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THE NATIONAL SURVEY OF SMALL BUSINESS FINANCES:

FINAL METHODOLOGY REPORT

by

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1. OVERVIEW

With respect to antitrust activities, the government currently treats banking as a distinct and separate line of commerce and includes within the market definition of banking only those firms that offer a full array of banking services. In addition, it assumes that banking markets are restricted to the local geographic area. However, numerous changes in bank regulation, technology and the economy have occurred over the past two decades. Banking services are now provided, not only by banks, but by thrift and nondepository institutions. In addition, many of the firms that provide banking services operate in a national, and even international market. In light of these changes in financial services, the previous market definition for banks may no longer be appropriate.

There has been little systematic study of the recent changes in the bank market. In particular, virtually no evidence has been gathered on the extent to which these changes have affected the use of financial services by small businesses. As interstate banking intensifies the move toward bank mergers, adequate government deliberation of mergers and acquisitions will depend on the availability of data relevant to the following questions:

- How can economically meaningful banking markets be defined?
- Within what geographic area do small businesses typically obtain their financial services?
- Do small businesses prefer obtaining services from a particular type of financial institution, such as a commercial bank?
- Do banks compete for small business credit and deposit services in a single product market or in several separate product markets?

Appropriate application of antitrust regulations is particularly crucial in rural and small urban areas, because small businesses have fewer service options in these geographic areas.

Small businesses account for about a third of employment and sales of U.S. industry and a majority of its growth (Small Business Administration, 1988). Despite the importance of small businesses to the economy, little is known about the financial side of their operations.

Sponsored by the Federal Reserve Board and the Small Business Administration (SBA) and conducted by Research Triangle Institute (RTI), the National Survey of Small Business Finances (NSSBF) meets this need for basic data about small businesses and their finances. The target population for the survey included all for-profit, privately owned small businesses with the exception of those whose principal business activity was agriculture or finance. A small business was defined as an enterprise that employed fewer than 500 employees across all of its branches or establishments. Dun's Market Identifiers (DMI) file was used to construct the sampling frame. A stratified, one-stage sampling design was used to select sample businesses, where the strata were defined using urban/rural categories, Census region, and number of employees.

A total of 3,600 small businesses together with an additional 400 businesses were interviewed who had SBA-guaranteed loans. The interview was by telephone with an initial mailout advising the business of their selection for the study and the company records that would assist them in completing the interview. Characteristics of the small business were determined such as geographic location, organization type, principal business activities, and ownership and management structure. Detailed information was collected for their last fiscal year on:

- their use of financial services for each institution used;
- the characteristics of their loans, leases and credit lines;
- the extent to which financial institutions solicited the firm's business; and
- the degree to which the small business shopped around for financial services.

Data were also obtained that allowed balance sheets and income statements to be constructed for the firm.

Several procedures were implemented to enhance data quality. Prior to the main survey, the questionnaire was tested using cognitive psychology techniques in a laboratory environment and then in a formal pretest of 30 small businesses. The telephone interviews were conducted using computer assisted telephone interviewing (CATI) methodology with more extensive than usual edit checks occurring while the interview was ongoing. Following the interview, respondents were asked to mail financial statements and other hard copy documents to RTI. These documents were transmitted to the Board for use in verifying data quality. Extensive edit checks were also made of completed interviews to insure that sufficient data had been obtained. Too many missing responses in a completed interview resulted in follow-up calls to obtain the missing data.

This report summarizes the methodology used by Research Triangle Institute (RTI) in conducting the National Survey of Small Business Finances.

2. BACKGROUND AND OBJECTIVES

One of the regulatory functions of the Federal Reserve Board is to determine whether proposed mergers or acquisitions of bank holding companies and of certain banks are anticompetitive. This requires empirical delineation of the economic markets in which these firms operate. Unfortunately, little data exist on the geographic and product dimensions of banking markets. Current analysis relies on research and court decisions that are more than two decades old. A major purpose of this survey was to collect data that would aid in determining whether the current approach to market definition in bank merger cases is appropriate. Large firms likely operate in national or international financial markets. It is not clear whether small firms and households face financial markets as wide in scope. Information about household's use of financial services is available from the Survey of Consumer Finances. One major objective of this survey was to determine how banking markets should be delineated for the small business. Data needed for this task also provide information about other issues associated with small business finances.

2.1 Bank Market Definition

Historically, the financial system in the US has been characterized by legal constraints that segmented markets along institutional lines. Thus, commercial banks provided business credit and checking services, credit unions provided consumer loans, and savings and loan associations provided mortgages. This market segmentation was recognized in the Supreme Court's decision in the 1963 Philadelphia National Bank case which forms the basis for the current approach to bank market definition. Considering the evidence available at that time, the court concluded that because customers generally obtained multiple financial products from one place, only firms offering the full array of commercial bank products should be included in bank markets (in other words, commercial banking was a distinct and separate line of commerce). Furthermore, the court determined that banking markets were limited to small geographic areas because the bulk of banking business was conducted with local customers. Small businesses (and households) were considered to be constrained in their choice of financial product suppliers. Subsequent survey research conducted in conjunction with individual bank merger and acquisition cases supported the court's decision, and in the 1974 Connecticut National Bank case, the Supreme Court reaffirmed its earlier decision.[1]

Sweeping regulatory changes, advances in technology, and financial innovations have occurred since the Connecticut decision. Most notable are the regulatory changes empowering savings institutions to offer traditional bank products (checking accounts, commercial loans, and consumer credit), the emergence of nondepository institutions (money market mutual funds) as competitors of depository institutions for household savings accounts, and technological changes (such as electronic fund transfer technology) reducing depository and nondepository institutions' cost of delivering financial services to final users. These changes make the current approach to bank market definition appear increasingly antiquated. Critics argue that the provision of bank products takes place in a market that includes

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1/ For an extended discussion of the issues, see Federal Reserve Bank of Atlanta (1982).

both thrifts and nondepository institutions as well as banks. They also contend that the geographic market in which these firms operate has national, if not international, dimensions. While large businesses have access to a variety of sources of financial products in a national or international market, there is little information about the sources and geographic extent of small business financial dealings. Except for data collected in conjunction with individual bank merger applications, recent evidence is limited to two surveys conducted during 1981: a Federal Reserve Bank of Atlanta survey of small businesses in the Sixth Federal Reserve District (Whitehead 1982) and survey of small businesses in Ohio sponsored by the Federal Reserve Bank of Cleveland (Watro 1982).

The need to study product and geographic markets dictated that NSSBF collect data along two dimensions. First, to delineate geographic markets, the survey obtained information on the geographic location of suppliers of financial products relative to the small business. Second, the survey collected an inventory of the different financial products that the firm obtained from each supplier to determine whether the business obtains services as a "cluster" from a single institution or purchases them separately from different institutions (in other words, whether banks compete in a single product market or in several separate product markets).

2.2 Other Survey Objectives

The bank market definition problem is only one component of the study of how small businesses finance their activities. In a modern economy, business firms invest in real assets to carry on production. Finance is concerned with the questions of how much the firm should invest and how it should obtain funds to pay for these investments. Important considerations for the small business are the cost and availability of credit to finance its operations.

Motivated in part by concerns about the effects of monetary policy on credit availability, the federal government sponsored several studies of small business financing after the Second World War (Bridge 1948; Bridge and Holmes 1950; McHugh 1951; McHugh and Ciaccio 1955; Board of Governors 1958; Stockwell and Byrnes 1961). These surveys showed that bank financing dominated all other sources of outside financing, supporting the view that availability of bank credit was an important determinant of small business investment. The majority of funds for investment, however, were obtained from owners. This suggests that a broader perspective is needed to understand small business finances. Unfortunately, most efforts to collect financial data from small businesses were abandoned after the 1950s.

Since these early studies, advances in economic theory have enhanced the ability of researchers to study business finances. Modigliani and Miller's (1958) pathbreaking work, which demonstrated that the value of the firm is independent of its source of financing in a perfect capital market, motivated substantial theoretical analysis of the effects of market imperfections (such as differential tax rules, transactions costs, agency costs, and asymmetric information) on the cost and availability of alternative sources of financing (see Miller 1988; Weston 1989). These market imperfections may have a greater effect on smaller firms than on larger firms, providing a basis for empirical analysis of how the behavior of smaller firms differs from that of larger firms (Pettit and Singer 1985). However, adequate data are not available for this purpose. Existing surveys generally do not cover all sources of financing (Dennis

1985; Dennis and Dunkelberg 1988) or have limited or incomplete coverage of the small business population (Ando 1985; Combs, Pulver, and Shaffer 1979; Dennis 1985; Dennis and Dunkelberg 1988). A few sources provide summary statistics of data from prepared balance sheets (Internal Revenue Service 1989a, 1989b; US Bureau of the Census 1987; Robert Morris Associates 1988). While these sources include all sources of financing, they provide little or no information on the identify of the sources of financing or on demographic characteristics of the firms.[2]

The NSSBF collects a complete balance sheet and identifies the sources of financing to the firm. It also collects information on the ownership and management characteristics of the firm, collateral and guarantor characteristics of the firm's debts, and extent of use of cash services. This information permits empirical analysis of many of the basic questions on small business financing (Ou 1986; Pettit and Singer 1985).

2/ Ou (1986) discusses previous surveys and other data sources on small business finances in greater detail.

3. SAMPLE SELECTION AND WEIGHTING

The sampling plan for the National Survey of Small Business Finances was designed so that study findings could be used to make inferences about small businesses in the United States. Major steps involved in data collection for the study included:

- defining the target population,
- constructing the sampling frame,
- designing the sample,
- selecting sample businesses,
- screening for eligibility,
- interviewing eligible persons, and
- weighting the survey data.

Two distinct objectives for NSSBF led to two distinct sample designs. The first objective was to conduct a multipurpose national survey of small business finances with special attention to obtaining data that could be used in reviewing the Board's approach to bank market definition in antitrust cases. To satisfy this objective, a sample was selected from Dun's Market Identifiers (DMI) File. A second objective was to obtain detailed data for firms having loans guaranteed by the Small Business Administration (SBA). This chapter discusses the DMI sample first; then modifications made for the SBA sample are discussed in the last section.

3.1 Definition of the Target Population

The target population for a survey is the entire set of elements about which inferences will be made using the survey data (Cox and Cohen, 1985, pp. 20-22). For the DMI sample, the target population was defined to be all small business enterprises in the United States that are for-profit and privately owned and whose line of business is not agricultural or financial in nature. The rationale behind the rules made in defining the target population follows.

An enterprise was defined as an autonomous operating entity, which includes all subsidiaries and branches of a firm. While production and sales occurs at the subsidiary or branch level of the firm, financial decisions typically are made at a higher level and encompass all branches and subsidiaries of the firm. This approach is similar to the Census Bureau methods for financial surveys of businesses (Federal Committee on Statistical Methodology 1988).

An enterprise was defined to be a small business if it employed less than 500 full-time equivalents in 1987. This definition is one commonly used by the Small Business Administration in its reports (e.g., Small Business Administration 1984, 1988)[3] Large firms were excluded from the target population because they generally have access to a national market for financial services and are not a concern in bank antitrust cases. Moreover, a large amount of publicly available data already exist for large businesses.

Nonfinancial and nonfarm business was defined as all privately owned and for-profit businesses, excluding industry groups: (1) agriculture, forestry, and fishing; (2) finance and insurance underwriting; and (3) real

3/ Total sales are also commonly used in defining what constitutes a small business. Using total sales to define the target population for NSSBF would have been impractical, however.

estate investment trusts. Some industry groups (especially utilities, transportation, and educational services) contain both privately and publicly owned entities as well as for-profit and not-for-profit firms. Ineligible firms in these industry groups were identified in the screening interview, discussed later in this report.

These restrictions correspond to the definitions for the nonfarm, noncorporate business and corporate nonfinancial sectors in the Federal Reserve Board's flow of funds accounts (Board of Governors 1980). In addition to conformance with extant statistical programs, the restrictions eliminate from the target population several types of organizations that differ substantially from most businesses. The nature of financial firms' business (financial intermediation) makes their behavior differ from that of other business firms. Moreover, detailed financial data are available for most financial firms. Publicly owned and not-for-profit firms were excluded because their peculiar objectives and environment give rise to different record keeping procedures than those used by for-profit firms. Agricultural firms, on the other hand, are often small and operate in rural markets where bank antitrust problems are likely to arise. However, adequate data are routinely collected for agricultural firms (US Department of Agriculture 1988), and the existence of substantial federal programs for agriculture mitigates concerns about adverse effects on credit availability for this industry.

Firms that were no longer in business, bankrupt, or in business less than a month at the time of the interview were also ineligible for the survey. At the target date, the finances of such firms would not reflect those of a going concern.

3.2 Choosing a Frame for NSSBF Sampling

The sampling frame for a survey is the list or mechanism used to identify population elements for sample selection purposes. The ideal frame is a list of all population members with sufficient data to identify each member and locate them for interviewing purposes (Cox and Cohen, 1985, pp. 24-33).

Available list frames can be categorized by the underlying reasons why businesses report information about themselves on a continuing basis. These underlying reasons impact on the completeness and accessibility of the frame. Several alternate frames were considered before choosing Dun's Market Identifiers (DMI) file as the basis for sampling.

Perhaps the most complete of business frames is the tax return file of the Internal Revenue Service (IRS). All corporations in existence at any time during the tax year must file a corporate income tax return regardless of whether they had any income (Internal Revenue Service 1987a, p. 1). With limited exceptions, all partnerships must file a partnership income tax return, again regardless of whether they had income during the year (Internal Revenue Service, 1987b, pp. 1-2). Proprietors file a Schedule C addition to their personal return when they have business income or deductions to report.

To be included in IRS tax records, a business must have started operations before the present tax year. Hence, newly formed businesses cannot be accessed via this data base, as well as those businesses that disobey tax filing laws.

Completeness issues are a minor concern for the IRS frame compared to accessibility and timeliness. Tax legislation imposes strict regulations on the IRS and its release of confidential data. Tax data was used to select a high-income sample for the 1983 Survey of Consumer Finances. The Comptroller of the Currency mailed each participant a letter requesting their participation in the survey. The only names released to the survey's outside contractor were the nine percent who had notified the Comptroller that they were willing to participate (Avery and Elliehausen,1988). As a further completeness issue, 1980 tax returns had to be used in selecting the sample. Businesses go out of business at a rate of about one percent per month (Converse and Heeringa, 1984) suggesting that an IRS tax-based sample frame might suffer from a 15 to 20 percent obsolescence rate as well as fail to cover new businesses starting operations during that time period. The 1983 Survey of Consumer Finances experience, then, suggests that IRS tax-based frames are infeasible for use in surveying small businesses due to inherent response and timeliness problems associated with the severe confidentiality restrictions placed on their use.

Another frame resulting from a legal mandate is the Bureau of Labor Statistics' Employment and Wages file, which results from a requirement that firms with five or more employees must file withholding information. The information in the BLS data base is confidential and the file cannot be released to outsiders. However, the Bureau of Labor Statistics has selected samples for other government agencies and supplied the necessary identification information for the sample facilities. An example of such interagency cooperation is furnished by the National Occupational Hazard Survey conducted by the National Institute for Occupational Safety and Health. Besides the lack of coverage of very small businesses, the BLS file had deficiencies that precluded its use for the NSSBF. Telephone numbers are not available and identification of the headquarter's office is difficult because a main office is designated for each state in which the firm has branches. For NSSBF use, study planners were advised that permission to use the sample records would have to be obtained from each state and state confidentiality rules would apply to use of the data.

Another alternative frame considered for NSSBF was an area-based sampling frame. The area-based frame is constructed by selecting a sample of geographic areas and having field interviewers list all businesses located in these areas. Size measures needed to select sample areas for listing would be difficult to obtain. In addition, identifying businesses in sampled areas was expected to be a nontrivial problem for this study. NSSBF's target population includes home-based businesses and businesses without an official site at which operations are conducted. As a result, the coverage achieved by the area-based design in practice would not be as comprehensive as expected. Moreover, listing the individual businesses in an area would be expensive. Lack of identifying data for the listed businesses would mean that all interviewing would have to use face-to-face methods with an initial screening interview to identify out of scope businesses and branch offices.

None of the frames described above include telephone numbers, which precludes their use in a telephone survey. The expense of a face-to-face interview, together with the complexities of gaining access to government data bases or implementing an area-based approach, led to the decision to use a commercially available data base for sampling.

3.3 Constructing the DMI Sampling Frame

For this study, Dun's Market Identifiers (DMI) file was used to build the sampling frame. The DMI file combines records derived from the traditional Dun and Bradstreet credit rating program -- firms applying for credit or interacting with businesses who require credit information -- with business telephone listings. The addition of firms from the telephone listings file substantially reduced the coverage problem associated with the traditional program, although there is still undercoverage of new firms, firms with few employees, and firms in service industries (Iannacchionne, LaVange and Duffer 1986). On a flow basis, DMI business listings are updated every 12 to 18 months. The December 1987 file was used for the NSSBF.

Information on the DMI file includes the business address, telephone number, main office/branch status, Standard Industrial Classification (SIC) code, and the name of the owner or chief executive officer. Without telephone numbers, a telephone survey would have been difficult if not impossible from a cost/data quality standpoint. The other information allowed us to eliminate many out of scope businesses and provided a contact person for mailouts and subsequent telephone calls.

The December 1987 DMI File uses 1972 SIC codes instead of 1987 codes. Lines of businesses that were ineligible for NSSBF could be identified by the following SIC codes:

0000 - 0999	Agriculture, Forestry and Fishing
4311	U.S. Postal Service
6000 - 6399	Finance and Insurance Carriers
6724	Unit Investment Trusts
6732	Educational, Religious and Charitable Trusts
6733	Trusts, Except Educational, Religious and Charitable
6798	Real Estate Investment Trusts
8600 - 8699	Membership Organizations
9000 - 9721	Public Administration.

In constructing the sampling frame, all records with the above SIC codes were deleted. Since the sampling unit was the entire enterprise rather than individual establishments, DMI records for branch offices and subsidiary companies were also excluded.

Previous RTI experience with the DMI file suggested that the Total Employees variable was imprecise. Further, it is not defined in terms of full-time equivalents so that a firm can have more than 500 employees but less than 500 full-time equivalents. Hence, in constructing the NSSBF sampling frame, the Total Employees variable was not used to exclude records from the frame.

3.4 Coverage of the DMI Sampling Frame

To evaluate coverage issues further, we compared frame counts for establishments on the DMI file with statistics on business tax returns compiled by the Statistics of Income Division of the IRS (Internal Revenue Service 1988a, 1988b, 1987). Exact comparisons are not possible, but IRS statistics provide some basis for evaluating the DMI file's coverage of the universe of interest for this study.

Before discussing our findings, several conceptual differences between the IRS and DMI lists should be noted. First, the IRS unit of observation is the business tax return. Firms owning other firms have the option of filing consolidated returns for the enterprise or separate returns for each company. Hence, IRS statistics overstate the number of corporate and partnership enterprises. Next, IRS statistics include firms that were active at any time during the year, while the NSSBF includes only those firms that were in business at a specified point of time. Thus, IRS estimates of the population of businesses will be larger because they count firms that change ownership more than once and include firms that went out of business before the reference date and firms that started operations after the reference date. In addition, IRS estimates include firms with more than 500 employees. This is not a large number, however, and it primarily affects the corporation total.[4] With these caveats, we present some results of our preliminary work.

The DMI estimate for number of corporations is not much smaller than IRS estimate.[5] Both data sources indicate that the majority of corporations were engaged in retail trade and services. The distribution of corporations by industry groups is also similar, although the DMI list contains proportionately somewhat fewer service and real estate firms and more manufacturing and trade firms than the IRS list. Hence, our preliminary work suggests that the DMI file's coverage of corporations is good.

The DMI estimate of the number of proprietorships, on the other hand, is substantially lower than the IRS estimate. In both lists, proprietorships are more concentrated in the service and construction industries and less concentrated in manufacturing than either partnerships or corporations. The DMI list undercovers proprietorships in all industry groups. The DMI file contains a greater proportion of trade firms and a smaller proportion of services than the IRS list.

4/ There is one further discrepancy. These preliminary comparisons are based on the latest available published statistics -- 1985 for corporations, 1984 for partnerships, and 1983 for proprietorships. The IRS totals for 1987 would be somewhat larger than the numbers we used.

5/ The DMI file does not identify ownership form. We estimated the distribution of firms by ownership form within industry groups using results from the NSSBF.

A large part of the coverage problem for proprietorships appears to arise from a lack of coverage of businesses without employees. Businesses without employees are mostly proprietorships. They are often part-time businesses and are not easily identified. These firms include, for example, individuals for whom part-time self-employment is a secondary occupation. Zero-employee firms are a large proportion of the total number of businesses in the US, although they probably account for a small share of total revenues, assets, or employment. Other than tax return data, the most complete coverage of zero-employee firms is from household surveys such as the Current Population Survey or the Survey of Consumer Finances, which provide data on self-employment.[6]

The DMI file's coverage of partnerships is not as good as its coverage of corporations but better than that of proprietorships. The most severe undercoverage of partnerships is found in the real estate industry. Again, the undercoverage of partnerships may be associated with zero-employee firms.

3.5 Design of the DMI Sample

To permit inferences from survey findings to the target population of small businesses, probability sampling was used to select the NSSBF sample. Probability sampling refers to sampling in which every unit on the frame is given a known, nonzero probability of inclusion in the survey. The NSSBF sample design was a stratified random sample with oversampling to insure separate estimation capability for reporting domains defined by Census region, metropolitan status, and number of employees.

6/ For further discussion of firms without employees, see US Small Business Administration 1983, 1986, 1988a.

To construct the sample design, we first obtained frame counts from the DMI file after ineligible business types and branch offices and subsidiary companies had been removed from the frame. Reporting domains of interest to this study included business type, Census region, metropolitan status, age of business, employment size and net worth. Tables 1, 2, and 3 present some of the frame counts computed at this stage of study planning.

The analysis plan for the study requires in depth analyses for each Census region, for metropolitan versus nonmetropolitan firms, and for small, medium and large sized businesses. The distribution of firms shown in Table 1 revealed the obvious -- unless nonmetropolitan firms were included in the survey in approximately the same numbers as metropolitan firms, analysts will not be able to make indepth comparisons of metropolitan versus nonmetropolitan firms. Also with 33 percent of all records having missing responses, total sales was unsuitable for use in stratification. An examination of Table 2, however, indicated that number of employees was sufficiently correlated with total sales so that number of employees could serve as a useful substitute for stratification purposes. The uses to which the data are to be put in antitrust studies required that analyses be possible by size of firm by region of the country by metropolitan status. Table 3 suggested that unless provisions were made, very small firms would dominate the sample with insufficient sample sizes for separate analyses of moderate to large businesses.

The final conclusions drawn from examining the distribution of firm counts for the NSSBF frame was that moderate-sized firms (those with 50 to 99 employees) and large-size firms (those with 100 to 500 employees) would have to be oversampled to insure adequate analytical estimation capability for these two firm sizes by metropolitan status. (Sample size constraints

TABLE 1.

Frequency distribution of Sampling Universe (Frame) for National Survey of Small Business Finances
SBA Task Order EA-88-52

Urban/Rural by other Variables

	-- Urban --	-- Rural --	-- Total --
SIC Group			
Mining	22021	18316	40337
Construction	537919	168424	706343
Manufacturing	342620	82472	425092
Transportation	115935	45498	161433
Communication	9163	6367	15530
Public Utilities	8909	5675	14584
Wholesale Trade	405925	103392	509317
Retail Trade	927717	401911	1329628
Insurance & Real Estate	308528	73859	382387
Services	1273435	329986	1603421
Census Regions			
Northeast	967614	172823	1140437
North Central	891507	387859	1279366
South	1147762	454623	1602385
West	945289	220595	1165884
Business Age			
Under 5 years	429196	104836	534032
5-25 years	2393257	739474	3132731
Over 25 years	510023	191143	701166
Unknown	619696	200447	820143
Employment Size			
1-4	1938123	703386	2641509
5-9	746984	226618	973602
10-19	383544	97927	481471
20-49	247237	56590	303827
50-99	81980	17127	99107
100-249	45440	9505	54945
250-499	13069	2722	15791
500+	12586	1687	14273
Unknown	483209	120338	603547
Sales Class			
1 <= x < 100k	594352	255521	849873
100k <= x <250k	662797	249669	912466
250k <= x <500k	445695	149438	595133
500k <= x < 1,000k	349546	97421	446967
1,000k <= x < 5,000k	411607	100593	512200
5,000k <= x < 10,000k	60427	13752	74179
10,000k <= x < 25,000k	39384	7636	47020
25,000k <= x < 50,000k	11759	1628	13387
50,000k <= x < 100,000k	4742	554	5296
100,000k <= x < 250,000k	2758	302	3060
250,000k+	1761	130	1891
Unknown	1367344	359256	1726600
Total	3952172	1235900	5188072

TABLE 2

Frequency distribution of Sampling Universe (Frame) for National Survey of Small Business Finances
SBA Task Order EA-88-52

Urban/Rural by Sales Size by Employment Size

-- Urban --

	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500+	Unknown
1 <= x < 100k	549414	35044	4067	1093	167	79	26	19	4443
100k <= x <250k	493258	137752	21546	4166	500	149	27	42	5357
250k <= x <500k	207755	164500	56481	11724	988	250	39	47	3911
500k <= x < 1,000k	92482	127085	84443	38189	3447	664	92	43	3101
1,000k <= x < 5,000k	41564	94129	119753	108628	32494	10251	907	299	3582
5,000k <= x < 10,000k	2320	4406	7511	20401	14485	8834	1732	319	419
10,000k <= x < 25,000k	917	1544	2767	8738	10251	10182	3597	1103	285
25,000k <= x < 50,000k	147	265	424	1017	2278	3452	2329	1779	68
50,000k <= x < 100,000k	50	83	130	209	347	1117	961	1832	13
100,000k <= x < 250,000k	37	49	56	109	165	295	373	1659	15
250,000k+	19	24	23	25	23	74	88	1475	10
Unknown	550160	182103	86343	52938	16835	10093	2898	3969	462005

-- Rural --

	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500+	Unknown
1 <= x < 100k	239640	13145	1285	272	38	19	5	5	1112
100k <= x <250k	192258	47977	6848	1237	94	28	5	4	1218
250k <= x <500k	73282	54388	17114	3522	273	54	4	4	797
500k <= x < 1,000k	25411	39982	20265	9947	1057	149	17	3	590
1,000k <= x < 5,000k	11905	24388	31161	23034	6763	2408	179	30	725
5,000k <= x < 10,000k	414	1038	2127	5096	2695	1828	394	46	114
10,000k <= x < 25,000k	150	229	678	2005	1669	1726	873	246	60
25,000k <= x < 50,000k	20	54	50	144	245	441	361	305	8
50,000k <= x < 100,000k	13	10	11	16	37	114	116	233	4
100,000k <= x < 250,000k	6	5	7	6	38	51	48	139	2
250,000k+	2	4	5	0	1	13	7	97	1
Unknown	160285	45398	18376	11311	4217	2674	713	575	115707

-- Total --

	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500+	Unknown
1 <= x < 100k	789054	48189	5352	1365	205	98	31	24	5555
100k <= x <250k	685516	185729	28394	5403	594	177	32	46	6575
250k <= x <500k	281037	218888	73595	15246	1261	304	43	51	4708
500k <= x < 1,000k	117893	167067	104708	48136	4504	813	109	46	3691
1,000k <= x < 5,000k	53469	118517	150914	131662	39257	12659	1086	329	4307
5,000k <= x < 10,000k	2734	5444	9638	25497	17180	10662	2126	365	533
10,000k <= x < 25,000k	1067	1773	3445	10743	11920	11908	4470	1349	345
25,000k <= x < 50,000k	167	319	474	1161	2523	3893	2690	2084	76
50,000k <= x < 100,000k	63	93	141	225	384	1231	1077	2065	17
100,000k <= x < 250,000k	43	54	63	115	203	346	421	1798	17
250,000k+	21	28	28	25	24	87	95	1572	11
Unknown	710445	227501	104719	64249	21052	12767	3611	4544	577712

TABLE 3.

Frequency distribution of Sampling Universe (Frame) for National Survey of Small Business Finances
SBA Task Order EA-88-52

Urban/Rural by Census Region by Employment Size

-- Urban --

	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500+	Unknown
Northeast	482434	173760	92246	62695	20911	12317	3698	3732	11582
North Central	429035	161675	84327	56116	19332	10923	3210	3082	12380
South	577846	234458	117656	72573	23700	12830	3630	3461	10160
West	448808	177091	89315	55853	18037	9370	2531	2311	14197

-- Rural --

	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500+	Unknown
Northeast	97656	29661	14163	8728	2732	1642	489	310	1744
North Central	221651	67206	28873	16825	5352	2925	746	441	4384
South	261469	90591	38529	22444	6697	3858	1181	754	2910
West	122610	39160	16362	8593	2346	1080	306	182	2995

-- Total --

	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500+	Unknown
Northeast	580090	203421	106409	71423	23643	13959	4187	4042	13326
North Central	650686	228881	113200	72941	24684	13848	3956	3523	16764
South	839315	325049	156185	95017	30397	16688	4811	4215	13070
West	571418	216251	105677	64446	20383	10450	2837	2493	17192

did not allow for separate analysis capability by Census regions for moderate to large firms.) In addition, approximately equal sample sizes was expected to be needed for small firms in metropolitan versus nonmetropolitan areas of the four Census regions.

The sample frame was partitioned on the basis of Census region (Northeast, North Central, South, and West), urban/rural location (firms in MSAs are classified urban; all others are classified rural), and firm size (small = 1-49 employees, medium = 50-99 employees, and large = 100 or more employees).[7] DMI frame counts for these strata and their allocated sample sizes are presented in Table 4.

The choice of strata and allocation of completed interviews to strata was based on consideration of three constraints:

- the size of the final sample should be 4,000 completed interviews;
- domain estimates for small firms for each region and urban/rural location should have approximately equal precision; and
- domain estimates for medium and large firms in urban and rural locations should have approximately equal precision.

The decision was to create 28 strata, allocating 400 completed interviews to small firms in each region by urban/rural location category, 200completed interviews to medium firms in each urban/rural location category, and 200 completed interviews to large firms in each urban/rural location category. For medium and large firms, the completed interviews were allocated proportional to population size within each Census region to reduce the effect of unequal weighting. Simple random sampling was used to select firms from each stratum.

7/ As mentioned, the DMI file contains records in which the number of employees is missing. For purposes of sample selection, these firms were classified as small.

Table 4. Sample Allocation Across Domains Defined by Census Region, Metropolitan Status, and Firm Size

Census Region	Metropolitan Status	Firm Size	DMI Frame Count	Allocated Sample Size
Northeast	Urban	Small	926,956	400
		Medium	20,911	51
		Large	19,747	56
North Central	Urban	Small	854,960	400
		Medium	19,332	47
		Large	17,215	48
South	Urban	Small	1,104,141	400
		Medium	23,700	58
		Large	19,921	56
West	Urban	Small	913,040	400
		Medium	18,037	44
		Large	14,212	40
Northeast	Rural	Small	167,650	400
		Medium	2,732	32
		Large	2,441	35
North Central	Rural	Small	378,395	400
		Medium	5,352	63
		Large	4,112	59
South	Rural	Small	442,133	400
		Medium	6,697	78
		Large	5,793	83
West	Rural	Small	216,681	400
		Medium	2,346	27
		Large	1,568	23

3.6 DMI Sample Selection

To begin discussing sample selection, we should note that the frame contained an unknown number of ineligible firms. These ineligible firms included:

- firms no longer in business,
- subsidiaries and branch companies that were not so identified on the DMI file (through error or a change in ownership),
- not-for-profit firms and publically owned firms that could not be identified via their SIC codes, and
- firms with 500 or more full-time equivalent employees in 1987.

Sample firms were screened to determine if they were eligible for the study. Hence, the presence of frame ineligibles does not bias study results.

Not knowing the percent of study ineligibles in the frame led to uncertainty as to how many selections to make to yield the desired final sample. To deal with this uncertainty, we decided that a much larger than needed sample would be selected from the DMI files and then subsampled to yield the required number of cases for NSSBF screening. The initial sample selection was done by SBA based upon specifications provided by RTI.

With over five million records in the DMI frame, we needed an initial sampling method that was both computationally simple and suitable for further subsampling. We chose a simple random sampling method within 24 strata defined by Census region, metropolitan status and firm size. Frame counts were first computed by SBA for each of the 24 strata. Then a cutoff point was established for each stratum as the desired initial sample size divided by the stratum frame count. (The desired initial sample size was set at approximately twice the size we anticipated would be needed for the study.) A random number was generated for each frame record and then compared to its stratum's cutoff point. When the random number was less than the cutoff point, the frame record was included in the initial sample.

When this type of sampling is used, the stratum sample sizes are random variables rather than fixed quantities. This variable sample size did not present a problem since this initial sample was intentionally larger than needed with an established plan for subsampling. For each stratum, Table 5 presents the DMI frame counts, the desired sample sizes, and the sample sizes that were actually selected for the initial sample.

The allocated sample sizes shown in terms of the desired number of completed interviews. To convert these to the number of selections to be made from the initial sample selected from the December 1987 DMI File, we had to factor in the effect of nonresponse and ineligibility. Further, we had to have a plan in place should our sample size estimates prove insufficient.

The data collection strategy that we adopted was this. Data collection wave sample size was set so that if response and eligibility rates occurred as expected, three data collection waves would be needed for interviewing purposes. The fourth wave was screened to serve as a backup should supplementation be needed. The total sample screened is presented in Table 5. We selected four data collection waves of about 2,000 DMI listings each.

The next issue to be addressed is the method that we used in subsampling the initial DMI sample for allocation to waves. For each of the 24 strata, we sorted the records by the value of the random number that was generated for the record and led to its selection for the initial DMI sample (from lowest to highest value). Then using the wave sample size for

Table 5. Allocation to Strata for the Various Stages of DMI Sampling

Census Region	Metropolitan Status	Firm Size	Targetted Initial Sample Size	Actual Initial Sample Size	Screening Sample Size	Interview Sample Size
Northeast	Urban	Small	1,200	1,210	800	782
		Medium	153	153	64	102
		Large	168	167	72	110
North Central	Urban	Small	1,200	1,224	800	782
		Medium	141	152	128	94
		Large	144	162	120	94
South	Urban	Small	1,200	1,176	800	782
		Medium	174	140	156	114
		Large	168	158	168	110
West	Urban	Small	1,200	1,139	800	782
		Medium	132	147	56	86
		Large	120	121	48	78
Northeast	Rural	Small	1,200	1,203	800	782
		Medium	96	98	104	63
		Large	105	93	112	70
North Central	Rural	Small	1,200	1,185	800	782
		Medium	189	190	96	125
		Large	177	187	96	117
South	Rural	Small	1,200	1,224	800	782
		Medium	234	263	116	153
		Large	249	247	112	164
West	Rural	Small	1,200	1,212	800	782
		Medium	81	86	88	55
		Large	69	82	80	47

the stratum [call this WSS(h) for the h-th stratum], we assigned the first WSS(h) records to Wave 1, the second WSS(h) records to Wave 2, the third WSS(h) records to Wave 3, and the fourth WSS(h) records to Wave 4.

Midway through the data collection period, we evaluated whether we could complete the required number of interviews with three data collection waves and decided that supplementation was needed to achieve the desired sample size. We subsampled additional cases from Wave 4 and then designated these selections for interviewing. To determine how many cases to sample for interviewing, we used our then-encountered eligibility rate and assumed a 75% response rate. The subsample of the screened sample used for interviewing purposes is included in the counts given in Table 5.

To select the subsample for interviewing purposes, we used the first three waves and then subsampled the fourth wave. Within strata, Wave 4 was subsampled by first ordering the records by their generated random number and then taking the desired number of supplementary records. Note that with this procedure, "interview sample" firms within each stratum were selected with equal probability. The final sample may be characterized as a stratified simple random sample.

3.7 Construction of DMI Analysis Weights

To make inferences about the Nation's small businesses from the NSSBF data, probability sample weights were constructed that reflect the sample design. The weight of a sample business can be viewed as the number of small businesses in the population that the sample firm represents. The sampling weight was constructed as the inverse of the selection probability of the sample and, hence reflects the differential sampling rates that were used. This sampling weight was adjusted in later steps to account for sample businesses who could not be contacted or who refused to participate. The final analysis weights serves to differentially weight the sample respondents to reflect the level of disproportionality in the final sample relative to the population of interest. The remainder of this section discusses the development of the analysis weights.

The probability of selection for sample record i from the h-th stratum (h = 1, 2, ..., 24) of the DMI frame was simply:

$$P(hi) = n(h)/N(h)$$

where

$n(h)$ = the total records selected from the h-th stratum for the interview sample, and

$N(h)$ = the total DMI records associated with the h-th stratum.

The sampling weight for the hi-th selection was calculated as the inverse of the probability of selection or

$$W_S(hi) = N(h)/n(h).$$

Note that

$$\sum_{i \epsilon S(h)} W_S(hi) = N(h)$$

where $i \epsilon S(h)$ denotes summation over all sample businesses in stratum h. This furnished a check to insure that the sampling weight had been constructed correctly.

The next step was to correct for nonresponse from eligible sample businesses. To digress for a moment, we need to discuss how ineligible cases were handled. First, in screening we attempted to identify out of business firms, firms with more than 500 employees, not-for-profit businesses, government-owned entities, and subsidiaries and branches -- all of which were ineligible for the study. All designated Interview Sample cases that were not positively known to be ineligible (i.e., screening-defined eligibles and nonrespondents) were brought into the CATI data base for interview. During the interview phase, additional ineligibles were later identified.

The first weight that we constructed was an analysis weight for use with Section I respondents. A weighting class adjustment procedure was used to adjust for nonresponse to Section I. The Section I weighting class adjustment for the c-th weighting class was calculated as

$$A_1(c) = \sum_{hi \epsilon SE(c)} W_S(hi) / \sum_{hi \epsilon SR_1(c)} W_S(hi)$$

where SE(c) is the set of eligible sample businesses belonging to weighting class c and $SR_1(c)$ is the set of eligible Section I respondents belonging to weighting class c.

Section I respondents in the c-th weighting class were assigned a weighting class adjusted weight calculated as the product of their Section I adjustment factor and their sampling weight or

$$W_1(hi) = A_1(c)\ W_S(hi).$$

For computation convenience, Section I nonrespondents were assigned an adjustment factor of zero and an adjusted weight of zero.

The next issue is the classes used in making this Section I nonresponse adjustment. Candidate variables included Census region, metropolitan status, firm size, SIC classification, and type of business. Except for the last variable, these variables were derived from the DMI file. Type of business (proprietorship, partnership or corporation) was obtained during screening and/or during the interview.

The candidate variables were examined to determine the extent to which they were defined for nonrespondents as well as the extent to which they explained Section I nonresponse rates and responses to data items. Firm size, SIC group, metropolitan status and Census region were chosen to define Section I weighting classes. Collapsing over Census regions was needed for medium and large firms due to their smaller sample sizes.

The next weight that we constructed was an analysis weight for use with Section II respondents. (By definition, all Section II respondents responded to Section I). Again, we calculated weighting class adjustments for the c'-th weighting class as

$$A_2(c') = \sum_{hi \in SR_1(c')} W_1(hi) \Big/ \sum_{hi \in SR_2(c')} W_1(hi)$$

where $SR_2(c')$ is the set of eligibles from weighting class c' who responded to Section II.

Section II respondents in the c'th weighting class were assigned a weighting class adjusted weight calculated as the product of their Section II adjustment factor and their Section I analysis weight or

$$W_2(hi) = A_2(c')\, W_1(hi).$$

Section II nonrespondents were assigned an adjustment factor of zero and a Section II analysis weight of zero.

Candidate variables for forming weighting classes included the previously mentioned variables plus number of full-time equivalent employees (I_A5 + 0.5 I_A6), type of organization (I_C1) and number of locations (I_D4). Firm size, SIC group, metropolitan status, Census region and corporate/noncorporate status were chosen to define weighting classes. Collapsing of small class occurred for the last two variables, particularly for medium and large sized firms.

The last weight that we constructed was an analysis weight for use with Section III-V respondents. (By definition, all of these had responded to

Sections I-II.) The weighting class adjustment for the c"-th weighting class was calculated as

$$A_3(c") = \sum_{hi \in SR_2(c")} W_2(hi) \Big/ \sum_{hi \in SR_3(c")} W_2(hi)$$

where $SR_3(c")$ is the set of eligibles from weighting class c" who responded to Section III-V.

Section III-V respondents in the c"-th weighting class were assigned a weighting class adjusted weight calculated as the product of their Section III-V adjustment factor and their Section II analysis weight or

$$W_3(h) = A_3(c")\, W_2(hi).$$

Nonrespondents were again given adjustment factors and weights of zero.

Candidate variables for forming weighting classes included those previously mentioned plus a type of financial services used recode (cash services only, financing only, cash services and financing, neither cash services nor financing). Type of financial services used, firm size, SIC group, metropolitan status and Census region were used to define the classes. Collapsing of small classes occurred for the last three variables, in particular for medium and large size businesses.

Three analysis weights resulted from the weighting process -- WTANAL1, WTANAL2 and WTANAL3 -- which are to be used in analyzing data from Section I, Section II (or Sections I and II data), and Sections III-V (or Sections I to V data). DMI data can be analyzed using stratified random sampling procedures, the above weights, and the variable STRATUM. STRATUM records the stratum membership of the sample business with levels 1-24 assigned following the ordering given in Table 4.

3.8 SBA Sample Selection and Weighting

SBA furnished us with their file of guaranteed loans disbursed in 1986. For comparability to the DMI sample, firms whose business was agricultural or financial in nature were excluded as well as not-for-profit businesses, government entities, and branches and subsidiaries.

Having removed ineligible businesses and duplicate entries, the frame was sorted by Census region, SIC code and number of employees using a serpentine ordering and then Chromy's sequential sample selection procedure was used to select a sample of 975 businesses. These businesses were then randomly allocated to 13 data collection waves. Ten of these waves were ultimately fielded for data collection purposes.

This procedure leads to a self-weighting sample. The probability of selection of the i-th firm from the SBA portion of the sample can be expressed as:

$$P(i) = n/N$$

where

- n is the number of records contained in the ten fielded data collection waves and
- N is the total SBA frame file records.

The sampling weight for SBA sample firm i was calculated as the inverse of this probability of selection or

$$W_S(i) = N/n.$$

Nonresponse adjustments were made following the procedure outlined previously to create Section I, Section II, and Sections III-V analysis weights. Because of the smaller sample size the number of weighting classes that can be used was necessarily less. Section I weighting classes were defined using SIC group and Census region. For Sections II and II-V, the weighting classes were defined using SIC group and corporation/noncorporation status.

Chromy's sequential sampling algorithm, used to select the SBA sample, produces an implicitly stratified design with one selection per zone. To analyze these data, we suggest analysts use WTCLASS1, the Section 1 weighting class variable, to define pseudo-strata. Stratified random sampling procedures would then be used to analyze the SBA data using these pseudo-strata and the analysis weights.

As a final point, we note that the DMI data and SBA data should never be analyzed jointly. There is an unknown amount of overlap between the target populations for the DMI sample and the SBA sample. The analysis weights apply only for separate estimation for each of the two samples and do not allow the data to be combined.

4. QUESTIONNAIRE DEVELOPMENT

The analytic goals of the NSSBF required the collection of large amounts of financial data. Accurate responses for the associated questions depended upon the respondents understanding of terminology from accounting (e.g., nonrecourse loans, trade notes, treasury stock) and financial services providers (e.g., capital leases, lock boxes, banker's acceptances). Access to financial records also enhanced the accuracy of responses. Information about these response issues was limited so study planners decided that a more elaborate than usual questionnaire development activities were in order.

Questionnaire development for the NSSBF began with a draft questionnaire created by the Board to satisfy their analytic needs for survey data. This questionnaire was refined using four rounds of cognitive testing and a formal pretest with major revisions of the questionnaire at each step in the process. The topics covered by the final questionnaire are displayed in Exhibit 1.

4.1 Questionnaire Formatting and Validation

The first step in the questionnaire development process was to reformat the Board's draft questionnaire to create a survey instrument. Steps in the process included establishing the logical ordering of the questions, specifying skip patterns and defining the temporal basis of the individual questions. As examples of the latter, some questions had to be answered as of a particular date (e.g., saving account balances, amounts owed) while other questions referred to a period of time (e.g., total sales, interest expenses).

Exhibit 1. Structure of the NSSBF Questionnaire

I. Characteristics of the Firm
   A. Screening Information
   B. SIC Code
   C. Organization Type
      1. Proprietorships
      2. Partnerships
      3. Corporations
   D. Location of Firm
   E. Reference Period (time period to which data apply)

II. Sources of Financial Services
   A. Use of Deposit Services
      1. Checking Accounts
      2. Savings Accounts
   B. Use of Credit and Financing
      1. Leases
      2. Lines of Credit
      3. Mortgages
      4. Motor Vehicle Loans
      5. Equipment Loans
      6. Loans from Partners/Stockholders
      7. Other Loans
      8. Most Recent Loan from an Institution
   C. Use of Other Financial Services
   D. Relationships with Financial Institutions
      1. Characteristics of Financial Institution
      2. Location Used for Noncredit Services
      3. Location Used for Credit Services
   E. Other Financial Institutions
   F. Previous Relationships with Financial Institutions
   G. Shopping for Financial Services
   H. Solicitation by Financial Institutions
   I. Use of Trade Credit
   J. SBA Borrowing Experience (SBA sample only)

III. Income and Expenses

IV. Balance Sheet
   A. Assets
   B. Liabilities and Equity
   C. Miscellaneous

V. Closing Remarks (Use of Records)

At this point, our emphasis was on verifying the accuracy and integrity of the survey's questions, not on creating questions that survey respondents would understand. For instance, the document was reviewed by accountants to ensure that accounting conventions were being followed and that the questions were appropriate for the diversity of accounting practices that would be encountered in the survey. The questionnaire was also reviewed by subject matter specialists to verify that all required data for study analyses were being collected by the questionnaire.

4.2 Cognitive Testing of the Questionnaire

Our next step was to focus on the ability of the small business to provide the required information. The survey objectives required detailed information on small business finances including an inventory of assets and liabilities of the business, a description of the types and locations of institutions used for financial services, and the clustering of these services within the same supplier. The questions involved technical concepts and requested confidential information about the firm, and in many cases required that the small business consult records to supply the answer.

To test the workability of the Board's draft questionnaire, we had to address the following issues:

- What records are readily available to the small business owner? What data do they provide?
- How knowledgeable are business owners about their firm's relationships with financial institutions and alternate sources of financing?
- To what extent do business owners understand accounting concepts embodied in the survey questionnaire?
- For what date/time period, can firms respond most accurately about their financial operations?

- What impact will advance copies of survey questions have on data quality and response?

- What are the specific confidentiality concerns of the business owners and how can these concerns be addressed?

- How can we motivate businesses to participate in the survey?

In addition to these broad issues, we also needed to access the respondent's understanding of each individual question.

To obtain data to answer these basic questions about the interview process, we conducted four rounds of testing. Prior to each round, survey specialists contacted small businesses in the local area to identify 5-9 who would agree to participate in the testing process. Businesses of differing types (e.g., services, manufacturing, transportation) and differing organizations (e.g., proprietorships, partnerships, corporations) were recruited in an attempt to characterize the diversity of study respondents. Considerable effort had to be expended to identify willing participants as many businesses were hesitant to spend the necessary time for testing or to answer the kind of questions that would be asked.

Businesses who agreed to participate were visited in person at their place of work. "Think-aloud" interviews were conducted where respondents were encouraged to talk out loud about how they were interpreting the questions and their thought processes associated with coming up with an answer. Reluctance to respond was also observed during the testing process itself with some respondents initially agreeing to participate and then refusing or putting us off when we arrived. Others responded to the majority of he questionnaire but refused to provide income statement or balance sheet information.

With the respondent's permission, we recorded the testing interviews. This allowed the interviewer to focus on encouraging respondents to report what they were thinking or doing. The recordings were reviewed by questionnaire developers to determine the strength and weaknesses of the draft questionnaire. Based upon the results, the questionnaire was revised in preparation for the next round of testing. Testing results consistently showed the questionnaire was longer than the desired 30 minutes so these revisions also involved modifications designed to cut the administration time.

Study plans called for mailing worksheets to sample businesses prior to the interview and urging them to complete them in advance of the interview. Thus, part of the response process for the study occurs before the interview itself. This process was observed in Round 3 of testing where businesses were shown draft worksheets to be used for recording financial information and asked about their interpretation of the form and the records that they might use to complete it. Prior to Round 4, we mailed the worksheets to the businesses who agreed to participate. Some businesses refused after they received the worksheets, citing their reluctance to answer questions about their business finances.

As should already be clear, the testing process indicated that the subject matter of the survey was highly sensitive and businesses could be expected to be reluctant to participate in the study. Other results of testing were as follows:

- Some questions were best answered by accountants/bookkeepers and others by owners. Within logical sequences of questions, both types sometimes occurred.

- Even for accountants/comptrollers there was confusion about the meaning of terms describing financial services (e.g., banker's acceptances, zero balance accounts, lock box).

- Rounded figures were often given for amounts even when the respondent was looking at records with exact figures.

- There was a tendency to describe personal finances even though business-only finances was emphasized. For the smallest businesses, comingling of personal and business finances was common.

- Balance sheet and income questions frequently provoked a, "What do you mean by ..." response that put testers on the spot to provide a definition.

- Many questions provoked a, "I'd have to look up that number." response.

- Respondents could not accurately list all financial institutions/credit sources used. A better approach appeared to be to ask if the firm had any use of the service and then to ask for specific institutions/sources used.

- Some concepts remained problematic such as the number of full time equivalent employees, use of trade credit, and the distinction between capital and operating leases.

- Important issues not addressed by the questionnaire were identified as well as skip pattern problems, repetitive questions, etc.

- Sensitive questions were highlighted with unexpected results at times. For instance, respondents sometimes gave amount owed for individual loans but refused to give aggregated total. Other respondents stated that their company did not give out balance sheet data to anyone but when asked the questions would answer yes/no questions and give some amounts.

- The recent tax law affected the reporting period by creating partial years for firms forced to convert to a calendar year basis.

This information was used in revising the questionnaire after each round and in preparation for the pretest.

For instance, respondents with accounting backgrounds insisted on short questions based on accounting terminology while less knowledgeable respondents needed longer questions with definitions embedded in them. To solve this problem, we created short questions that only knowledgeable respondents could answer. If not immediately answered, the interviewer followed up with a probe that contained a definition. Instructions were also given to provide guidance in separating business and personal finances. In addition, a glossary of terms was provided for interviewer use in interpreting the questionnaire and answering questions from respondents.

Another problem was to develop a structure for collecting reasonably consistent financial data from all firms in the sample. Several obstacles were encountered. Accounting practices, developed for controlling the operations of business firms rather than reporting economic value, are not uniform. Larger firms tend to have greater coordination and monitoring needs and thus more complex records that smaller firms. Similarly, partnerships and corporations tend to have more sophisticated records than proprietorships. Indeed, a proprietor's business and personal finances are not normally separated. Federal tax returns provided a nearly common basis for reporting balance sheet items for partnerships and corporations. Appropriate lines from the tax forms were identified for each item requested in the worksheets and questionnaire.[8] Proprietorships, however, do not normally prepare balance sheets. They were given instructions on how to construct a balance sheet.

Some respondents were unwilling to report aggregate debts or cash holdings in a balance sheet, even though they had reported dollar amounts of individual debts and accounts. The order of questions was based on this experience. Questions about general characteristics of the firm came first and then questions about the sources of financial services. The income statement and balance sheet were at the end. Thus, for some firms, partial balance sheet information would be available from responses to questions about financial service use even if balance sheet questions were refused.

8/ Respondents sometimes had to add two or more lines or to disaggregate items reported on a single line on the tax form.

4.3 Pretest Results

A formal pretest was conducted for sample businesses selected from the DMI and SBA frames. The same target population definition was used for the pretest as planned for the main study. Our testing experience prior to the pretest indicated that response patterns and difficulty in responding differed by organization type. For this reason, we distributed the pretest samples evenly across the three organization types -- proprietorships, partnerships and corporations.

The SBA frame had an organization type indicator which we used to choose five of each type for screening. For the DMI frame, no such indicator was available. Instead, we used the title of the firm's representative taking all records with the title of partner or proprietor and choosing a representative mix from the rest to get a total sample of 59 firms from the DMI frame.

The interviewing planned for the main study was tested in the pretest. An initial telephone call was made to sample businesses to determine if they were eligible for the study and to verify name and address information. Eligible businesses were mailed a lead letter package containing

- a letter from Federal Reserve Board chairman Alan Greenspan, and another letter from RTI introducing the study and urging participation,
- a brochure with answers to questions about the study,
- a worksheet for recording income statement, balance sheet and financial services data prior to the interview,
- a postage-paid envelope for returning the worksheets, and
- a return post card so that the business could advise us of the best time and place for interview.

Results of the screening are given in Table 6 by type of organization. To insure equal spread of the pretest interviews across the three organization types, we added a question on type of organization to the screener. For completed screeners this response was used to categorize the business.

All of the SBA firms were eligible for the study. Screening interviews were completed with 73.3 percent or eleven firms, with two firms providing partial data, one firm refusing and one firm with no answer. The organization type variable on the SBA frame appeared to be out of date with more firms listed as proprietorships and partnerships than reported themselves to be corporations.

Two of the DMI firms were ineligible types of businesses -- one was not-for-profit and the other was a subsidiary. Another 13.6 percent of the DMI firms (eight firms) had disconnected numbers. For this latter group, we implemented extensive telephone tracing attempting to get a new number for the firm or its representative through directory assistance, contacting the Chamber of Commerce, etc. The 13.6 percent that remained untraced after this procedure are most likely out of business and can be treated as ineligible bringing the total percentage of ineligibles to 16.9 percent.

Screening interviews were completed with 79.6 percent of the eligible firms (39 firms) with an additional 4.1 percent partially completing the interview. Of the remaining firms, we had two refusals, one callback appointment never kept, one answering machine, and four with no answer after repeated tries. For the main study, callbacks, answering machines, and ring no answers would be worked longer than we did for the pretest (one day) and so the response results are somewhat atypical.

Table 6. NSSBF Pretest Screening Results

Screening Component	DMI Sample	SBA Sample	Overall Total
Total Firms Screened	59	15	74
No Telephone Listing	8	0	8
Complete: Ineligible Firms	2	0	2
Complete: Eligible Firms	39	11	50
Proprietorships	15	0	15
Partnerships	8	4	12
Corporations	16	7	23
Partially Completed	2	2	4
Refusal	2	1	3
Callback Appointments	1	0	1
Answering Machine	1	0	1
No Answer	4	1	5

Based upon the pretest experience, we decided for the main study that we would not attempt to convert a refusal to screening. Instead we would mail then the lead letter packet, attempt to convert the firm, and if successful we would then screen prior to the interview itself. The idea behind this approach is that reluctant firms may become more receptive after they receive the lead letter packet and hence should not be followed up too strenuously during screening.

As the result of the pretest, we found that the name and address information was least sensitive and hence should be asked first. We deliberately chose to screen whoever answered the telephone and not ask for the owner in the pretest. We discovered that the questions on number of employees and on not-for-profit, public ownership, and subsidiary status could not always be answered by the person answering the telephone. This was the explanation for the partial interviews. Based upon this finding, we decided that interviewers should ask to speak to the owner (if possible) in the main study screening, verifying name and address data first and then asking the eligibility questions.

After screening was complete, we identified the firms we wished to mail to for the pretest interview. Using titles of corporate officers and the SBA organization type variable, we chose 51 DMI firms and 9 SBA firms, trying to come as close as possible to equal numbers for the three organization types. Lead letter packets were mailed to these businesses.

Postcards were included in the lead letter packet so that the firm could indicate the best time, person and number to call. Only two postcards were returned, one by a firm that ultimately refused to participate. This experience suggested that it would not be worthwhile to include return postcards in the main study lead letter packet.

The lead letter gave the RTI Project Director's name and telephone number to call if the respondent had questions. Two respondents called -- one to request another copy of the worksheets. With both firms it appeared that their true purpose was to see if we were legitimate. (Both participated and were easy interviews.) For the main study we had RTI's president, George Herbert, sign RTI's lead letter. The letter gave the name of a survey specialist to call if they have questions.

Sample firms were called approximately 2-3 weeks after the pretest mailout. As a part of the introduction, the interviewer asked if the respondent had received the lead letter packet. Packets were remailed to firms who indicated that they had not received the packet of materials. Some firms indicted that they had received it but threw it away. Several of these firms insisted that we remail the package before they would complete the interview. The control sheets show nine remailings, two with ultimate refusals, five with interviews completed, and two that were still being worked when data collection ceased.

The experience with the lead letter package in the pretest suggested that firms should be called soon after they receive the package and then the interview scheduled later. Questions on general characteristics and ownership could be asked at that time to establish rapport with the respondent. With this approach, the respondent can be notified in the lead letter that we will call in "the next few days" and may retain the materials until he/she talks to us. Note that it does not make sense to enclose a postcard with this approach since it will not arrive before the call.

Table 7 presents the pretest interview results. It should be noted that we chose the most convenient stopping point after we had reached 30

Table 7. NSSBF Pretest Interview Results

Interview Component	DMI Sample	SBA Sample	Overall Total
Total Mailouts	51	9	60
Out of Business	4	0	2
Unable to Locate	3	0	3
Completed Interviews	26	6	33
Proprietorships	6	2	8
Partnerships	7	1	8
Corporations	13	3	16
Partial Interviews	2	0	2
Refusals	13	2	15
Answering Machine	1	0	1
Not Finalized	3	1	4

completed interviews. Therefore, we had some put offs, refusal and breakoff cases that had not been finalized yet.

From screened firms with SBA guaranteed loans, we chose nine firms for interview. Six firms completed the interview, two refused and one was not finalized at the time data collection was terminated. One of the completed interviews was conducted with a firm that initially refused to participate.

Mailouts were made to 51 firms from the DMI sample. We were unable to locate three firms and another four firms had gone out of business. These cases had been deemed problematic in screening. We followed up on them to confirm our belief that firms without directory listings for the owner or the company were ineligible. For two firms, the designation of "out of business" was chosen because the lead letter was returned as undeliverable. For the other two we received confirmation during interviewing that they were out of business. For the unable to locate firms, we had two firms where the mailout was not returned to us but the owner did not contact us and the firm could not be traced. Most likely these are firms that had gone out of business and now have their mail forwarded to an owner. The uncertainty that existed here suggested that the main study lead letters should be sent out marked "forwarding address requested". (This was an oversight for the pretest.)

Responses were obtained from 59 percent of the identified DMI eligibles or 26 firms. Six of these firms had initially refused to participate. Remaining were 13 refusals (29 percent of identified eligibles) some of which could have been converted. For another six firms (13 percent of eligibles), we had partial interviews, answering machine contacts only, or otherwise had not finalized them. Some of the latter were put-off type refusals but still might have been converted.

An extraordinary amount of telephone calls was needed to establish contact and attempt an interview. For the SBA sample, the average number of contacts was 6.4 and ranged from 2 to 16. For the DMI sample, the average number of calls was also 6.4 and ranged from 1 to 17. Note that these calls do not include the calls made to complete the screener.

We also implemented two mini-experiments as a part of the pretest. We were concerned that our normal interviewers might not be able to master the business terminology being used or cope with the questions that respondents might ask. To try this out, we recruited an interviewer with a business background (but inexperienced as an interviewer), one inexperienced interviewer with no business background, and two experienced interviewers.

Basically, we found during the pretest that the glossary of terms and the definitions embedded in the questions were sufficient in explaining the accounting terms although some business background was helpful. However, the difficulty of converting reluctant respondents and cajoling other respondents to resolve mistakes convinced us that our originally proposed strategy is the best. That is, that the main study should concentrate efforts on hiring experienced interviewers (to the extent possible) and also interviewers good at nonresponse conversion. To fill the cadre of interviewers, some inexperienced interviewers might have to be hired. Here the search should be for a business background and good interviewer traits.

Another experiment that we tried during the pretest concerned the proposed plan to ask respondents to mail back the worksheets. Some uncertainty was felt by survey specialists as to whether knowing that we were going to request the worksheets might make respondents reluctant to participate in the telephone interview. For this reason, we enclosed postage-paid envelopes in 25 of the mailouts and noted in our instructions that they were for the return of the worksheets and other materials at the end of the interview. For the remaining mailouts, we did not enclose an envelope or indicate that materials should be returned to us. At the conclusion of each business' interview (regardless of whether mailback was indicated in the lead letter), we requested that worksheets and other records be returned to us.

It did not seem to matter whether we requested the mailback or not. In all, we got records back from three respondents, one of whom had not been sent a postage paid envelope. Three respondents refused to return their records. Most respondents said nothing at all or promised to return them and then did not. Knowing that advance warning would not hurt response led to a decision to beef up the lead letter and the closing script to encourage return of the worksheets in the main study and to enclose a postage-paid envelope. The pretest experience made clear, however, that the majority of respondents would not return their worksheets.

Some parts of the pretest interview went well and some parts remained problematic. We examined all of the pretest interviews and generally found that the interview worked. However, we had difficulty obtaining accurate responses about the firm's use of financial services and for the income statement and balance sheet questions. We also found during the pretest that some respondents were refusing to complete the income and balance sheet sections. For the main study, extensive conversion attempts were clearly indicated to complete as many of these cases as possible.

The major problem in the pretest was that many respondents did not complete the worksheets. Hence, dollar amounts were often rounded and inaccurate. As a result of the pretest experience, several measures were taken for the main study to increase use of the worksheets. First, respondents were contacted much sooner after the mailout packages were sent to reduce the number of lost and discarded worksheets. Second, we remailed worksheets to firms that lost, discarded or did not receive them and then recontacted respondents after remailing. Finally, when interviewers discovered that respondents had not completed worksheets, respondents were encouraged to do so, and the interview rescheduled for a later date.

With respect to use of financial services we had respondents giving us estimates and not checking their records. Clearly their memory was faulty at times and even more disturbing, they neglected to discuss all events of interest and hence missed some institutions. For the main study, we redesigned the questionnaire and data collection procedures to minimize this underreporting.

Two problems appeared to be happening with respect to the income statement. First, some respondents did not have their taxes completed at the time of the pretest and so left many of the questions blank. (This would not be expected to be a problem in the main study since presumably all firms will have filed taxes by late October.) Another problem that occurred was obvious erroneous responses. Unfortunately, this section was so trim that there were not sufficient redundancies to figure out what caused the problems. To correct the problem, we built in more definitions of terms in the main study questionnaire and added checks to spot erroneous responses as they were reported. The interviewers then attempted to get the respondent to correct the obvious discrepancy (e.g., profit unequal to total sales minus cost of goods sold).

The problems with the balance sheet questions were more approachable. A number of the balance sheets did not add up because liabilities plus equity was given instead of the total liabilities we requested. In other cases, a misunderstanding had clearly occurred. The approach that we adopted for the main study was to include strategic questions designed to identify the discrepancy and extensive CATI edits to spot the problem section and the take the respondent through the entire section confirming each answer.

The most disturbing result of the pretest was the length of time needed to conduct the pretest interview. For the SBA sample, the average length was 52.3 minutes and ranged from 37 minutes to 67 minutes. For the DMI sample, the average time was 43.2 minutes and ranged from 20 to 124 minutes. Only 9 of the 25 DMI firms with interview times (1 firm had time missing) had an interview length of 30 minutes or less. These results do not include the time required to complete the screener. Another disturbing event observed in the pretest was that the length of time to complete the interview kept increasing as data collection continued. This suggests that if we had continued the pretest until we obtained the 75% response rate desired for the main study, the average interview length would have been even greater.

Prior to the main study, we revised the pretest questionnaire to solve the problems described above. We also added a few questions at the request of the Board and SBA on the characteristics of the firm's most recent loan and a few other miscellaneous questions.

5. DATA COLLECTION

Based upon the results of the four rounds of testing and the pretest, a data collection strategy evolved. The approach began with a short screening interview to determine study eligibility and to confirm the mailing address. A lead letter package and worksheets were then mailed to the business. After a ten day delay, the business was contacted by telephone and questionnaire data collected including worksheet responses. At the conclusion of the interview, the interviewer asked the respondent to mail the worksheet and the records they used in answering the questions. This section discusses the results of this data collection approach.

5.1 Screening Results

Screening interviews were conducted for DMI and SBA sample firms to determine eligibility and to correct inaccurate information on ownership, telephone number, and address. The form used for screening is given in Appendix A.

Because the eligibility rate was unknown, screening was scheduled in waves. Each wave was a random sample. Thus, estimates of eligibility from the early waves could be used to select a sufficient number of firms in the fourth wave to yield the desired number of eligible firms.

Many telephone calls were needed to complete the screener even though any knowledgeable person could respond. An average of 4.3 calls was made for each business selected for screening with 3.1 calls made for completed screenings, 4.9 calls for nonrespondents, and 9.6 calls for unable to contact firms.

A total of 8,017 firms from the DMI frame were screened (Table 8). Of these firms, 66 percent were determined to be eligible and an additional 5 percent remained indeterminable.

Virtually all of the ineligible firms from the DMI frame can be classified into one of two categories. The first category consisting of ineligible types of businesses, contains 12 percent of screened firms. About 57 percent of these ineligible firms were not-for-profit or publicly owned, 28 percent were not the main office of the firm, 9 percent had more than 500 employees, and 6 percent were subsidiary companies.

The second category contains firms that were no longer in business. About 17 percent of the DMI sample was in this no-longer-in-business category. For 11 percent of the sampled firms, the owner or another knowledgeable person reported that the firm was out of business. For another 6 percent of sampled firms, no directory listing existed for the company and the business could not be traced through calls to their top executive, the Better Business Bureau, the Chamber of Commerce, local libraries, and the telephone company.

Similar results were obtained for the SBA sample. A total of 675 firms from the SBA frame were screened (Table 8). Of these firms, 83 percent were determined to be eligible for the study with an addition 3 percent as indeterminable.

5.2 Interviewing and Response

After completion of screening, lead letter packages were mailed to all screened eligibles and to indeterminables in the data collection waves designated for interview. More businesses wee screened than were expected to be needed. As discussed in Chapter 3, the screening sample for each

Table 8. NSSBF Screening Results

Category	DMI Sample: Sample Size	DMI Sample: Percent (%)	SBA Sample: Sample Size	SBA Sample: Percent (%)
Total Firms Screened	8,017	100.00	675	100.00
Eligible or Indeterminable	5,669	70.71	581	86.07
Ineligible Firms	2,348	29.29	94	13.93
Ineligible Firms	2,348	100.00	94	100.00
Ineligible Business Type	969	41.29	19	20.21
Not-for-Profit	494	21.04	5	5.32
Publically Owned	58	2.47	1	1.06
Branch Office	272	11.58	13	13.83
Subsidiary	58	2.47	0	0.00
500 or More Employees	87	3.71	0	0.00
Confirmed Out of Business	921	39.22	41	43.62
No Listing, Cannot Be Traced	452	19.25	34	36.17
Other Ineligible	6	0.26	0	0.00
Eligible or Indeterminable	5,669	100.00	581	100.00
Screening Completed	5,280	93.14	562	96.73
Partial Screener	79	1.39	7	1.20
Refusal	125	2.20	3	0.52
Language Barrier	15	0.26	2	0.34
Listed Number, UTC	17	0.30	0	0.00
Other Eligible	151	2.66	7	1.20

survey component (DMI and SBA) was subsampled to yield an interview sample that can be viewed as a stratified random sample from the respective sampling frame. The packages contained letters from Alan Greenspan and the president of RTI urging participation in the survey, a question and answer pamphlet explaining the purposes and procedures for the survey, and the worksheets. Copies of these materials are included as Appendix B. The worksheets used 1987 income tax returns as a guide for answering the income statement and balance sheet questions. Copies of these tax forms are provided in Appendix C.

Ten days after packages were mailed, interviewers began telephoning respondents. The pretest had indicated that most respondents could not complete the interview in one session. Initially, we planned to have the interviewer ask the general questions about business characteristics first and then break off the interview if the respondent had not completed the worksheets. Early results, however, indicated that the majority of sample businesses were very reluctant to respond or difficult to reach. In addition, not having completed the worksheets was clearly being used as a "put off" technique by many firms who were not even answering the general questions about business characteristics. To alleviate this problem, interviewers were instructed to allow a breakoff only when they were convinced the respondent intended to complete the worksheets. Otherwise, the interviewer was to encourage respondents to get any records they had and continue the interview.

Obtaining response was a continuing problem throughout the interview process with two primary sources for the difficulty: (1) respondents did not want to respond to a survey that asked for such sensitive, confidential data and (2) establishing contact with the owner and finding an appropriate time for interview was often problematic. This difficulty in establishing contact and gaining cooperation was reflected in the number of contacts needed to complete screening and the interview. For the interview itself, 11.6 calls were made on average for each sample business with 10.4 calls made for totally complete interviews, 11.6 to 20.3 calls for partial interviews, 10.9 calls for total nonrespondents and 19.2 calls to unable-to-contact businesses. These figures do not include the telephone calls made during screening.

Since obtaining response was so problematic for this study, we set up four separate response status indicators for the interview: the first for Section I where business characteristics were discussed, the second for Section II where the financial services used by the firm were inventoried, the third for Sections III-V where the income statement and balance sheet were obtained and the fourth for the questionnaire as a whole. For completed questionnaires and work in progress, we evaluated the individual section response status indicators by tabulating the frequency of missing data in the data base. When too large a percentage of the items in a completed section were missing, the respondent was telephoned to obtain the missing data. Data were obtained for approximately 60 percent of these reopened cases.

The data collection goal was to achieve a 75% response rate among study eligibles. Early in the data collection process, it became clear that achieving this goal might not be possible. From the beginning days of the survey, respondents demonstrated extreme reluctance to participate in the study. As an example, during the first two weeks of data collection, we averaged less than one completed interview per interviewer day worked (an 8-hour shift). Drastic measures were taken to boost production including staff retraining, reassignment of personnel, changes in working hours, incentives, etc. Production increased markedly peaking at 3-4 completed interviews per day. The bulk of time was spent in trying to establish contact with respondents and to convince them to participate. The interview itself averaged 50 minutes in length; this time to complete together with the end-of-year data collection period made every interview difficult to obtain.

Table 9 presents results of the data collection process. For this study, a completed interview was defined to be one in which Sections I and II were completed (the bulk of the questionnaire). When all possible nonresponse follow-up approaches had been exploited, we achieved a 71 percent response rate for the DMI sample and an 81 percent response rate for the SBA sample. Of those completing interviews, 92 percent of the DMI cases and 97 percent of the SBA cases completed all survey sections including the income statement and balance sheet sections. Breakoffs were more frequent than typically found in sample surveys and they occurred at all points in the survey questionnaire. To illustrate, 12 percent of DMI eligibles and 8 percent of SBA eligibles stopped after having provided at least some Section I data on characteristics of their business. Response rates tended to be higher for the SBA sample than for the DMI sample.

In spite of having screened for eligibility, we had six percent of the fielded DMI sample and four percent of the SBA sample classified as ineligible. These survey ineligibles included ineligible business types (e.g., farms) with incorrect SIC codes, subsidiary companies and large

Table 9. NSSBF Interview Response and Eligibility Results

Response Status	DMI Sample Number	DMI Sample Percent	SBA Sample Number	SBA Sample Percent
Total Interview Sample	5,547	100.00	520	100.00
Ineligible Firms	357	6.44	19	3.65
Eligible Firms	5,190	93.56	501	96.35
Ineligible Firms	357	100.00	19	100.00
Out of Business	213	59.66	12	63.16
Ineligible Business Type	120	33.61	3	15.79
Ineligible New Business	5	1.40	3	15.79
Ineligile Bad SIC Code	13	3.64	1	5.26
Other Ineligible Firm	6	1.68	0	0.00
Eligible Firms	5,190	100.00	501	100.00
Section I Incomplete	1,153	22.22	68	13.57
Refusal	903	17.40	57	11.38
Breakoff	53	1.02	2	0.40
Unable to Contact	166	3.20	6	1.20
Language Barrier	17	0.33	3	0.60
Other Nonresponse	14	0.27	0	0.00
Section II Incomplete	358	6.90	29	5.79
Breakoff	292	5.63	26	5.19
Unable to Contact	65	1.25	3	0.60
Language Barrier	0	0.0C	0	0.00
Other Nonresponse	1	0.02	0	0.00
Sections III-V Incomplete	282	5.43	14	2.79
Breakoff	268	5.16	13	2.59
Unable to Contact	13	0.25	1	0.20
Language Barrier	0	0.00	0	0.00
Other Nonresponse	1	0.02	0	0.00
All Sections Completed	3,397	65.45	390	77.84

businesses not identified during screening, and companies that had gone out of business since screening or were not truly in business. The latter source of ineligibility often was identified after the interview was nearly complete. In recording income, the interviewer would encounter no sales and no expenses. Probing in these cases usually determined that the business had been actively pursued in the past but was now totally inactive.

Rather surprising were the similarities in response rates across reporting domains (Table 10). As an example, the lowest DMI regional response rate for the financial statement questions (Sections III-V) was 62 percent for the Northeast, as compared to 68 percent for the South. The largest difference was found for metropolitan status. Urban firms provided financial statement data 62 percent of the time as compared to 70 percent of the time for rural firms. Firm size had little impact on response with the lowest response for large businesses (64%) and the highest for medium sized businesses (68%). Industry showed more variation with the lowest response for business transportation, communication, and public utilities (61%) and the highest for businesses engaged in mining and manufacturing (70%). Similar patterns were found for the other two sections of the questionnaire and for the SBA sample.

5.3 Use of Worksheets

Despite efforts to encourage return of worksheets, over both samples only about 10 percent returned worksheets or tax records as requested. About 16 percent of DMI respondents and 32 percent of SBA respondents reported having completed worksheets, however (Table 11). We expected worksheets to be more useful to proprietorships than partnerships or

Table 10. Response Rates by Reporting Domains

Domain	Level	Sample Eligibles		Business Characteristics Described		Financial Services Inventoried		Financial Statements Provided	
		DMI	SBA	DMI	SBA	DMI	SBA	DMI	SBA
Region:	Northeast	1,328	79	75%	82%	68%	78%	62%	76%
	North Central	1,292	148	79	84	72	80	67	79
	South	1,367	111	81	94	74	89	68	86
	West	1,203	163	76	85	69	76	65	72
Metropolitan Status*:	Urban	2,613	--	74	--	67	--	62	--
	Rural	2,577	--	82	--	75	--	70	--
Firm Size:	Small	4,258	486	78	86	71	80	66	78
	Medium	533	11	80	100	74	91	68	82
	Large	399	4	77	100	71	100	64	100
Industry:	Mining, Manufacturing	623	77	82	92	75	84	70	82
	Construction	668	25	79	88	72	84	67	84
	Transportation, Communication, Public Utilities	191	18	77	78	68	78	61	78
	Wholesale Trade	504	52	80	85	75	81	68	75
	Retail Trade	1,446	172	76	90	69	85	64	83
	Insurance, Real Estate	281	3	80	67	73	67	69	67
	Services	1,477	154	76	81	69	74	64	70
Total		5,190	501	78	86	71	81	66	78

*Metropolitan status was not defined for the SBA sample.

Table 11. Use of Records When All Sections Completed

Domain	Worksheets Prepared		Records Used For: Financial Services Inventory		Income Statement Questions		Balance Sheet Questions	
	DMI	SBA	DMI	SBA	DMI	SBA	DMI	SBA
Proprietorships	16%	32%	25%	52%	37%	65%	28%	57%
Partnerships	15	32	30	27	42	50	39	45
S Corporations	18	28	36	47	52	60	53	60
Corporations	22	27	36	51	54	68	54	68
Fewer than 5 employees	14	33	24	47	38	67	31	59
5 to 9 employees	21	24	32	44	48	57	45	56
10 to 49 employees	22	29	38	54	51	70	52	70
50 to 99 employees	27	24	42	41	60	59	60	53
100 or more employees	26	80	47	80	66	80	67	80
Mining, Manufacturing	28	24	44	51	60	62	59	63
Construction	16	31	29	62	45	81	39	76
Transportation, communication, Public Utilities	15	50	38	79	53	100	48	100
Wholesale Trade	17	26	32	50	47	69	45	71
Retail Trade	17	25	29	44	44	60	41	55
Insurance, Real Estate	18	--	36	100	46	100	44	100
Services	19	33	28	49	42	64	38	59
TOTAL	19	29	32	50	46	65	43	62

corporations because proprietorships normally do not prepare financial statements. We found the opposite result: corporations were more likely than other organization forms to have completed the worksheets. Among the other groups examined, larger firms and manufacturers were more likely than smaller firms and firms in other industries to have completed worksheets. However, there were no apparent differences in worksheet use by Census region or urban/rural location.

Firms were more willing to use records than to complete worksheets. About 32 percent of DMI respondents reported consulting records to answer questions about financial institution relationships, and 43-46 percent used records to answer the income statement and balance sheet questions. Corporations, larger firms, and manufacturers were more likely than other groups of firms to consult records.

In all groups, accounting records were the most commonly used records for questions about financial institution relationships. Use of accounting records increased with firm size, and nearly three-fifths of the records used by partnerships and corporations were accounting records. Nevertheless, large proportions of records used in all groups were bank or tax records. In contrast, tax records were the most commonly used records for the income statement and balance sheet, probably because the worksheet and questionnaire indicated on which line of income tax forms each item could be found. Proprietorships were more likely than other organization forms to use tax records for the income statement. However, that is not true for the balance sheet. Tax records are less useful for this purpose because proprietorship tax forms do not include a balance sheet, although tax records are necessary for some items (especially inventory and property) that appear on a balance sheet. For both the income statement and balance sheet, the use of tax records declined with firm size.

A few additional preliminary observations about responses and use of worksheets and records are worth mentioning. Most respondents had little difficulty in reporting about financial institution relationships. Dollar amounts were the most difficult questions in this section. Many estimated dollar amounts here but later consulted records to report income statement and balance sheet items. Small firms' failure to use worksheets or records is troublesome, but most of these firms appear to have simple finances. Major items appear to be reported, although dollar amounts are often estimates. Items such as prepayments, deposits, and accrued expenses and taxes payable are likely to be underreported. However, these items tend to be relatively small amounts.

6. DATA PROCESSING

With respect to data processing, RTI's role was to produce a cleaned, edited data file of survey observations. The Board will perform all additional logical editing and statistical imputation activities needed to produce a user data file. This chapter describes RTI's data processing activities.

6.1 Computer Assisted Telephone Interviewing

NSSBF was conducted using computer-assisted telephone interviewing (CATI). Rather than using a printed questionnaire, the CATI interviewer read questions as they were displayed on a computer viewing screen. After the interviewer recorded the respondent's answer, the next question consistent with that answer and prior answers appeared on the screen and the process was repeated. As the interview was conducted and the respondent's data keyed, the CATI system entered the data directly into a computer-readable file.

CATI gave greater control over the interview process and aided in reducing transcription errors. Because skip patterns were computer controlled rather than interviewer controlled, the incidence of missing or inconsistent data was reduced. Editing procedures were included in the CATI program so that the data were checked for out-of-range codes and other invalid responses as the data were entered. The CATI system required that invalid responses be corrected before the interview could proceed.

In addition to the range and valid response checks normally done with CATI, the NSSBF included cross-item checks designed to insure that known relationships were not violated. Relationships that were checked include:

- The year the business was founded should be before or in the same year as it was purchased/acquired.

- Across all partners, the ownership shares should add to 100 percent.

- The combined ownership share of stockholders owning 10 percent or more of the firm should be no less than ten times the number of such stockholders.

- The number of branch offices in the same area as the headquarters should be no more than the total number of branch offices.

- The amount owed on a credit line should be no more than the total line.

- The characteristic least important to the firm in conducting its financial business should be different from the most important characteristic.

- The institution from which the firm took business should be different from the institution to which they transferred the business.

- Gross profit should equal total sales (less returns and allowances) minus cost of goods or services sold.

- Interest expenses should be no more than total selling and administrative expenses.

- The book value of the firm's three largest other assets should be no more than the book value of all other assets.

- The total amount of mortgages, notes and bonds due within one year should be no more than the total amount owed.

- The amount of the firm's three largest other liabilities should be no more than the total amount owed for other liabilities.

The specific checks being performed are listed in the questionnaire after the affected items.

In addition to these fairly simple cross-item checks, an elaborate cross-item check was made to insure that the calculated total for assets was within $\pm$ 5% of the calculated total liabilities plus equity. If not, the checking algorithm determined whether the fault lay with assets and/or liabilities plus equity responses by comparing the calculated amounts to the totals reported by the business.[9] Data in the faulty section(s) were reviewed with the respondent and corrections made as indicated. The review process may or may not have corrected the discrepancy since a second consistency check was not implemented after the data were reviewed. From past surveys, we have found that one review is helpful as respondents can spot obvious discrepancies and correct them. If discrepancies remain after this review, it is unlikely that the respondent can clear up the problem.[10]

Other special algorithms were built into the CATI program for two primary purposes. First, space and burden limitations led us to restrict the detailed financial inventory in Section II to no more than four suppliers for each service. Second, the number of suppliers of financial services was quite large for some businesses. To limit the associated burden, detailed characteristics were obtained for six institutions and more limited location data for another six institutions.

Section II collected an inventory of the financial services used by the firm. For each financial service, a yes-no question was asked to determine if the firm used the service. If the answer was "yes", the CATI program had the interviewer record at which institutions (or sources) these services were obtained.[11] As needed, the interviewer could add

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9/ The exact check that was performed is specified in the questionnaire.

10/ The Board will use both sets of data in their production of a cleaned, imputation-revised data base.

11/ Financial services, particularly financing, may be obtained from individuals as well as organizations. For convenience, we use "institutions" as a general term to cover all of these suppliers of financial services.

institutions to the roster. Having noted all institutions where the particular service was obtained, the CATI program had the interviewer choose up to four institutions for collecting detailed information about the service. Usually the business had fewer than five institutions for each service and so all providers were discussed. When the business obtained a service from more than four institutions, the program had the interviewer record data for the three largest or most important institutions and then record data for "All Other Institutions."

The "other loan" portion of the inventory posed even more burden problems as it had a repeating section nested within each institution used for other loans. For each institution where the business had other loans, the interviewer determined how many loans the business had and then asked questions for up to four loans at each institution. A further limit of no more than ten loans discussed across all four institutions was also imposed.

As noted earlier, the questionnaire only allowed for detailed discussions of six suppliers of financial services and location data for another six. To decide which institutions to discuss, the CATI program listed the institutions in roster order within levels of this priority ordering established by the Board:

(1) the primary institution,

(2) institutions where multiple service categories were used (arrayed by the number of categories used where the categories were checking, savings, financing, and other services),

(3) institutions with checking only,

(4) the first institution (in roster order) with savings only,

(5) institutions with lines of credit only,

(6) institutions with financing only (arrayed by number of different types of financing used),

(7) the remaining institutions with savings only, and

(8) institutions with other services only.

Having ordered the institutions, detailed data were collected for the first six institutions and location data for the next six institutions in the ordered list. In a few instances, the business used more than 12 institutions; in which case, only the first 12 in the priority ordering were discussed.

6.2 Problem Resolution Reports

A routine component of RTI's CATI surveys is the Problem Resolution Report (Exhibit 2). These reports are a way of documenting problems and/or passing information along to the CATI programmer. For instance, an interviewer would complete such a report if the respondent gave an answer which CATI would not allow them to enter. Typically, the source of the problem is a keying error made by the interviewer or a misunderstanding of meaning of the associated question(s). In the early days of interviewing, the source of the problem is sometimes a flaw in the CATI program such as a contingency that the program cannot handle. After receiving the Problem Resolution Report, the CATI programmer corrects the CATI data base if needed and then comments what caused the problem and how it might be avoided in the future. Thus, the report serves multiple purposes: (1) it allows the correction of data that may be unintentionally missing or keyed in error, (2) it serves as a training tool for interviewers by identifying the problems they are having and providing solutions, and (3) it provides an early warning if changes are needed in the CATI program.

Exhibit 2

<table>
<tr><td>NSSBF

Problem Resolution Report</td><td>Cati No.:______ Question No.:________
Date:__________ Supervisor:__________
Resolved by:___________________________</td></tr>
<tr><td colspan="2">1. Brief Description of Problem:</td></tr>
<tr><td colspan="2">______________________________
____
____
____
____
____
______________________________</td></tr>
<tr><td colspan="2">2. Resolution By:_________________ Date:__________</td></tr>
<tr><td colspan="2">______________________________
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____
____
____
______________________________</td></tr>
<tr><td colspan="2">3. Notes:</td></tr>
<tr><td colspan="2">______________________________
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______________________________</td></tr>
</table>

An extraordinary number of Problem Resolution Reports were generated in NSSBF interviewing. The nature of the questionnaire together with the built-in checks and special algorithms led to a complex CATI program that some interviewers had difficulty mastering. These problems were evident during the first few weeks of interviewing. As the interviewers gained experience in administering the interview, two new problems emerged. Frequently, respondents changed their minds or remembered additional services/institutions long after the relevant section had been passed. In these cases, the interviewer asked the necessary questions using a hard copy questionnaire, recording what had happened and any new data on the Problem Resolution Report. Another common occurrence was for the respondent and/or the interviewing circumstances to raise rather technical issues. For instance, an automobile dealer might have a "floor loan" which they use to purchase the vehicles they sell. This situation might prompt the interviewer to ask, "How do you want us to handle this loan? Should I classify it as a line of credit, a motor vehicle loan or as an other loan?" As needed, we responded to the Problem Resolution Reports changing the data in the CATI data base if indicated and recording actions taken on the report and any instructions to the interviewing staff.

The cross-item checks and range check also resulted in some problems for the interviewer. For instance, it was common for the respondent to give answers for gross profit that were not equal to total sales (less returns and allowances) minus costs of goods and services sold. When this discrepancy could not be resolved, the interviewer would usually enter "DK" for "don't know" and proceed with the interview. After the interview was complete, the interviewer submitted a Problem Resolution Report citing the respondent's answers. The CATI programmer manually entered the discrepant data for resolution later by the Board.

Other checks that frequently resulted in Problem Resolution Reports were the range checks for balance sheet items. For items such as total assets and total liabilities plus equity, zero was not an allowable response in CATI. These responses did occur, however, usually for very small service businesses. In these situations, the interviewer entered $1 in order to proceed with the interview. We examined all such cases to determine whether the business was truly in business and hence eligible for the study.

At the conclusion of Section I, II and V and at the menu screen, the interviewer was given an opportunity to write comments about the interview into an open-ended comment file. These comments were intended to be technical in nature (e.g., "They are a real estate holding company. That's the reason for all the zeros in the income statement.") but often were observations about the interviewing situation (e.g., "Never in until late afternoon"). Some interviewers also used the comment fields to record changes needed in the CATI data base. Typically, these were after the interview was concluded when the respondent remembered an answer or realized that they had answered a question in error. At the conclusion of the survey, all comments were examined and changes made in the CATI data base as appropriate. A Problem Resolution Report was again generated for the case to reflect any changes made.

6.3 Completeness Checks

As noted in Chapter 3, all cases were checked to verify that sections labeled as "complete" were indeed complete and that sections that were labeled as "incomplete" were incomplete. Discrepant cases were examined and the source(s) of the discrepancy resolved. Usually, the problem was that the record had too few data to be considered complete. In this case, the response status variable was reset to indicate the incomplete section(s) and the case returned for reinterviewing. In a few instances, the interviewer labeled an interview as incomplete when only one or two questions remained to be asked. With all data essentially present, we set the remaining questions to "don't know" responses and changed the response status code to "complete" for the section.

The completeness checks resulted in several hundred discrepant records being examined. This examination occasionally identified interviewer errors other than those associated with the completeness check. An example of this type of error would be a "yes" response to the other assets lead-in question and then answers that clearly indicated that the firm had no other assets. In some cases the error made a completed interview appear incomplete. In other cases, the record might have missing data for a particular institution and/or type of financial service but an interviewer comment elsewhere might indicate the service was never obtained or that the institution was not used on the relevant date. These types of problems were resolved on a case by case basis with a Problem Resolution Sheet completed to record the actions taken.

6.4 Edits to Resolve Interviewer Errors

Our examination of these discrepant records also identified some basic errors being made by the interviewers. When such errors were identified, we searched all records for occurrence of the problem. As an example, we discovered that many interviewers were misinterpreting the section on most recent loans. Added after the pretest and hence never tested, the most recent loan section was a series of questions to be answered about the most recent loan the person had obtained from a financial institution, business or other organization. This section was not to have been completed for loans received from persons (the questions did not make sense then). If all of the businesses' loans were from persons, the interviewer was to record this fact so that CATI could skip the rest of the section.

We had two types of interviewer errors occurring for the Most Recent Loan section. First, for some businesses, the interviewer recorded data about a loan from a person. When all the business' loans were from persons, the error was not particularly serious; we simply noted that all loans had come from persons and blanked out the questions that had been asked in error. When one or more of the business' loans came from institutions, however, the interviewer error resulted in loss of data for the entire section. These cases had the lead-in question set to a special "Interviewer Error" consistency code and the remaining data items set to missing. A second source of error for this section was to have the interviewer record that all loans came from persons when the business had financing from an institution. Again this error resulted in completely missing data for the entire section. Here again, we set the lead-in question to "Interviewer Error" and left the remaining questions blank. Over both types of errors, we had 117 cases coded as interviewer errors.

Two other interviewer errors were detected as a result of these activities. First, we discovered that some business firms had been incorrectly labeled as "another source." Since these miscellaneous "another source" types of suppliers of financial services did not have detailed characteristics collected for them, this mistake resulted in missing data on the characteristics of the associated business firms. To identify these errors, we checked all suppliers classified as "another source" to verify if they had been coded in error. We corrected erroneous type of supplier data as encountered and recontacted the business to obtain the missing data if possible.

Second, in the balance sheet section, we had amounts where several yes-no questions were asked to determine if the firm had assets or liabilities of that type. In a number of cases, the respondents had an amount but did not know the specific type of asset or liability with which it was associated. In this situation, the interviewer usually keyed "DK" for all yes-no questions except the last and then keyed "Yes" so that CATI would let them record the amount. As a result of this problem, the individual yes-no questions may be unreliable when there are several associated with a particular amount. To solve this problem, we created yes-no recodes for the entire set of questions associated with such amounts.

6.5 Matching to Institutional Files

RTI also matched commercial banks, savings and loan associations, and savings banks to data bases maintained by the Federal Government on these types of institutions. The result of this match was the identification number and county FIPS code of the institutional record matched to the NSSBF-reported institution.

For matching purposes, the Board provided the most current institutional data base, which was for institutions in operation in 1986. With NSSBF data collected for 1987-88, this time frame difference can be expected to produce mismatches for new businesses and those whose names have changed. For instance, it is common for savings and loan associations to convert to savings banks.

Our first step in matching was to verify geographic location of the NSSBF-reported institutions, editing these fields to correct discrepant state codes and ZIP Codes. Very few changes were needed for state codes since CATI had included a cross-item check that made sure the ZIP Code was appropriate for the reported state (and vice versa). For some cases, the respondent did not know the last few digits of their ZIP Code and the interviewer put in question marks or dashes instead. For processing purposes, we set these missing digits to zero after verifying that no legitimate ZIP Codes used zeros in these positions.

In the process of examining these location data, we identified institutions in foreign countries, which were not eligible for the match. In addition, we identified cases with city and state missing, which could not be matched due to insufficient information.

Our next step was to examine the institution names as supplied by NSSBF businesses. For matching purposes, the names were modified to correct obvious misspellings and other differences from the government's data base rendition of the name. In some cases the respondent had refused to give the name of the institution. Such cases could not be matched by definition.

Only commercial banks, savings and loan associations and savings banks were to be matched. Type of institution was recorded by the NSSBF interviewer as reported by the respondent. As respondent errors and keying errors could result in misspecified institution types, we searched for occurrences of the terms "bank," "savings," "thrift" and "trust" in the institution names, playing out all cases with these words appearing whose type was not given as commercial bank, savings and loan association or savings bank. Errors in the type of institution variable were corrected prior to performing the computer match. In some cases,the entire set of data was missing, including the type of institution, and hence it was not known whether or not the institution was eligible for the match.

On a state by state basis, we matched the two data bases, using several consecutive matches of the data base. To be "eligible" for attempting matching, the institution had to be of the appropriate type and have name and location data given. The first pass required an exact match of the full institution name and of the Zip Code. Twenty-four percent of all eligible institutions were matched. The second pass required an exact match of the full institution name and the city and matched an additional eight percent of the eligible NSSBF-reported institutions. The next two passes were similar except we matched using the first 13 characters of the institution name instead of the full name. In these two passes, 17 and 6 percent of the institutions were matched, respectively. Our final step was a hand match of the remaining records. Thirty-one percent of the records were matched by hand with another four percent having institution matched but not location. Over all steps of the matching process, we matched 90 percent of the eligible records.

6.6 Final Editing and File Delivery

Editing software was developed to perform project-specific checks on the CATI data base prior to delivery. Using the CATI program as a guide, we verified the integrity of all skip patterns in the CATI data base.

Discrepant cases were played out and examined to determine the source of the discrepancy and to resolve the problem. Few in occurrence, these skip pattern errors tended to result from interviewers backing up to change responses keyed in error and the CATI software not erasing backed-up over data items when new responses caused these data items to be skipped.

In addition to these skip pattern checks, we examined the frequency and range of the study variables for validity of the responses. Erroneous responses were played out to determine the best way to resolve the discrepancy and then appropriate changes were made.

The final data files incorporate the questionnaire responses as well as the sampling design variables, analysis weights and the results of the match to the financial institution data bases. A machine-readable codebook was also delivered that provided a description for each variable and a range or frequency distribution as appropriate. The RTI data base will form the starting point for editing and imputation activities by the Board to produce a final NSSBF user data base.

7. CONCLUDING REMARKS

The National Survey of Small Business Finances was designed to close a large gap in knowledge of the financial behavior of small business firms. Our initial results suggests that the survey goes a long way towards accomplishing this objective.

It appears that reasonably good coverage of firms with employees was obtained using the DMI sampling frame. More comprehensive tax-based sample frames may have provided theoretically better coverage of the population of small businesses, but restrictions on their use would have made their actual coverage much worse than that obtained using the DMI file.

Firms were induced to cooperate in this voluntary survey which requested difficult and confidential financial information. However, substantially greater resources were required to obtain an interview that is normally required for a consumer survey. Only experienced and "natural" interviewers were able to achieve adequate yield rates. Even for these interviewers, a substantial amount of time was required to obtain an interview. The time required to complete an interview was dominated by the time spent to establish contact, to gain cooperation, and to resume contact following breakoffs. On average, the total time spent for an interview was more than three times the average administration time for the questionnaire.

Despite these difficulties, an acceptable overall response rate was obtained for the NSSBF, which is comparable to those obtained for consumer financial surveys. For completed interviews, item nonresponse does not appear to be a problem. Common knowledge questions had very low rates of missing data. Even for dollar amounts, missing data rates were low. However, the use of worksheets or records was lower than hoped and reported dollar amounts were frequently estimated. Future work by the Board will focus on data consistency, the extent of use of estimates, and the accuracy of reported data.

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APPENDIX A

NSSBF SCREENING FORM

OMB NO. 7100-0234

THE NATIONAL SURVEY OF SMALL BUSINESS FINANCES
SCREENING FORM

BATCH: ______ LAST RESULT: ______

A. CONTACT INFORMATION	ORIGINAL INFORMATION	CORRECTED INFORMATION
1. CASE ID NO.		1. ______
2. FIRM NAME		2. ______
3. ADDRESS		3. ______
4. CITY, STATE, ZIP..		4. ______
5. EXECUTIVE, TITLE .		5. ______
6. TELEPHONE NO.		6. ( ) ______ - ______ AC TELEPHONE NUMBER EXT.
		ORGANIZATION TYPE: 1-Prop. 2-Part. 3-Corp. 4-DK
		RESPONDENT NAME: ______

B. WHEN SAMPLE COMPANY IS CONTACTED, SAY: Hello, my name is ________. I'm calling from the Research Triangle Institute in North Carolina on behalf of the Federal Reserve Board in Washington, DC. May I speak to ([EXECUTIVE]/the owner or top executive of your firm)?

1. YES, THIS IS HE/SHE → CONTINUE SCREENING
2. YES, EXECUTIVE COMES TO PHONE → REPEAT INTRODUCTION WHEN EXECUTIVE COMES TO PHONE. CONTINUE SCREENING
3. NO, UNAVAILABLE → SCREEN PERSON WHO ANSWERED THE PHONE
4. (EXECUTIVE) NO LONGER WITH FIRM → ASK FOR CURRENT OWNER OR TOP EXECUTIVE AND FOLLOW DIRECTIONS IN 1, 2, OR 3

We would like to mail your company information about a research study the Federal Reserve Board is sponsoring. I'm calling to verify the information we have on our records.

1. Is your company's mailing address (FIRM NAME, ADDRESS, CITY, STATE, ZIP)?
   YES ... 1
   NO ... 2 → PROMPT FOR ADDRESS CHANGES AND RECORD CORRECTIONS ON LINES 2-4 IN "CORRECTED INFORMATION" SECTION

   a. We would like to address this information to (you/the owner or top executive). VERIFY NAME ON LINE 5 ABOVE.
      SAME AS LINE 5 1
      DIFFERENT FROM LINE 5 ... 2 → PROMPT FOR CORRECT NAME AND RECORD ON LINE 5 IN "CORRECTED INFORMATION" SECTION

   b. What is (your/[EXECUTIVE]'s]) title or position in the company?
      SAME AS LINE 5 1
      DIFFERENT FROM LINE 5 ... 2 → RECORD CORRECT TITLE ON LINE 5 IN THE "CORRECTED INFORMATION" SECTION

   c. Can (you/[EXECUTIVE]) best be reached at (TELEPHONE NO.)?
      YES ... 1
      NO ... 2 → PROMPT FOR TELEPHONE NUMBER AND RECORD ON LINE 6 IN THE "CORRECTED INFORMATION" SECTION

2. Is this the headquarters or main office of (FIRM NAME)?
YES ... 1
NO ... 2 → Thank you for your time. This is a survey for main offices only.

3. As of December 31, 1987, did (FIRM NAME) have 500 or fewer full-time employees?
YES (500 or fewer) ... 1 → (GO TO 4)
NO (more than 500) ... 2
DON'T KNOW .... 8 → (GO TO 4)

a. Including owners who worked full-time for the firm, what was the average number of full time employees in 1987?

NUMBER ________

b. Including owners who worked part-time for the firm, what was the average number of part time employees in 1987?

NUMBER ________

CALCULATE 1987 FULL-TIME EQUIVALENTS AS (Q.3a + (0.5 x Q.3b)) AND RECORD BELOW.
NUMBER: ________ → IF 500 OR MORE, SAY: Thank you for your time. This is a survey of small businesses only. Goodbye.

4. Is the firm a not-for-profit organization?
YES ... 1 → Thank you for your time. This is a survey of for-profit businesses.
NO ... 2

5. Is the firm owned by a local, State, or Federal government agency?
YES ... 1 → Thank you for your time. This is a survey of privately owned businesses.
NO ... 2

6. Does another company own more than 50% of (FIRM NAME)?
YES ... 1 → Thank you for your time. This is a survey of independently operated businesses.
NO ... 2

7. Is the firm considered to be a ...

Proprietorship ... 1
Partnership 2
Corporation 3
DON'T KNOW 8

CIRCLE RESPONSE HERE AND IN "CORRECTED INFORMATION" SECTION ON PAGE 1.

8. DO NOT ASK IF RESPONDENT IS (EXECUTIVE)

In case I need to recontact you about any of this information, would you give me your name?

ENTER RESPONDENT NAME IN "CORRECTED INFORMATION" SECTION ON FRONT PAGE.

Thank you very much for your help. (You/Please inform [EXECUTIVE] that (he/she)) should be receiving an important package from the Federal Reserve Board within the next few weeks. Please retain the package. Our interviewers will be calling you within a week after receiving the package. Goodbye.

C. RECORD OF CALLS

Call Number	Date	Time	Check (√) am	pm	TO	RESULT	PHONE NUMBER CALLED
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

CONTACT RESULTS

TEMPORARY CODES

Code	Result	Code	Result
01	Ring no answer	08	Answering service/machine
02	Busy	09	Call back appointment
03	No result from dial	10	Directory Assistance call
04	Wrong number	11	Chamber of Commerce call
05	Double wrong connection	12	Better Business Bureau call
06	Non-working number	13	Other Tracing call
07	Computer modem		

FINAL CODES

Code	Result	Code	Result
20	Complete (eligible business)	26	Language barrier
21	Complete (ineligible business)	27	Listed Number, UTC
24	Confirmed, no longer in business	28	No phone listing, UTC
25	Refusal	29	Other (Specify above)
		30	Partial Screening

COMMENTS: ______

APPENDIX B

NSSBF LEAD LETTER MATERIALS

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

ALAN GREENSPAN
CHAIRMAN

December 19, 1988

The Federal Reserve Board is concerned with how recent changes in financial markets are affecting the availability of credit and other financial services to small businesses. These changes, a result of both innovation by financial institutions and a relaxation of regulatory restrictions by government, have dramatically altered the range of financial options available to small businesses.

A survey of business people like yourself is the only way to obtain the information that we need for understanding the financial needs of small businesses. For this reason, the Board, together with the Small Business Administration, is sponsoring the National Survey of Small Business Finances, which is described in the accompanying materials from Research Triangle Institute of North Carolina. The information collected in the survey will help to evaluate public policy in areas such as the cost and availability of financing to small businesses, bank deregulation, and bank holding company acquisitions.

I am writing to urge you to participate in this survey. Your firm and others were statistically selected to represent a cross section of small businesses in the United States. Participation in the survey is, of course, voluntary. However, your cooperation is vital for the survey to reflect the views and needs of small businesses. Any information you provide will be held in strictest confidence.

As stated in the attached letter, a representative of the Research Triangle Institute will be contacting you within the next few days about the survey. I would like to thank you in advance for your cooperation.

Sincerely,

Alan Greenspan

Attachment

RESEARCH TRIANGLE INSTITUTE

George R. Herbert
President

October 10, 1988

Dear Sir or Madam:

Research Triangle Institute (RTI) is pleased to be conducting the National Survey of Small Business Finances (NSSBF) for the Federal Reserve Board and the Small Business Administration. The purpose of the survey is to help these agencies understand and evaluate public policies affecting small business finances. An RTI telephone interviewer will call you in the next few days to conduct the interview.

As Federal Reserve Board Chairman Alan Greenspan stated in his letter, the participation of each small business is critical to the success of the survey. As the operator of a business you understand the need for complete and accurate information when making a business decision. The Board will use the information collected in this survey to assist decision making and to evaluate policies that affect small businesses like yours. Without your participation, the Board's decisions will have to be made in the absence of complete information about firms like yours.

Enclosed are worksheets to assist you in locating and organizing business records needed to answer questions asked in the interview. To increase the accuracy of the survey data, it is important that you complete the worksheets prior to the interview. In addition, completing these worksheets will greatly reduce the interview time.

To answer questions commonly asked, we have enclosed a brochure entitled "Questions and Answers About the NSSBF." If you have additional questions about the survey, please call Ms. Susan Henderson, toll-free, Monday through Friday, from 9:00 am to 5:00 pm EDT at (800) 334-8571. If you are in North Carolina, call collect at (919) 541-6000.

At the end of the study, participating businesses will receive a summary report prepared by the Federal Reserve Board. As described in the attached brochure, your responses will be kept confidential and your participation is voluntary.

The survey is of vital importance to all small businesses. I join Chairman Greenspan in expressing advance appreciation for your cooperation.

Sincerely,

George R. Herbert

GRH:pb

Enclosures

Post Office Box 12194 Research Triangle Park, North Carolina 27709 Telephone 919 541-6436

National Survey of
Small Business Finances

Questions and Answers

Sponsored by Board of Governors of the Federal Reserve System and the Small Business Administration

1 Why is this survey being done?

There has been little study of how recent changes in financial markets and the regulation of commercial banks and other financial institutions have affected the cost and availability of financial services used by small businesses. In particular, the government's evaluation of policies designed to ensure adequate credit and other services for small businesses depends on answers to questions such as these:

1. What types of financial services do small businesses use and where do they get these services?
2. What sources do small businesses use to meet their financing needs?
3. Do small businesses purchase their financial services from a single source or do they use multiple sources?
4. How far away from the firm are the financial institutions that small businesses use?
5. What types of financial institutions solicit firms in an attempt to get their business?
6. What types of institutions do small businesses consider when looking for financial services?

The National Survey of Small Business Finances is being conducted to answer these questions.

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8 Am I required by law to participate?

No. Your participation is voluntary and you may refuse to answer any question to which you object. However, the participation of each selected business is vital to the success of the survey.

9 What will I get out of this?

The information you provide will help the Federal Reserve Board and the Small Business Administration to understand the needs of small businesses like yours and to evaluate public policy affecting the cost and availability of financial services to small businesses.

All participating businesses will receive a report prepared by the Federal Reserve Board summarizing the basic findings of the survey.

For further information, please contact:

Ms. Susan Henderson
Research Triangle Institute
Post Office Box 12194
Research Triangle Park, NC 27709-2194
(800) 334-8571
In North Carolina, call collect
(919) 541-6000

OMB No 7100-0234
Exp. 12/31/88

National Survey of Small Business Finances

Worksheets

Sponsored by Board of Governors of the Federal Reserve System and the Small Business Administration

INSTRUCTIONS

Completing these worksheets will reduce the time needed for the interview and provide us with the accurate data we need. These worksheets will be used during the interview to answer questions. Records that will be useful in completing the worksheets are:

1. bank statements
2. income tax returns
3. balance sheets
4. income statements.

Choosing the right time period for answering these questions is crucial. The following rules will allow you to choose the appropriate time period:

- Firms that filed 1987 taxes under one of the current owners should use their 1987 tax year in answering the questions unless financial records are available for a more recent fiscal year. Use the beginning date and ending date of the 1987 tax year or 1988 fiscal year as the BEGINNING DATE and END DATE for reporting.
- Firms that did not file 1987 taxes under one of the current owners but who began operations prior to 1988 should use June 30, 1988 as the END DATE for reporting and the date they began operations as the BEGINNING DATE.
- Firms that began operations in 1988 should use the end of the previous month as the END DATE for reporting and the date they began operations as the BEGINNING DATE.

Enter the BEGINNING DATE and END DATE for the time period here:

BEGINNING DATE: Month: ______________ Day: _______ Year: _______

END DATE: Month: ______________ Day: _______ Year: _______

Please be sure that all answers reflect this time period and please provide <u>exact</u> amounts in dollars whenever possible.

Note that some items request that you sum over <u>all</u> accounts at the <u>same</u> institution. Also note that some items may not be applicable for the firm. If not applicable, just enter "0" or check the "NONE" or "NOT USED" line and go to the next item.

Firms that use more than four institutions for a particular financial service should report for the three where they have the largest dollar amounts and then aggregate across all other institutions.

Firms that have more than one office, plant or store and firms that own subsidiary companies should provide data for the entire enterprise.

At the end of the interview, you will be asked to mail the completed worksheets to RTI in the enclosed postage-paid envelope. We will use the documents for quality control purposes. All information will be kept confidential.

Thank you for your cooperation.

A. Use of Financial Institutions and Other Sources of Financing*

(As of END DATE)

Item No. and Description	Institution or Source of Financing: First	Second	Third	Fourth or All Others
1. Checking Accounts:				
If none, check here ____ and go to 2.				
Name of institution	________	________	________	________
Balance of checking account(s)	$________	$________	$________	$________
2. Savings and Investments:				
If none, check here ____ and go to 3.				
Name of institution	________	________	________	________
Balance of savings, money market deposit and share accounts, money market mutual funds, certificates of deposit (CDs) and other time deposits (except trusts, retirement accounts, and pension funds)	$________	$________	$________	$________
3. Capital Leases:**				
If none, check here ____ and go to 4.				
Name of institution or source	________	________	________	________
Number of capital leases	________	________	________	________
Total amount of remaining obligations	$________	$________	$________	$________
4. Lines of Credit/Revolving Credit Agreements:				
If none, check here ____ and go to 5.				
Name of institution	________	________	________	________
Number of credit lines/ revolving agreements	________	________	________	________
Total amount of credit line(s)/ revolving credit	$________	$________	$________	$________
Total amount owed on credit line(s)/ revolving credit	$________	$________	$________	$________

*__Financial Institutions__ include commercial banks, savings and loan associations, savings banks, credit unions, finance companies, insurance companies, brokerage and mutual fund companies, leasing companies, and mortgage banks. __Other sources of financing__ include owners, family and other individuals; venture capital and other business firms; the Small Business Administration (SBA) and other government agencies; and any other source.

**__Capital Leases__ satisfy one of the following conditions:
1. the lease transfers ownership of the asset at the end of the lease term,
2. the lease contains an option for a bargain purchase of the asset,
3. the lease term extends over most of the economic life of the asset, or
4. the lease requires rental payments that approximate the fair market value of the leased asset.

A. Use of Financial Institutions and Other Sources of Financing (continued)

(As of END DATE)

Item No. and Description	Institution or Source of Financing: First	Second	Third	Fourth or All Others
5. Mortgages on Business Real Estate:				
If none, check here ____ and go to 6.				
Name of institution or source	________	________	________	________
Number of mortgages	________	________	________	________
Amount of principal owed on mortgage(s)	$ ________	$ ________	$ ________	$ ________
6. Automotive and Other Vehicle Loans:				
If none, check here ____ and go to 7.				
Name of institution or source	________	________	________	________
Number of motor vehicle loans	________	________	________	________
Amount of principal owed on motor vehicle loan(s)	$ ________	$ ________	$ ________	$ ________
7. Loans Secured by Equipment and Installment Purchases of Equipment:				
If none, check here ____ and go to 8.				
Name of institution or source	________	________	________	________
Number of equipment loans	________	________	________	________
Amount of principal owed on equipment loan(s)	$ ________	$ ________	$ ________	$ ________
8. Loans from Partners/Stockholders:*		ALL LOANS FROM PARTNERS/ STOCKHOLDERS ARE TO BE COMBINED AND ENTERED IN THE FIRST COLUMN.		
If none, check here ____ and go to 9.				
Number of loans from partners/ stockholders	________			
Amount of principal owed on loans from partners/stockholders	$ ________			

*Item 8 is to be completed by partnerships, S corporations, and corporations only. Sole proprietorships should check "NONE" and record any personal borrowing for business purposes in Item 9.

A. Use of Financial Institutions and Other Sources of Financing (continued)

(As of END DATE)

Item No. and Description	Institution or Source of Financing: First	Second	Third	Fourth or All Others
9. Other Loans: *				
If none, check here ____ and go to 10.				
Name of institution or source	________	________	________	________
Number of other loans	________	________	________	________
Largest Loan from Institution/Source:				
Original term of largest loan	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______
Amount owed on largest loan	$ ________	$ ________	$ ________	$ ________
Second Largest Loan from Institution/Source:				
Original term of second largest loan	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______
Amount owed on second largest loan	$ ________	$ ________	$ ________	$ ________
Third Largest Loan from Institution/Source:				
Original term of third largest loan	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______
Amount owed on third largest loan	$ ________	$ ________	$ ________	$ ________
Fourth Largest Loan from Institution/Source:				
Original term of fourth largest loan	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______	Yrs: ______ Mos: ______
Amount owed on fourth largest loan	$ ________	$ ________	$ ________	$ ________

*For example, loans from family, other individuals, and other business firms, short-term loans, working capital loans, unsecured term loans, demand loans, and so on. Sole proprietorships should also include any personal borrowing for business purposes.

A. Use of Financial Institutions and Other Sources of Financing (continued)

(As of END DATE)

10. Other Services:

If the firm used the following services at an institution, enter the name or names of the institutions.

a. **Supply of paper money and coins for use in operations.** NOT USED: ☐

Name(s) of Institutions: ____________________

b. **Cash management services such as sweep and zero balance accounts.** NOT USED: ☐

Name(s) of Institutions: ____________________

c. **Processing of credit card receipts.** NOT USED: ☐

Name(s) of Institutions: ____________________

d. **Night depository.** NOT USED: ☐

Name(s) of Institutions: ____________________

e. **Brokerage services.** NOT USED: ☐

Name(s) of Institutions: ____________________

f. **Letters of credit or banker's acceptances.** NOT USED: ☐

Name(s) of Institutions: ____________________

g. **Other services such as pension funds, business trust services, lock boxes, safekeeping for securities, factoring, sales financing, wire transfers, etc. Do not include insurance.** NOT USED: ☐

Name(s) of Institutions: ____________________

A. Use of Financial Institutions and Other Sources of Financing (continued)

(As of END DATE)

11. FINANCIAL INSTITUTION INFORMATION:

For each institution you listed, please provide the following information.

Full Name of Institution	ZIP Code of office used most often for noncredit services (if any)	ZIP Code of office where applications made most often for credit or financing (if any)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

B. Income and Expenses

Items 1-5 on the opposite page may be obtained from 1987 income tax returns, as follows:

Item	Type of Business	Form	Schedule	Line Number(s)
1	Proprietorship	1040	Schedule C	Line 1c
	Partnership	1065	— —	Line 1c
	S Corporation	1120S	— —	Line 1c
	Corporation	1120	— —	Line 1c
		1120A	— —	Line 1c
2	Proprietorship	1040	[redacted]edule C	Line 2
	Partnership	1065	[redacted]	Line 2
	S Corporation	1120S	[redacted]	Line 2
	Corporation	1120	[redacted]	Line 2
		1120A	[redacted]	Line 2
3	Proprietorship	1040	[redacted]edule C	Line 3
	Partnership	1065	[redacted]	Line 3
	S Corporation	1120S	[redacted]	Line 3
	Corporation	1120	[redacted]	Line 3
		1120A	[redacted]	Line 3
4	Proprietorship	1040	Sc[redacted]ule C	Line 30
	Partnership	1065	[redacted]	Line 20
	S Corporation	1120S	[redacted]	Line 20
	Corporation	1120	[redacted]	Line 27
		1120A	[redacted]	Line 23
5	Proprietorship	1040	[redacted]hedule C	Lines 17a + 17b
	Partnership	1065	— —	Line 12
	S Corporation	1120S	— —	Line 13
	Corporation	1120	— —	Line 18
		1120A	— —	Line 18

Item 6 on the opposite page may be obtained from 1986 income tax returns, as follows:

Item	Type of Business	Form	Schedule	Line Number(s)
6	Proprietorship	1040	Schedule C	Line 1c
	Partnership	1065	— —	Line 1c
	S Corporation	1120S	— —	Line 1c
	Corporation	1120	— —	Line 1c
		1120A	— —	Line 1c

B. Income and Expenses

(from BEGINNING DATE to END DATE)

Item No. and Description	Amount
1. **Total sales net of amounts for returned merchandise and allowances for bad debts.** [Gross receipts or sales less returns of merchandise and allowances for bad debts. Also called "net sales."]	$ ______
2. **Costs of goods or services sold.** [The cost of producing or purchasing the product sold to customers. Also called "cost of sales."]	$ ______
3. **Firm's gross profit.** (Item 1 – Item 2) [Net sales minus the cost of goods or services sold.]	$ ______
4. **Firm's total selling and administrative expenses, interest expense, and other deductions.** [These are the costs that are subtracted from gross profit and other income to determine the firm's net profit/loss (ordinary income from business activities).]	$ ______
5. **Total dollar amount of interest expense.** [Interest paid on loans, mortgages, notes and bonds. Interest expense is one of the expenses recorded in Item 4.]	$ ______

(For Year Prior to **BEGINNING DATE**)

6. **For previous year, total sales net of amounts for returned merchandise and allowances for bad debts.**	$ ______

C. Balance Sheet — Assets

Items 1-8 on the opposite page may be obtained from 1987 income tax returns, as follows:

Item	Type of Business	Form	Schedule	Line Number(s)
1	Partnership S Corporation Corporation	1065 1120S 1120 1120A	Schedule L Schedule L Schedule L Part II	Line 1(d) Line 1(d) Line 1(d) Line 1(b)
2	Partnership S Corporation Corporation	1065 1120S 1120 1120A	Schedule L Schedule L Schedule L Part II	Line 2a(d) Line 2a(d) Line 2a(d) Lines 2(b) − 2a(b)
3	Proprietorship Partnership S Corporation Corporation	1040 1065 1120S 1120 1120A	Schedule C Schedule L Schedule L Schedule L Part II	Part III Line 7 Line 3(d) Line 3(d) Line 3(d) Line 3(b)
4	Partnership S Corporation Corporation	1065 1120S 1120 1120A	Schedule L Schedule L Schedule L Part II	Lines 4(d) + 5(d) Lines 4(d) + 5(d) Lines 4(d) + 5(d) Lines 4(b) + 5(b)
5	Partnership S Corporation Corporation	1065 1120S 1120 1120A	Schedule L Schedule L Schedule L Part II	Lines 6(d) + 7(d) Lines 6(d) + 7(d) + 8(d) Lines 6(d) + 7(d) + 8(d) Lines 6(b) + 7(b)
6	Partnership S Corporation Corporation	1065 1120S 1120 1120A	Schedule L Schedule L Schedule L Part II	Lines 8a(d) + 9a(d) + 10(d) + 11a(d) Lines 9a(d) + 10a(d) + 11(d) + 12a(d) Lines 9a(d) + 10a(d) + 11(d) + 12a(d) Lines 8(b) − 8a(b) + 9(b)
7	Partnership S Corporation Corporation	1065 1120S 1120 1120A	Schedule L Schedule L Schedule L Part II	Line 12(d) Line 13(d) Line 13(d) Line 10(b)
8	Partnership S Corporation Corporation	1065 1120S 1120 1120A	Schedule L Schedule L Schedule L Part II	Line 13(d) Line 14(d) Line 14(d) Line 11(b)

C. Balance Sheet — Assets

(As of END DATE)

Item No. and Description	Amount
1. **Cash holdings.** [Total cash on hand and in checking, savings, money market deposit accounts, money market mutual funds, certificates of deposit (CDs), and other time deposits.]	$ ______
2. **Trade notes and accounts receivable less allowance for bad debts.** [Money owed to the firm by customers who bought goods or services on account.]	$ ______
3. **Value of firm's inventories.** [Merchandise held for sale or materials for production such as raw materials, work in progress, or finished goods.]	$ ______
4. **Amount of firm's other current assets.** [Consists of Federal, State or local government bonds; corporate and other bonds; stocks held for short-term investment (do not include stocks held for ownership control or long-term investment); prepaid expenses such as advance payments for insurance, rent, taxes, advertising and operating supplies; and any other current assets which may be converted to cash or sold or used up within a year through normal operations of the business.]	$ ______
5. **Total value of firm's investments.** [Loans made to stockholders, money owed to the firm for mortgages or real estate loans, investments in real estate not used in business operations, and stocks held for ownership control or long-term investment.]	$ ______
6. **Book value of land and depreciable, depletable, and intangible assets net of accumulated depreciation, depletion, and amortization.** [Acquisition cost of land used by the firm for business purposes; depreciable assets such as buildings and equipment; depletable assets such as mines, timberlands, and oil wells; and intangible assets such as patents, trademarks, copyrights, franchises, and good will, less accumulated depreciation, depletion, and amortization.]	$ ______
7. **Book value of any other assets owned by the firm.** Type and book value of three largest other assets: a. ______________ $ ______ b. ______________ $ ______ c. ______________ $ ______	$ ______
8. **TOTAL ASSETS.** (Should equal sum of last column)	$ ______

C. Balance Sheet — Liabilities

Items 1-5 on the opposite page may be obtained from 1987 income tax returns, as follows:

Item	Type of Business	Form	Schedule	Line Number(s)
1a	Partnership	1065	Schedule L	Lines 15(d) + 17(d) + 18(d)
	S Corporation	1120S	Schedule L	Lines 16(d) + 18(d) + 19(d)
	Corporation	1120	Schedule L	Lines 16(d) + 18(d) + 19(d)
		1120A	Part II	Lines 14(b) + 15(b) + loans, mortgages, notes, and bonds listed on attached schedule for Line 13(b)
1b	Partnership	1065	Schedule L	Line 15(d)
	S Corporation	1120S	Schedule L	Line 16(d)
	Corporation	1120	Schedule L	Line 16(d)
		1120A	Part II	Loans, mortgages, notes, and bonds listed on attached schedule for Line 13(b)
2	Partnership	1065	Schedule L	Line 14(d)
	S Corporation	1120S	Schedule L	Line 15(d)
	Corporation	1120	Schedule L	Line 15(d)
		1120A	Part II	Line 12(b)
3	Partnership	1065	Schedule L	Line 16(d)
	S Corporation	1120S	Schedule L	Line 17(d)
	Corporation	1120	Schedule L	Line 17(d)
		1120A	Part II	From attached schedule for Line 13(b) excluding loans, mortgages, notes, and bonds
4	Partnership	1065	Schedule L	Line 19(d)
	S Corporation	1120S	Schedule L	Line 20(d)
	Corporation	1120	Schedule L	Line 20(d)
		1120A	Part II	Line 16(b)
5	Partnership	1065	Schedule L	Sum of Lines 14(d) to 19(d)
	S Corporation	1120S	Schedule L	Sum of Lines 15(d) to 20(d)
	Corporation	1120	Schedule L	Sum of Lines 15(d) to 20(d)
		1120A	Part II	Sum of Lines 12(b) to 16(b)

C. Balance Sheet — Liabilities

(As of END DATE)

Item No. and Description	Amount
1a. Total amount owed on all loans, mortgages, notes, and bonds. [Combined short and long term loans, mortgages, notes and bonds; loans from stockholders (CORPORATIONS); and nonrecourse loans (PARTNERSHIPS).]	$ ____________
1b. Total amount of Item 1a due within the next year ...... $ ____________	
2. Total amount of accounts payable. [Money owed to suppliers for purchases the firm made on account.]	$ ____________
3. Total amount of other current liabilities. [Accrued expenses, taxes payable, prepayments, deposits and advances and other current liabilities (not included in item 1b above) which are obligations that are due within one year.]	$ ____________
4. Other debts or liabilities. [All other debts and liabilities, including obligations under capital leases.] Type and amount of three largest **other** liabilities: a. ______________________ $ ____________ b. ______________________ $ ____________ c. ______________________ $ ____________	$ ____________
5. **TOTAL LIABILITIES.** (Should equal sum of last column)	$ ____________

C. Balance Sheet — Equity

Items 2-6 on the opposite page may be obtained from 1987 income tax returns, as follows:

Item	Type of Business	Form	Schedule	Line Number(s)
2	Partnership	1065	Schedule L	Line 20(d)
3a	Corporation	1120 1120A	Schedule L Part II	Line 21a(c) Line 17(b) Aggregated with common stock
3b	S Corporation Corporation	1120S 1120 1120A	Schedule L Schedule L Part II	Line 21(d) Line 21b(c) Line 17(b) Aggregated with preferred stock
3c	S Corporation Corporation	1120S 1120 1120A	Schedule L Schedule L Part II	Line 22(d) Line 22(d) Line 18(b)
3d	S Corporation Corporation	1120S 1120 1120A	Schedule L Schedule L Part II	Line 27(d) Lines 23(d) + 24(d) Line 19(b)
3e	S Corporation Corporation	1120S 1120 1120A	Schedule L Schedule L Part II	Line 28(d) Line 25(d) Line 20(b)
6	Partnership S Corporation Corporation	1065 1120S 1120 1120A	Schedule L Schedule L Schedule L Part II	Line 21 Line 29(d) Line 26(d) Line 21(b)

C. Balance Sheet — Equity

(As of END DATE)

Item No. and Description		**Amount**
Equity in firm:		
1. **PROPRIETORSHIP:** [Total assets minus total liabilities]	$ ________	
2. **PARTNERSHIP:** [Total of all partners' equity]	$ ________	
3. **CORPORATION:**		
a. Par value of preferred stock	$ ________	
b. Par or stated value of common or capital stock	$ ________	
c. Paid-in capital or capital surplus	$ ________	
d. Retained earnings	$ ________	
e. Less Treasury stock	$ (________)	
f. Total Equity (3a + 3b + 3c + 3d − 3e)	$ ________	
4. **TOTAL EQUITY IN FIRM.** (1 or 2 or 3f)		$ ________
5. **TOTAL LIABILITIES OF FIRM.** (Item 5 from page 8)		$ ________
6. **TOTAL LIABILITIES PLUS TOTAL EQUITY.** (Item 4 + Item 5) (Should equal total assets)		$ ________

APPENDIX C

1987 INCOME TAX RETURNS

Form 1120 U.S. Corporation Income Tax Return 1987

Department of the Treasury
Internal Revenue Service

For calendar 1987 or tax year beginning ...., 1987, ending ...., 19 ....

► For Paperwork Reduction Act Notice, see page 1 of the instructions.

OMB No. 1545-0123

Check if a—
A Consolidated return ☐
B Personal Holding Co. ☐
C Business Code No. (See instructions)

Use IRS label. Otherwise please print or type.
Name
Number and street
City or town, state, and ZIP code

D Employer identification number
E Date incorporated
F Total assets (See Specific Instructions) Dollars Cents $

G Check applicable boxes: (1) ☐ Initial return (2) ☐ Final return (3) ☐ Change in address

Income

1a	Gross receipts or sales .... b Less returns and allowances .... Balance ►	1c
2	Cost of goods sold and/or operations (Schedule A)	2
3	Gross profit (line 1c less line 2)	3
4	Dividends (Schedule C)	4
5	Interest	5
6	Gross rents	6
7	Gross royalties	7
8	Capital gain net income (attach separate Schedule D)	8
9	Net gain or (loss) from Form 4797, line 18, Part II (attach Form 4797)	9
10	Other income (see instructions—attach schedule)	10
11	TOTAL income—Add lines 3 through 10 and enter here ►	11

Deductions (See instructions for limitations on deductions)

12	Compensation of officers (Schedule E)		12
13a	Salaries and wages .... b Less jobs credit .... Balance ►		13c
14	Repairs		14
15	Bad debts (see instructions)		15
16	Rents		16
17	Taxes		17
18	Interest		18
19	Contributions (see instructions for 10% limitation)		19
20	Depreciation (attach Form 4562)	20	
21	Less depreciation claimed in Schedule A and elsewhere on return	21a	21b
22	Depletion		22
23	Advertising		23
24	Pension, profit-sharing, etc., plans		24
25	Employee benefit programs		25
26	Other deductions (attach schedule)		26
27	TOTAL deductions—Add lines 12 through 26 and enter here ►		27
28	Taxable income before net operating loss deduction and special deductions (line 11 less line 27)		28
29	Less: a Net operating loss deduction (see instructions)	29a	
	b Special deductions (Schedule C)	29b	29c

Tax and Payments

30	Taxable income (line 28 less line 29c)		30
31	TOTAL TAX (Schedule J)		31
32	Payments: a 1986 overpayment credited to 1987		
b	1987 estimated tax payments		
c	Less 1987 refund applied for on Form 4466	( )	
d	Tax deposited with Form 7004		
e	Credit from regulated investment companies (attach Form 2439)		
f	Credit for Federal tax on gasoline and special fuels (attach Form 4136)		32
33	Enter any PENALTY for underpayment of estimated tax—check ► ☐ if Form 2220 is attached		33
34	TAX DUE—If the total of lines 31 and 33 is larger than line 32, enter AMOUNT OWED		34
35	OVERPAYMENT—If line 32 is larger than the total of lines 31 and 33, enter AMOUNT OVERPAID		35
36	Enter amount of line 35 you want: Credited to 1988 estimated tax ►	Refunded ►	36

Please Sign Here

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.

► Signature of officer | Date | ► Title

Paid Preparer's Use Only

Preparer's signature ► | Date | Check if self-employed ☐ | Preparer's social security number

Firm's name (or yours, if self-employed) and address ► | E.I. No. ► | ZIP code ►

H732

Schedule A **Cost of Goods Sold and/or Operations** (See instructions for line 2, page 1.)

1 Inventory at beginning of year	1	
2 Purchases	2	
3 Cost of labor	3	
4a Additional section 263A costs (see instructions)	4a	
b Other costs (attach schedule)	4b	
5 Total—Add lines 1 through 4b	5	
6 Inventory at end of year	6	
7 Cost of goods sold and/or operations—Line 5 less line 6. Enter here and on line 2, page 1	7	

8a Check all methods used for valuing closing inventory:
(i) ☐ Cost (ii) ☐ Lower of cost or market as described in Regulations section 1.471-4 (see instructions)
(iii) ☐ Writedown of "subnormal" goods as described in Regulations section 1.471-2(c) (see instructions)
(iv) ☐ Other (Specify method used and attach explanation.) ▶
b Check if the LIFO inventory method was adopted this tax year for any goods (if checked, attach Form 970) ☐
c If the LIFO inventory method was used for this tax year, enter percentage (or amounts) of closing inventory computed under LIFO 8c
d Do the rules of section 263A (with respect to property produced or acquired for resale) apply to the corporation? ☐ Yes ☐ No
e Was there any change (other than for section 263A purposes) in determining quantities, cost, or valuations between opening and closing inventory? If "Yes," attach explanation. ☐ Yes ☐ No

Schedule C **Dividends and Special Deductions** (See Schedule C instructions.)

	(a) Dividends received	(b) %	(c) Special deductions: multiply (a) × (b)
1 Domestic corporations subject to section 243(a) deduction (other than debt-financed stock)		see instructions	
2 Debt-financed stock of domestic and foreign corporations (section 246A)		see instructions	
3 Certain preferred stock of public utilities		see instructions	
4 Foreign corporations and certain FSCs subject to section 245 deduction		see instructions	
5 Wholly owned foreign subsidiaries and FSCs subject to 100% deduction (sections 245(b) and (c))		100	
6 Total—Add lines 1 through 5. See instructions for limitation			
7 Affiliated groups subject to the 100% deduction (section 243(a)(3))		100	
8 Other dividends from foreign corporations not included in lines 4 and 5			
9 Income from controlled foreign corporations under subpart F (attach Forms 5471)			
10 Foreign dividend gross-up (section 78)			
11 IC-DISC or former DISC dividends not included in lines 1 and/or 2 (section 246(d))			
12 Other dividends			
13 Deduction for dividends paid on certain preferred stock of public utilities (see instructions)			
14 Total dividends—Add lines 1 through 12. Enter here and on line 4, page 1. ▶			
15 Total deductions—Add lines 6, 7, and 13. Enter here and on line 29b, page 1 ▶			

Schedule E **Compensation of Officers** (See instructions for line 12, page 1.)
Complete Schedule E only if total receipts (line 1a, plus lines 4 through 10, of page 1, Form 1120) are $150,000 or more

(a) Name of officer	(b) Social security number	(c) Percent of time devoted to business	Percent of corporation stock owned (d) Common	(e) Preferred	(f) Amount of compensation
		%	%	%	
		%	%	%	
		%	%	%	
		%	%	%	
		%	%	%	
		%	%	%	
		%	%	%	
Total compensation of officers—Enter here and on line 12, page 1					

Schedule J Tax Computation (See instructions.)

1 Check if you are a member of a controlled group (see sections 1561 and 1563) ▶ ☐

2 If line 1 is checked, see instructions. If your tax year includes June 30, 1987, complete both a and b below. Otherwise, complete only b.

a (i) $ .... (ii) $ .... (iii) $ .... (iv) $ ....

b (i) $ .... (ii) $ ....

3 Income tax (see instructions to figure the tax; enter this tax or alternative tax from Schedule D, whichever is less). Check if from Schedule D ▶ ☐ | 3

4a Foreign tax credit (attach Form 1118) | 4a

b Possessions tax credit (attach Form 5735) | b

c Orphan drug credit (attach Form 6765) | c

d Credit for fuel produced from a nonconventional source (see instructions) | d

e General business credit. Enter here and check which forms are attached ☐ Form 3800 ☐ Form 3468 ☐ Form 5884 ☐ Form 6478 ☐ Form 6765 ☐ Form 8586 | e

5 Total—Add lines 4a through 4e | 5

6 Line 3 less line 5 | 6

7 Personal holding company tax (attach Schedule PH (Form 1120)) | 7

8 Tax from recomputing prior-year investment credit (attach Form 4255) | 8

9a Alternative minimum tax (see instructions—attach Form 4626) | 9a

b Environmental tax (see instructions—attach Form 4626) | 9b

10 Total tax—Add lines 6 through 9b. Enter here and on line 31, page 1 | 10

Additional Information (See instruction F.)

Yes | No

H Did the corporation claim a deduction for expenses connected with:

(1) An entertainment facility (boat, resort, ranch, etc.)?

(2) Living accommodations (except employees on business)?

(3) Employees attending conventions or meetings outside the North American area? (See section 274(h).)

(4) Employees' families at conventions or meetings?

If "Yes," were any of these conventions or meetings outside the North American area? (See section 274(h).)

(5) Employee or family vacations not reported on Form W-2?

I (1) Did the corporation at the end of the tax year own, directly or indirectly, 50% or more of the voting stock of a domestic corporation? (For rules of attribution, see section 267(c).)

If "Yes," attach a schedule showing: (a) name, address, and identifying number; (b) percentage owned; (c) taxable income or (loss) before NOL and special deductions of such corporation for the tax year ending with or within your tax year; (d) highest amount owed by the corporation to such corporation during the year; and (e) highest amount owed to the corporation by such corporation during the year.

(2) Did any individual, partnership, corporation, estate, or trust at the end of the tax year own, directly or indirectly, 50% or more of the corporation's voting stock? (For rules of attribution, see section 267(c).) If "Yes," complete (a) through (d)

(a) Attach a schedule showing name, address, and identifying number. Enter percentage owned ▶ ....

(b) Was the owner of such voting stock a person other than a U.S. person? (See instructions.) **Note:** *If "Yes," the corporation may have to file Form 5472.*

If "Yes," enter owner's country ▶ ....

(c) Enter highest amount owed by the corporation to such owner during the year ▶ ....

(d) Enter highest amount owed to the corporation by such owner during the year ▶ ....

Note: *For purposes of I(1) and I(2), "highest amount owed" includes loans and accounts receivable/payable.*

Yes | No

J Refer to the list in the instructions and state the principal:

Business activity ▶ ....

Product or service ▶ ....

K Was the corporation a U.S. shareholder of any controlled foreign corporation? (See sections 951 and 957.)

If "Yes," attach Form 5471 for each such corporation.

L At any time during the tax year, did the corporation have an interest in or a signature or other authority over a financial account in a foreign country (such as a bank account, securities account, or other financial account)?

(See instruction F and filing requirements for form TD F 90-22.1.)

If "Yes," enter name of foreign country ▶ ....

M Was the corporation the grantor of, or transferor to, a foreign trust which existed during the current tax year, whether or not the corporation has any beneficial interest in it?

If "Yes," the corporation may have to file Forms 3520, 3520-A, or 926.

N During this tax year, did the corporation pay dividends (other than stock dividends and distributions in exchange for stock) in excess of the corporation's current and accumulated earnings and profits? (See sections 301 and 316.)

If "Yes," file Form 5452. If this is a consolidated return, answer here for parent corporation and on Form 851, Affiliations Schedule, for each subsidiary.

O During this tax year did the corporation maintain any part of its accounting/tax records on a computerized system?

P Check method of accounting:

(1) ☐ Cash (2) ☐ Accrual

(3) ☐ Other (specify) ▶ ....

Q Check this box if the corporation issued publicly offered debt instruments with original issue discount ☐

If so, the corporation may have to file Form 8281.

R Enter the amount of tax-exempt interest received or accrued during the tax year ▶ ....

S If you are a member of a controlled group, enter the amount of taxable income for the entire group ▶ ....

Schedule L Balance Sheets

Assets	Beginning of tax year (a)	(b)	End of tax year (c)	(d)
1 Cash				
2 Trade notes and accounts receivable				
a Less allowance for bad debts				
3 Inventories				
4 Federal and state government obligations				
5 Other current assets (attach schedule)				
6 Loans to stockholders				
7 Mortgage and real estate loans				
8 Other investments (attach schedule)				
9 Buildings and other depreciable assets				
a Less accumulated depreciation				
10 Depletable assets				
a Less accumulated depletion				
11 Land (net of any amortization)				
12 Intangible assets (amortizable only)				
a Less accumulated amortization				
13 Other assets (attach schedule)				
14 Total assets				
Liabilities and Stockholders' Equity				
15 Accounts payable				
16 Mortgages, notes, bonds payable in less than 1 year				
17 Other current liabilities (attach schedule)				
18 Loans from stockholders				
19 Mortgages, notes, bonds payable in 1 year or more				
20 Other liabilities (attach schedule)				
21 Capital stock a preferred stock				
b common stock				
22 Paid-in or capital surplus				
23 Retained earnings—Appropriated (attach schedule)				
24 Retained earnings—Unappropriated				
25 Less cost of treasury stock		( )		( )
26 Total liabilities and stockholders' equity				

Schedule M-1 Reconciliation of Income per Books With Income per Return

You are not required to complete this schedule if the total assets on line 14, column (d), of Schedule L are less than $25,000.

1 Net income per books		7 Income recorded on books this year not included in this return (itemize)	
2 Federal income tax		a Tax-exempt interest $	
3 Excess of capital losses over capital gains			
4 Income subject to tax not recorded on books this year (itemize)			
5 Expenses recorded on books this year not deducted in this return (itemize)		8 Deductions in this tax return not charged against book income this year (itemize)	
a Depreciation $		a Depreciation $	
b Contributions carryover $		b Contributions carryover $	
		9 Total of lines 7 and 8	
6 Total of lines 1 through 5		10 Income (line 28, page 1)—line 6 less line 9	

Schedule M-2 Analysis of Unappropriated Retained Earnings per Books (line 24, Schedule L)

You are not required to complete this schedule if the total assets on line 14, column (d), of Schedule L are less than $25,000.

1 Balance at beginning of year		5 Distributions: a Cash	
2 Net income per books		b Stock	
3 Other increases (itemize)		c Property	
		6 Other decreases (itemize)	
		7 Total of lines 5 and 6	
4 Total of lines 1, 2, and 3		8 Balance at end of year (line 4 less line 7)	

Form **1120S**
Department of the Treasury
Internal Revenue Service

U.S. Income Tax Return for an S Corporation

For the calendar year 1987 or tax year beginning ...., 1987, ending ...., 19....

▶ For Paperwork Reduction Act Notice, see page 1 of the instructions.

OMB No. 1545-0130

1987

A Date of election as an S corporation

B Business code no. (see Specific Instructions)

Use IRS label. Otherwise, please print or type.

Name

Number and street (P.O. Box number if mail is not delivered to street address)

City or town, state, and ZIP code

C Employer identification number

D Date incorporated

E Total assets (see Specific Instructions)

Dollars | Cents

$

F Check applicable boxes: (1) ☐ Initial return (2) ☐ Final return (3) ☐ Change in address (4) ☐ Amended return

G Check this box if this is an S corporation subject to the consolidated audit procedures of sections 6241 through 6245 (see instructions) ▶ ☐

H Was this corporation in operation at the end of 1987 (see instructions)? Yes ☐ No ☐

I How many months in 1987 was this corporation in operation (see instructions)? ▶

Caution: Include only trade or business income and expenses on lines 1a through 21. See the instructions for more information.

Income	1a Gross receipts or sales .... b Less returns and allowances .... Balance ▶	1c	
	2 Cost of goods sold and/or operations (Schedule A, line 7)	2	
	3 Gross profit (subtract line 2 from line 1c)	3	
	4 Net gain (or loss) from Form 4797, line 18 (see instructions)	4	
	5 Other income (see instructions—attach schedule)	5	
	6 TOTAL income (loss)—Combine lines 3, 4 and 5 and enter here ▶	6	
Deductions (See instructions for limitations.)	7 Compensation of officers	7	
	8a Salaries and wages .... b Less jobs credit .... Balance ▶	8c	
	9 Repairs	9	
	10 Bad debts (see instructions)	10	
	11 Rents	11	
	12 Taxes	12	
	13 Deductible interest expense not claimed or reported elsewhere on return (see instructions)	13	
	14a Depreciation from Form 4562 (attach Form 4562) 14a		
	b Depreciation reported on Schedule A and elsewhere on return 14b		
	c Subtract line 14b from line 14a	14c	
	15 Depletion (**Do not deduct oil and gas depletion.** See instructions.)	15	
	16 Advertising	16	
	17 Pension, profit-sharing, etc. plans	17	
	18 Employee benefit programs	18	
	19 Other deductions (attach schedule)	19	
	20 TOTAL deductions—Add lines 7 through 19 and enter here ▶	20	
	21 Ordinary income (loss) from trade or business activity(ies)—Subtract line 20 from line 6	21	
Tax and Payments	22 Tax		
	a Excess net passive income tax (attach schedule) 22a		
	b Tax from Schedule D (Form 1120S) 22b		
	c Add lines 22a and 22b	22c	
	23 Payments		
	a Tax deposited with Form 7004 23a		
	b Credit for Federal tax on gasoline and special fuels (attach Form 4136) 23b		
	c Add lines 23a and 23b	23c	
	24 **TAX DUE (subtract line 23c from line 22c).** See instructions for Paying the Tax ▶	24	
	25 **OVERPAYMENT (subtract line 22c from line 23c)** ▶	25	

Please Sign Here

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.

▶ Signature of officer | Date | ▶ Title

Paid Preparer's Use Only

Preparer's signature ▶ | Date | Check if self-employed ▶ ☐ | Preparer's social security number

Firm's name (or yours if self-employed) and address ▶ | E.I. No. ▶ | ZIP code ▶

Schedule A Cost of Goods Sold and/or Operations (See instructions for Schedule A.)

1 Inventory at beginning of year	1	
2 Purchases	2	
3 Cost of labor	3	
4a Additional section 263A costs (attach schedule)	4a	
b Other costs (attach schedule)	4b	
5 Total—Add lines 1 through 4b	5	
6 Inventory at end of year	6	
7 Cost of goods sold and/or operations—Subtract line 6 from line 5. Enter here and on line 2, page 1	7	

8a Check all methods used for valuing closing inventory:
(i) ☐ Cost
(ii) ☐ Lower of cost or market as described in Regulations section 1.471-4 (see instructions)
(iii) ☐ Writedown of "subnormal" goods as described in Regulations section 1.471-2(c) (see instructions)
(iv) ☐ Other (Specify method used and attach explanation) ▶ ....

b Check this box if the LIFO inventory method was adopted this tax year for any goods (if checked, attach Form 970) ☐

c If the LIFO inventory method was used for this tax year, enter percentage (or amounts) of closing inventory computed under LIFO | 8c |

d Do the rules of section 263A (with respect to property produced or acquired for resale) apply to the corporation? ☐ Yes ☐ No

e Was there any change (other than for section 263A purposes) in determining quantities, cost, or valuations between opening and closing inventory? (If "Yes," attach explanation.) ☐ Yes ☐ No

Additional Information Required

Yes No

J Did you at the end of the tax year own, directly or indirectly, 50% or more of the voting stock of a domestic corporation? (For rules of attribution, see section 267(c).)
If "Yes," attach a schedule showing:
(1) Name, address, and employer identification number; (3) Highest amount owed by you to such corporation during the year; and
(2) Percentage owned; (4) Highest amount owed to you by such corporation during the year.
(Note: *For purposes of J(3) and J(4), "highest amount owed" includes loans and accounts receivable/payable.)*

K Refer to the listing of business activity codes at the end of the Instructions for Form 1120S and state your principal:
Business activity ▶ .... Product or service ▶ ....

L Were you a member of a controlled group subject to the provisions of section 1561?

M Did you claim a deduction for expenses connected with:
(1) Entertainment facilities (boat, resort, ranch, etc.)?
(2) Living accommodations (except for employees on business)?
(3) Employees attending conventions or meetings outside the North American area? (See section 274(h).)
(4) Employees' families at conventions or meetings?
If "Yes," were any of these conventions or meetings outside the North American area? (See section 274(h).)
(5) Employee or family vacations not reported on Form W-2?

N At any time during the tax year, did you have an interest in or a signature or other authority over a financial account in a foreign country (such as a bank account, securities account, or other financial account)? (See instructions for exceptions and filing requirements for form TD F 90-22.1.)
If "Yes," enter the name of the foreign country ▶ ....

O Were you the grantor of, or transferor to, a foreign trust which existed during the current tax year, whether or not you have any beneficial interest in it? If "Yes," you may have to file Forms 3520, 3520-A, or 926

P During this tax year did you maintain any part of your accounting/tax records on a computerized system?

Q Check method of accounting: (1) ☐ Cash (2) ☐ Accrual (3) ☐ Other (specify) ▶ ....

R Check this box if the S corporation has filed or is required to file **Form 8264**, Application for Registration of a Tax Shelter ▶ ☐

S Check this box if the corporation issued publicly offered debt instruments with original issue discount ▶ ☐
If so, the corporation may have to file Form 8281, Information Return for Publicly Offered Original Issue Discount Instruments

T If section 1374 (new built-in gains tax) applies to the corporation, enter the corporation's net unrealized built-in gain as defined in section 1374(d)(1) (see instructions) ▶

Designation of Tax Matters Person

The following shareholder is hereby designated as the tax matters person (TMP) for the tax year for which this tax return is filed:

Name of designated TMP ▶ Identifying number of TMP ▶

Address of designated TMP ▶

Schedule K Shareholders' Shares of Income, Credits, Deductions, etc. (See instructions.)

	(a) Distributive share items		(b) Total amount
Income (Losses) and Deductions			
1	Ordinary income (loss) from trade or business activity(ies) (page 1, line 21)	1	
2a	Gross income from rental real estate activity(ies) 2a		
b	Minus expenses (attach schedule) 2b		
c	Balance: net income (loss) from rental real estate activity(ies)	2c	
3a	Gross income from other rental activity(ies) 3a		
b	Minus expenses (attach schedule) 3b		
c	Balance: net income (loss) from other rental activity(ies)	3c	
4	Portfolio income (loss)		
a	Interest income	4a	
b	Dividend income	4b	
c	Royalty income	4c	
d	Net short-term capital gain (loss) (Schedule D (Form 1120S))	4d	
e	Net long-term capital gain (loss) (Schedule D (Form 1120S))	4e	
f	Other portfolio income (loss) (attach schedule)	4f	
5	Net gain (loss) under section 1231 (other than due to casualty or theft)	5	
6	Other income (loss) (attach schedule)	6	
7	Charitable contributions (attach schedule)	7	
8	Section 179 expense deduction (attach schedule)	8	
9	Expenses related to portfolio income (loss) (attach schedule) (see instructions)	9	
10	Other deductions (attach schedule)	10	
Credits			
11a	Jobs credit (attach Form 5884)	11a	
b	Low-income housing credit (attach Form 8586)	11b	
c	Qualified rehabilitation expenditures related to rental real estate activity(ies) (attach schedule)	11c	
d	Credits related to rental real estate activity(ies) other than on lines 11b and 11c (attach schedule)	11d	
e	Credit(s) related to rental activity(ies) other than on lines 11b, 11c, and 11d (attach schedule)	11e	
12	Other credits (attach schedule)	12	
Tax Preference and Adjustment Items			
13a	Accelerated depreciation of real property placed in service before 1987	13a	
b	Accelerated depreciation of leased personal property placed in service before 1987	13b	
c	Depreciation adjustment on property placed in service after 1986	13c	
d	Depletion (other than oil and gas)	13d	
e	(1) Gross income from oil, gas, or geothermal properties	13e(1)	
	(2) Gross deductions allocable to oil, gas, or geothermal properties	13e(2)	
f	Other items (attach schedule)	13f	
Investment Interest			
14a	Interest expense on investment debts	14a	
b	(1) Investment income included on lines 4a through 4f, Schedule K	14b(1)	
	(2) Investment expenses included on line 9, Schedule K	14b(2)	
Foreign Taxes			
15a	Type of income		
b	Name of foreign country or U.S. possession		
c	Total gross income from sources outside the U.S. (attach schedule)	15c	
d	Total applicable deductions and losses (attach schedule)	15d	
e	Total foreign taxes (check one): ▶ ☐ Paid ☐ Accrued	15e	
f	Reduction in taxes available for credit (attach schedule)	15f	
g	Other (attach schedule)	15g	
Other Items			
16	Total property distributions (including cash) other than dividend distributions reported on line 18, Schedule K	16	
17	Other items and amounts not included in lines 1 through 16, Schedule K, that are required to be reported separately to shareholders (attach schedule).		
18	Total dividend distributions paid from accumulated earnings and profits contained in other retained earnings (line 26 of Schedule L)	18	

Schedule L Balance Sheets

Assets	Beginning of tax year (a)	(b)	End of tax year (c)	(d)
1 Cash				
2 Trade notes and accounts receivable				
a Less allowance for bad debts				
3 Inventories				
4 Federal and state government obligations				
5 Other current assets (attach schedule)				
6 Loans to shareholders				
7 Mortgage and real estate loans				
8 Other investments (attach schedule)				
9 Buildings and other depreciable assets				
a Less accumulated depreciation				
10 Depletable assets				
a Less accumulated depletion				
11 Land (net of any amortization)				
12 Intangible assets (amortizable only)				
a Less accumulated amortization				
13 Other assets (attach schedule)				
14 Total assets				
Liabilities and Shareholders' Equity				
15 Accounts payable				
16 Mortgages, notes, bonds payable in less than 1 year				
17 Other current liabilities (attach schedule)				
18 Loans from shareholders				
19 Mortgages, notes, bonds payable in 1 year or more				
20 Other liabilities (attach schedule)				
21 Capital stock				
22 Paid-in or capital surplus				
23 Accumulated adjustments account				
24 Other adjustments account				
25 Shareholders' undistributed taxable income previously taxed				
26 Other retained earnings (see instructions) Check this box if the corporation has subchapter C earnings and profits at the close of the tax year ▶ ☐ (see instructions)				
27 Total retained earnings per books—Combine amounts on lines 23 through 26, columns (a) and (c) (see instructions)				
28 Less cost of treasury stock		( )		( )
29 Total liabilities and shareholders' equity				

Schedule M Analysis of Accumulated Adjustments Account, Other Adjustments Account, and Shareholders' Undistributed Taxable Income Previously Taxed

(If Schedule L, column (c), amounts for lines 23, 24, or 25 are not the same as corresponding amounts on line 9 of Schedule M, attach a schedule explaining any differences. See instructions.)

	Accumulated adjustments account	Other adjustments account	Shareholders' undistributed taxable income previously taxed
1 Balance at beginning of year			
2 Ordinary income from page 1, line 21			
3 Other additions			
4 Total of lines 1, 2, and 3			
5 Distributions other than dividend distributions			
6 Loss from page 1, line 21			
7 Other reductions			
8 Add lines 5, 6, and 7			
9 Balance at end of tax year—Subtract line 8 from line 4			

1120-A U.S. Corporation Short-Form Income Tax Return 1235

To see if you qualify to file Form 1120-A, see instructions.

For calendar 1987 or tax year beginning ____________ 1987, ending ____________ 19 ____ **87**

[illegible]	Use IRS label. Otherwise, please type or machine print	D Employer identification number (EIN)
[illegible]	[illegible]	E [illegible]
[illegible]	[illegible]	F [illegible]
		$

[illegible] (1) ☐ [illegible] (2) ☐ [illegible] (3) ☐ [illegible] ▶

[illegible] (1) ☐ [illegible] (2) ☐ [illegible]

Income

1a [illegible]	b [illegible] Balance ▶	1c
2 [illegible]		2
3 Gross profit (line 1c less line 2)		3
4 Domestic corporation dividends subject to the section 243(a)(1) deduction		4
5 Interest		5
6 Gross rents		6
7 Gross royalties		7
8 [illegible] income (attach separate Schedule D (Form 1120))		8
9 Net gain or (loss) from Form 4797, line [illegible], Part [illegible] (attach Form 4797)		9
10 Other income (see instructions)		10
11 TOTAL income—Add lines 3 through 10		11

Deductions (See instructions for limitations on deductions)

12 Compensation of officers (see instructions)		12
13a Salaries and wages	b Less jobs credit Balance ▶	13c
14 Repairs		14
15 Bad debts (see instructions)		15
16 Rents		16
17 Taxes		17
18 Interest		18
19 Contributions (see instructions for 10% limitation)		19
20 Depreciation (attach Form 4562)	20	
21 Less depreciation claimed elsewhere on return	21a	21b
22 Other deductions (attach schedule)		22
23 TOTAL deductions—Add lines 12 through 22		23
24 Taxable income before net operating loss deduction and special deductions (line 11 less line 23)		24
25 Less: a Net operating loss deduction (see instructions)	25a	
b Special deductions (see instructions)	25b	25c

Tax and Payments

26 Taxable income (line 24 less line 25c)		26
27 TOTAL TAX (from Part I, line 6 on page 2)		27
28 Payments:		
a 1986 overpayment allowed as a credit		
b 1987 estimated tax payments		
c Less 1987 refund applied for on Form 4466		
d Tax deposited with Form 7004		
e Credit from regulated investment companies (attach Form 2439)		
f Credit for Federal tax on gasoline and special fuels (attach Form 4136)		28
29 Enter any PENALTY for underpayment of estimated tax—Check ▶ ☐ if Form 2220 is attached		29
30 TAX DUE—If the total of lines 27 and 29 is larger than line 28, enter AMOUNT OWED		30
31 OVERPAYMENT—If line 28 is larger than the total of lines 27 and 29, enter AMOUNT OVERPAID		31
32 Enter amount of line 31 you want: Credited to 1988 estimated tax ▶	Refunded ▶	32

Please Sign Here

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.

▶ Signature of officer ____________ Date ____________ ▶ Title ____________

Paid Preparer's Use Only

Preparer's signature ▶ ____________ Date ____________ Check if self-employed ▶ ☐ Preparer's social security number

Firm's name (or yours if self-employed) and address ▶ ____________ E.I. No. ▶ ZIP code ▶

Page 2

Part I Tax Computation (See instructions.)

Enter EIN ▶

1	Income tax ... Check if from Schedule D ▶ ☐	1	
2	Credits. Check if from ☐ Form 3800 ☐ Form 3468 ☐ Form 5884 ☐ Form 6478 ☐ Form 6765 ☐ Form 8586	2	
3	Line 1 less line 2	3	
4	Tax from recomputing prior-year investment credit (attach Form 4255)	4	
5	Alternative minimum tax (see instructions—attach Form 4626)	5	
6	Total tax—Add lines 3 through 5. Enter here and on line 27, page 1	6	

Additional Information (See instructions.)

[illegible]

(a) Purchases ▶

(b) [illegible] ▶

(c) [illegible] (attach schedule) ▶

[illegible] the name of the foreign country ▶

Part II Balance Sheets

		(a) Beginning of tax year		(b) End of tax year	
Assets	1 Cash				
	2 Trade notes and accounts receivable				
	a Less allowance for bad debts	(	)	(	)
	3 Inventories				
	4 Federal and state government obligations				
	5 Other current assets (attach schedule)				
	6 Loans to stockholders				
	7 Mortgage and real estate loans				
	8 Depreciable, depletable, and intangible assets				
	a Less accumulated depreciation, depletion, and amortization	(	)	(	)
	9 Land (net of any amortization)				
	10 Other assets (attach schedule)				
	11 Total assets				
Liabilities and Stockholders' Equity	12 Accounts payable				
	13 Other current liabilities (attach schedule)				
	14 Loans from stockholders				
	15 Mortgages, notes, bonds payable				
	16 Other liabilities (attach schedule)				
	17 Capital stock (preferred and common stock)				
	18 Paid-in or capital surplus				
	19 Retained earnings				
	20 Less cost of treasury stock	(	)	(	)
	21 Total liabilities and stockholders' equity				

Part III Reconciliation of Income per Books With Income per Return (Must be completed by all filers)

1 Enter net income per books		5 Income recorded on books this year not included in this return (itemize)	
2 Federal income tax		6 Deductions in this tax return not charged against book income this year (itemize)	
3 Income subject to tax not recorded on books this year (itemize)		7 Income (line 24, page 1). Enter the sum of lines 1, 2, 3, and 4 less the sum of lines 5 and 6	
4 Expenses recorded on books this year not deducted in this return (itemize)			

1 1 1 1 1 1 2 2 2 3 3 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 8

1 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 3 3 4 4 5 6 6 7 7 7 7 7 7 8 9 10 11

1065

Department of the Treasury
Internal Revenue Service

U.S. Partnership Return of Income

▶ For Paperwork Reduction Act Notice, see Form 1065 Instructions.

For calendar year 1987 or fiscal year beginning ...., 1987, and ending ...., 19...

OMB No. 1545-0099

1987

A Principal business activity

B Principal product or service

C

Use IRS label. Otherwise, please print or type.

Name

Number and street (or P.O. Box number if mail is not delivered to street address)

City or town, state, and ZIP code

D Employer identification number

E Date business started

F Enter total assets at end of tax year
$

G Check accounting method: (1) ☐ Cash (2) ☐ Accrual (3) ☐ Other

H Check applicable boxes: (1) ☐ Final return (2) ☐ Change in address (3) ☐ Amended return

	Yes	No
I Number of partners in this partnership ▶		
J Is this partnership a limited partnership (see the instructions)?		
K Is this partnership a partner in another partnership?		
L Are any partners in this partnership also partnerships?		
M Does the partnership meet all the requirements shown in the instructions for Question M?		
N Was there a distribution of property or a transfer (for example, by sale or death) of a partnership interest during the tax year? If "Yes," see the instructions concerning an election to adjust the basis of the partnership's assets under section 754		

	Yes	No
O At any time during the tax year, did the partnership have an interest in or a signature or other authority over a financial account in a foreign country (such as a bank account, securities account, or other financial account)? (See the instructions for exceptions and filing requirements for Form TD F 90-22.1.) If "Yes," write the name of the foreign country. ▶		
P Was the partnership the grantor of, or transferor to, a foreign trust which existed during the current tax year, whether or not the partnership or any partner has any beneficial interest in it? If "Yes," you may have to file Forms 3520, 3520-A, or 926		
Q Was this partnership in operation at the end of 1987?		
R Number of months in 1987 that this partnership was in operation ▶		
S Check this box if the partnership has filed or is required to file Form 8264, Application for Registration of a Tax Shelter	☐	
T Check this box if this is a partnership subject to the consolidated partnership audit procedures of TEFRA. (See page 7 of the instructions.)	☐	

Caution: *Include only trade or business income and expenses on lines 1a–21 below. See the instructions for more information.*

Income

1a	Gross receipts or sales $ .... 1b Minus returns and allowances $ .... Balance ▶	1c	
2	Cost of goods sold and/or operations (Schedule A, line 7)	2	
3	Gross profit (subtract line 2 from line 1c)	3	
4	Ordinary income (loss) from other partnerships and fiduciaries (attach schedule)	4	
5	Net farm profit (loss) (attach Schedule F (Form 1040))	5	
6	Net gain (loss) (Form 4797, line 18)	6	
7	Other income (loss)	7	
8	TOTAL income (loss) (combine lines 3 through 7)	8	

Deductions (*see instructions for limitations*)

9a	Salaries and wages (other than to partners) $ .... 9b Minus jobs credit $ .... Balance ▶	9c	
10	Guaranteed payments to partners	10	
11	Rent	11	
12	Deductible interest expense not claimed elsewhere on return (see instructions)	12	
13	Taxes	13	
14	Bad debts	14	
15	Repairs	15	
16a	Depreciation from Form 4562 (attach Form 4562) $ .... 16b Minus depreciation claimed on Schedule A and elsewhere on return $ .... Balance ▶	16c	
17	Depletion (*Do not deduct oil and gas depletion.*)	17	
18a	Retirement plans, etc.	18a	
b	Employee benefit programs	18b	
19	Other deductions (attach schedule)	19	
20	TOTAL deductions (add amounts in column for lines 9c through 19)	20	
21	Ordinary income (loss) from trade or business activity(ies) (subtract line 20 from line 8)	21	

Please Sign Here

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.

▶ Signature of general partner ▶ Date

Paid Preparer's Use Only

Preparer's signature ▶ | Date | Check if self-employed ▶ ☐ | Preparer's social security no.

Firm's name (or yours if self-employed) and address ▶ | E.I. No. ▶ | ZIP code ▶

Schedule A Cost of Goods Sold and/or Operations

1	Inventory at beginning of year	1
2	Purchases minus cost of items withdrawn for personal use	2
3	Cost of labor	3
4a	Additional section 263A costs (see instructions)	4a
b	Other costs (attach schedule)	4b
5	Total (add lines 1 through 4b)	5
6	Inventory at end of year	6
7	Cost of goods sold (subtract line 6 from line 5) Enter here and on page 1, line 2	7

8a Check all methods used for valuing closing inventory

(i) ☐ Cost

(ii) ☐ Lower of cost or market as described in regulations section 1.471-4

(iii) ☐ Writedown of "subnormal" goods as described in regulations section 1.471-2(c)

(iv) ☐ Other (specify method used and attach explanation) ▶ ....

b Check if the LIFO inventory method was adopted this tax year for any goods (if checked, attach Form 970) ☐

c Do the rules of section 263A (with respect to property produced or acquired for resale) apply to the partnership? ☐ Yes ☐ No

d Was there any change (other than for section 263A purposes) in determining quantities, cost, or valuations between opening and closing inventory? If "Yes," attach explanation ☐ Yes ☐ No

Schedule H Income (Loss) From Rental Real Estate Activity(ies)

1 In the space provided below, show the kind and location of each rental property. Attach a schedule if more space is needed

Property A ....

Property B ....

Property C

Rental Real Estate Income		Properties A	Properties B	Properties C	Totals (Add columns A, B, C, and amounts from any attached schedule)
2 Gross income	2				2
Rental Real Estate Expenses					
3 Advertising	3				
4 Auto and travel	4				
5 Cleaning and maintenance	5				
6 Commissions	6				
7 Insurance	7				
8 Legal and other professional fees	8				
9 Interest expense	9				
10 Repairs	10				
11 Taxes	11				
12 Utilities	12				
13 Wages and salaries	13				
14 Depreciation from Form 4562	14				
15 Other (list)					
....					
....					
16 Total expenses. Add lines 3 through 15	16				16
17 Net income (loss) from rental real estate activity(ies). Subtract line 16 from line 2. Enter total net income (loss) from all properties on Schedule K, line 2.	17				17

Schedule K Partners' Shares of Income, Credits, Deductions, etc.

Section		(a) Distributive share items		(b) Total amount
Income (Loss)	1	Ordinary income (loss) from trade or business activity(ies) (page 1, line 21)	1	
	2	Net income (loss) from rental real estate activity(ies) (Schedule H, line 17)	2	
	3a	Gross income from other rental activity(ies) 3a $		
	b	Minus expenses (attach schedule) 3b $		
	c	Balance net income (loss) from other rental activity(ies) ▶	3c	
	4	Portfolio income (loss)		
	a	Interest income	4a	
	b	Dividend income	4b	
	c	Royalty income	4c	
	d	Net short-term capital gain (loss) (Schedule D, line 4)	4d	
	e	Net long-term capital gain (loss) (Schedule D, line 9)	4e	
	f	Other portfolio income (loss) (attach schedule)	4f	
	5	Guaranteed payments	5	
	6	Net gain (loss) under section 1231 (other than due to casualty or theft)	6	
	7	Other (attach schedule)	7	
Deductions	8	Charitable contributions (attach list)	8	
	9	Expense deduction for recovery property (section 179)	9	
	10	Deductions related to portfolio income (do not include investment interest expense)	10	
	11	Other (attach schedule)	11	
Credits	12a	Credit for income tax withheld	12a	
	b	Low-income housing credit (attach Form 8586)	12b	
	c	Qualified rehabilitation expenditures related to rental real estate activity(ies) (attach schedule)	12c	
	d	Credit(s) related to rental real estate activity(ies) other than 12b and 12c (attach schedule)	12d	
	e	Credit(s) related to rental activity(ies) other than 12b, 12c, and 12d (attach schedule)	12e	
	13	Other (attach schedule)	13	
Self-Employment	14a	Net earnings (loss) from self-employment	14a	
	b	Gross farming or fishing income	14b	
	c	Gross nonfarm income	14c	
Tax Preference Items	15a	Accelerated depreciation of real property placed in service before 1/1/87	15a	
	b	Accelerated depreciation of leased personal property placed in service before 1/1/87	15b	
	c	Depreciation adjustment on property placed in service after 12/31/86	15c	
	d	Depletion (other than oil and gas)	15d	
	e	(1) Gross income from oil, gas, and geothermal properties	15e(1)	
		(2) Deductions allocable to oil, gas, and geothermal properties	15e(2)	
	f	Other (attach schedule)	15f	
Investment Interest	16a	Interest expense on investment debts	16a	
	b	(1) Investment income included on lines 4a through 4f, Schedule K	16b(1)	
		(2) Investment expenses included on line 10, Schedule K	16b(2)	
Foreign Taxes	17a	Type of income		
	b	Foreign country or U.S. possession		
	c	Total gross income from sources outside the U.S. (attach schedule)	17c	
	d	Total applicable deductions and losses (attach schedule)	17d	
	e	Total foreign taxes (check one): ▶ ☐ Paid ☐ Accrued	17e	
	f	Reduction in taxes available for credit (attach schedule)	17f	
	g	Other (attach schedule)	17g	
Other	18	Attach schedule for other items and amounts not reported above. See Instructions		

Schedule L Balance Sheets

(See the Instructions for Question M Before Completing Schedules L and M.)

	Beginning of tax year		End of tax year	
Assets	**(a)**	**(b)**	**(c)**	**(d)**
1 Cash				
2 Trade notes and accounts receivable				
a Minus allowance for bad debts				
3 Inventories				
4 Federal and state government obligations				
5 Other current assets (attach schedule)				
6 Mortgage and real estate loans				
7 Other investments (attach schedule)				
8 Buildings and other depreciable assets				
a Minus accumulated depreciation				
9 Depletable assets				
a Minus accumulated depletion				
10 Land (net of any amortization)				
11 Intangible assets (amortizable only)				
a Minus accumulated amortization				
12 Other assets (attach schedule)				
13 TOTAL assets				
Liabilities and Capital				
14 Accounts payable				
15 Mortgages, notes, bonds payable in less than 1 year				
16 Other current liabilities (attach schedule)				
17 All nonrecourse loans				
18 Mortgages, notes, bonds payable in 1 year or more				
19 Other liabilities (attach schedule)				
20 Partners' capital accounts				
21 TOTAL liabilities and capital				

Schedule M Reconciliation of Partners' Capital Accounts

(Show reconciliation of each partner's capital account on Schedule K-1 (Form 1065), Question I.)

(a) Capital account at beginning of year	(b) Capital contributed during year	(c) Income (loss) from lines 1, 2, 3c, and 4 of Sch. K	(d) Income not included in column (c), plus nontaxable income	(e) Losses not included in column (c), plus unallowable deductions	(f) Withdrawals and distributions	(g) Capital account at end of year

Designation of Tax Matters Partner

The following general partner is hereby designated as the tax matters partner (TMP) for the tax year for which this partnership return is filed:

Name of designated TMP ▶ Identifying number of TMP ▶

Address of designated TMP ▶

☆ U.S. Government Printing Office: 1987—183-166 23-0916760

SCHEDULE K-1 (Form 1065)
Department of the Treasury Internal Revenue Service

Partner's Share of Income, Credits, Deductions, etc.

For calendar year 1987 or fiscal year beginning .... 1987, and ending .... 19 ...

OMB No. 1545-0099

1987

Partner's identifying number ▶

Partner's name, address, and ZIP code

Partnership's identifying number ▶

Partnership's name, address, and ZIP code

A(1) Is this partner a general partner? __ Yes __ No
If "yes" to Question A(1).
(2) Did this partner materially participate in the trade or business activity(ies) of the partnership? (See page 12 of the Form 1065 Instructions. Leave blank if no trade or business activities.) __ Yes __ No
(3) Did this partner actively participate in the rental real estate activity(ies) of the partnership? (See page 13 of the Form 1065 Instructions. Leave blank if no rental real estate activities.) __ Yes __ No

B Partner's share of liabilities
Nonrecourse. $ ....
Other $ ....

C What type of entity is this partner? ▶

D Enter partner's percentage of: (i) Before decrease or termination / (ii) End of year
Profit sharing ....% ....%
Loss sharing ....% ....%
Ownership of capital ....% ....%

E IRS Center where partnership filed return ▶ ....

F Tax Shelter Registration Number ▶ ....

G(1) Did the partner's ownership interest in the partnership increase after Oct. 22, 1986? ☐ Yes ☐ No
If yes, attach statement. (See page 13 of the Form 1065 Instructions.)
(2) Did the partnership start or acquire a new activity after Oct. 22, 1986? ☐ Yes ☐ No
If yes, attach statement. (See page 14 of the Form 1065 Instructions.)

H Check here ▶ ☐ if this Schedule K-1 is for a short tax year required by section 706(b).

I Reconciliation of partner's capital account

(a) Capital account at beginning of year	(b) Capital contributed during year	(c) Income (loss) from lines 1, 2, 3, and 4 below	(d) Income not included in column (c), plus nontaxable income	(e) Losses not included in column (c), plus unallowable deductions	(f) Withdrawals and distributions	(g) Capital account at end of year

Caution: *Refer to attached Partner's Instructions for Schedule K-1 (Form 1065) before entering information from this schedule on your tax return.*

		(a) Distributive share item	(b) Amount	(c) 1040 filers enter the amount in column (b) on:
Income (Loss)	1	Ordinary income (loss) from trade or business activity(ies)		(See Partner's Instructions for Schedule K-1 (Form 1065))
	2	Income or loss from rental real estate activity(ies)		
	3	Income or loss from other rental activity(ies)		
	4	Portfolio income (loss):		
	a	Interest		Sch. B, Part I, line 2
	b	Dividends		Sch. B, Part II, line 4
	c	Royalties		Sch. E, Part I, line 5
	d	Net short-term capital gain (loss)		Sch. D, line 5, col. (f) or (g)
	e	Net long-term capital gain (loss)		Sch. D, line 12, col. (f) or (g)
	f	Other portfolio income (loss) (attach schedule)		(Enter on applicable lines of your return)
	5	Guaranteed payments		(See Partner's Instructions for Schedule K-1 (Form 1065))
	6	Net gain (loss) under section 1231 (other than due to casualty or theft)		
	7	Other (attach schedule)		(Enter on applicable lines of your return)
Deductions	8	Charitable contributions		See Form 1040 Instructions
	9	Expense deduction for recovery property (section 179)		(See Partner's Instructions for Schedule K-1 (Form 1065))
	10	Deductions related to portfolio income		
	11	Other (attach schedule)		
Credits	12a	Credit for income tax withheld		See Form 1040 Instructions
	b	Low-income housing credit		Form 8586, line 8
	c	Qualified rehabilitation expenditures related to rental real estate activity(ies) (attach schedule)		(See Partner's Instructions for Schedule K-1 (Form 1065))
	d	Credit(s) related to rental real estate activity(ies) other than 12b and 12c (attach schedule)		
	e	Credit(s) related to rental activity(ies) other than 12b, 12c, and 12d (attach schedule)		
	13	Other credits (attach schedule)		

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H732

		(a) Distributive share item	(b) Amount	(c) 1040 filers enter the amount in column (b) on:
Self-employment	14a	Net earnings (loss) from self-employment		Sch. SE, Part I
	b	Gross farming or fishing income		(See Partner's Instructions for Schedule K-1 (Form 1065))
	c	Gross nonfarm income		
Tax Preference Items	15a	Accelerated depreciation of real property placed in service before 1/1/87		Form 6251, line 5a
	b	Accelerated depreciation of leased personal property placed in service before 1/1/87		Form 6251, line 5b
	c	Depreciation adjustment on property placed in service after 12/31/86		Form 6251, line 4g
	d	Depletion (other than oil and gas)		Form 6251, line 5h
	e	(1) Gross income from oil, gas, and geothermal properties		See Form 6251 Instructions
		(2) Deductions allocable to oil, gas, and geothermal properties		See Form 6251 Instructions
	f	Other (attach schedule)		(See Partner's Instructions for Schedule K-1 (Form 1065))
Investment Interest	16a	Interest expense on investment debts		Form 4952, line 1
	b	(1) Investment income included in Schedule K-1, lines 4a through 4f		(See Partner's Instructions for Schedule K-1 (Form 1065))
		(2) Investment expenses included in Schedule K-1, line 10		
Foreign Taxes	17a	Type of income		Form 1116, Check boxes
	b	Name of foreign country or U.S. possession		Form 1116, Part I
	c	Total gross income from sources outside the U.S. (attach schedule)		Form 1116, Part I
	d	Total applicable deductions and losses (attach schedule)		Form 1116, Part I
	e	Total foreign taxes (check one): ▶ ☐ Paid ☐ Accrued		Form 1116, Part II
	f	Reduction in taxes available for credit (attach schedule)		Form 1116, Part III
	g	Other (attach schedule)		See Form 1116 Instructions
Other	18	Other items and amounts not included in lines 1 through 17g and 19 that are required to be reported separately to you		(See Partner's Instructions for Schedule K-1 (Form 1065))

Property Subject to Recapture of Investment Credit		19 Properties:	A	B	C	
	a	Description of property (State whether recovery or nonrecovery property. If recovery property, state whether regular percentage method or section 48(q) election used.)				Form 4255, top
	b	Date placed in service				Form 4255, line 2
	c	Cost or other basis				Form 4255, line 3
	d	Class of recovery property or original estimated useful life				Form 4255, line 4
	e	Date item ceased to be investment credit property				Form 4255, line 8

Other Information Provided by Partnership:

SCHEDULE C (Form 1040)

Department of the Treasury Internal Revenue Service (O)

Profit or (Loss) From Business or Profession

(Sole Proprietorship)

Partnerships, Joint Ventures, etc., Must File Form 1065.

▶ Attach to Form 1040, Form 1041, or Form 1041S. ▶ See Instructions for Schedule C (Form 1040).

OMB No. 1545-0074

1987

Attachment Sequence No. 09

Name of proprietor

Social security number (SSN)

A Principal business or profession, including product or service (see Instructions)

B Principal business code (from Part IV) ▶

C Business name and address ▶

D Employer ID number (Not SSN)

E Method(s) used to value closing inventory:

(1) ☐ Cost (2) ☐ Lower of cost or market (3) ☐ Other (attach explanation)

F Accounting method: (1) ☐ Cash (2) ☐ Accrual (3) ☐ Other (specify) ▶

	Yes	No
G Was there any change in determining quantities, costs, or valuations between opening and closing inventory? (If "Yes," attach explanation.)		
H Are you deducting expenses for an office in your home?		
I Did you file Form 941 for this business for any quarter in 1987?		
J Did you "materially participate" in the operation of this business during 1987? (If "No," see Instructions for limitations on losses.)		
K Was this business in operation at the end of 1987?		
L How many months was this business in operation during 1987? ▶		

M If this schedule includes a loss, credit, deduction, income, or other tax benefit relating to a tax shelter required to be registered, check here ▶ ☐

If you check this box, you MUST attach Form 8271

Part I Income

1a Gross receipts or sales	1a	
b Less: Returns and allowances	1b	
c Subtract line 1b from line 1a and enter the balance here	1c	
2 Cost of goods sold and/or operations (from Part III, line 8)	2	
3 Subtract line 2 from line 1c and enter the **gross profit** here	3	
4 Other income (including windfall profit tax credit or refund received in 1987)	4	
5 Add lines 3 and 4. This is the **gross income** ▶	5	

Part II Deductions

6 Advertising		23 Repairs	
7 Bad debts from sales or services (see Instructions)		24 Supplies (not included in Part III)	
8 Bank service charges		25 Taxes	
9 Car and truck expenses		26 Travel, meals, and entertainment:	
10 Commissions		a Travel	
11 Depletion		b Total meals and entertainment	
12 Depreciation and section 179 deduction from Form 4562 (not included in Part III)		c Enter 20% of line 26b subject to limitations (see Instructions)	
13 Dues and publications		d Subtract line 26c from 26b	
14 Employee benefit programs		27 Utilities and telephone	
15 Freight (not included in Part III)		28a Wages	
16 Insurance		b Jobs credit	
17 Interest:		c Subtract line 28b from 28a	
a Mortgage (paid to financial institutions)		29 Other expenses (list type and amount):	
b Other			
18 Laundry and cleaning			
19 Legal and professional services			
20 Office expense			
21 Pension and profit-sharing plans			
22 Rent on business property			

30 Add amounts in columns for lines 6 through 29. These are the **total deductions** ▶	30	
31 **Net profit or (loss).** Subtract line 30 from line 5. If a profit, enter here and on Form 1040, line 13, and on Schedule SE, line 2 (or line 5 of Form 1041 or Form 1041S). If a loss, you **MUST** go on to line 32	31	

32 If you have a loss, you **MUST** answer this question: "Do you have amounts for which you are not at risk in this business?" (See Instructions.) ☐ Yes ☐ No

If "Yes," you **MUST** attach **Form 6198**. If "No," enter the loss on Form 1040, line 13, and on Schedule SE, line 2 (or line 5 of Form 1041 or Form 1041S).

Part III Cost of Goods Sold and/or Operations (See Schedule C Instructions for Part III)

1	Inventory at beginning of year (If different from last year's closing inventory, attach explanation.)	1	
2	Purchases less cost of items withdrawn for personal use	2	
3	Cost of labor (Do not include salary paid to yourself.)	3	
4	Materials and supplies	4	
5	Other costs	5	
6	Add lines 1 through 5	6	
7	Less: Inventory at end of year	7	
8	**Cost of goods sold and/or operations.** Subtract line 7 from line 6. Enter here and in Part I, line 2	8	

Part IV Codes for Principal Business or Professional Activity

Locate the major business category that best describes your activity (for example, Retail Trade, Services, etc.). Within the major category, select the activity code that identifies (or most closely identifies) the business or profession that is the principal source of your sales or receipts. **Enter this 4-digit code on line B on page 1 of Schedule C.** *(Note: If your principal source of income is from farming activities, you should file* ***Schedule F*** *(Form 1040), Farm Income and Expenses.)*

Construction

Code

0018 Operative builders (building for own account)

General contractors

0034 Residential building
0059 Nonresidential building
0075 Highway and street construction
3889 Other heavy construction (pipe laying, bridge construction, etc.)

Building trade contractors, including repairs

0232 Plumbing, heating, air conditioning
0257 Painting and paper hanging
0273 Electrical work
0299 Masonry, dry wall, stone, tile
0414 Carpentering and flooring
0430 Roofing, siding, and sheet metal
0455 Concrete work
0471 Water well drilling
0885 Other building trade contractors (excavation, glazing, etc.)

Manufacturing, Including Printing and Publishing

0612 Bakeries selling at retail
0638 Other food products and beverages
0653 Textile mill products
0679 Apparel and other textile products
0695 Leather, footware, handbags, etc.
0810 Furniture and fixtures
0836 Lumber and other wood products
0851 Printing and publishing
0877 Paper and allied products
0893 Chemicals and allied products
1016 Rubber and plastics products
1032 Stone, clay, and glass products
1057 Primary metal industries
1073 Fabricated metal products
1099 Machinery and machine shops
1115 Electric and electronic equipment
1313 Transportation equipment
1339 Instruments and related products
1883 Other manufacturing industries

Mining and Mineral Extraction

1511 Metal mining
1537 Coal mining
1552 Oil and gas
1719 Quarrying and nonmetallic mining

Agricultural Services, Forestry, and Fishing

1917 Soil preparation services
1933 Crop services
1958 Veterinary services, including pets
1974 Livestock breeding
1990 Other animal services
2113 Farm labor and management services
2212 Horticulture and landscaping
2238 Forestry, except logging
0836 Logging
2279 Fishing, hunting, and trapping

Wholesale Trade—Selling Goods to Other Businesses, Government, or Institutions, etc.

Durable goods, including machinery, equipment, wood, metals, etc.

Code

2618 Selling for your own account
2634 Agent or broker for other firms—more than 50% of gross sales on commission

Nondurable goods, including food, fiber, chemicals, etc.

2659 Selling for your own account
2675 Agent or broker for other firms—more than 50% of gross sales on commission

Retail Trade—Selling Goods to Individuals and Households

3012 Selling door-to-door, by telephone or party plan, or from mobile unit
3038 Catalog or mail order
3053 Vending machine selling

Selling From Store, Showroom, or Other Fixed Location

Food, beverages, and drugs

3079 Eating places (meals or snacks)
3095 Drinking places (alcoholic beverages)
3210 Grocery stores (general line)
0612 Bakeries selling at retail
3236 Other food stores (meat, produce, candy, etc.)
3251 Liquor stores
3277 Drug stores

Automotive and service stations

3319 New car dealers (franchised)
3335 Used car dealers
3517 Other automotive dealers (motorcycles, recreational vehicles, etc.)
3533 Tires, accessories, and parts
3558 Gasoline service stations

General merchandise, apparel, and furniture

3715 Variety stores
3731 Other general merchandise stores
3756 Shoe stores
3772 Men's and boys' clothing stores
3913 Women's ready-to-wear stores
3921 Women's accessory and specialty stores and furriers
3939 Family clothing stores
3954 Other apparel and accessory stores
3970 Furniture stores
3996 TV, audio, and electronics
3988 Computer and software stores
4119 Household appliance stores
4317 Other home furnishing stores (china, floor coverings, drapes, etc.)
4333 Music and record stores

Building, hardware, and garden supply

4416 Building materials dealers
4432 Paint, glass, and wallpaper stores
4457 Hardware stores
4473 Nurseries and garden supply stores

Other retail stores

4614 Used merchandise and antique stores (except used motor vehicle parts)
4630 Gift, novelty, and souvenir shops
4655 Florists
4671 Jewelry stores

Code

4697 Sporting goods and bicycle shops
4812 Boat dealers
4838 Hobby, toy, and game shops
4853 Camera and photo supply stores
4879 Optical goods stores
4895 Luggage and leather goods stores
5017 Book stores, excluding newsstands
5033 Stationery stores
5058 Fabric and needlework stores
5074 Mobile home dealers
5090 Fuel dealers (except gasoline)
5884 Other retail stores

Real Estate, Insurance, Finance, and Related Services

5512 Real estate agents and managers
5538 Operators and lessors of buildings (except developers)
5553 Operators and lessors of other real property (except developers)
5710 Subdividers and developers, except cemeteries
5736 Insurance agents and services
5751 Security and commodity brokers, dealers, and investment services
5777 Other real estate, insurance, and financial activities

Transportation, Communications, Public Utilities, and Related Services

6114 Taxicabs
6312 Bus and limousine transportation
6338 Trucking (except trash collection)
6510 Trash collection without own dump
6536 Public warehousing
6551 Water transportation
6619 Air transportation
6635 Travel agents and tour operators
6650 Other transportation and related services
6676 Communication services
6692 Utilities, including dumps, snowplowing, road cleaning, etc.

Services (Providing Personal, Professional, and Business Services)

Hotels and other lodging places

7096 Hotels, motels, and tourist homes
7211 Rooming and boarding houses
7237 Camps and camping parks

Laundry and cleaning services

7419 Coin-operated laundries and dry cleaning
7435 Other laundry, dry cleaning, and garment services
7450 Carpet and upholstery cleaning
7476 Janitorial and related services (building, house, and window cleaning)

Business and/or personal services

7617 Legal services (or lawyer)
7633 Income tax preparation
7658 Accounting and bookkeeping
7674 Engineering, surveying, and architectural

Code

7690 Management, consulting, and public relations
7716 Advertising, except direct mail
7732 Employment agencies and personnel supply
7757 Computer and data processing, including repair and leasing
7773 Equipment rental and leasing (except computer or automotive)
7914 Investigative and protective services
7880 Other business services

Personal services

8110 Beauty shops (or beautician)
8318 Barber shop (or barber)
8334 Photographic portrait studios
8516 Shoe repair and shine services
8532 Funeral services and crematories
8714 Child day care
8730 Teaching or tutoring
8755 Counseling (except health practitioners)
8771 Ministers and chaplains
6882 Other personal services

Automotive services

8813 Automotive rental or leasing, without driver
8839 Parking, except valet
8854 General automotive repairs
8870 Specialized automotive repairs (brake, body repairs, paint, etc.)
8896 Other automotive services (wash, towing, etc.)

Miscellaneous repair, except computers

9019 TV and audio equipment repair
9035 Other electrical equipment repair
9050 Reupholstery and furniture repair
2881 Other equipment repair

Medical and health services

9217 Offices and clinics of medical doctors (MD's)
9233 Offices and clinics of dentists
9258 Osteopathic physicians and surgeons
9274 Chiropractors
9290 Optometrists
9415 Registered and practical nurses
9431 Other licensed health practitioners
9456 Dental laboratories
9472 Nursing and personal care facilities
9886 Other health services

Amusement and recreational services

8557 Physical fitness facilities
9613 Videotape rental stores
9639 Motion picture theaters
9654 Other motion picture and TV film and tape activities
9670 Bowling alleys
9696 Professional sports and racing, including promoters and managers
9811 Theatrical performers, musicians, agents, producers, and related services
9837 Other amusement and recreational services

8888 Unable to classify

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