SECONDARY SERVICES

U.S. BUREAU OF THE CENSUS BUSINESS DIVISION

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Secondary Services

The purpose of this paper is to define the various categories of secondary activities and discuss some of the problems associated with identifying and measuring these activities. Further, this paper will discuss possible ways of improving and expanding information on secondary services. Finally, it will pose questions for further discussion.

In recent years there has been considerable attention given to the growth of the service sector (all nongoods producing industries), in 1986 it accounted for over 70 percent of GNP. There also has been concern that the information available to measure the service sector is not sufficient. Because data collection efforts traditionally have been directed toward measuring the manufacturing sector, the ability to expand data collection in the service sector has not kept pace with the growth in service activity. Further, significant amounts of service sector data were lost when deregulation caused discontinuation of or reductions in associated data collection programs. Therefore, a number of statistical agencies are striving to fill the data gaps. This paper will address one aspect of service activity that often is viewed as a data gap, secondary services.

Broadly, secondary activities are those activities performed by an establishment that are not the primary activity of the establishment, such as the trucking activities of a retail store or computer software development activities of a computer manufacturer. Secondary services are the service subset of secondary activities. Some data users have expressed an interest in being able to measure the total activity of a given industry. Ideally, one would like to have the ability to aggregate data for an industry as a primary activity, plus data for that same industry wherever the activity takes place, yielding a true industry total. Using the trucking example, this would mean having the ability to add data from SIC 421 (Truck- ing, Local and Long Distance) to information collected from other sectors such as Retail Trade or Construction that are known to have substantial trucking operations. The way data are collected currently does not make this easy. In addition, changes taking place in the way business is conducted could make it even more difficult.

In some sectors of the economy there is a bundling of activities taking place. For example, banks are offering stocks, bonds and financial planning; overnight delivery service companies offer a combination of motor and air freight services; and doctors now offer to fill prescriptions in their offices. Yet in other sectors there appears to be a move toward contracting out activities that were traditionally done in-house, such as captive legal, accounting, janitorial, or

clerical activities. In fact, some analysts believe that employment growth in the service sector simply reflects the shifting of these existing support activities (and their classification) from one user industry to another providing industry. However, a recent BLS study, "Producer Services Industries: Why are They Growing?", says that analysis of the data shows this to be an unlikely explanation for the growth of producer services industries. Having the ability to measure the volume of secondary activities would help analysts track these types of shifts in the way business is conducted.

Let us examine a little more closely what secondary activities are.

- o Secondary activities can be directly related to the primary activity of the establishment such as a automobile manufacturer also providing service and maintenance as a part of the automobile purchase.
- Secondary activities can serve a supporting role such as a data processing or health unit in a manufacturing establishment.
- o Secondary activities can be income generating such as restaurants in hotels that are owned and operated by the hotel; and auto repair done at a new car dealer or a gasoline station.

- o Secondary activities can be nonincome generating such as health units within an establishment, trucking for affiliates only, and accounting or data processing for affiliates only.
- o Secondary activities could be both income and nonincome generating. For example: in-house communications where excess capacity is sold; school buses being rented for nonschool functions; and trucking where excess capacity is sold.

Secondary activities can take place either in an operating establishment or at an auxiliary establishment. An auxiliary establishment is an establishment primarily engaged in performing management or support services for other establishments of the same enterprise. Gaylord Worden suggested the following matrix to illustrate the various combinations:

Income 	No	 Yes
 Departing	1	l l 2
 Auxiliary	3	4

Possible names for these cells would be:

- 1. Operating Support
- 2. Operating support and secondary.
- 3. Auxiliary support.
- Auxiliary support and secondary.

Given that we have these descriptions of secondary activities, why is it that more data are not available for these activities? One possible reason is the way the data are collected and classified.

Most economic data are collected using the Standard Industrial Classification (SIC) system. The SIC is the statistical classification standard underlying all establishment-based Federal economic statistics classified by industry. The SIC is used to promote the comparability of establishment data describing various facets of the U.S. economy. Using this system, each establishment is classified only once, by the primary activity of the establishment. Activities of an auxiliary establishment are classified according to the primary activity of the establishment(s) it serves. Thus secondary activities generally are recorded only as part of the primary activity and are not always distinguishable as a separate activity. For example, retail grocery chains often own and operate their own trucking fleets, but when data are collected from the establishment in a 5 year Census, all activities are tabulated according to the primary activity, in this case grocery stores. So in most cases data on the trucking activity is not requested separately in such a way to permit data for all components of the trucking industry to be easily aggregated.

During economic census years (years ending in 2 and 7) the Census Bureau collects some information at a level more detailed than the 4-digit SIC. Manufacturing industries are covered in the greatest detail with information collected for 7-digit product codes from establishments. In addition, some manufacturing forms collect information about related nonmanufacturing activities, like computer software development by computer manufacturers. Nonmanufacturing industries are not covered in quite as much detail. For example, during Economic Census Years the establishment reports detailed activities that are used to assign a principle kind of business (KB). This KB code is frequently the same as a 4-digit SIC code like, 5541 Gasoline Service Stations. But in some cases the KB code is more detailed like 55412 Truck Stops, a subset of gasoline stations. In addition, there is a section on the forms to report detailed sales information such as Merchandise Lines. This section generally includes at least one nonmerchandise receipt line, sometimes more. Expanding and improving inquires such as these could enhance our knowledge of secondary activities.

How much activity is not identified separately? It is difficult to tell in most cases. But in other cases we have limited data that allow us to make rough estimates. One such example is the auto repair industry. Using data from the 1982 Economic Censuses, receipts for Automotive Repair (SIC 753) were \$17.9 billion. This figure only includes receipts from

those establishments whose primary activity is auto repair. It does not include auto repair done by automobile dealers or gasoline stations. In 1982, nonmerchandise receipts for Automobile Dealers (SIC 55, except 554) were \$18.3 billion. Industry analysts indicate that we can assume about 90% (\$16.5 billion) of this total was for auto repair. For gasoline service stations (SIC 554) labor charges and parts installed amounted to receipts of \$2.8 billion. We can assume that most of this was for auto repair. Combined receipts from those two groups equals a total of over \$19.3 billion, \$1.2 billion more than was reported for Automotive Repair (753)! One can see that looking only at receipts from establishments whose primary activity is Automotive Repair (SIC 753) can cause a major under estimation of the total auto repair industry.

If a data user is not familiar with the way the SIC is structured and the way data are collected, they could be misled. For example, if a data user heard that productivity of auto repair was declining, they would probably assume that all auto repair regardless of where performed was considered in the evaluation. But that is not the case. The Bureau of Labor Statistics's (BLS) productivity measures for auto repair are calculated using only data from reporting units who's major activity is SIC 753. According to the February 1988 BLS publication, Productivity Measures for Selected Industries and Government Services, output per hour of all persons in automotive repair shops (753) decreased at an average annual

ratio of 1.2 percent between 1972 and 1986. To an unsophisticated user this may be hard to believe when auto repair shops located in automobile dealerships have become computerized and quite sophisticated and therefore, more efficient. BLS states that factors contributing to this decline in automotive repair shops (753) include; the small size of industry firms, the large influx of new establishments and workers, the introduction of more complicated cars and trucks, the shortage of adequately trained mechanics, and the impact of several recessions.

The measurement of secondary activity is somewhat less of a problem in the manufacturing sector because data are available on secondary activities. As with the other sectors, general statistics (employment, payroll, inventory, total value of shipments, etc.) shown for an industry in the Census of Manufactures encompass not only the primary activities of the establishments in that industry but also their secondary activities. However, the product statistics of the industry reports assemble the total output of specific products whether they are produced by establishments classified in the same industry as the products or not. This means that all engines produced regardless of the type of plant manufacturing them, are aggregated and published as a total. Another table provides a matrix where the columns breakdown industry shipments into primary and secondary products and miscellaneous receipts. So, for manufactured products, there is some information available for secondary activities.

Attached are tables showing where information that might be used as secondary activities information was collected for the nonmanufacturing sectors on the 1982 economic censuses. Some new data items were added to the 1987 economic census forms that should provide marginal new information about secondary activities. For example, more breakouts by type of employment on the auxiliary forms and questions relating to construction activities were added to some forms in both the Census of Retail Trade and the Census of Manufactures.

Knowing the problems with the way data currently are collected and some of the needs for secondary activity information, what is the best way to improve information about secondary activities? Perhaps it would be best to address the issue to stages. First create a user guide, as recommended by the Census Bureau's American Marketing Association Advisory Committee, showing where secondary activities information currently are collected, explaining the differences--comparability/noncomparability problems between data sets, and so forth. This way users could become familiar with what is available so that they can be knowledgeable about the data they are using and better able to make suggestions for improvement and expansion. At the same time, the Census Bureau might improve the limited data that are collected. For example, request data for specific activities like auto repair or trucking where all other or miscellaneous receipts are collected, and improve the coding of these items to make cross

tabulations easier and less costly. In addition, reaggregate secondary activity with primary data from major Census files where available. Then, where secondary activities are significant, expand the amount of secondary activity information that is collected, first on the Economic Censuses and later if feasible on annual surveys. Employment data probably would be the easiest data item to collect, making it a good place to start. It would be best to identify significant secondary activities and concentrate on them rather than attempting to cover all secondary activities at once.

We recognize that there are potential problems with identifying and measuring secondary activities. For instance, should both income and nonincome generating activities be measured? It appears to be much easier to collect comparable data for only the income generating secondary activities. For secondary activities like auto repair, capturing the income generating portion of the industry would be extremely helpful. But for secondary activities like trucking, large portions are nonincome generating and would still not be recorded separately by the firm. Further, what items should be collected -receipts, employment, payroll, expense items? If we attempted to collect information on nonincome generating activities how would one value the activity for the purpose of reporting revenues? If an establishment has a secondary activity that is both income and nonincome generating, you could conceivably use the same value for both. But beyond that

it is much more difficult. If it does not appear to be feasible to collect information for nonincome generating activities, would information on only the income generating activities be helpful? Do companies keep records that would permit them to report information on secondary activities? If so, at what level (establishment, company, division, EI or enterprise) of the company are data available on these activities?

This paper has defined secondary activities, discussed the problems associated with collecting the data and suggested some ways of improving data on secondary activities. We recognize that this paper poses as many questions as it answers. It is intended to stimulate discussion and initiate action to improve information on secondary activities so that we might get one step closer to measuring total industries.

		Items Col	lected			
All Nonmerchandise Receipts from Customore for						
Retail		<u> </u>		7 7 7 7 7	Sastamers rur	Materials Used
Form		Repair and	Labor	Delivery	Parts Inst.	Materials used
Titles	Construction	Maintenance		Charges	in Repair	in Landscaping
		7121.1102	0111111111	charges	III vehait	or Lawn Serv.
Lumber, Other						
Building Mat.	Х	х		} ,		
Paint, Glass,	· 	—-— ^	 -			
Wall Paper	χ	x				
Hardware	X		· ···· ····			
Lawn & Garden	·····	_ ^				_
Supplies			X	1 :		
Dept. General		··	^- -	 		, <u>X</u>
Merchandise				X		
Passenger					X	
Vehicles			X	!	· ·	
Tires and			^-	 	<u> </u>	
Batteries			χ			
Boats, Rvs, and					X	
Motorcycles			v	J		
Gas Stations		 	X		X	
Furniture	· · · · · · · · · · · · · · · · · · ·			 	Χ	j - -
Appliance,			 ^	X	! 	
Radio, and TV		l	J	1		
Musical Instru-	· 		X		X	
ments, Records		ı	U	1		
Floor Caverings	·		Х		X	
Home		· · · · · · · · · · · · · · · · · · ·		X		
Furnishings			V			
Drug			X		<u>X</u>	
Sporting Goods					<u> </u> 	
Gifts, Books,			X	<u> </u>	χ	
Stationery, etc.			ų.	}		
Jewelry	· · · · · · · · · · · · · · · · · · ·		X		X	<u> </u>
Cameras, Photo			Χ		X	
Supply		!	v	}		_
Sewing, Needle-		- 	<u> </u>		X	
work, Piece Gds]				
Optical Goods				<u> </u>		<u></u>
Pets, Pet				<u> </u>		
Supplies]		1		
20PH 1122				1		ĺ

1	Items Collected							
Retail	Rental or Lease Receipts from Rental or Le							
Form	Rental or Lease of	of Vehicles, Boats,	storage and	of Auto, Truck,				
Titles	Autos or Trucks	Aircraft, ect.	Docking Serv.	or Utility Trailers!				
			Bouning Sci 14	or octively marriers				
Lumber, Other]					
Building Mat.								
Paint, Glass,	- - 	 						
Wall Paper		1	}	.				
Hardware			 	-				
Lawn & Garden				· · · · · · · · · · · · · · · · · · ·				
Supplies		İ	1					
Dept. General		 						
Merchandise		}						
Passenger		 	 					
Vehicles	X			i				
Tires and			 	 -				
Batteries				1				
Boats, Rys, and		 	·					
Matorcycles		1 x	X					
Gas Stations		 	 					
Furniture				^				
Appliance,			 					
Radio, and TV		1						
Musical Instru-			 					
ments, Records		İ						
Floor Coverings								
Home		***************************************	 	- ·				
Furnishings								
Drug			 					
Sporting Goods		 	 					
Gifts, Books.	 		ļ					
Stationery, etc.		}		•				
Jewelry	· · · · · · · · · · · · · · · · · · ·							
Cameras, Photo		 	 					
Supply		i	İ					
Sewing, Needle-		 		<u> </u>				
work, Piece Gds		1	ł	1				
Optical Goods	 		 	 				
Pets, Pet		 	 	 				
Supplies)				
1			1	<u> </u>				

	Items Colleted					
Retail		Groceries &	[Packaged		Parts and Mat.
Form	Car Wash	other	Meals &	Liquor,	Cars, Trucks	Used in Repair or
Titles	Receipts	Food Items	Snacks	Wine & Beer	& Other Veh.	Upholstery Work
					··· - · · · · · · · · · · · · · · · ·	
Lumber, Other			1]	
Building Mat.			1		i i	
Paint, Glass,					 	
Wall Paper				ĺ	i i	
Hardware			1			· · · · · · · · · · · · · · · · · · ·
Lawn & Garden					 	
Supplies					ì	
Dept. General			T	···-		
Merchandise				Ì		
Passenger				·	1	
Vehicles						
Tires and			· · · · · · · · · · · · · · · · · · ·		 	
Batteries						
Boats, Rvs, and			 	T		
Motorcycles						
Gas Stations	X	X	X	T	1 ×	
Furniture			<u> </u>			
Appliance,			 	 -	1	
Radio, and TV			ĺ	1	1	
Musical Instru-		† 		 		
ments, Records			ĺ			1
Floor Coverings				 	 	
Home			 	 		
Furnishings		i				
Drug		1				
Sporting Goods		T		†		
Gifts, Books,		· · · · · · · · · · · · · · · · · · ·	 	+		
Stationery, etc.	ĺ	İ			}	
Jewelry		 	 	 	 	
Cameras, Photo		 				
Supply			{			
Sewing, Needle-			1			
work, Piece Gds	1	1				}
Optical Goods	 		·	 	 	
Pets, Pet	 	 	 	· · · · · · · · · · · · · · · · · · ·		
Receipts			1		1	1

	 	Items Col	lected			
Retail	Rental or Lease	Rental or Lease	Receipts from	Carpet	Carpet	
Form	of Appl., Radios,	of Musical Instr.	Instru. and	Repair	Cleaning	Photo-
Titles	& Television		Lessons	Receipts	Receipts	fishing
Lumber, Other						
Building Mat.			1			
Paint, Glass,						
Wall Paper		ì				
Hardware		· · · · · · · · · · · · · · · · · · ·				
Lawn & Garden						 -
Supplies		i				
Dept. General						<u> </u>
Merchandise						1
Passenger						 _
Vehicles						
Tires and						ļ
Batteries			}]
Boats, Rys, and						 -
Motorcycles			}			
Gas Stations						 -
Furniture						ļ
Appliance,	 				 	
Radio, and TV	X	ļ			ļ	
Musical Instru-					 	
ments,		ĺ x	l u		}	ļ
Floor Coverings		 	<u> </u>			
Home				X	Х	
Furnishings	<u>!</u>				İ	
Drug					 	·
Sporting Goods			 			
Gifts, Books,		 	X		ļ 	 -
Stationery, etc.		}		}	1	
Jewelry		 	 -		ļ	<u> </u>
Cameras, Photo				ļ	ļ	
Supply					}	
Sewing, Needle-	 	 	 	 	 	X
work, Piece Gds	1		Į ,	1	}	
Optical Goods	 		X		 	 -
Pets, Pet	 			 	 -	
Supplies		1		}		
Janhiis?	J	<u> </u>	<u></u>	<u> </u>	L	<u> </u>

			ms Collected			
Retail	Rental of	Kental or	Printing or		Charges	 _
Form	Convalesent	Lease of	Engraving to	Fees from Eye		Pet
Titles	Equipment	Equipment	Order	Examinations	Insurance	Boarding
Lumber, Other						
Building Mat.						1.
Paint, Glass,						1
Wall Paper						
Hardware						
Lawn & Garden						1
Supplies	1					1
Dept. General					<u> </u>	1
Merchandise					(
Passenger				······		T
Vehicles						1
Tires and						
Batteries	Ì					
Boats, Rys, and						
Motorcycles		!				
Gas Stations						
Furniture		• • • • • • • • • • • • • • • • • • • •				1
Appliance,			T		1	
Radio, and TV	İ				1	1
Musical Instru-					 	
ments, Records	ĺ		1			1
Floor Coverings					 	
Home			· · · · · · · · · · · · · · · · · · ·		 	
Furnishings						
Drug	χ		 		-	
Sporting Goods	·	X	 			
Gifts, Books,	-				- 	
Stationery, etc.			x	}	1	1
Jewel ry			 		 	
Cameras, Photo			 		 	
Supply		X	1		1	
Sewing, Needle-			 			
work, Piece Gds		ı	}			1
Optical Goods	 		 	 -	 	
Pets, Pet				 		 -
Supplies				!		
Laubbiles	L	<u> </u>		<u> </u>		<u> </u>

Secondary Activities Collected on the Census of Construction Industries

	 						
Form Titles							
	Building Construction	Construction other	Construction-	Subdividers and			
Items	General Contractors &	than Building Const.	Special Trade	Developers, except			
Collected	Operative Builders	Contractors	Contractors	Cemeteries			
Percent of		}					
Total Business							
Receipts	\	·					
from:	}]				
	l			<u> </u>			
Architectural							
Services	ľ x	X	χ	Х			
Cemetery Sub-		T					
dividing and		·					
Developing	X			X			
Engineering							
Services	X	X	X	X			
Manufacturing	X	X	X	X			
Mining	Х	X	X	X			
Real Estate							
Agents and	Į.	}]			
Managers	<u> </u>	X	<u>X</u>	X			
Rental of				1			
Construction	1						
Machinery or	1			}			
Equipment	<u> </u>	<u> </u>	<u> </u>	Х			
Retail Trade	<u> </u>	<u> </u>	1 X	<u> </u>			
Sale of Land	X X	X	1X	.) <u>X</u>			
Transportation	X X	<u>X</u>	<u> </u>	<u> </u>			
Wholesale		1	T X) X			
Trade	X	X	<u> </u>	1 × × × × × × × × × × × × × × × × × × ×			