

USING FINANCIAL STATEMENT DATA TO EVALUATE THE STATUS OF SMALL BUSINESS

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The success of our economy depends in large part upon the maintenance of opportunities for the small business sector. Recent research has shown that small business supplies much of the goods and services to the nation, provides many of the new jobs, and develops a majority of the innovations. Given our current economic difficulties we cannot afford to ignore the potential contribution of small business to economic recovery.

Although major progress has been made the small business sector has remained poorly documented in the Federal statistical system. Most existing data sources of statistical data and administrative records are not adequate for assessing the impact on small business in a variety of policy analysis and decision making areas. The Small Business Administration, Office of Advocacy's small business data base is being designed to correct these shortcomings. This data base is drawn from commercially available data, places no additional paperwork burden on the business community, permits the maintenance of confidentiality, and provides policy relevant data.

Congressional and executive interest has been substantial. P.L. 94-305 which created the Office of Advocacy called for a new program of economic research and analysis of small business issues. More recently in P.L. 96-302 Congress reaffirmed the required development of a small business mailing list, a small business data base, and called for a Presidential annual report to the Congress on the status of small business.

The legislative mandate specifically identifies objectives for the small business data base:

1. Provide data describing the current conditions of small business.
2. Provide current data over time to identify trends.
3. Provide data for policy analysis.

Congress has not specified the priorities among these objectives. It leaves the sources and the specific content of the data base undefined. However, Congress defines and budgets a mailing list (indicative) effort and an external data base activity.

The legislative history clearly indicates that no additional data collection burden be placed on small business.

Given the redundant data collection system that the decentralized statistical system imposes on small business, this seems perfectly reasonable.

In order to understand what we are trying to do with the Dun and Bradstreet Financial Statement (FINSTAT) file it is useful to understand this work in its context.

Aside from the FINSTAT project, there are three other basic efforts underway in the Office of Advocacy which are interrelated and should be mentioned.

First, we are making a major effort to have data available on small business from the various statistical and administrative agencies of the Federal government. Together with IRS, for example, we are trying to link the business Statistics of Income files, for partnerships, proprietorship and corporations with the tax reports of employment and payrolls from the 941 IRS system. Other projects include organizing the Corporate Source Books in machine-readable form, and examining the disclosure and confidentiality issue, particularly as it relates to business data from these IRS sources.

Second, we are creating a mailing list of all business firms and establishments. We are matching the 4.5 million Duns Market Identifier (DMI) file with the Market Data Retrieval file. When the matching is complete, probably within the next month, Advocacy will have an 8 million record file of businesses.

Additional efforts involve developing mailing lists for statistical and research purposes of minorities and women-owned businesses. Many methodological issues concerning such a mailing list need to be addressed. This includes methods of updating, purging firms no longer in business, and adding new firms, as well as establishing methods to evaluate coverage and data quality.

The third project, which has now

spanned more than 2 1/2 years, involves organizing the Duns Market Identifier file into a useful tool for economic analysis [1].

This file contains information on business organizations that had financial activity in any one year. Each record, which identifies an establishment, has the following information:

1. Dun's Number - This is a number assigned by D&B that uniquely identifies each establishment and can be used to merge it with prior years' files.
2. Geographic location -- City, county, State, SMSA and zip code
3. Year business started
4. Annual sales volume
5. Number of employees
6. Standard Industrial Classification (SIC) and up to four minor SICs
7. Parent and Headquarters city and state
8. Dun's number of parent and ultimate parent.
9. Subsidiary indicator
10. Status indicator -- Single location, headquarters, establishment or branch
11. Manufacturing indicator -- indicates if manufacturing takes place at the location.

These files have been edited, cleaned, and reformatted, and are the centerpiece for the small business data base development effort. The 1978 and 1980 files have been developed, the 1976 file is being worked on currently, and by early in 1983 the 1982 DMI will be completed. This will provide six years of current and comparable data[2].

This work has been carried out by the Brookings Institution. Briefly the data base now includes 4.7 million business establishments with complete estimates of employment and industry classification for establishments and firms, and the age, organizational status and geographic data for each establishment. Approximately 85 percent of the firms report gross receipt data, and missing sales data have been imputed. Associate data from other Dun and Bradstreet files have been linked to these basic data to provide five year growth rates of sales and employment for about 1/4 of the firms.

It should be emphasized that the DMI Brookings files and the FINSTAT are longitudinal. This is a primary and necessary requirement to deal with policy relevant research.

These DMI files present two important problems:

1. The firms included are neither a random sample nor a Census of all firms in the universe. Thus, it has been necessary to validate or "benchmark" the files against appropriate sources to be sure that the information drawn from the files accurately reflects small business in total.
2. The files are not assembled by statistically rigorous methods of data collection, but instead rely on voluntary cooperation of respondents. Many firms provide limited data, and errors arise from a variety of sources. The raw files are "dirty"; some individual establishment records contain missing or obviously incorrect data on one or more items. These records must be located, "cleaned", edited, and reconciled.

The FINSTAT file contains about 150,000 financial statements for 1975, but for the past three years the number has increased to 800,000 per year. To preserve the confidentiality of cooperating companies, all identifying information has been removed by D&B.

All data items that are available in the DMI are also available in the Financial Statement file. In addition the following key data items are included:

- Current Assets
 - Cash
 - Accounts Receivable
 - Inventories
 - Notes Receivable
 - Other Current Assets
- Noncurrent Assets
 - Fixtures
 - Other Fixed Assets
 - Real Estate
 - Other Noncurrent Assets
- Current Liabilities
 - Accounts Payable
 - Bank Loans
 - Notes Payable
 - Other Current Liabilities
- Noncurrent Liabilities
 - Mortgages
 - Amortized Liabilities
 - Non-Amortized Liabilities
 - Deferred Credit Items
- Tangible Net Worth
- Profits
- Dividends

Although the file includes major U.S.

corporations approximately 95 percent of the firms have fewer than 100 employees, and 74 percent have fewer than 20 employees. By comparing this data with other sources we are beginning to resolve the question, how well do these data represent the small business community?

Our current work with these data files has pinpointed several specific problems. In some cases key data items are missing or are just zeroes; some records are not internally consistent -- assets do not equal liabilities plus net worth, or the components of current assets do not equal current assets; -- the longitudinal information is not as rich over time as one would prefer.

The financial statement file presents formidable problems in their use in a small business data base. They are unedited, raw data. Within the next several months we will have more definitive information developed for each year's individual financial statement record, indicating its internal consistency, its relation with data for prior years in terms of level and trend, and the reliability of basic financial ratios. Such data will enable us to understand the basic financial status of small business for the first time.

Our preliminary work is extremely encouraging. It indicates:

1. that the key data elements are available for many of the records,
2. that the file contains information on a large number of small firms,
3. that the quality of the data is

4. improving over time, that the file will become more valuable over time as more data years became available,
5. that financial simulation models can be developed using these data,
6. that key data items (tax payments and depreciation) from several sources can be obtained and then statistically merged to enrich the file.
7. and most importantly, that these data can begin to be applied to policy related questions of concern to the small business community.

Detailed analytical reports have been prepared by several contractors who have examined the FINSTAT data in considerable industry detail. For specific information regarding these studies contact the authors.

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NOTES AND REFERENCES

- [1] See U.S. Establishment & Enterprise Microdata (USEEM) -- Version I: File Description, Brookings Institute, available from the Small Business microdata project, 1981.
- [2] See Associating Establishments into Enterprises for a Microdata File of the U.S. Business Population, Catherine Armington and Marjorie Odle, Brookings Institute, 1981.