUSEHOLD SURVEY TO COUNT AND CHARACTERIZE HOME-BASED BUSINESSES
(Formatted as a supplement to the Current Population Survey)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SUPPLEMENT QUESTIONS</th>
<th>SCHEDULE C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Interviewer Check Item (Entries in CPS question 23)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Household member is:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>An employee of PRIVATE Co. (Ask 2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A Federal, State, or Local government employee (Ask 6)</td>
<td>(non-farm)</td>
</tr>
<tr>
<td></td>
<td>Self-employed in OWN business, prof. practice or farm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>incorporated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>non-incorporated</td>
<td>(Ask 3)</td>
</tr>
<tr>
<td></td>
<td>Working without pay in family business or farm (Ask 2)</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Does ____ have any ownership in that enterprise?</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>yes (Ask 3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>no (Ask 6)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>What type of owner in the enterprise is ____?</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>sole proprietor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>partner</td>
<td></td>
</tr>
<tr>
<td></td>
<td>stockholder in a corporation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>don't know</td>
<td></td>
</tr>
<tr>
<td>3a.</td>
<td>What percent ownership in the business does ____ have?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100%  25-49%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>75-99% 1-24%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50-74% less than 1% (Ask 10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>don't know</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Who are the owners? (check all that apply)</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>non relative(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>yourself (or ____ )</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>spouse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>other relative(s) specify</td>
<td></td>
</tr>
<tr>
<td>5a.</td>
<td>What was ____'s total initial investment to start the business?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ &lt;1000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1000-4999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5000-9999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10000-24999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;25000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>don't know</td>
<td></td>
</tr>
</tbody>
</table>
5b. Have there been any additional investments made in that business?
   yes (Ask 5c)
   no (Ask 6)

[INTERVIEWERS' MEMORANDUM Do not include proceeds reinvested in the business.]

5c. What was the total of all additional investment(s)?
   $ <1000
   1000-4999
   5000-9999
   10000-24999
   >25000
   don't know

6. What percent of the family's total combined annual income is from that employment?
   * (calculate)
   100%
   75 - 99% less than 25%
   50 - 74%

7. How is ____ paid for his/her work? (check all that apply)
   salary
   commission
   hourly rate
   consignment
   daily rate
   profits
   piece-rate
   other ____ please specify
   by the job

   (Interviewer Check Item: business
   job ____ (Skip to 10)

8. How old in years is the business?
   1
   1-4
   4-10
   10+

   [INTERVIEWERS' MEMORANDUM In what years did the current owners take control of this business either by starting
   it from scratch or purchasing it?]

9. Counting owners who work in the business, how many
   paid workers does the business have?
   * (wages)
   relatives
   full time
   part time
   non-relatives
   full time
   part time

   [INTERVIEWERS' MEMORANDUM An owner who does not draw a salary is
   considered paid by the profits of the business.]
Section IV: Surveying Home-Based Businesses

10. Does ___ do any work at home for his/her job or business?
   no (Ask 15)
   full time
   part time
   intermittent
   overtime (work in addition to 40 hour week)
   (If work at home is business-related, go to 10a; if job-related, go to 11.)

[INTERVIEWERS' MEMORANDUM The first cycle of questions refers to the primary employment. The repeat cycle refers to a second job or business.]

10a. Is the business operated from the home? (such as selling cosmetics, sub-contracting carpentry services or traveling as a sales representative from a home base)
   yes
   no

(NOTE: End of interview for 2nd income-producing activity)

11. How many rooms are in this unit (count the kitchen but not the bathroom)?

12. In which room(s) does ___ work at home?
   (Check all that apply)
   family room
   enclosed porch
   kitchen
   garage
   bedroom
   basement
   dining room/living room
   detached building
   office/workroom
   space in the same multi-tenant building as home
   other

13. Is the room used also for another purpose?
   yes
   no

14. Does ___ directly use a computer at work?
   Yes
   No

[INTERVIEWERS' MEMORANDUM "Directly" means that the respondent personally uses a computer.]

15. Does ___ directly use a computer at home?
   Yes
   No (Ask 18)
Section IV: Surveying Home-Based Businesses

16. Who owns the computer at home?
   - member of household
   - leased from employer
   - provided by employer
   * (if deducted)
   - other

17. At home does ___ use the computer for: (Read categories - mark all that apply)
   - Household record-keeping, taxes, etc.
   - Volunteer work
   - Job-related activities
   - Telecommunicating
   - Business-related activities
   * (if IRS requires)
   Other uses not listed
   above (specify____)

18. In addition to the primary job or business, LAST WEEK did ___ engage in any other income-producing activities?
   - no (Ask 18a)
   - yes (Ask 18b)

18a. Are there income-producing activities that ___ routinely engages in but did not engage in last week including seasonal work?
   - no (Ask 19)
   - yes (Ask 18b)

18b. Please rank those activities including separate businesses, additional jobs, or real estate management. Please rank them in the order that they produce an income.

<table>
<thead>
<tr>
<th>Business Job</th>
<th>Estimated annual dollar income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity #1</td>
<td>__</td>
</tr>
<tr>
<td>Activity #2</td>
<td>__</td>
</tr>
<tr>
<td>Activity #3</td>
<td>__</td>
</tr>
</tbody>
</table>

[INTERVIEWERS' MEMORANDUM Include those activities that are intended to be income-producing although they are not currently generating income.]

19. Which days of the week does ___ usually work? Include all income-producing activities.
   - Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday

20. What schedule did ___ work in all jobs most days last week? (Underline the periods worked at home; circle the period worked away from home.)

   1 2 3 4 5 6 7 8 9 10 11 12 Noon
   1 2 3 4 5 6 7 8 9 10 11 12 Midnight

21. Interviewer Check Item. Children in household?
   - yes _ (Ask 21a); no _ (Skip to 22)
Section IV: Surveying Home-Based Businesses

21a. Who provides supervision of children while ___ works? * (if deducted)

(Check all that apply)
- self
- spouse, partner
- other relative (specify)
- school
- babysitter coming to home
- live in help
- childcare outside home
- other
- no one

[INTERVIEWERS' MEMORANDUM] "Self" is the respondent. When questioned about spouse's working, if respondent provides child care, mark "self"; if spouse takes care of children, mark "spouse." "Partner" refers to a household partner in distinction to a legal partner.

22. Interviewer Check Item.

None of the activities listed in 18b. is a business. (Ask about next person in household)

One or more of activities mentioned is a business.

Identify the business activity by name that produces the most income and ask 23.

23a. Name of business

b. Industry
c. Occupation
d. Main activity

[INTERVIEWERS' MEMORANDUM] "Ask 2" begins a repeat cycle of questions for respondents who have said in 18b that they have a second business. The questions are repeated with respect to the second business through question 10a.

ADD TO SUPPLEMENT IF SPECIAL SAMPLE FRAME USED FOR SURVEY INSTEAD OF CPS

Sex
Age
Race
Marital status
Number and ages of children living in home
Educational level
Total family income
Employer, industry, and occupation

IV-21
E3. Participants' Commentary on Questionnaire

Draft copies of the questionnaire were sent to the fifty persons who responded to a mailing which invited participation in this study. A psychometrician, three members of the Advisory Panel and seven representatives of research, trade associations, newsletters, and state and federal government (Appendix B) submitted comments.

There was no stated disagreement with the content of the questionnaire with two exceptions: "I don't suppose anything you would include in your questionnaire would be able to help our fight for freedom of the workplace" and "These questions may address your areas of concern but they reflect a very narrow perspective."

Concern was expressed that "quite a few people will deny having home-based businesses because the restrictions (zoning and other laws prohibiting home-based businesses) make them hide their businesses."

Several revisions were suggested for the wording of standard Bureau of Census questions, for example, question #1 that categorizes type of employment and #14 and #15 that relate to computer use. It would be impossible to revise the first question on a Census-conducted survey. By retaining the exact wording of the October 1984 CPS Supplement, data from the proposed survey can be compared with the earlier data. The interviewers' manual will clarify that "directly" means that the respondent "personally" uses a computer.

Revisions that clarified questions have been incorporated in the recommended questionnaire (Section IV.D.2). Other problems are less easily resolved:

In general, researchers would prefer that a specific value be recorded in preference to ranges of dollars or years. This format would instill perhaps a misleading notion of accuracy of any number recorded, especially for those values given by proxy for other members of the household. It also presents the problems of taking more space and requiring more time for tabulation.

5a What was ___'s initial investment to start the business?
5c What was the total of all additional investment(s)?

The specified dollar ranges may be too broad.

The question has been raised "over what time period" is information being sought? In 5a do we mean all start-up costs, the first year, or just what? In 5c we may be asking about 20 year old businesses.

For Mom and Pop businesses the phrasing "What was ___'s initial investment..." asks for a separation of what may have been an investment of joint funds. If the question is phrased "What was the total investment to start the business," we are switching between questions regarding the individual and those addressing the business unit.
Section IV: Surveying Home-Based Businesses

§8  How old in years is the business?

Are a) the years from founding the business or b) the years of current ownership being asked?

To ensure that the family-owned business and the home-based business questionnaires agree that b) is the information requested, clarification has been supplied for the interviewers' memorandum.

§10a  Is the business operated from the home? (such as selling cosmetics, sub-contracting carpentry services, or traveling as a sales representative from a home base)

The intent of the item is to capture business persons who keep their books and make business appointments from a home “office” although their income-producing activity is performed at varying locations.

§17  At home does ___ use the computer for:

Definitions of “job-related” and “business-related” will need to be included in the interviewers' manual.

§18  In addition to the primary job or business, LAST WEEK did ___ engage in any other income-producing activities?

§18a  Are there income-producing activities that ___ routinely engages in but did not engage in last week including seasonal work?

§18b  Please rank those activities including separate businesses, additional jobs, or real estate management. Please rank them in the order that they produce an income.

Further testing is needed to determine whether the context of this series is clear enough so that people will answer correctly. The questions will need special attention in pre-tests. The wording and layout are not a typical CPS format and may need revising if used in a CPS Supplement.

Specific questions may be necessary to elicit income.

§20  What schedule did ___ work in all jobs most days last week?
(Underline the periods worked at home; circle the period worked away from home.)

We may be trying to get too much information from one question. The alternatives might be a) to request only the periods worked at home or b) to ask a series of questions that obtains times that work was started and stopped. This would be a difficult series to construct since we know that home-based workers tend to start and stop working several times a day. Hence the layout recommended for response.
Section IV: Surveying Home-Based Businesses

$21$ Interviewer Check Item. Children in household?

We need to know the number and ages of children. In the CPS, children are defined as from birth up to 14 years of age.

Additional items were suggested:

Dollar sales from businesses

Other income, not from work of any kind

If the respondent has been in business over one year, is his/her income increasing, the same, or decreasing?

Percent of time that a computer is used and that telecommunications are needed.

Identification of which room in the household is used the most for the business when more than one room is specified in question $\#12$.

Space limitations of a CPS Supplement have constrained the content and response choices in the proposed questionnaire. If the proposed survey is not run as a CPS Supplement, questions of little interest can be deleted from the basic CPS and others added to minimize the remaining ambiguity.

F. A THEORY OF HOME-BASED BUSINESS INCEPTION

Some of the questions that have been raised in the section titled A 1985 View of Work at Home (Section II.D2) are currently being addressed by researchers. Their work has been alluded to in this study and the accompanying bibliography. But interacting parameters of home-based work are so varied and complex that we have only glimpsed what home-based work means if the trend continues until most of our neighbors are staying home to work.

How does income-producing work get started in the home? Individuals are motivated to begin home-based work for many reasons including the "desire to spend more time with their families or because of a family history of entrepreneurship." Shifts in the economy that cause loss of employment or an involuntary transfer to part-time employment are other incentives to begin working from home.

But now there is an added incentive: widespread adoption of the personal computer has made it technically feasible to perform many tasks relatively unlimited by place or time. As an individual gains familiarity with his or her new tool, it becomes increasingly obvious that a more flexible work and leisure life is a practical option.

Pratt's own theory of the category of business inception prompted by the electronic revolution suggests that an employee begins to work at home with his or her electronic briefcase, a personal computer. A little volunteer spreadsheet bookkeeping leads to moonlighting for pay. This contract work
Section IV: Surveying Home-Based Businesses

grows into an income-producing activity that launches a home-based entrepreneur. We have anecdotal evidence that this is a pathway to business birth, but no more. Horatio Alger-type success stories abound with Stephen Jobs the best known of contemporary entrepreneurs. What about others? There are outstanding successes and less publicized failures.

A business may begin as a hobby, volunteer activity, or moonlighting. At some point it acquires the symbols of a true business: letterhead, business cards, a tax number, and Schedule C income tax filings. If the business remains a one employee—the sole proprietor—business by preference or limited market, it probably never moves out of the home, but may expand within the home.

If, however, the business begins to acquire employees and expand its sales or service, pressure builds to become a more "business-like" entity in order to carry the larger overhead costs. The business may expand into the living quarters to the point of intrusion on the household or perhaps disturb the neighbors. Operation in a home may become too inefficient. For one or more reasons the fledgling business then moves out of the home.

Launched with low risk, minimal overhead, and part-time commitment, a home-based business may lapse, remain a very small but contributing entity in the economy, or grow out of the home into a Liquid Paper Corporation or Apple Computer Corporation.

The home can, therefore, be the permanent location of a business or the nursery that shelters a nascent enterprise while it matures to a size that enables it to carry the overhead of commercial quarters.

In conducting surveys in order to anticipate the future we do not know whether we are dealing with a fad or a trend. To whom does work at home apply? All of the workers all of the time? All workers some of the time? Some workers some of the time? Or is home-based employment an option for only a few workers?

If all home workers turn into contractors, is this an optimum status? for the employee? for the economy? Does it put everyone on the entrepreneurial track?

What are possible future problems with work at home? Many have been anticipated in Section II.D2. Just one, the definition of "contractor," raises very complex issues. Should policies be developed in anticipation of problems? Should home work be banned in fear of exploitation, as unions propose?

To maximize the benefits of home-based businesses in the economy and society we must obtain knowledge of what is happening and to what degree.
Section IV: Surveying Home-Based Businesses

ENDNOTES


2. Ibid p. 172

3. Ibid p. 168


10. Sheldon Haber, personal communication.


12. Ibid p. 171.

V. SURVEYING FAMILY-OWNED BUSINESSES

A. CHOICE OF THE SMALL BUSINESS DATA BASE METHOD

Concurrent with efforts to define appropriate research questions on family-owned businesses, an investigation was made of several national survey methods to see if they would be appropriate means to measure the number, characteristics and contributions of these firms:

- The Bureau of the Census' Annual Surveys of Business Units
- The Bureau of the Census' Annual Report of Organization
- The 1987 Census of Businesses
- The 1980 Census of Population
- The Small Business Data Base (SBDB) Method

This section considers the advantages and disadvantages of each method, and discusses why the SBDB method was chosen.

Al. The Census' Annual Surveys of Business Units

The various divisions of the Census concerned with business units (Manufacturing, Retail Trade, Wholesale Trade, Service Industries, Construction Industries, Mineral Industries and Transportation) use brief survey instruments to update what is going on in these sectors. These surveys have very well-developed sampling frames, based on stratified random samples, using land segments. Other big advantages of these surveys are that they "require" responses and capture business births. If questions could be placed on these instruments to identify family-owned businesses, the surveying itself would be cost free to the SBA and the analysis of the data would be performed by the Bureau of the Census at a relatively low cost. A major drawback to relying on the surveys is that it is not certain we could place any family-owned business questions on the questionnaires. Moreover, because the Census Bureau understandably wants to keep the questionnaires short, a single categorical question to identify family-owned businesses was strongly preferred. A single question would probably not permit reliable classification of family-owned businesses and non-family-owned businesses. This drawback makes this method risky. The annual surveys vary somewhat in the information they gather. For instance, Surveys of Retail and Wholesale Trade and Services collect information on organizational status, numbers of establishments, sales inventory and gross margins. The Survey of Manufacturers collects data on industry, employment, labor and material costs, inventories and other assets, capital expenditures and gross margins. Since the SBDB is essentially a "universe" file, the Census' sound sampling frame is not a strong advantage. This survey method is recommended only if the SBDB method were ruled out.
Section V: Surveying Family-Owned Business

A2. The Census' Annual Report of Organization

The Census' Annual Report of Organization gathers extensive data at the enterprise and establishment levels for multi-establishment companies: organizational status, industry activity, employment, sales, capital expenditures, assets, operating expenses and gross margins. It would be possible to submit a question to classify family-owned businesses for the Company Organization Survey form, but these questionnaires would only reach multi-establishment companies with more than 250 employees. Single establishment companies (most family-owned businesses) including sole proprietors without employees are examined through IRS data. The IRS data, unfortunately, do not indicate family ownership or management. The Census' Annual Report of Organization would be a very acceptable instrument for examining larger family-owned businesses but would miss most business units in which we are interested. Using this method is recommended only as a backup, if the SBDB Method does not gather enough data from larger companies.

A3. The Census of Business

The Census of Business (being prepared for 1987) collects useful data every five years from all employers on organizational status, sales, payroll and employment, and operating expenses. Non-employer data are taken from IRS returns. Besides the length of time between surveys, this instrument has the disadvantage of being short and open to only one or two additional questions, which could make it difficult to reliably classify family-owned businesses. This survey would permit a sound initial inquiry into family-owned businesses, but is still inferior to the SBDB Method which examines more types of business characteristics and allows for a more reliable classification of family-owned business.

A4. The 1980 Census of Population

The 1980 Census of Population (questions 28, 29, 30 and 32) contains information on how many self-employed individuals in families there are, in what industries they are employed, how much they work and how much they earn. We could cross-tabulate these data to estimate the number of family businesses and family employment in them but learn little else about these companies. This would be an attractive option if it is learned from the first-round SBDB survey that family companies are resisting giving information.

These four Census methods are summarized in Table V-1.
### Section V: Surveying Family-Owned Business

<table>
<thead>
<tr>
<th>Survey</th>
<th>Numbers and Types of Businesses Surveyed</th>
<th>Information Available</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Surveys of Business Units</td>
<td>Samples drawn from all firms.</td>
<td>Varies across surveys. Survey of Manufacturers gathers data on: Industry, Employment, Cost of Materials, Inventories, Assets, Capital Expenditures, Gross Margins</td>
<td>Well-developed sampling frames; required responses; business births captured; low cost to SBA.</td>
<td>Difficult to classify family businesses; less information or the business than in SBDB.</td>
</tr>
<tr>
<td>Annual Report of Organization</td>
<td>Multi-establishment firms with more than 250 employees surveyed. Single establishment firms examined through IRS data.</td>
<td>Organizational Status, Industry, Employment, Sales, Capital Expenditures, Assets, Operating Expenses</td>
<td>Good data on larger companies; well-developed sampling frames, low cost to SBA.</td>
<td>Difficult to classify family business in Census survey; impossible to classify firms in IRS data; only data on larger firms available.</td>
</tr>
<tr>
<td>Census of Business (1987)</td>
<td>All employees</td>
<td>Organizational Status, Payroll, Employment, Operating Expenses</td>
<td>Universe file; Good data on most all companies.</td>
<td>Difficult to classify family businesses; long time between survey; less information per firm than in SBDB.</td>
</tr>
<tr>
<td>Census of Population (1980)</td>
<td>All households</td>
<td>The number of self-employed people in families, industry, organization, hours worked and earnings.</td>
<td>Can estimate the number of family businesses and family employment in them.</td>
<td>Can learn less than by using SBDB.</td>
</tr>
</tbody>
</table>
Section V: Surveying Family-Owned Business

A5. The Small Business Data Base Method

The Small Business Data Base (SBDB) contains the most thorough set of company data found and offers the greatest opportunity to learn about the structural and employment characteristics and business practices of family-owned businesses. The files which comprise the SBDB are described in Table V-2.

The sampling frame of the SBDB contains almost all firms which employ more than one person and covers over 98 percent of all non-government, non-farm employment. The USEEM file includes 3 percent of the enterprises with sales below $25,000; 40 percent between $25,000 and $99,999; 91 percent between $100,000 and less than $1 million; and 100 percent of the firms with sales of $1 million and more. Sixty-six percent of the firms in the SBDB have annual sales in excess of $100,000. By using the SBDB only sole proprietors with no paid employees would be missed. These businesses are family-owned businesses and certainly worthy of study. Still, they are less interesting to researchers and policy-makers than firms which have employees and constitute more of a force in their industries and communities.

What is needed is a survey method that can reliably classify firms (enterprises) in the SBDB as family-owned businesses or non-family-owned businesses. A five percent random sample taken from the 1982 USEEM file (4.5 million firms) would yield about 200,000 enterprises that could be surveyed. A short voluntary survey could be sent to these enterprises from which a 10 percent return would be expected. The Master Establishment List, updated in November 1985, should give accurate mailing addresses. The 20,000 firms responding to this survey could be labeled as family-owned businesses or non-family-owned businesses using criteria of the researcher. Different researchers could cut the sample in different ways, according to their definition of a family business. Family-owned businesses could be studied on the variables that are available for each firm and family-owned businesses and non-family-owned businesses could be compared. Based on the questions that arise from this first phase study and previously generated research questions, the sample of 20,000 could be resurveyed later using a longer and more detailed instrument. For both the first and second round surveys, a follow-up telephone survey should be attempted to gather missing data and check for non-response bias. The Master Establishment List, updated in November 1985, should contain recent phone numbers to facilitate the follow-up survey.

This survey method, which is called the Small Business Data Base Method, provides the required sample frame and contains data to conduct in-depth research on family-owned businesses. While potentially more costly than relying on the Census methods (it is estimated to cost around $75,000 to cover the first round expenses), it offers an opportunity to reliably classify family and non-family businesses. Given the quality and type of data in the SBDB, the return on this method for researchers and policy makers is much greater. Of the methods examined, the SBDB Method is the clear preference.
### TABLE V-2: BUSINESS MICRODATA FILES IN THE SMALL BUSINESS DATA BASE

<table>
<thead>
<tr>
<th>DATA FILE</th>
<th>SOURCE</th>
<th>NUMBER OF RECORDS</th>
<th>INFORMATION AVAILABLE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Establishment List</td>
<td>Dun and Bradstreet's Market Identifier (DMI)</td>
<td>8.8 million establishments</td>
<td>Establishment name, address and industry, employment, enterprise/establishment relationship for 8.8 million establishments.</td>
<td>1981</td>
</tr>
<tr>
<td>(MEL)</td>
<td>File and Market Data Retrieval (MDR) File</td>
<td>(1985)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Enterprise and Microdata</td>
<td>Dun's Market Identifier File</td>
<td>3.9 million firms per year (1984)</td>
<td>Includes all the above, and enterprise and establishment linkage, firm sales, age of firm, secondary and primary, 4 digit SIC codes and imputations for missing data.</td>
<td>1976</td>
</tr>
<tr>
<td>File (USEEM)</td>
<td>(DMI)</td>
<td></td>
<td></td>
<td>1976</td>
</tr>
<tr>
<td>(USELM)</td>
<td>(DMI)</td>
<td></td>
<td></td>
<td>1976</td>
</tr>
</tbody>
</table>
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B. RECOMMENDED FIRST ROUND SURVEY (THE BUSINESS IDENTIFICATION QUESTIONNAIRE)

B1. Contents of the Survey

The first round survey proposed will collect the following information on each company:

<table>
<thead>
<tr>
<th>Question</th>
<th>Purpose of Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Legal form of organization</td>
<td>To help match the company with its file in the database, and to estimate the distribution of legal forms in the family-owned business population.</td>
</tr>
<tr>
<td>2. Employment</td>
<td>To help match the company with its file in the database, and to estimate the contribution to employment by family-owned firms.</td>
</tr>
<tr>
<td>3. Establishment starting date</td>
<td>To help match the company with its file in the database, and to estimate the lifespan of family-owned businesses.</td>
</tr>
<tr>
<td>4. Home-based history</td>
<td>To begin to estimate the importance of home origins to these business entities and to permit future measurements of the overlap of home-based and family-owned business sectors.</td>
</tr>
<tr>
<td>5. Ownership by the three largest shareholder families</td>
<td>To determine how much of the company is owned by a single family and to see how diluted ownership control is.</td>
</tr>
<tr>
<td>6a. Family involvement in investment decisions and/or goal setting</td>
<td>To gauge the extent to which family members exercise their ownership power to determine the long-run direction of the firm.</td>
</tr>
<tr>
<td>6b. Family involvement in day-to-day operations and running of the business</td>
<td>This is a &quot;process&quot; measure to gauge the involvement of family members in the firm's management, and hence, to help estimate the number of family-owned and managed companies.</td>
</tr>
<tr>
<td>7. Family involvement in management positions</td>
<td>Same as 6b. This is a &quot;structural&quot; measure of involvement versus the &quot;process&quot; measure in 6b.</td>
</tr>
</tbody>
</table>

Exhibits V-1 and V-2 show the first-round Business Identification Questionnaire and cover letter, respectively. Section B2 explains a rationale for these survey tools and makes further recommendations.
This questionnaire has been designed to provide researchers and policy makers with information about the structure of businesses. Your company is not required to respond. However, we would greatly appreciate your response and it will be kept completely confidential. Whether your company is publicly held or closely held please complete this questionnaire. When you have completed the form, simply fold it over, seal it, and place it in the mail.

1. What is the legal form of this company? (Check one) Sole Proprietorship  
   Partnership  
   Corporation

2. Approximately how many people (including owners who work here) have worked here during 1985?  
   Number of paid full-time employees  
   Number of paid part-time employees  
   Number of unpaid family employees

3. In what year was this company:  
   started from scratch?  
   purchased or inherited by the current controlling owners?  
   incorporated?  
   (Leave the space blank if you don't know or the category doesn't apply)

4. Has this company ever been operated or managed out of an individual's home? (Check one) Yes  
   No

5. What percentage of this company do the three largest owning families represented in this company own?  
   Family 1 (largest owner) owns  
   Family 2 (2nd largest owner) owns  
   Family 3 (3rd largest owner) owns

6. What role do members of each of the major owning families have in the company's:  
   a. investment decisions  
      Family 1  
      Family 2  
      Family 3
   b. day-to-day operations and running?  
      Family 1  
      Family 2  
      Family 3

7. Please check (X) the positions in the company held by members of the major owning families. If no one is employed in this position check the last row.  
   Board Chairman  
   Board Director  
   President/CEO  
   Vice-President  
   Other Officer  
   Manager  
   Supervisor  
   Staff
   Family 1  
   Family 2  
   Family 3  
   No one in this position

THANK YOU VERY MUCH FOR YOUR CO-OPERATION.
Dear [Name],

Currently the Small Business Administration is conducting research on the ownership and management of companies, both large and small, publicly held and closely held, in all industries. The goal of this study is to formulate policies which take into account the different ownership and management characteristics of companies. For this purpose, it is necessary to learn how companies are owned and managed. The accompanying questionnaire is designed with this in mind.

Your company has been selected randomly from the Small Business Administration's data base, a data base compiled entirely from information available in Dun and Bradstreet. The questionnaire should take approximately five minutes to complete and your responses will be greatly appreciated. While your completion of this questionnaire is voluntary, the success of this research project depends on your response. Ultimately, this project will benefit your company through policies more closely designed to benefit your particular business situation. The information you provide will be kept completely anonymous and confidential.

Thank you very much in anticipation of your reply.

Sincerely,

[Name]

Questionnaire enclosed
Section V: Surveying Family-Owned Businesses

B2. Rationale Behind First-Round Survey Instrument

To be successful, research projects using mail questionnaires as the major means of gathering information must pay attention to a few general principles: the survey must achieve a good response rate, respondents must be representative of the populations to which generalizations will be made and respondents need to be guided to answer the questions completely so that they provide the information required by the researcher. In mail surveys, the recipient receives much more than a series of questions. A package of information including a cover letter, the questionnaire and accompanying instructions for its completion can and should be used to the fullest possible extent to achieve the aims of all successful investigations.

The process of getting people to respond accurately and completely can be viewed from two different social psychological perspectives. First, it can be viewed as a helping relationship in which the recipient of the questionnaire is a potential helper of the researcher. Attention to the dynamics of helping relationships can often enhance the response rate. For example, one reason why people won't help in many circumstances is fear of committing social blunders. Recipients of questionnaires may fear committing a social blunder if questions look too difficult to answer. Considerations such as these have been important in the construction of the present questionnaire. Questions that are easy to read and answer have been designed.

The difficulty of completing a questionnaire can also be viewed from the 'social exchange' perspective. From this perspective all social interactions, such as that between the researcher and the respondent, involves an exchange of resources. People engage in interaction only when they believe their potential gains will outweigh the cost they have to incur. The important aim of questionnaire design and implementation from this perspective is to minimize the costs of the recipient of the questionnaire and to maximise their potential rewards so that they become respondents. To minimize the time and effort costs for the respondent, questions have been used that seem interesting and non-threatening.

The wording and presentation of the identifier questionnaire and the cover letter employ principles from the above two perspectives and also pay attention to the psychometric concerns of reliability and validity. A successful mail survey requires a balance between these psychometric concerns and concerns with achieving good responses to the instrument.

A reliable instrument is one that obtains information which is as close as possible to the true nature of things. One can have confidence that this has been achieved if the same information can be obtained at different times with the same measuring instrument, at the same time with different instruments, or with a combination of these two methods. A valid instrument is one to which
Section V: Surveying Family-Owned Businesses

the responses accurately answer the questions that need to be answered. In the case of the identifier questionnaire, responses must enable an accurate and distinct classification of businesses as either family or non-family-owned and managed. With these general considerations on successful mail questionnaires in mind, our rationale for the design and presentation of the Identification Questionnaire is now presented.

The only way to absolutely ensure a representative sample is for all the members of a sample selected by a probability method, such as random or stratified random sampling, to respond to all questions. In most cases this is unattainable and the next best standard is to obtain a response rate as high as possible and hope that respondents are similar in the important ways to those who do not respond. A number of techniques have been used in the construction and presentation of the Identification Questionnaire to ensure the highest possible response rate.

From a helping perspective, questions have been designed to be simple and help allay the fear of committing a social blunder. For example, question 2 asks only for the approximate number of employees rather than an exact figure. We have carefully planned the order of the questions so that the first few are the easiest, giving the impression that all questions are as simple as these. Throughout the questionnaire, carefully worded instructions for completing the questions have been given. Extensive attention was paid during pilot testing to the ease with which respondents understood the questions. To further enhance the ease of completing the Identification Questionnaire, it is recommended that a contact telephone number be included in the cover letter so that respondents needing help can call and obtain assistance.

In social exchange terms, a request to complete a questionnaire is unlikely to be seen as profitable unless special care is taken. Foremost in achieving a perception of equity involves limiting the length of the questionnaire. Only those questions necessary and sufficient to differentiate family from non-family-owned businesses have been included. Also, an attempt has been made to reduce the perception of the cost involved in completing the questionnaire by confining it to one page. A questionnaire extending over a number of pages is likely to be seen as more daunting than a questionnaire asking the same questions in condensed format one page. To further reduce the cost to the respondent it is suggested that the questionnaire be printed on a 'business reply' card that can easily be dropped in the mail at no monetary cost and little time cost to the respondent.

Apart from attempts to minimize the cost involved in completing the questionnaire, the cover letter has also been designed to increase the perception of rewards that will be obtained by its completion. Expressions of gratitude and appreciation for completion of the questionnaire are made both in the cover letter and in the questionnaire itself. Social approval in this form has been found to be a very powerful reward which can motivate action. Also, the possibility of real benefits to the recipient in the form of...
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policies assisting their situation is stressed in the cover letter. Importantly, these potential benefits have been made contingent on the completion and return of each recipient's questionnaire.

Achieving a good response rate to the Identification Questionnaire is of the utmost importance but is really only half the battle. The responses of those who return the questionnaire must be accurate and interpretable within the framework of the study. These requirements can be met, in part, if the questionnaire is reliable. Ideally, an extensive pilot test would have indicated the extent to which the identifier questionnaire was reliable but this was not possible. The Office of Management and Budget requires that no more than nine tests of a questionnaire be performed without OMB granting special permission. The Identification Questionnaire was tested in three iterations on three businesses in each round to minimize this limitation. These businesses were family-owned and non-family-owned, large and small. The respondents were CEO's, senior officers and secretaries. Some pilot respondents were followed as they completed the instrument and others were interviewed about it after they completed it on their own. In this way, learning was maximized about the instrument's potential flaws. By the third iteration in testing, elimination of all but the slightest confusions about the meaning of questions and how to answer them was achieved.

Reliability can only be achieved if the questions are unambiguous, so the first step in designing the questions was to limit any possible ambiguities. Extensive consultations took place between the researcher, advisors and pilot respondents to obtain information on proper question wording, ensure clarity of response and gauge the time needed to respond. The final product is the culmination of numerous revisions of question wording, format, and presentation that includes input from all sources available. Ambiguity is very low and additional reliability has been achieved by including standard definitions where several interpretations were possible. One major finding of the pilot testing phase was that companies with public ownership perceived some bias in the instrument favoring family-owned companies and, thus, were reluctant to respond. This bias was reduced to ensure that all forms of companies would respond to the survey by including an instruction for all companies to respond to the questionnaire.

Similar efforts were made to ensure a valid instrument as well. Two types of validity are of concern to us here. The first of these is "content validity" which is the degree to which the questionnaire accurately reflects the domain of interest. Specifically, this means that the questions must sample adequately the characteristics that define whether a business is family-owned and managed. The extensive process of consultation among several members of the Advisory Panel has led to a series of questions that well-define both the ownership and management requirements of a family business.
The second important form of validity is "concurrent" or "criterion-related" validity. This is determined by knowing that a business, which is known to be family-owned and managed from independent sources, can be correctly classified on the basis of questionnaire responses by someone unfamiliar with the company. Questions need to identify dimensions that show the differences between family and non-family-owned and managed companies so that the distinctions between the two are emphasized. The questionnaire includes response categories for all possible forms of companies with many different ownership and operation characteristics. As a final indicator of the validity of the instrument, all companies participating in the pilot study were easily and accurately classified by an independent rater.

In summary, the final product for this first-round identification stage, including the questionnaire, the cover letter, instructions for returning the questionnaire and contingency plans for dealing with non-respondents attends to sound psychometric principles and increases the likelihood of a high response rate.

C. RECOMMENDED SECOND ROUND SURVEY

For the second round survey, a two-page questionnaire is recommended be sent to all companies which responded to the first round instrument. No specifications have been made to the questions to be asked in the second round survey since topics will arise from the first round study that cannot be anticipated and because a consortium of groups interested in the second round survey will hopefully want to shape this version. Labeled with a "(2)" are the topics listed in section III.C that are believed to deserve the most attention in the second round survey.

D. ESTABLISHING A RESEARCH CONSORTIUM

While there are several federal agencies and many industry groups that should be interested in learning more about family-owned businesses, more groundwork must be done to build a consortium that would financially support such research. Candidates for a family-owned business consortium could include the Small Business Administration, the Bureau of the Census, the Securities and Exchange Commission, the Department of Transportation and the Department of Agriculture. Industry associations, claim great interest in the survey and also poverty; little hope is held of obtaining industry association support for these surveys. To encourage support for the Small Business Administration study of family-owned businesses, we recommend that Davis continue to meet with members of these and other agencies, encouraging them to further shape the second-round survey and to contribute funds to the process. Once a group of potential supporters of this survey is identified, the Small Business Administration should organize a conference for representatives of these agencies to draft a second-round instrument and to encourage their financial support.
Section V: Surveying Family-Owned Businesses

Bureau of the Census

The Economics Divisions of the Census (Industry, Construction, Business and Agriculture) recognize that most of their samples are comprised of family-owned businesses and have expressed interest in the Small Business Administration's study of family-owned businesses. They seem to regard family-owned businesses, however, as more of a curiosity than a subject for serious study. They are open to the Small Business Administration submitting questions on family-owned businesses to them for their surveys. The Small Business Administration might be able to gain the Census' support by arguing that the Small Business Administration study will point out questions on family-owned businesses that the Census should be asking in its own surveys.

Securities and Exchange Commission

The SEC could be a strong supporter of a Small Business Administration study of family-owned businesses. In previous years they have tried to get closely held companies to reveal information on family involvement in the business — especially regarding what income relatives take from the company. They could be very interested in shaping the second round survey instrument.

Department of Transportation

Because of the large numbers of family-owned businesses in transportation industries, DOT could also be very interested in learning more about the characteristics and business practices of these firms.

Department of Agriculture

The Economic Research Service of DOA is very interested in studying the economic health and viability of the family-owned and managed farm. Congress is asking DOA for more information on large farm corporations and how they compare to family farms, so this agency is very interested in what the Small Business Administration would do on this topic. The Small Business Administration might get the DOA to help fund some of the survey development expenses of an family-owned business study if a corresponding study could be developed for them in the process.
VI. CONCLUSIONS

Section I of this report described why the home-based business and family-owned business surveys were separated; although there is a substantial overlap between these two sectors, sampling considerations convince the authors that it is not possible to survey the two together. Family-owned businesses must be sampled as business units; home-based businesses can only be identified by surveying individuals.

For the survey of each group, a questionnaire has been designed which tags the other group. The first-round family-owned business questionnaire identifies businesses which, at one time, have been operated out of a person's home. The home-based business questionnaire asks a series of questions about ownership by and employment of relatives, pinpointing family ownership and employment in a home-based business. Thus, tabulations will be possible to measure the degree of overlap of these two sectors.

A. HOME-BASED BUSINESS SECTOR

The home-based business questionnaire has been designed as a Current Population Survey (CPS) supplement to be conducted following a preliminary analysis of data collected in the October 1984 and May 1985 CPS supplements.

It has been recommended that the SBA piggyback on existing surveys wherever appropriate. During the course of this study, the authors have been able to influence the May 1985 CPS Supplement and advocate tagging the National Longitudinal Surveys for home-based work.

Knowledge of the existence of various surveys and the timing of questionnaire preparation together with personal contact makes this achievable. Some surveys with very small samples have in-depth data that can help the design of follow-on surveys with sample sizes generalizable for SBA purposes.

Cross-tabulation of home-based businesses from Schedule C filings would provide accurate financial data to supplement information gained by the recommended surveys.

A data base collected under the sponsorship of the SBA will serve many disparate interests. Those who may want to use the data base include several government agencies. The Department of Labor, Wage and Hour Division is concerned with issues of contract labor; it's Women's Bureau has responsibility for women's issues. The Bureau of Census and the Department of Transportation monitor travel to work and thus must understand the impact of telecommuting.
Section VI: Conclusions

The Congress must provide legislation to stimulate or control work at home. Some states offer a service to home workers in the form of information or legislation and one state government is planning optional telecommuting for state employees.

In the private sector, business schools want to examine technology's impact on management, corporate culture and information transfer. In the humanities, sociologists focus on the home worker and family relationships; psychologists on work at home and isolation. Futurists anticipate telecommuting trends. Trade associations want to know what is happening in their industries. Labor unions want statistics on home "sweatshops." A data base could be used to address all of these specific interests. It could also build a fuller pictures of prototype workers: educated white collar, professional and managerial people—whose work at home ranges from intermittent use of an electronic briefcase to full-time employee status or proprietors of a home-based business; clerical white collar employees or contract workers; and craft workers engaged in piece work.

B. FAMILY-OWNED BUSINESS SECTOR

Although much anecdotal evidence exists on family-owned businesses, few empirical studies have been conducted on these organizations. To date, we can only speculate on their numbers, their economic contribution, and how they compare with non-family businesses.

Much interest exists in learning more about these organizations. Business researchers would like to know how family companies compare with non-family companies and also how they vary across industries.

Government agencies are interested in these questions and also in understanding the economic contributions of these firms. Trade associations and family business executives are interested in publicizing the contributions of these firms to get more favorable tax treatment.

The literature on family-owned businesses contains mostly case histories of their characteristics focusing on social problems that occur when relatives work together. The survey methods that have been proposed for family-owned businesses will complement the existing case material to help generate a needed understanding of family companies' performance characteristics.

For family-owned businesses, two surveys are proposed. The first, a Business Identification Questionnaire will label companies in the Small Business Data Base as either family-owned and managed or nonfamily-owned and managed. A second round questionnaire will propose further questions to help us learn more about family-owned businesses.
APPENDIX A: IMPORTANT DEFINITIONS FOR THIS STUDY

There are a variety of definitions for home-based work which confuses the interpretation of what limited data exist on this occupational group. Several definitions for a family business also exist but they are similar and cause only minimal confusion for researchers. Listed below are examples of definitions that are in use, as well as those that have been applied in this study.

Cottage Industry: A centralized marketing and management company which sells materials to a host of independent contractors working out of their homes. These contractors then sell their finished products back to the cottage industry.

Home-Based Business: An enterprise producing goods or services operated in or from the home. (Authors' definition)

Home Business: An enterprise, usually a sole proprietorship, producing goods and services out of a home, and employing only members of the immediate family. (Minnesota project definition)

Telecommuting: The partial or total substitution of the daily commute by communication via a computer terminal.

Telework: Refers to the use of computers as a primary communications tool in the workplace.

Work at Home: Operation of a business from home or job-related work performed at home.
- Job-at-Home: Job-related work performed at home. (AT&T definitions)

Family Business: A family business is one in which two or more extended family members influence the direction of the business through the exercise of kinship ties, management roles or ownership rights. (Authors' definition)

Family-Owned Business: A family-owned business is one whose management and policies are substantially influenced by a single owning extended family. (Authors' definition)
APPENDIX B: ACKNOWLEDGEMENTS

The authors wish to acknowledge the generosity of all those below who contributed to this study of home-based business and family-owned business.

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APPENDIX C: ISSUES FOR RESEARCH ON FAMILY-OWNED AND MANAGED BUSINESSES
ISSUES FOR RESEARCH ON FAMILY-OWNED
AND MANAGED BUSINESSES

In order to understand the issues on family-owned and managed businesses that you believe are the most interesting and useful to research. I would appreciate your completing this brief questionnaire and mailing it to:

Assistant Professor John Davis
Department of Management & Organization
University of Southern California
Los Angeles, CA 90089-1421

Your Name: ____________________________
Address: ______________________________
                                          ______________________________
Phone: ( ) ____________________________

(1) WHAT TOPICS ON FAMILY BUSINESSES (OR RELATED TO FAMILY BUSINESSES) HAVE YOU IN THE PAST INVESTIGATED OR CURRENTLY ARE RESEARCHING?

________________________________________________________________________
________________________________________________________________________
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(2) WHAT TOPICS ON FAMILY BUSINESSES DO YOU WANT TO INVESTIGATE IN THE FUTURE?

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(3) WHAT TOPICS ON FAMILY BUSINESS DO YOU THINK THE FEDERAL GOVERNMENT OUGHT TO INVESTIGATE FOR THE PURPOSE OF GENERATING EFFECTIVE POLICIES?

______________________________________________________________________________
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______________________________________________________________________________
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______________________________________________________________________________
______________________________________________________________________________
(4) HOW USEFUL IS IT TO UNDERSTAND MORE ON EACH OF THE FOLLOWING TOPICS ABOUT FAMILY BUSINESSES? (CIRCLE ONE NUMBER PER TOPIC.)

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>Essential</th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Not Useful</th>
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<tr>
<td>Their ownership characteristics</td>
<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
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<td>Their employment characteristics</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Their failure rates</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Their innovativeness</td>
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<td>2</td>
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<tr>
<td>Their output's quality</td>
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<td>2</td>
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<td>Their competitive strategies</td>
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<td>2</td>
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<td>4</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td>Their industry involvement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Their contribution to the economy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Their contribution to society</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

PLEASE SUGGEST OTHER TOPICS AND RATE THEIR USEFULNESS:

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
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_________________________________________________________________
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THANKS FOR YOUR ASSISTANCE!
APPENDIX D

SAMPLE SURVEY METHODS TO IDENTIFY THE POPULATION OF INDIVIDUALS WORKING AT HOME

Prepared by ICF Incorporated
APPENDIX
SAMPLE SURVEY METHODS TO IDENTIFY THE POPULATION
OF INDIVIDUALS WORKING AT HOME

INTRODUCTION

This appendix discusses considerations in establishing a sample design and
data collection methodology for identifying work-at-home individuals. The
survey data are to fulfill the following research objective, namely --

• describe by two-digit SIC businesses based in the home.

In addition, these data will have value in numerous other applications such as
(1) analyzing the use of computers by persons working at home, (2) analyzing
the size distribution, ownership, and age of home-based businesses, and (3)
estimating the proportion of persons working at home associated with
home-based businesses.

The study requires a nationally representative sample of households
containing persons working at home with a suggested sample size equal to 5,000
households.

We suggest fielding a multi-stage cluster sampling survey using an area
frame for selecting sample clusters or units in each stage. The sections that
follow discuss the sample design procedures and considerations at each stage
of the process. We also consider tradeoffs between clustering design effects
and precision levels and assess the ability of the survey to achieve the
study’s research objective.

PRIMARY SAMPLING UNITS

The primary sampling units (PSUs) in our first stage sample will be coun-
tr


groups in the U.S. Typically, counties (or their equivalent in New England

/22
and elsewhere) comprising major metropolitan areas will be consolidated into a single county group. County groups will likely be stratified by various characteristics such as SMSA or non-SMSA status, and census region (or possibly Census division). The criterion for selecting stratifiers is correlation with the incidence of the work-at-home population. Since so little is known about this population, there is little if any empirical basis for this selection.

There are technical reasons for using stratified random sampling in selecting PSUs. Although cluster sampling produces unbiased estimates of national parameters of interest, sampling variances are larger than those from systematic random sampling of all U.S. households. Clearly, it would be impractical and prohibitively expensive to enumerate and randomly sample the 80 million (plus) households in the U.S. The multi-stage cluster sampling approach with an area frame that we suggest is less costly and more practical, but possesses larger sampling error. Selecting stratifying variables that produce relatively homogeneous sampling units within stratification cells, and relatively heterogeneous units across cells, helps to reduce sampling variability to some degree.

A second method that may help reduce sampling variability under a certain set of conditions is to select PSUs within each stratification cell with probability proportionate to size (PPS). County groups within given strata with five times the size of other groups would be five times more likely to be selected for our sample.

In preparing the area frame for selecting PSUs for this survey, we would define county groups and assign them to stratification cells using 1980 Census publications, summary tape files, and area maps. For the size measure, population is the likeliest candidate, although size of the middle or high
income population (or high income population density) may be better measures for this study. Final selection of stratifying variables and size measures can be made in consultation with the Small Business Administration.

The institutionalized and military populations would presumably be excluded from the survey population and, possibly, residents of Alaska, Hawaii, and Puerto Rico.

Selecting the number of PSUs involves trade-offs between precision and costs. Exhibit 1 illustrates the precision loss from clustering in estimating proportions under alternative assumptions regarding sample size. The exhibit reports (1) the coefficient of variation (the standard error as a percent of the population proportion), which is expressed as follows for large sampling universes:

\[ CV = \frac{q}{p - pn} \]

where \( p \) = the proportion, 
\( q = (1-p) \), and 
\( n \) = sample size,

and (2) this statistic multiplied by the clustering design effect,

\[ dc = 1 + (m - 1)\gamma \]

where \( m \) = the average cluster size, and 
\( \gamma \) = the intraclass correlation coefficient.

The clustering premium is clearly more severe the larger \( m \) or \( \gamma \) for a fixed total sample size. The more homogeneous the sampling units within clusters, the larger the interclass correlation coefficient. Typical values range between 0.1 and 0.2 so we have selected \( \gamma = 0.15 \) for illustrative purposes in Exhibit 1. We emphasize that Exhibit 1 in no way provides definitive
EXHIBIT 1

COEFFICIENTS OF VARIATION FOR SELECTED DESIGN PARAMETERS

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<th>Coefficient of Variation (%)</th>
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<td></td>
<td>25</td>
<td>4.29</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>4.82</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>5.23</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>5.78</td>
</tr>
<tr>
<td></td>
<td>67</td>
<td>6.60</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>7.96</td>
</tr>
<tr>
<td></td>
<td>500</td>
<td>17.42</td>
</tr>
</tbody>
</table>
NOTES TO EXHIBIT 1

NOTE: The * row indicates coefficient of variation values corresponding to a simple random sample of the indicated size.

Reading down a column within a panel indicates the precision loss as the degree of clustering increases -- that is, as the number of sites declines for a fixed sample size and specified proportion.

Reading across a row for cluster samples indicates the combined effect of sample size and number of site increases on precision levels.

The relative standard errors can be transformed into absolute standard errors quite readily. For example, with a sample of 5,000 and 100 sites and a sample estimate of 0.05, we can be 95 percent confident that the population proportion falls in the interval 2.6 to 7.4 percent. In this example, the 24.5 percent relative error is, in effect, a 2.4 percentage point absolute error.
estimates of final design effects but is only suggestive of the design effects introduced by clustering in the first stage sample selection procedure. Ultimately, the optimal decision on the number of sites selected as PSUs (and total sample size) will involve trade-offs between precision levels and costs and would be determined in consultation with the Small Business Administration.

SECONDARY SAMPLING UNITS

In the second stage, the PSUs selected in the first stage will be divided into, and enumerated by, census tract, block numbering areas (in areas where blocks are present but census tracts are not), and enumeration districts (in areas where neither census tracts nor block numbering areas are present). Metropolitan and county enumeration district maps will facilitate constructing this second stage area frame of intra-county units.

The census tract and other areas in the second stage frame may also be stratified by variables thought to be correlated with the incidence of the work-at-home population. Sampling rates within each stratum may be set inversely proportionate to the size measure used to select the PSU and may be adjusted to produce the desired number of second stage units. Setting sampling rates in this way will produce a self-weighted second stage sample of local areas -- that is, each census tract or non-tract area in the second stage sample will have the same weight.

Exhibit 2 illustrates, as one would expect, the higher incidence of middle and high income individuals found in non-poverty areas, regardless of race or SMSA status. We therefore propose sampling stage two census tract (or "tract-like") areas in non-poverty areas at about twice the rate of those in poverty areas (which will alter the self-weighted PPS selection of stage two units).
**EXHIBIT 2**

**PERSONS BELOW POVERTY AND NEAR POVERTY IN 1978**
**BY WHETHER OR NOT IN POVERTY AREAS**

<table>
<thead>
<tr>
<th>Area</th>
<th>Below Poverty Level</th>
<th>Below 125 Percent of Poverty Level</th>
<th>Below 150 Percent of Poverty Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Population In Area (000)</td>
<td>Number (000)</td>
<td>Percent of Population below Poverty in Area</td>
</tr>
<tr>
<td><strong>All Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total U.S.</td>
<td>211,308</td>
<td>23,991</td>
<td>11</td>
</tr>
<tr>
<td>In poverty area</td>
<td>39,209</td>
<td>10,516</td>
<td>27</td>
</tr>
<tr>
<td>Other</td>
<td>172,100</td>
<td>13,475</td>
<td>8</td>
</tr>
<tr>
<td>Inside SMSA</td>
<td>145,085</td>
<td>14,511</td>
<td>10</td>
</tr>
<tr>
<td>In poverty area</td>
<td>16,554</td>
<td>5,165</td>
<td>31</td>
</tr>
<tr>
<td>Other</td>
<td>128,531</td>
<td>9,346</td>
<td>7</td>
</tr>
<tr>
<td>In central cities</td>
<td>61,536</td>
<td>8,718</td>
<td>14</td>
</tr>
<tr>
<td>In poverty area</td>
<td>12,272</td>
<td>4,042</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>49,264</td>
<td>4,676</td>
<td>9</td>
</tr>
<tr>
<td>Not in SMSA</td>
<td>66,224</td>
<td>9,450</td>
<td>14</td>
</tr>
<tr>
<td>In poverty area</td>
<td>22,655</td>
<td>5,351</td>
<td>24</td>
</tr>
<tr>
<td>Other</td>
<td>43,569</td>
<td>4,129</td>
<td>9</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total U.S.</td>
<td>24,243</td>
<td>7,105</td>
<td>30</td>
</tr>
<tr>
<td>In poverty area</td>
<td>12,190</td>
<td>4,957</td>
<td>41</td>
</tr>
<tr>
<td>Other</td>
<td>12,053</td>
<td>2,228</td>
<td>18</td>
</tr>
<tr>
<td>Inside SMSA</td>
<td>18,801</td>
<td>4,944</td>
<td>26</td>
</tr>
<tr>
<td>In poverty area</td>
<td>8,333</td>
<td>3,135</td>
<td>38</td>
</tr>
<tr>
<td>Other</td>
<td>10,468</td>
<td>1,809</td>
<td>17</td>
</tr>
<tr>
<td>In central cities</td>
<td>13,910</td>
<td>3,807</td>
<td>27</td>
</tr>
<tr>
<td>In poverty area</td>
<td>6,942</td>
<td>2,591</td>
<td>37</td>
</tr>
<tr>
<td>Other</td>
<td>6,968</td>
<td>1,216</td>
<td>17</td>
</tr>
<tr>
<td>Not in SMSA</td>
<td>5,442</td>
<td>2,241</td>
<td>41</td>
</tr>
<tr>
<td>In poverty area</td>
<td>3,857</td>
<td>1,622</td>
<td>47</td>
</tr>
<tr>
<td>Other</td>
<td>1,505</td>
<td>419</td>
<td>26</td>
</tr>
</tbody>
</table>
The third stage of the sampling design involves selecting blocks within census tract and block numbering areas. Similar areas may be constructed in enumeration districts, but it is unlikely that housing unit size needed for subarea selection will be available from the 1980 census data. The blocks will be selected with probability proportionate to size with the size based on the number of housing units in each block reported in the 1980 census.

In the third stage area frame, blocks could be stratified by correlates of the work-at-home population such as average rent or value of home available for each block from the 1980 census publications or summary tape files.

To assure that the final and fourth stage sample of households contains only those units with work-at-home individuals, we suggest a double sampling technique. In the first phase, a saturation screening of all housing units in each sampled third stage block (or related area) is conducted. A screener interview is administered to each household that classifies it as either one containing a work-at-home individual, or one without such a person. Each household containing such a person will be given a personal interview after the screening without a repeat visit.

SAMPLE DESIGN SUMMARY

Exhibit 3 summarizes the four stages proposed in our sample design. The first stage selects contiguous county groups as primary sampling units with probability proportionate to size. In stage two, census tract or "tract-like" areas within PSUs are selected with sampling rates inversely related to stage one rates. In stage three, blocks are selected within stage two tract or block numbering areas with probability proportionate to size. Finally, a double sampling procedure in stage four selects households containing work-at-home individuals within stage three blocks and enumeration districts.
EXHIBIT 3
SUMMARY OF THE MULTI-STAGE NATIONAL SAMPLE DESIGN FOR HOUSEHOLDS CONTAINING WORK-AT-HOME INDIVIDUALS

STAGE I
Sample of County Groups

STAGE II
Subsample of Census Tracts, Block Numbering Areas, and Enumeration Districts

STAGE III
Subsample of Blocks Within Census Tracts and Block Number Areas (and possibly Block-Like Areas Within EDs)

STAGE IV
Subsample of Housing Units Within Blocks and EDs by Double Sampling Technique
Phase One Screening for Households Containing Work-at-Home Individuals
Phase Two Sample Selection of Households Containing Work-at-Home Individuals
Except for the oversampling of non-poverty areas in stages two and three, the sample through the first phase of the final stage is self-weighted. Final sample weights will be adjusted in making national estimates for (1) nonresponse, (2) oversampling of middle and higher income households, and (3) double sampling to identify the work-at-home households in the final stage.

SAMPLE SIZE CONSIDERATIONS

To maintain reasonable costs for this survey, our preliminary recommendation is for a fairly highly clustered sample design that selects 50 PSU county groups in the first stage, an average of three second stage census tracts (or the equivalent) per PSU in the second stage, and an average of 22 blocks per census tract (or the equivalent) in the third stage. Assuming 30 housing units per block on average, this produces approximately 100,000 households for the first phase screening of the work-at-home population.

Since middle- and upper-income areas will be oversampled, the proportion of households containing work-at-home individuals is probably higher among our fourth stage sample than the two percent rate found in the 1980 census. If five percent of the sample contains work-at-home individuals, then we will obtain 5,000 households with such individuals in our fourth stage sample.

Assuming that 50 percent of these work-at-home households contain such persons in home-based businesses, then we will obtain a final sample of 2,500 such households. This nationally representative sample of 2,500 households across 50 county groups and 150 census tracts provides reasonably precise estimates of the characteristics of these home-based businesses (such as two-digit SIC code) -- see Exhibit 1.

Should there be any problem with sample non-response, then our final sample will, of course, be smaller. Offsetting this reduction in the final
sample size may be an overly conservative assumption regarding the proportion of the sample of fourth-stage households containing persons working at home.

**ANALYSIS**

For the analysis, we would produce national estimates of the population of persons working at home and of home-based businesses, including national estimates of characteristics of these two populations. We assume that our initial screener may provide enough information on all of the first-phase sampled households to enable analysis of differences between households containing and not containing work-at-home persons.

For analyses involving estimated proportions, frequencies, means, totals, regression coefficients, and associated variances, we suggest using the SAS statistical software packages SESUDAAN (Shah, 1981b), RATIOEST (Shah, 1981a), SURPEGR (Holt and Shaw, 1982), and RTIFREQS (Shah, 1982). These packages provide the multivariate statistical analyses required for the analyses and incorporate estimated design effects from complex multi-stage survey designs.

Precise specifications for the kinds of tabulations needed from the work-at-home data base will be drafted jointly with SBA.

A draft report of the analytical results would be produced along with a report documenting the survey methodology and data collection activities.
COSTS

ICF Incorporated estimates the total cost of this survey work to be approximately $500,000. This includes the costs for interviewer training, interviewing, editing, keypunching the data, data processing, and analysis. The costs are based on a telephone screening of 100,000 households to a sample of 5,000 work-at-home units. The latter sample will also be administered a longer form telephone interview without a repeat phone call.

We estimate that data collection will account for about 85 percent of the total costs with analysis and data processing filling in the remaining 15 percent.

Additional details are available from ICF supporting these preliminary cost estimates should the need arise.
REFERENCES


# APPENDIX E

## CURRENT POPULATION SURVEY SUPPLEMENT, OCTOBER 1984

### SUPPLEMENT QUESTIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.</td>
<td>INTERVIEWER CHECK ITEM</td>
<td>(Translates from item on page 264) Yes: 30 31: 30 32: 30 33: 30</td>
</tr>
<tr>
<td>30.</td>
<td>Is the person attending or enrolled in school? Yes: 31 No: 30</td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Is the person employed by a public or private school? Public: 30 Private: 30</td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>When was the person attending school?</td>
<td>April 12, 1984 (Fall 63) August 12, 1984 (Spring 63)</td>
</tr>
<tr>
<td>33.</td>
<td>INTERVIEWER CHECK ITEM</td>
<td>All entry 11 368 item 36 28 34 otherwise see item 33.</td>
</tr>
<tr>
<td>34.</td>
<td>Is the person attending college at least a part-time student? Full time: 30 Part time: 30</td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>INTERVIEWER CHECK ITEM</td>
<td>June 1, 1984 (Fall 63) August 1, 1984 (Spring 63)</td>
</tr>
<tr>
<td>36.</td>
<td>What type of college or university?</td>
<td>2-year college: 30 Community or junior college: 30 4-year college or university: 30</td>
</tr>
</tbody>
</table>

### LEAD-IN

The next set of questions is to do with "HANDS ON" use of computers in household and workplace. These questions are NOT to be asked once computer or computer game which does not have a keyboard is listed.

### NOTE

Age items 46 & 48 use of first computer and first computer game which does not have a keyboard are not required.

### TRANSCRIPTS

Transactions specific for following respondents and begin with 45.

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.</td>
<td>Is there a computer in this household? Yes: 46 No: 46</td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>How many computer or computer game units in the household?</td>
<td>1984: 461 1980: 800</td>
</tr>
<tr>
<td>47.</td>
<td>Does computer or computer game unit use a computer as unit? Yes: 48 No: 48</td>
<td></td>
</tr>
<tr>
<td>48.</td>
<td>CHECK ITEM: Entry of &quot;Yes&quot; in 38 (Computer in household)</td>
<td></td>
</tr>
<tr>
<td>49.</td>
<td>Does computer or computer game unit use a computer as unit? Yes: 49 No: 49</td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>CHECK ITEM: Entry of &quot;Yes&quot; in 38 (Computer in household)</td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>Does computer or computer game unit use a computer as unit? Yes: 51 No: 51</td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>As name of brand use the computer or computer game unit on the household</td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>During the last month of household and workplace unit use computer or computer game unit</td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>INTERVIEWER CHECK ITEM</td>
<td>Who responded to supplement items 29-69</td>
</tr>
</tbody>
</table>
### APPENDIX F

**CURRENT POPULATION SURVEY SUPPLEMENT, MAY 1985**

#### REMINDER

**BE SURE TO ASK THE LABOR FORCE QUESTIONS FOR ALL HOUSEHOLD MEMBERS 16+ YRS OLD BEFORE ASKING THE SUPPLEMENT QUESTIONS.**

#### SUPPLEMENT QUESTIONS

**29. Interviewer Check item**  
Entry for N/A in item 20A or item 21B  
1, 2, 4, 5, 6, 8, 12, 13 (A40)  
5, 7, 9, 11, 13 (A40)

**30. You told me that... worked for (Express in 23A to 23D), how many hours per week does... usually work at this job?**  
(Express in 23A to 23D)  
(Express in 23A to 23D)  
(Express in 23A to 23D)

**31. Has your head wear for (Express in 23A to 23D) how many hours per day does... usually work at this job?**

**32. How many days a week does... usually work at this job?**

**33. What does the same as... usually work at this job?**  
Mon Wed Fri  
Sun Thu Sat

**34. LAST WEEK in what time of day did... begin work on this job most days?**

**35. Which of the following best estimates the hours... usually works at this job?**

**36. What is the main reason why... works here type of shift?**

**37. Has the main reason why... works here type of shift?**

**38. When was... paid for these hours?**

**NOTE**: Mark whether second job is same or different from job in 23A-23D.  
**Last week or 24A-24D.**

**39. LAST WEEK for 23A-23D.**

**40. LAST WEEK for 24A-24D.**

**41. LAST WEEK**

**42. LAST WEEK**

**43. LAST WEEK**

**44. LAST WEEK**

**45. LAST WEEK**

**46. LAST WEEK**

**47. LAST WEEK**

**48. LAST WEEK**

**49. LAST WEEK**

**50. LAST WEEK**

**51. LAST WEEK**

**52. LAST WEEK**

**53. LAST WEEK**

**54. LAST WEEK**

**55. LAST WEEK**

**56. Interviewer check item:**  
(Express in 24A to 24D)  
(Express in 24A to 24D)  
(Express in 24A to 24D)  
(Express in 24A to 24D)

**57. If you had a choice would you prefer to work:**

**58. If you had a choice would you prefer to work:**

**59. Interviewer check item:**

**60. Interviewer check item:**
LITERATURE ON
HOME-BASED BUSINESS AND WORK
AND
THE FAMILY-OWNED BUSINESS

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July 1985

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INTRODUCTION

The home-based business and family-owned business sectors are two of the most dynamic and vital parts of our economy. This bibliography was compiled as part of a study to determine what is known about these companies, what needs to be learned, and how to go about learning it.

To help scholars sort through the long lists of references, the authors have tagged with an asterisk reports of research findings and references that they judge may be most pertinent to academic studies.

The authors would like to express their appreciation to the many persons who contributed references. Particular thanks are extended to Chris Pearson and Tammara Wolfgram who helped us conduct computer searches of the literature on home-based business and work and Dr. Renato Tagiuri and Thierry Pauchant who contributed greatly to the collection and categorizing of the family-owned business literature.

LITERATURE ON HOME-BASED BUSINESS AND WORK

Interest in home-based work has been growing rapidly in the eighties. References have been selected to provide a comprehensive overview of the issues that are being discussed, but they are not inclusive of everything published on work at home. Many newspaper columns, for example, are essentially identical syndicated releases. A range and quantity of those have been included to give the flavor of what interests people about work at home: new employment opportunities, concerns for potential exploitation, and a fascination with the implications of changing ways to work.

Neither the scholarly nor the media articles limit their attention to one topic. Most research and popular articles address overlapping issues such as women and work, leisure and work, and home-based work studied from the point of view of psychology, anthropology, economics, business, and sociology. Although the references have been loosely divided into major topics, one category of the bibliography should not be taken as a sole source of information.

Major Topics

1. Home-Based Business

Many popular articles and monographs describe how to earn money at home. A small number have been listed to suggest the range of available resources. Few articles in the professional literature have more than touched on the subject of home-based business.

2. Homework Regulations

Since 1981 a lively debate on work at home has centered on homework regulations for the knitting industry. Three pages of news articles debate two points of view: labor unions see the home as a potential sweatshop; the worker considers himself or herself as an independent contractor operating a home business.

3. Moonlighting

The microcomputer has opened new opportunities for employees to moonlight. That additional job or business activity has raised concerns for employers.

4. Organization of the Home Office Environment

The introduction of the personal computer into homes has prompted attention to the problem of creating space in a household for a functional office.

5. Self-Employed Workers

Trends in self-employment, in or out of the home, are being followed in government and business periodicals. In the popular media, use of a personal computer for business activities in the home tends to be highlighted without differentiating the status of the worker as self-employed or employee.

6. Tax Considerations for the Home Office

Published interpretations of the Internal Revenue Service code regulating the deductibility of home offices have become essential as the home is used in new varied ways for income-producing activities.

7. Telecommuting

Over fifteen pages of articles on telecommuting are only a part of what is being published on this "hot" topic. The public is fascinated by it. Researchers are few now, but their numbers are rapidly increasing as graduate students elect to study the phenomenon as a thesis topic.

The references have been roughly collected under subheadings that indicate their primary concern: Handicapped Telecommuters; Home Business Owners and Telecommuters; Telecommuting Trends; and Telecommuting and Women.

8. Work at Home

Collected under the heading Work at Home are the more historical and philosophical examinations of the home as the location for income-producing work.
9. Zoning Considerations for Work at Home

Most residential areas are not now zoned to allow for income-producing work in the home. Zoning regulations reflect a community value system that may be changing as more people opt to work at home. Both popular media and professional planning journals are addressing public policy questions of what types of home-based work should be legalized.

LITERATURE ON THE FAMILY-OWNED BUSINESS

Most research on the family-owned business has been qualitative and the better part of it has been anecdotal. Most of what we know about family-owned businesses comes from case analyses of small and medium-sized family-owned and managed firms that employ two or more relatives. There is an increasing amount of research that attempts to lay out a conceptual scheme for understanding the behavior of individuals in the firm. Most writing on family-owned businesses, however, focuses on certain problems that occur in these companies and offers advice for addressing these concerns.

Relatively few of the articles on family-owned businesses examine the financial characteristics or business practices of these companies and those that do generally rely on anecdotal evidence. There are just a few studies that present quantitative data on a sample of family-owned businesses and just a couple that quantitatively compare family-owned businesses with non-family-owned businesses. The lack of comparative empirical studies of family-owned businesses constitutes the biggest shortcoming in the literature.

Major Topics

The literature on family businesses and other important related topics has been organized into eleven (11) areas. Some of these references could be categorized into more than one area and in a few cases we have listed an article twice. For the remainder, we have placed them in their single most appropriate category.

1. Economic, Social, Political, and Demographic Importance of the Family Business

This collection critiques the contributions that family-owned businesses make in a capitalistic society and discusses the theory behind business success and failure. This is intriguing reading but it lacks reliable economic data demonstrating the real extent of family business activity.

2. The Life Cycle of the Family Business

These few references describe the start-up, growth and death of family businesses and firms in general. Little research has been done to understand the birth process in particular. Research on home-based businesses will hopefully address this need. More research is required on growing and professionalizing the family-owned business as well as why family-owned businesses die.
3. General Descriptions, Organization Theory, and Management Advice on Family Business

These articles and a few books are based on case research and together give the reader an in-depth understanding of the social structure of these companies. Only a few of these references give a comprehensive explanation of these organizations. Research is required that will compare family-owned businesses with non-family businesses and study the business practices of family firms.

4. Conflict and Conflict Management in the Family Business

This section of the bibliography presents several representative writings that focus specifically on conflict in family-owned businesses. Most popular press and management writing on family-owned businesses refer to these work settings as being potentially tense and conflictful, and many offer useful insights into the conflicts and ways of approaching them.

5. Case Studies on the Family Business

These are mostly book-length biographies of family businesses and the entrepreneurs who started them.

6. Family Relationships in the Family Business

Many references in Topic Areas 3, 4 and 5 discuss particular family relationships to some extent. Articles in this section of the bibliography focus on the dynamics of these work relationships. Father-son work relationships receive the most attention. Father-daughter work relationships have begun to be examined. The role of women in family companies is an important but relatively neglected area of the literature.

7. Entrepreneurship

There is now a voluminous literature on entrepreneurship. Here we list representative references that examine the personality of the entrepreneur and the role he typically plays in the family-owned business.

8. Nepotism

This topic is discussed in an implicit way in many articles in Topic Area 3. The works in this section examine the advantages and disadvantages of favoring relatives in employment. Nepotism has been examined on a case-by-case basis but little has been done to compare nepotistic and non-nepotistic firms using large samples.

9. Management Succession in the Family Business

The most crucial (and, it seems, painful) issue for family-owned businesses is passing power to the next generation. These articles describe the process of succession and many offer useful advice on making succession successful.

These articles deal with tax, estate and legal issues in family-owned businesses. Because estate law and tax law have been changing significantly, this section can become dated quickly.

11. Family Theory, Family Therapy and Interpersonal Issues

These mostly technical articles are intended for the professional who wants to better understand the interpersonal dynamics in family businesses and learn how to intervene effectively in these settings.
LITERATURE ON HBB AND WORK AT HOME

HOME-BASED BUSINESS


Chapman, Michaela. Earning Extra Money at Home. Sun-Tattler, January 17, 1985, pp. 1B-2B.


Engel, Allison. Despite Legal Obstacles, Number of Home-based Workers Grows.


1. Items of most interest to scholars (in our judgement) are marked by an asterisk


HOW TO OPERATE A HOME-BASED BUSINESS


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