

The Economic Censuses in the U.S.A.  
Improved Statistics on Services

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## I. IMPORTANCE OF SERVICES

Over the past 15 years or so, the loosely defined term of "Services" has captured the attention of the economists, policy makers, and press alike, as this area has become, and continues to be, the fastest growing component of the nation's economy. The reasons for the increased importance include: The changing demographics (more two-wage earning families, more single heads of households, and longer life expectancy), added emphasis on leisure activity, new technology creating service industries that did not exist a few years ago, the recent government deregulation of some segments of the economy, and businesses changing the ways in which they delivered goods and services (secondary services becoming sizable, and the trend toward contracting out for services previously provided in-house).

## II. DEFINITION OF SERVICES

There is no one correct definition of "Services". There are different definitions of "Services" depending on the needs of the user/definer. For example, some data users define services to include: Restaurants, satellite communications, plumbing repair, and package delivery. However, the Standard Industrial Classification (SIC) System, and, hence the Census Bureau, classifies the activities into retail, communications, construction, and transportation,

respectively. The broad definition includes the entire non-goods producing portion of the economy (i.e., excludes agriculture, manufacturing, mining, and construction). This definition represents about 72 percent of the non-goods production in the United States (75 percent of the employment), and includes transportation; communication; electric, gas, and sanitary services; wholesale and retail trade; finance, insurance, and real estate (FIRE); services; and government; and is commonly referred to as the services sector. In contrast, the more narrowly defined services industries of the SIC system--Division I--(which represents about 18 percent of the total GNP and 23 percent of the employment), include personal and business services, such as hotels, repair, amusement, health, legal, educational, and social services. Unless otherwise noted, this paper deals with the broader "non-goods producing" definition.

### III. CENSUS v. SURVEY

In a census each unit of the universe is represented by itself; whereas in a survey, selected units are counted (sampled) and weighted to represent the entire universe. At the Census Bureau, the goals of the Economic Censuses are to define the universe by assigning kind-of-business, geographic location (to zip code level in some cases), measure of size, industry-specific output statistics, and company affiliation to each establishment conducting

economic activity. This universe serves as a benchmark for the recurring Economic Surveys, which collect receipts and selected industry-specific operating statistics. The censuses provide much detailed data, but takes several years to collect, process, and publish; whereas the surveys provide limited data on a more timely basis. Both programs are needed to produce useful statistics on the level and trend of the nation's economy.\*

Due to the sheer size of the mailout and the processing and review time needed to publish SIC detail in 52 separate reports (one for the U.S., D.C., and each of the 50 states (with substate geographic detail)), the economic censuses take 5 years to complete a cycle (results are published between 15 and 36 months after the census reference year. The annual surveys, on the other hand, require a one year cycle and are published within one year after the survey reference year.

Although many of the topics contained in this paper are applicable to both censuses and surveys, this paper is written from the census perspective; another paper is being presented from the survey perspective.

#### IV IMPROVEMENTS IN SERVICES SECTOR DATA COLLECTION

There are four areas where efforts are being made to improve data collection on services in the quinquennial censuses. These include: (1) additional industries included in the Census; (2) exported services data collected for additional industries; (3) secondary services collected for additional industries; (4) and a revised SIC system to provide more detailed service classifications.

##### A. ADDITIONAL INDUSTRY COVERAGE

###### History:

In order to appreciate the additional industry coverage of the censuses, one must remember that coverage of various segments and industries did not occur all at once. Rather, they have evolved over time.

America's fledgling industrial output was first measured in the 1810 Decennial Census, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, a separate census enumerated manufactures and mineral industries.

Retail and wholesale trade data were first collected in 1930; and in 1933 information on selected service industries was added to the data-collection operation. Information on construction industries was first obtained in 1930, although data for the full spectrum of construction industries were not gathered until 1968. The first transportation data collection (consisting of several surveys) was taken for 1963.

For the 1977 censuses, the coverage of the service industries was broadened from "selected services" to "services" by the addition of Health, Education, Social services, and Membership organizations. The coverage of the 1982 censuses was basically identical to that of 1977. <sup>1/</sup>

In what amounts to the largest single expansion in industry coverage of the Economic Censuses since 1930, when the Retail and Wholesale industries were first included, the Bureau has designed a two-tiered expansion that began in 1987 and continues on for 1992.

- <sup>1/</sup> Due to budgetary and other constraints, the 1982 censuses dropped coverage of hospitals, elementary and secondary school, college and universities, labor unions, and political organizations.

Phase II:

For the 1992 Censuses, the Census Bureau plans are to further expand coverage to include the remaining 17 Transportation industries plus the 74 Communication, Utilities, Finance, Insurance, and Real estate (FIRE) industries.

This phase of the expansion adds over 570,000 establishments with paid employees, with over 9.6 million employees, and payroll of over \$230 billion <sup>4/</sup>. This expansion increases the economic censuses' coverage from 88 to 98 percent of the nation's employees.

NOTE: The missing component is comprised of elementary and secondary schools, colleges and universities, labor unions, political organizations, and religious institutions.

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transportation SIC's have been collected by several different divisions of the Bureau as part of the economic censuses. The responsibility for collecting and publishing these data has been switched back and forth within the Bureau, and has resulted in increased user burden and some inconsistency. Combining entire SIC groups within one census group will increase efficiency.

<sup>4/</sup> 1986 County Business Patterns.

By expanding to include these missing industries, the non-goods producing industries sector achieves coverage (although not content) parity with the goods producing sector.

#### 1. Deregulation

Why has it taken so long for the Census Bureau to cover the transportation, utilities, communications, and FIRE segments? The Economic Censuses are conducted under provisions of Title 13, U.S. Code, which precludes the Census Bureau from collecting data from transportation industries where data are compiled and published by a regulatory body. Secondly, in its mandate to keep respondent burden to a minimum, the Office of Management and Budget (OMB) takes measures to assure that data collection efforts are not duplicated by government agencies. During the era of regulation, byproduct statistical data were produced by the regulatory authority. With the recent deregulation <sup>5/</sup> that has occurred, the amount of available statistics (both regulatory and general-purpose) have been limited or sharply reduced.

<sup>5/</sup> Examples--The Motor Carrier Act of 1980 has removed most trucking firms from Interstate Commerce Commission



(Continued)

## 2. Support

With the rapid growth in services in the economy, and changes in the way services were delivered, the available statistics on services were actually decreasing due to deregulation. Private industry's and trade associations' attempts to collect data on a voluntary basis for these missing segments has fallen short due to statistically unrepresentative memberships. Association membership lists are usually incomplete; and sometimes include members whose primary concern does not coincide with the association. Also, response can be poor since there is a built-in reluctance for a company to provide operating data to a group whose staff may well work for a competitor in the future.

In an effort to improve statistics on services, several private and governmental organizations have been formed and have lobbied, supported, and funded attempts in these areas.

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regulation. The court-ordered breakup of AT&T (the telephone monopoly) has created about 500 independent telephone companies.

The Coalition of Service Industries was formed in early 1982 to represent the interests of the services sector of the U.S. economy. Their objective is to "heighten awareness on the part of the general public, legislators, policy makers, and foreign governments" about the role of the services sector in the U.S. economy, and its importance to other countries' economies.

Various government agencies, trade associations, companies, and academia requested additional efforts be expended for service industries data collection. These groups include: Office of Technology Assessment (U.S. Congress); National Oceanic and Atmospheric Administration, Bureau of Economic Analysis, and International Trade Administration--(all of the Department of Commerce); Bureau of Labor Statistics (Department of Labor); U.S. Trade Representative; Federal Reserve Board; Securities and Exchange Commission; Comptroller of the Currency; Department of Transportation; Energy Information Administration; and the University of Chicago, Department of Statistics.

Improving statistics on the service sector of the economy is one of the new administration's chief concerns. This effort is also one of the Secretary of Commerce's "Departmental Goals," as well as one of the elements of the Bureau of Census' strategic plans to further improve data.

### 3. Conceptual Issues

As with any large undertaking, there exist many conceptual issues which need to be identified, investigated, and satisfactorily resolved. With sufficient lead time, planning, and staff; hopefully most issues can be adequately resolved using existing terminology and methodology, while some will require modifications to census methodology and/or definitions. These conceptual issues include:

- a. Company reporting level--Regarding definition of a plant (or site), the economic censuses follow the guidelines of the SIC Manual, which is an establishment-based system. That is, an economic entity (establishment) is defined and classified according to the primary economic activity performed at that operating location.

For most industries (e.g., hotel, manufacturing plant, restaurant), data are available and meaningful at the individual operating location. However, the structure of some of these to-be-added industries do not lend themselves very well to traditional census methodology.

NOTE: This issue is unique to the 5 year establishment-based census--and does not apply to the current surveys, which are typically company/enterprise based. Some examples follow:

Railroads and trucking companies have terminal yards, industrial sidings, and other sites that are used to service trains, tracks, trucks, and cargo. An unknown number of these locations have not been identified to the Census Bureau for establishment reporting, and even if they were, there is likely no identifiable revenue or other activity for these locations. Those locations which are so identified will probably be classified as auxiliary establishments.

For the airline industry, if a number of distinct airlines sell tickets, board passengers, etc., at an airport, normal

establishment-based reporting would classify each airline once, thereby resulting in multiple establishments coded to SIC 4512 (Air Transportation, Scheduled), plus one establishment coded to SIC 4581 (the airport itself). There will be no attempt to set up separate establishments for each ticket counter (baggage handling site, etc.) at an airport for the same airline. Also, depending on an airline's ability to report separate data for its activity at each airport within the same metropolitan area, the airline may report consolidated data for the metropolitan area; and this would constitute an establishment.

The banking industry is increasing its reliance on standalone automatic teller machine (ATM) locations. However, since ATM's do not have payroll or employment, these locations will not be counted as a separate establishment.

Further, any revenues generated from transactions through a standalone ATM will be included with the branch location that services the ATM.

Insurance carriers provide another example where the concept of an establishment is not straightforward. For example, an insurer can occupy an entire multi-story office building with its various activities (i.e., life insurance (SIC 6311), property/casualty insurance (SIC 6331), pension funds (SIC 6371), etc.). Although many functions and activities are taking place in the one location, there is no one single industry classification which covers all these activities. Because of the regulations governing this industry, separate data are required and reportable for each type of insurance activity. In this instance, the Bureau is investigating whether to create multiple establishments at a single physical location.

Another issue is classification of "establishments" located in retail stores. For example, a leased tire, battery, and accessory department in a discount store is counted as a separate tire, battery, and accessory store (SIC 5531). Using the same logic, a real estate sales office leased department located in a department store

will be counted as a separate real estate office (SIC 6531). Likewise, an independent insurance leased department will be counted as a separate insurance agency (SIC 6411).

- b. Geographic detail--(The issue of geographic detail is related to the establishment reporting concept.) NOTE: This issue is unique to the 5 year establishment-based census and does not apply to the current surveys, which are mostly U.S. based.

The economic censuses historically have collected data for each physical location (establishment, plant, site). For most of the censuses, the basic data are published at the U.S., state, MSA, county and place levels. For some censuses (Retail and Service), some basic data are published at the very detailed zip code level; whereas for other censuses the most detailed geographic level published is the state level.

If, for certain industries, it is determined that the establishment level is meaningless, (e.g. utility company substations), there is no need to collect data at the geographic detail. Conversely, if the firms cannot provide meaningful geographic detail, it is futile to attempt to publish establishment-based data. Employment and payroll may be reportable at the establishment level, although the same may not be true for other data (e.g., revenue). In order to obtain these data, the data user may have to sacrifice geographic detail because these data may only be reported on a consolidated basis.

- c. Measure of volume--The Bureau attempts to measure economic activity in terms which are comparable across the different economic censuses (i.e., payroll and employment--both input measures). However, output measures vary by industry. As an indication of output, the various censuses traditionally collect data on other non-comparable measures such as sales, operating receipts, revenues, or shipments. (The term "sales" can be thought of as merchandise rung up on the cash register



at a retail or wholesale store. "Operating receipts" refers to the income generated for providing a service. "Revenue", a term used to measure activity of not-for-profits, refers to the sum of "operating receipts" plus contributions, interest income, grants, etc., which may not be related to services provided. "Shipments" refer to the value of merchandise leaving the manufacturing plant, whether or not it has been sold.)

Since many of the industries to be added in the 1992 censuses have their own trade-specific output measures, the Bureau must determine the appropriate measures to be collected and tabulated. These include: insurance underwriters (face value of policies, assets); railroads and local transportation (subsidies); banks and savings and loan companies (gross deposits or assets); real estate agents and companies (commissions); and trusts and investment offices (interest). Note that some of these measure size, not activity. The proper industry measure for operating income may best be determined independently for each of the various SIC classifications.

With these newly-added industries there are instances where the revenue is generated from a location that is removed physically (and classified differently) from the location where the services were rendered. A ticket on a domestic airliner can be purchased at a ticket counter at a foreign or domestic airport, or from a travel agent (a different SIC major group). Thus two different industries, (airline and travel agency) can perform the same function (selling an airline ticket); and/or the activity be measured at a location geographically removed from the site where the service is finally delivered (travel agency v. the airport).

- d. Employee--"Employees" in certain newly-added industries technically are not true employees of the businesses in which they work; e.g., real estate agents and insurance agents usually are not paid employees of the agency in which they work. Rather, due to tax laws, they are considered self-employed persons, or independent contractors, and need to be counted differently than employees in industries with more traditional employee-employer relationships.

This so called "independent contractor" category presents a problem to our data collection efforts since there are no readily available administrative data with which to estimate the size of the industry, nor to use as proxy if the respondent fails to report employment and payroll data. These data for the traditionally covered industries are readily available from administrative sources. But, because of this disparate treatment, obtaining data for these "employees" will require access to various tax forms which we do not currently receive, as well as additional data collection efforts in the census. Also, special efforts must be taken to link the data from these two sources.

- e. Public and private operations--Traditionally, the economic censuses exclude establishments which are operated by a government (or elected officials). [Exceptions--liquor stores and hospitals.] The 1992 expansion will include some industries which have sizable public (government) components. Examples of these industries include railroads, school buses, sanitary services, and some banking and insurance activities. In some states these

activities are exclusively private, while in others, exclusively public. A drawback in creating the mailing list is the fact that the private operators can be identified from one administrative source (IRS) whereas creating a universe list of government establishments in an industry would require access to countless administrative lists (if in fact, they exist).

Another drawback is that the activities may not be separately identified from other public governmental functions (e.g., some governmental units might have data for school bus operations separate from physical school plant operations, whereas others might combine the two). Coverage of government operations will vary by industry.

- f. Administrative data availability-- In a full-count census, every unit in the universe is tabulated. For the quinquennial economic censuses, this means tabulating data for about 6 million establishments with paid employees and another 6 million establishments which have no paid employees. Rather than subjecting 12 million establishments to questionnaires asking

for operating data, the Census Bureau, in an effort to reduce reporting burden and costs, utilizes administrative records of other Federal agencies to a large degree.

Establishments with no paid employees are not mailed questionnaires. Rather administrative data from IRS are summarized and published separately from the "with paid employee" segment.

For establishments with paid employees, the economic censuses and surveys use the Bureau's Standard Statistical Establishment List (SSEL) as the master list for sample selection, mailing, and estimating for non-response. The SSEL contains individual detail records created by using the quarterly employment reports of Social Security Administration (SSA) and income tax reports of the IRS. These forms are filed by the companies with the taxing authorities. For multiple establishment companies the SSEL is supplemented by an annual Company Organization Survey, whose main purpose is to identify new and changing physical locations and ownership.

In an effort to reduce respondent burden, the Census universe is stratified by industry such that the larger operations are mailed questionnaires, and the smaller ones sampled. For the non-mailed cases, as well as the ones who do not return their questionnaires, the administrative data are used.

Several of the previously addressed conceptual issues are influenced by what data are/are not available from these administrative records.

- 1) The measures of volume may vary between industries--however, some of the measures may not be available on the IRS forms, and others may require additional keying, handling, etc., in order to be made available to the Bureau. For example, the administrative data for sales (or receipts) come from a specified line from a particular IRS form. These data reflect exactly what the Bureau asks on its report form from a retail or service establishment. However, another measure (e.g., rental income) may be the preferred measure of economic activity for real estate management companies.

Administrative data for these businesses may be reported on a data line (not currently provided to the Bureau) from a tax form already provided to the Bureau, or on a tax form which is not currently provided to the Bureau.

- 2) "Paid employee", as defined by the taxing authority, follows current tax law. However, no data are available on the many people who perform various services not as paid employees, but as independent contractors.

Also, depending on how a wholly or partially government-controlled entity is organized, there may not be existing administrative data by establishment (e.g., a governmental entity might have data on number of employees working in education, but not know how many drive a bus compared to how many clean the buildings).

#### 4. Pretest Planned

In order to test the forms design, questionnaire and instructions wording, data availability, and data

reporting problems, a pretest is planned for early 1990.

Hopefully all of the existing conceptual issues will be uncovered by the pretest, and resolved prior to the 1992 census.

- B. EXPORTED SERVICES--The exported contribution to the services sector is now deemed to play a more important role than originally thought. There are adequate programs already in place to collect export data for the goods producing sector. However, the same is not true for the services sector.

Goods can be inventoried and counted (and the Customs Service has the necessary export and import documents); whereas services do not fit the traditional export/import methodology. Also, services are difficult to measure, since they may not be created until they are consumed (overseas).

The Standard Statistical Establishment List (SSEL), which is the universe for the census, contains data on domestic payroll of firms, regardless of which country the firm calls home. Thus, for a U.S. firm which has branches in both the States and abroad, the SSEL reflects only the payroll (and thus the economic activity) subject to U.S. payroll tax laws. Conversely, a foreign-owned company with some plants in the U.S. also would have its U.S.-based activity on the



SSEL--assuming the operating employees are subject to U.S. payroll tax laws. Within these guidelines, the economic censuses collect data only on domestic activity. Service industries which are apt to have significant domestic receipts from foreign clients are asked to report those receipts separately.

In everyday terminology the following examples illustrate the conceptual issues involved in determining (and the Bureau's handling of) these exported receipts:

1. A New York City barbershop cutting the hair of a foreign student is considered an exported service by most (but not all) data users. Since providers of such personal services would have no indication of the citizenship of their individual clients, the Bureau does not ask such a question of personal service providers. The question is asked of "business services", which are more likely to know the nationality of the final user.
2. A Los Angeles firm sending some U.S. employees to the Far East to provide consulting services for factory development is considered an exported service.
3. A Florida company has a subsidiary in South America. The South American location is staffed by the local population--this activity is NOT considered exported activity.

1982 was the first time that the exported services question was asked of specific Service industries; it was included on four report forms (six industries): computer and data processing services; management, consulting, and public relations services; equipment rental and leasing services; and engineering, architectural, and surveying services. For the 1987 Census of Service Industries, in addition to the previous four industry groups, the question also was asked of firms classified in advertising, accounting, legal, and research and development (for a total of 26 industries).

Note: While the Census Bureau has the responsibility for collecting data on domestic activity, the Bureau of Economic Analysis (part of Department of Commerce) has the responsibility for data collection of international services of domestic companies. Their program collects sample survey data for selected industries on the value of exports, regardless of payroll tax coverage (a major constraint of the Census Bureau).

### C. CONTRACTED SERVICES

As any economist (or even casual reader of the Statistical Abstract) will confirm, there has been a marked increase in the level of service activity over the last decade--far out pacing the goods-producing sector. Some of the growth--as yet unmeasured--is due to the increased practice of firms contracting out for services they previously performed themselves. This occurs for various reasons including:

1. Due to a company not wanting to be bothered by complicated payroll tax and employee benefit laws, a manufacturing company releases its employees on Friday. On Monday the same people report to work and perform the same jobs, but now as employees of a personnel supply firm. (In this example, the employment would be included in the personnel supply firm's statistics, and dropped from the operating plant. In some cases, the Bureau is taking measures to add these "lost" employees back into the operating plant's statistics.)
2. A furniture retailer wants to reduce the capital tied up in its operations, so it sells its trucks and contracts with a trucking firm to deliver its

goods. Statistics would show a drop in employment (no change in receipts) in the furniture industry, and a gain in both receipts and employment in the trucking industry.

3. A company decides that it is more profitable contracting out for accounting services on an as-needed basis, instead of keeping several accountants on its staff. Again, the same statistical aberrations would appear.

Looking at the last example in greater detail, assume a company has an in-house staff performing a secondary activity (i.e., the accounting activity of a legal firm). This accounting activity would be combined with other support functions, and since it is not revenue producing, there are no separate receipts data on accounting activity. As time progresses, the company may opt to purchase the service on a contract basis (rather than keep employees on its payroll). Then the accounting firm (which has been awarded the contract) would include the activity with its own receipts and payroll. The resulting aggregate industry data would indicate an increase in the payroll and receipts of the accounting industry, a decrease in payroll of the legal industry, but no change in output (receipts) of the legal industry. This distorts trend analysis for both

industries, since NO actual change in activity took place. It would be interesting to know the impact of the growth due to contracting out for services. Unfortunately, this information is not presently available.

#### D. SECONDARY SERVICES

Many of the users of service data are more interested in the level of service activity rather than establishments classified as service.

The establishment-based coding system classifies each establishment once, which means that the entire economic activity of the operating unit is classified into the industry of the primary activity, at the expense of clouding over detailed data on secondary and support activities. Thus a plant whose receipts are derived from legal services (even though it maintains a large accounting staff) is classified in SIC 8111, and one whose principal activity is baking bread (a manufacturing industry) is classified in SIC 2051 (even though the bread company operates its own fleet of delivery trucks). Since the Census Bureau's Economic Census programs are tied to the establishment-based concept, much of these secondary and support data are not separately identified.

In attempting to quantify secondary service activity, assigning a value to the service provided presents a problem. While a firm may be able to identify costs (expenses and employment) associated with the activity, usually there is no separate identifiable income generated that would allow a value to be assigned to the activity. This makes it difficult to collect output data on the secondary service activity.

Sometimes a company becomes so proficient in providing in-house secondary service, that the secondary activity evolves into an income-generating activity, is spun off on its own, and is marketed to other firms. In this case the establishment statistics would show an increase in activity, when, in reality, the level remained unchanged. The airlines industry reservation system provides such an example, i.e., although originally designed as a support service (non revenue-generating) for use by its affiliated airline company, the service is now sold to many airlines and travel agencies, and earns receipts on its own merits.

Although there are published tables containing data on secondary service activity for various industries, they are by no means exhaustive. The data are collected and published only for those industries which have significant secondary service activity.

In order to measure all secondary activity, inquiries would have to be added to all economic report forms requesting data on the various secondary activities. For some reporting units (depending on SIC, company structure, and size of operation) the data would be available and reportable; while for others, the data would be unavailable and insignificant.

Chances are an automobile manufacturing plant has employees who work full-time providing accounting services; whereas a small retailer may have one employee who performs some accounting services, in addition to ordering, stocking, selling, managing, etc. For the small businesses, the data are meaningless, possibly unreportable, and subjecting these companies to such inquiries would prove excessively costly in terms of economic data gathered. However significant these data might be at the aggregate level, as a practical matter the data can not be collected.

For the 1987 censuses, questions on secondary service activity have been added for industries where the activity is significant. However, since the secondary service activity is collected independently within each of the various economic censuses, painting a complete picture requires access not to one publication, but rather many separate publications. Assume a data user

wants retail sales of gasoline. A 'gasoline station' whose receipts are primarily from gasoline sales is classified as a gasoline service station (SIC 5541), regardless of its repair work. Conversely, a 'gasoline station' whose receipts are derived mainly from automobile repair is classified as an automotive repair shop (SIC 753) regardless of its gasoline sales. The good news is that gasoline sales are collected for both industries. The bad news is that there is NO one publication which presents total gasoline sales. The user must access publications from both the Census Retail Trade and Census of Service Industries. This confusion has caused the Bureau to question whether to create a separate report containing secondary service activity. Tables would be culled from the various census reports, and duplicate data already published. However, due to budgetary constraints, it has been decided that the funds could be better spent elsewhere.

## V. OTHER SERVICE ISSUES

### A. NONEMPLOYER FIRMS

Smaller owner-operated businesses (nonemployers) represent an important segment of the services sector. Reduced barriers to entry and small capital investment have encouraged the growth in the number of small firms.



Also, many professionals have left their employer, started their own independent business, and taken their previous employer as a client. Some estimates indicate that over 60 percent of the service establishments are nonemployers. There is a problem in identifying and locating them. Unlike a retail store, which usually locates near its potential customers and generally has a sign outside its place of business, many of these nonemployer services operate from their homes and do not place a sign on the premises. Also, many services are not performed on the premises of the business, but rather at the client's home or business. As described earlier in this paper, in an effort to reduce reporting burden, establishments without paid employees are not mailed questionnaires. Rather, selected data are gleaned from approximately 12 million records from the IRS. Records which have an indication of paying wages are dropped (since these are included in the mailout portion), the remaining records (approximately 6 million) are tabulated and summarized. Then the results are published, albeit separately from the employer segment, due to timing and the fact that the classification codes on the IRS forms lack the detail contained in the SIC.

## B. SIC REVISION

The SIC system represents the Federal Government's system for promoting consistency in industrial classification across its many agencies, and is the responsibility of the Office of Management and Budget (OMB). Many states, private companies, and academia also have incorporated the system, which was recently revised in time for the 1987 Economic Censuses. For the 1987 revision, OMB's Technical Committee on Industrial Classification, with representatives from Federal statistical agencies, reviewed numerous recommendations from private industry and Government agencies to expand, clarify, and redefine service industries. Since the Census Bureau does not expect all emerging industries to have their own SIC code established in the 1987 revision, some would continue to be classified in the "Not Elsewhere Classified" (NEC) category. The Census Bureau will, however, have the capability to include additional classification questions for a number of these "NEC" industries that would enable it to publish more detailed levels of industry classification, and provide data to justify a future SIC revision.

The services sector makes up over 70 percent of the U.S. economy but accounts for only one-third of the SIC codes. The 1987 SIC Revision created a net increase of

19 Service industries, and 8 industries in Wholesale and Retail Trade; while Finance, Insurance and Real Estate (FIRE) industries had a net decrease of 20 industries. This decrease in the number of FIRE industries reflects the ambiguity and the complexity of the interrelationships among these industries, much of which is caused by deregulation allowing certain industries to assume functions previously limited to other industries.

C. TECHNOLOGICAL IMPROVEMENTS/SHIFTING CONSUMER DEMANDS

Changes in demographic factors (e.g., increased disposable income, more two-income families, and a greater emphasis on leisure activity) and improvements in technology has caused shifts in consumer spending patterns. This leads to new industries (e.g., lawn maintenance services, video rental, etc.), and renders others obsolete (e.g., television repair). These new industries are born before the statistical system recognizes them. Thus no data are collected. In an attempt to collect subindustry data prior to the industry being recognized by the SIC, the 1982 Census of Service Industries collected data for 20 subindustries which were made industries in the 1987 SIC revision. By guessing which new industries will be created, and by collecting data for them, the Bureau will be able to provide additional detail for trend analysis for sub-industries before they achieve industry status.

## CONCLUSION

The many questions and issues that are currently being investigated (and those not yet discovered), combined with the initial canvas of such an important and growing segment of the economy, will challenge us in the present and near future.

Thank you!