

## DEFINITION AND MEASUREMENT OF THE NONFARM SELF-EMPLOYED

Irving Leveson\*  
National Bureau of Economic Research

Self-employment encompasses many different occupations ranging from peddlers to physicians. It can exist under a wide variety of legal (and illegal) and institutional arrangements--sole proprietorships, partnerships, small owner-managed corporations, franchises etc. This diversity makes the definition and measurement of the self-employed difficult, and limits the clarity with which aggregate data on the self-employed can be interpreted. Measurement problems have hampered studies of many aspects of economic activity and limited analysis of the self-employed themselves.

Frequently held reservations about the quality of data on the number of proprietors stem in part from the elusive nature of the activities of persons without an established place of business such as peddlers and door to door salesmen, of persons whose places of business are in their own homes, and of seasonal businesses. Lack of agreement about conceptual problems of measurement is compounded upon differences between sources in treatment of the groups in question. A systematic examination of these problems is attempted here.

### Definition of the Self-Employed

Many attributes of the work of the self-employed might be considered as the basis of a definition. The performance of entrepreneurial functions such as risk taking, autonomy in performing one's work, and ultimate authority within the firm are possible criteria. However, these characteristics do not clearly distinguish the independent proprietor from the salaried manager, director, or the stockholder. Such a distinction would be

made if we counted as self-employed, persons who are substantially residual income recipients and are active in a business or profession.

This definition is preferred to a more general one which would include all persons "working for themselves." Persons who sell only their own labor are usually engaged in production directed by an economic unit--often a household and sometimes a firm--and not by themselves. The residual income definition is analytically convenient since under it the status of a person in self-employment corresponds with the existence of a firm. While there may be some ambiguity in classifying persons who work with small quantities of other factors of production, the count of the self-employed would probably not be seriously affected by choice of a point of demarcation.

Many persons receive large parts of their incomes in forms such as commissions and tips which, although not residuals, depend directly on the level of business activity and therefore are probably closely tied to profits. The individual can often have an immediate influence on the amount of such incomes. Such groups as independent craftsmen may also have greater incentives than if they worked for someone else. These persons may be termed the quasi-self-employed. It would be useful to know whether the behavior and characteristics of the quasi-self-employed are closely related to those of the self-employed, particularly since for those who desire to be paid on an incentive basis, the two forms of employment may be close substitutes. The definition of this group will not be considered here.

Many persons engaged in criminal activity could in principle be considered as self-employed or quasi-self-employed. The oldest profession is characterized by self-employment, much the same as many of the newer, less notorious ones. The number of self-employed criminals is quantitatively important. In 1965 there were three and a half million crimes against property. In the same year there were 1.2 million part-time self-employed and 577,000 wage and salary workers who were self-employed on secondary jobs according to the Current Population Survey. Criminal activity may be an important substitute for these legitimate activities. Here, however, we confine our attentions to those activities that are normally measured in the GNP accounts and regular employment series.

Current statistical practice is to classify persons according to their class of worker status in the major labor market activity of a single week. All of the number, hours, earnings, and characteristics of many multiple jobholders are attributed to their major employment in this way. This practice affects the classification of some

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Certain data used in this paper were derived by the author from punched cards furnished under a joint project sponsored by the U.S. Bureau of the Census and the Population Council and containing selected 1960 Census information for a 0.1 per cent sample of the population of the United States. Neither the Census Bureau nor the Population Council assumes any responsibility for the validity of any of the figures or interpretations of the figures published herein based on this material.

information tabulated by occupation, industry and other characteristics, in addition to data on class of worker. If we wish to know the contribution to production of the self-employed or how individuals allocate their time (aside from the question of multiple job-holding), we do not wish to count the time of self-employed spent in wage and salary employment, while we would like to include the time spent in self-employment of wage and salary workers who are self-employed on secondary jobs. One solution to this problem is to classify portions of a person's hours, earnings, etc. according to the proportion of his time spent in each activity over a period of time. We would then obtain a number of full-time equivalent proprietors and a total manhours of proprietors which would correspond with entrepreneurial income as it is now being measured.<sup>1</sup>

Another question which arises is the treatment of proprietors of small, closely held corporations. Since they are similar in function and behavior to proprietors of unincorporated businesses, they should be included in the count of the self-employed for many problems of analysis. Interest in the unincorporated sector arises either when we wish to supplement existing information on the corporate sector to obtain a more complete picture of an industry or the economy, or when we are specifically concerned with legal status. For a great many questions such as understanding changes in opportunities in self-employment for disadvantaged groups or the role of small firms in the economy, attention should focus on all self-employed including those in small, closely-held corporations. It is therefore necessary to consider what effects inclusion of corporate proprietors would have on the number of self-employed.

#### Existing Estimates of the Number of Nonagricultural Self-Employed and Their Definitions

#### Sources

Before considering the quantitative aspects of the questions raised, let us briefly review the information available. The main features of some of the major sources of data on the number of self-employed are summarized in Table 1. All series exclude proprietors of corporations by definition. The sources vary greatly as to the frequency with which data appears and the amount of detail available. The Census of Population provides detailed information based on enumeration of households. The labor force concept of employment which it adopted beginning in 1940 is used by the other series. Earlier Census data applied to gainful workers.<sup>2</sup> The Current Population Survey (CPS) provides monthly data on a current basis for the postwar period from household surveys. Recently Stanley Lebergott has prepared annual estimates of the number of non-agricultural self-employed since 1900, based largely on Census of Population data, and designed to be consistent with the concepts and coverage of the CPS.<sup>3</sup>

Data on the number of proprietors of unincorporated business is collected approximately every five years for many service industries on employer reports in the Census of Business. Data for other industries appears in the Census of Manufactures, Census of Mineral Industries and the Annual Survey of Manufactures. The Office of Business Economics has estimated the number of self-employed since 1929, as a component of the series on the number of persons engaged in production, relying heavily on these censuses. Because the Census of Business benchmarks are so infrequent, the OBE uses information on the number of unincorporated business tax returns for interpolation and current extrapolation.

#### Official Definitions

The official definition in the Census of Population would appear to include many persons who are not residual income recipients by defining the self-employed as

Persons who worked for profit or fees in their own business, profession, or trade, or who operated a farm either as an owner or tenant. Included here are the owner-operators of large stores and manufacturing establishments as well as small merchants, independent craftsmen and professional men, farmers, peddlers, and other persons who conducted enterprises of their own. Persons paid to manage businesses owned by other persons or by corporations, on the other hand, are classified as private wage and salary workers (or, in some few cases, as government workers).<sup>4</sup>

Class of worker status was ascertained by asking "Was this person self-employed in his own business, professional practice of farm?" Many construction craftsmen, visiting nurses and others who provide little in addition to their own labor services are counted as self-employed. The CPS follows the Census of Population criteria. Both classify persons by their major activity at a point in time.

The 1958 Census of Business questionnaire asks for information on the number of "Proprietors or partners who worked 15 hours or more during the one week ended nearest November 15, 1958." The hours limitation is intended to include only those devoting a major portion of their time to the business. This has the effect of reducing double counting of proprietors of more than one establishment. It is not clear which individuals within businesses are being classified as proprietors or partners, although collection of information on legal status does assure exclusion of corporate proprietors.

#### Corporate Self-Employed

#### The Number of Corporate Self-Employed

Now let us examine the effects of including the corporate self-employed. Very little direct

information is available on the number of small, closely held corporations. In 1960 there were 90,000 Small Business Corporation income tax returns. These originated from operating domestic firms with fewer than ten shareholders which elected to be taxed as individuals. Another half million returns of a total of 1.1 million returns came from corporations which were more than 50 per cent owned by one stockholder.<sup>5</sup>

The size distribution of all corporations may give a better indication of how many small, closely held corporations there are. Table 2 indicates that over two-thirds of all corporations' tax returns had business receipts of less than \$100,000 and five-sixths had less than \$200,000 in 1962. The percentages that had value added below these are even higher. About a million corporate tax returns indicated business receipts of below \$200,000 in 1962. While not all of these firms were closely held and the number of tax returns tends to overstate the number of businesses, some of these firms had more than one proprietor and some larger firms were undoubtedly closely held. This would suggest that the number of corporate proprietors is about 1 million.

#### Treatment of Corporate Proprietors in the Census of Population and CPS

The Census Bureau established an experimental panel, the Monthly Labor Survey (MLS), about one-fourth the size of the CPS, and the CPS Methods Test, a three area sample, to sharpen measurement of labor force activity. These surveys, which were discussed at the 1965 meetings, found that many corporate proprietors were reporting themselves as self-employed, contrary to the official definition, because information on legal status of their business was not being elicited. The Monthly Labor Survey (MLS), reported on by Robert L. Stein and Daniel B. Levine, showed that when the question on self-employment was followed by a question as to whether the business was incorporated, approximately one million fewer non-farm self-employed were indicated than by the CPS, which had no such question, for the first half of 1965. Similar results from the CPS Methods Test were presented by Joseph Waksberg and Robert B. Pearl. A follow-up mail questionnaire regarding legal form of the business, sent to those reporting initially as self-employed during April 1963-December 1964, indicated that the count of self-employed would be reduced by about 750,000 if corporate proprietors were excluded.<sup>6</sup> A comparison between the CPS and MLS for the full year 1966 based on a MLS sample increased to half the size of the CPS has been published. The difference there is also about 750,000.<sup>7</sup> These figures can be considered as estimates of the number of proprietors of small, closely held corporations. Their level is consistent with the number implied by the tax return data.

No direct information is available on the extent to which corporate proprietors report themselves as self-employed in different groups

or over time. Some indication of the relative importance of corporate proprietors in different industries can be obtained, however, by comparing the CPS and MLS estimates. The CPS, which includes proprietors in corporations exceeded the MLS estimate by 39 per cent in mining and manufacturing, 5 per cent in construction, 6 per cent in transportation, communications and public utilities, and 18 per cent in trade and in services for the first half of 1966.

#### The Effect of Including Corporate Self-Employed on Recent Changes

The shifting of firms into corporate status limits the value of the reported number of self-employed as a measure of the total number including those in corporations in recent years. Table 3 compares the CPS and OBE number of self-employed in manufacturing, trade and services with the number of establishments and employees for 1954-1963. Changes in the number of establishments better reflect changes in the total number of self-employed since establishments of corporations are included. However, they probably tend to somewhat overstate the growth of the number of proprietors since they include increases in the number of establishments of large firms which are not associated with changes in the number of proprietors. Data from the CPS and OBE for the three industries combined show the number of proprietors to be growing much less rapidly than the number of establishments because of the growth of corporations. The similarity of changes in the CPS series to changes in the OBE number of proprietors suggests that the changes in CPS number of self-employed will not be significantly biased as a measure of changes in the number of proprietors of unincorporated businesses. This is helpful for gauging current changes since the CPS series is available monthly on a current basis and is not subject to large revisions like the OBE series.

Changes in the number of establishments are much more similar to changes in the number of employees than are changes in the total number of self-employed. The comparison of establishments and employees suggests that the percentage of employed persons in all nonagricultural industries who are self-employed, including corporate proprietors, declined slightly from 1954-1963 with all of the decline coming since 1958. The decline in the ratio of corporate proprietors to employees appears to have been much greater in trade than in services.

Beginning in January 1967 the CPS has excluded corporate proprietors by making use of information now requested on legal status from persons responding as self-employed. It would be useful if the questions on class of worker and legal status were tabulated so as to provide separate data on the number of corporate and non-corporate proprietors. This would also permit calculation of a current series which is comparable to the earlier one.

## Some Problems With Existing Estimates

### Differences Between the Census of Population and CPS

A number of other sources of difficulty exist with present estimates. According to the Gordon Committee Report, 970,000 more nonagricultural self-employed were indicated in the April 1960 CPS than in the 1960 Census of Population.<sup>8</sup> Table 4 compares the annual averages of the number of nonagricultural self-employed from the CPS with the April Census of Population figures for 1940, 1950 and 1960. The CPS show higher levels than the Census of Population in all industries and years. While the two sources show 1940-60 percentage changes in the total number of nonagricultural self-employed which are close, 15.6 per cent for the Census of Population compared to 18.1 per cent for the CPS, individual industries showed wide divergence. Differences between sources in the size of changes are not consistent in direction across industries or decades.

In the opinion of Census Bureau personnel, about half of the differences between the sources results from the Census of Population assumption that persons who do not report class of worker status are private wage and salary workers. Furthermore, the CPS elicits better reporting of self-employment in marginal enterprises, such as those conducted part-time in the home.<sup>9</sup>

### Differences Between Establishment and Household Series

Substantial differences often exist between data from household series and information collected from employers. Establishment data counts multiple jobholders at each place of work. In recent years there have been about 400,000 wage and salary workers on their primary jobs who are self-employed on secondary jobs.<sup>10</sup> In addition an unknown number of proprietors are counted at more than one establishment. Another difference is that all corporate proprietors are excluded by the Census of Business because information on legal form of organization is made use of. Important differences may exist in the information on industry given by households and employers.<sup>11</sup>

I compared the number of self-employed in the 1960 Census of Population to the average number in the 1958 and 1963 Censuses of Business, with minor adjustment for the exclusion of small establishments in the latter, for 20 trade and service industries which could be easily matched. The unweighted mean ratio of the Census of Population to the Census of Business count was .97 and its standard deviation was .12. The total number of self-employed in the 20 industries was lower in the Census of Population by 5 per cent. The uneven effects of inclusion of corporate proprietors and classifying persons not reporting class of worker status as wage and salary workers in the Census of Population, and the double counting of multiple jobholders in the Census of Business, plus differences in

industry classification explain the dispersion of the differences among industries.

Additional problems appear when we examine time series data. Chart 1 compares the number of self-employed as reported by the OBE and the CPS series with Lebergott's extension. Because of the smoothing introduced by interpolation between infrequent benchmarks, the OBE series is less sensitive to cyclical and war related changes. Furthermore, revisions have at times been large. The latest OBE revision cut the number of construction self-employed in half in recent years reducing the estimated number of proprietors in all nonagricultural industries by one-tenth.<sup>12</sup> After this change, the OBE data show about the same rise as the CPS since 1950, compared to the more rapid rise in the unrevised OBE series. The revision also eliminated the declines in the recession years of 1954 and 1958. The remaining difference in level comes largely in services. Another inconsistency is a large decline in the OBE construction estimates from 1948 to 1954 while the CPS showed a slight rise.

A large discrepancy in trend existed between the CPS and OBE for the period 1949 to 1952. Part of it was removed by the revision. Table 5 shows the size of the differences and effect of revisions. Part of the remaining differences may be because the OBE relies on Census of Business data for the month of November which, in the benchmark year of 1954, was about 200,000 above the annual average according to the CPS, while there was no strong seasonal pattern in other years. The importance of eliminating such inconsistencies between "official" series can be appreciated with reference to current changes. If forces related to the war in Viet Nam produce differences of the kind that existed during the Korean War, our understanding of current developments would be most unsatisfactory.

### Estimates of the Number of Self-Employed in 1960

Next I make use of information on the content of available series in order to derive estimates of the number of self-employed according to alternative concepts and sources in 1960. Estimates are presented for self-employed in unincorporated businesses and all self-employed, alternatively derived classifying persons by their major activity at a point in time and dividing their time between activities during the year, and alternatively based on OBE and CPS data. These estimates are presented in Tables 6 and 7.

The estimate of corporate proprietors was based on the findings of the expanded Monthly Labor Survey. Current Population Survey data permitted elimination of multiple jobholders. An estimate was made for the number of proprietors with negligible amounts of residual income. Large differences exist between the published numbers of self-employed and my estimates of the number in unincorporated businesses. The level in the published figures is about the same as the estimates

of the total number of self-employed. The reconciliation has successfully eliminated the differences between sources. Estimates based on allocation of time are higher because more wage and salary workers have second jobs as self-employed than self-employed have secondary jobs as wage and salary workers. Either classifying at a point in time or over a period, and whichever source is used, it is estimated that the number of nonagricultural self-employed in unincorporated businesses was about 5 million in 1960 while the total number of self-employed was nearly 6 million.

Available data suggest that if similar estimates were made for 1950, we would observe the 1950-60 trend little affected by changes in the extent of multiple jobholding. The rate of growth in self-employment would be reduced by the exclusion of persons with small amounts of residual income, but the effect of including corporate proprietors would be large enough so that the total number of self-employed would show a greater rise than existing series.

#### Summary

The heterogeneity of the self-employed makes their definition and measurement difficult. It is maintained that the appropriate definition of a self-employed person for problems of economic analysis is one who is substantially a residual income recipient and is active in a business or profession. The number of self-employed is better defined as the average number over the year in full-time equivalents, than by classifying persons by their major activity and at a point in time. While we may wish to examine proprietors of unincorporated businesses in order to supplement existing information for the corporate sector, for most problems of analysis, proprietors of small, closely-held corporations should be included in the count of self-employed. In 1960 the number of nonagricultural self-employed in unincorporated businesses was about 5 million while the total number was nearly 6 million, according to the preceding criteria. Reductions in self-employment as a per cent of all employment have been greatly overstated in recent years as a result of the growing importance of the corporate form of organization.

Estimates of the number of nonagricultural self-employed differ widely between sources for many reasons. The Current Population Survey and Census of Population have been counting up to a million corporate proprietors as self-employed. However, the CPS began excluding proprietors of corporations from the count of the self-employed in January 1967. The Census of Population seriously undercounts marginal proprietors and classifies persons not reporting class of worker status as wage and salary workers. The OBE series on active proprietors of unincorporated enterprises double counts multiple jobholders and proprietors of more than one establishment since it is based on establishment reports. Before the latest OBE revisions, there were

large differences between the CPS and OBE construction estimates which seriously affected the total for all industries. Trends in the CPS and OBE series have at times sharply diverged. Adjustment for major differences results in close reconciliation of the OBE and CPS series in 1960.

It is recommended that the use of a residual income criterion to define the self-employed be investigated, that information for persons with multiple activities be distributed among those activities, that separate data on the number of corporate proprietors be published by the CPS, and that the OBE publish more information on its estimating procedures.

#### Footnotes

1. Such a measure of the number of self-employed would not be sensitive to the undercount of those working few hours. This is a constant source of difficulty in obtaining consistency over time in the Census of Business on which the OBE series is based and is at least a potential source of error in the CPS. For a comparison of employment both at a point in time and over a period of time with comparable earnings data see Irving Leveson, "Nonfarm Self-Employment in the U.S.," unpublished Ph.D. dissertation, Columbia University, 1967, Chapter IV.

2. Briefly, the 1930 gainful worker group includes all persons who reported a gainful occupation, regardless of whether they were working or seeking work at the time of the census. The group includes all persons who usually worked at gainful labor, regardless of when they worked. The 1940 labor force on the other hand, was determined by activity during a particular period - the last week of March 1940 - and includes only persons who were working, or with a job, or seeking work in that week.

Alba M. Edwards, Sixteenth Census of the United States: 1940, Population, Comparative Occupation Statistics for the United States 1870 to 1940, Washington: U.S. Government Printing Office, 1943, p. 7.

3. Stanley Lebergott, Manpower in Economic Growth, New York: McGraw-Hill Book Company, 1964, Table A-4.

4. U.S. Bureau of the Census, Census of Population: 1960, Vol. 1, Characteristics of the Population, Part 1, United States Summary, Washington: U.S. Government Printing Office, 1964, p. LXXIII.

5. U.S. Internal Revenue Service, Statistics of Income...1960-61, Corporation Income Tax Returns, Tables 17 and 35.

6. Robert L. Stein and Daniel B. Levine, "Research in Labor Force Concepts," Proceedings of the Social Statistics Section of the American Statistical Association, 1965, pp. 218-26 and Joseph Waksberg and Robert B. Pearl, "New Methodological Research on Labor Force Measurements," Proceedings of the Social Statistics Section of the American Statistical Association, 1965, pp. 227-37. The CPS Methods Test applied to all industries, including agriculture. However, since there are relatively few corporations in agriculture, the results are very close to those that would be obtained for non-agricultural industries alone.
7. U.S. Bureau of Labor Statistics, "New Definitions for Employment and Unemployment," reprinted from Employment and Earnings and Monthly Report on the Labor Force, February 1967, Table 11.
8. U.S. President's Committee to Appraise Employment and Unemployment Statistics, Measuring Employment and Unemployment Statistics, Washington, U.S. Government Printing Office, 1962, Table J.4.
9. Robert B. Pearl, Chief, Demographic Surveys Division, U.S. Bureau of the Census, letter to the author, January 13, 1966. The assumption of private wage and salary worker status applies to persons who do not report employment status and are allocated to the labor force on the basis of the procedure used for allocation of unknown cases (about 3 per cent of the working age population) and those reporting in the labor force but with missing entries for class of worker, occupation and industry (about 5 per cent of persons reporting themselves in the labor force). The CPS-Census Match found that in April 1960 the CPS reported 536,000 nonagricultural self-employed who had reported being out of the labor force in the Census of Population compared to 202,000 persons indicating non-agricultural self-employment in the Census of Population who were classified as out of the labor force in the CPS. U.S. Bureau of the Census, Evaluation and Research Program of the U.S. Censuses of Population and Housing, 1960, Accuracy of Data on Population Characteristics as Measured by CPS-Census Match, Series ER 60, No. 5, Washington: U.S. Government Printing Office, 1965.
10. U.S. Bureau of Labor Statistics, Multiple Jobholders in December 1960, Special Labor Force Report, No. 18, Table 1.
11. These differences could arise for self-employed if wives respond in the household interviews but husbands respond in employer reports.
12. This change is supported by data from the 1/1000 sample which shows that approximately the amount of self-employment income in construction according to the OBE estimate was earned by the smaller number of persons. At the very least this demonstrates that the earlier OBE estimates of income of unincorporated enterprises and active proprietors were inconsistent with each other.

Table 1  
Major Sources of Data on the Number of Nonagricultural Self-Employed

	Primary Sources			Secondary Sources	
	Census of Population	Current Population Survey	Census of Business	Lebergott	Office of Business Economics
Frequency	decennial	monthly	irregularly	annual	annual
Period covered	up to 1960	1947 to present	1929 to 1963	1900 to 1946	1929 to present
Reporting unit or primary source	households	households	establish- ments	CPS and Census of Population	Census of Business
Multiple jobholders double counted	no	no	yes	no	yes
Corporate proprietors excluded by definition	yes	yes	yes	yes	yes
Some corporate proprietors included in practice	yes	yes	no	yes	no
Coverage of marginal enterprises	poor	good	good	CPS level, poor for changes	good
Level of industry detail	detailed	major	detailed	major	detailed
Other detail available	detail on labor force and personal characteris- tics	some data on labor force and personal characteris- tics	location, firm size	none	none

TABLE 2

Number and Distribution of Tax Returns by Size of Business Receipts and  
Legal Form of Organization, Nonagricultural Industries,  
1962

Size of Business Receipts	Sole Proprietor- ships	Partner- ships	All Un- incorporated Returns	Cor- pora- tions	All Returns
<u>Number (thous.)</u>					
Under \$5,000	2,334	167	2,501	181	2,682
\$5,000-\$10,000	840	83	923	142	1,065
\$10,000-\$25,000	1,089	137	1,226	148	1,374
\$25,000-\$50,000	696	126	822	168	990
\$50,000-\$100,000	425	117	542	168	710
\$100,000-\$200,000	194	80	274	182	456
\$200,000-\$500,000	77	48	125	93	218
\$500,000-\$1,000,000	14	12	36	87	123
\$1,000,000-\$5,000,000	4	6	10	9	19
\$5,000,000 or more	-	1	1	6	7
Total*	5,675	777	6,452	1,188	7,640
<u>Percent Distribution</u>					
Under \$5,000	41.1%	21.5%	38.8%	15.2%	35.1%
\$5,000-\$10,000	14.8	10.7	14.3	12.0	13.9
\$10,000-\$25,000	19.2	17.6	19.0	12.5	18.0
\$25,000-\$50,000	12.3	16.2	12.7	14.1	13.0
\$50,000-\$100,000	7.5	15.1	8.4	14.1	9.3
\$100,000-\$200,000	3.4	10.3	4.2	15.3	6.0
\$200,000-\$500,000	1.4	6.2	1.9	7.8	2.9
\$500,000-\$1,000,000	.2	1.5	.6	7.3	1.6
\$1,000,000-\$5,000,000	.1	.8	.2	.8	.2
\$5,000,000 or more	-	.1	-	.5	.1
Total*	100.0%	100.0%	100.0%	100.0%	100.0%
Percent under \$100,000	94.9%	81.1%	93.2%	67.9%	89.3%

Source: U.S. Internal Revenue Service, Statistics of Income...1962, U.S. Business Tax Returns, Tables 6, 16 and 34.

\* Excluding receipts not reported.



TABLE 3

Comparisons of Changes in Self-Employment With Changes in the Number of Establishments and Employees, Manufacturing, Trade and Services, 1954-63

				Percentage Change		
				1954-58	1958-63	1954-63
				(thousands)		
				1954	1958	1963
CPS Self-Employed:	Manufacturing			424	408	362
	Trade			2,481	2,449	2,203
	All Services			1,745	1,984	2,319
	Total			4,650	4,841	4,884
OBE Self Employed:	Manufacturing			410	363	360
	Trade (excluding automobile services)			2,299	2,440	2,219
	Selected Services*			1,000	1,086	1,267
	Total			3,709	3,889	3,846
Establishments:	Manufacturing			286	298	312
	Trade			1,974	2,075	2,016
	Selected Services*			786	979	1,062
	Total			3,046	3,352	3,390
Employees:	Manufacturing			16,099	16,035	16,962
	Trade			9,679	10,750	11,499
	Selected Services*			2,362	2,904	3,262
	Total			28,140	29,689	31,723

Source: U.S. Bureau of the Census, Censuses of Business and Manufactures and U.S. Office of Business Economics.

\*Excludes professional services and nonprofit organizations.

TABLE 4

Comparison of Levels and Changes in the Number of Self-Employed in  
Nonagricultural Industries in the Census of Population and  
Current Population Survey, by Industry, 1940-60

				Percentage Change		
	1940 (thousands)	1950	1960	1940-50	1950-60	1940-60
Census Total*	4,600	5,121	5,317	11.3	3.8	15.6
Manufacturing	269	403	366	49.8	-9.2	36.1
Construction	482	640	733	32.8	14.5	52.1
Trade	1,827	2,115	1,906	15.8	-9.9	4.3
Service	1,573	1,498	1,780	-4.8	18.8	13.2
Other	415	449	472	8.2	5.1	13.7
CPS Total	5,390	6,069	6,367	12.6	4.9	18.1
Manufacturing	324	407	383	25.6	-5.9	18.2
Construction	582	696	758	19.6	8.9	30.2
Trade	2,344	2,562	2,443	9.3	-4.6	4.2
Service	1,589	1,883	2,175	18.5	15.5	36.9
Other	551	521	608	-4.6	16.7	10.3
CPS minus Census:						
Total	790	948	1,050	1.3	2.1	2.5
Manufacturing	55	4	17	-24.2	3.3	17.9
Construction	100	56	25	-13.2	-5.6	-21.9
Trade	517	447	537	-6.5	5.3	-.1
Service	26	385	395	23.3	-3.3	23.7
Other	136	72	136	-12.8	11.6	-3.4

Note: CPS data are averages of monthly figures.

Source: U.S. Bureau of the Census, Census of Population, 1940: Industrial Characteristics, Table 6, 1950: Industrial Characteristics, Table 8, 1960: U.S. Summary, Detailed Characteristics, Table 6, Stanley Lebergott, Manpower in Economic Growth, New York: McGraw-Hill, Inc., 1964, Table A-7.

\*Includes industry not reported.

TABLE 5

Comparison of the CPS Number of Self-Employed With the  
OBE Number Before and After Revision, Nonagricultural Industries,  
1949-52  
(thousands)

Year	CPS	OBE, Unrevised	OBE, Revised
1949	6,208	5,662	5,654
1950	6,069	5,729	5,721
1951	5,869	5,901	5,782
1952	5,670	6,023	5,822

Source: CPS and revised OBE data from Table A-1. Unrevised data  
from U.S. Income and Output Tables VI-13 and VI-16.

TABLE 6

Alternative Estimates of the Number of Self-Employed in Unincorporated Businesses and the Total Number of Self-Employed, Measured by Classifying Persons by Their Major Activity at a Point in Time, Nonagricultural Industries, 1960 (thousands)

	Based on OBE	Based on CPS
1. Number of self-employed as published	5,941	6,367
2. less corporate self-employed		-743
3. less wage and salary workers who are self-employed on secondary jobs	-399	
4. less reported self-employed with negligible residual income	<u>-600</u>	<u>-700</u>
5. Number of self-employed in unincorporated businesses	4,942	4,924
6. plus corporate self-employed	<u>743</u>	<u>743</u>
7. Total number of self-employed	5,685	5,667

Sources: Line

- 1 U.S. Office of Business Economics, The National Income and Product Accounts of the United States, 1929-1965, Statistical Tables, Tables 6.4 and 6.6, and U. S. Bureau of Labor Statistics, Labor Force and Employment in 1960, Special Labor Force Report No. 14, Table C-4.
- 2 U.S. Bureau of Labor Statistics, "New Definitions of Employment and Unemployment," reprinted from Employment and Earnings and Monthly Report on the Labor Force, February, 1967, Table 11.
- 3 U.S. Bureau of Labor Statistics, Multiple Jobholders in December, 1960, Special Labor Force Report No. 18, Table 1.
- 4 Sum of selected occupations including clerical and kindred workers, carpenters, electricians, operatives, clergymen, nurses, waiters, insurance agents and dressmakers outside of factories. A smaller number was used for the OBE data because some part-time proprietors are excluded.
- 5 Line 1 minus lines 2-4.
- 6 Same as line 2.
- 7 Line 5 plus line 6.

TABLE 7

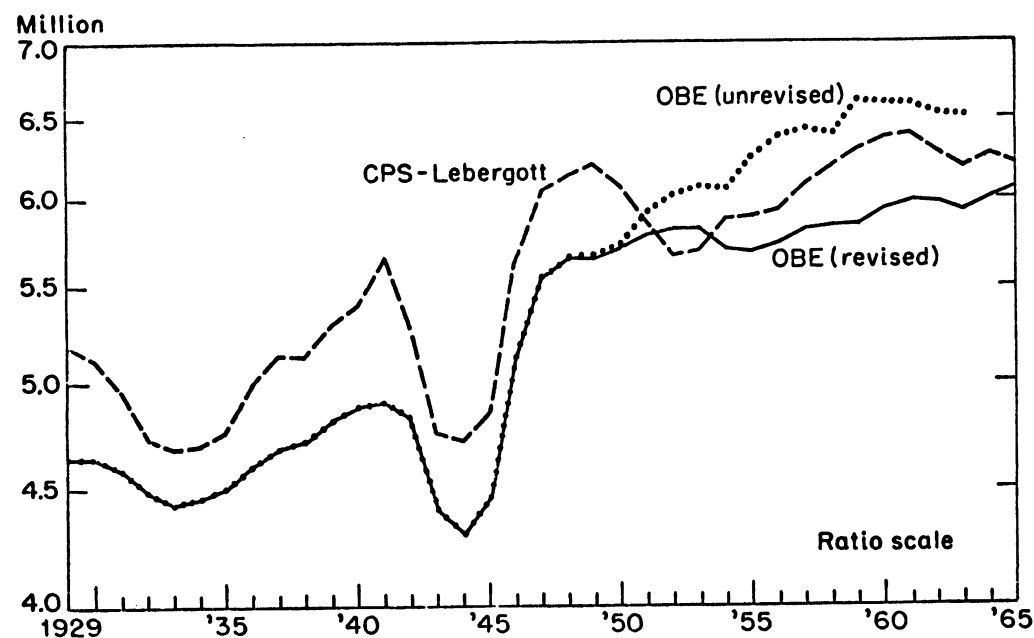
Alternative Estimates of the Number of Self-Employed in Unincorporated Businesses and the Total Number of Self-Employed, Measured by Classifying the Portion of a Person's Time Spent in Each Activity During a Period in that Activity, Nonagricultural Industries, 1960 (thousands)

Line		Based on OBE	Based on CPS
1	Number of self-employed as published	5,941	6,367
2	less corporate self-employed		-743
3	plus adjustment of wage and salary workers with secondary jobs as self-employed to full-time equivalent self-employed	-200	80
4	less adjustment of self-employed with secondary jobs as wage and salary workers to full-time equivalent self-employed	-36	-36
5	less reported self-employed with negligible residual income	<u>-600</u>	<u>-700</u>
6	Number of self-employed in unincorporated businesses	5,105	4,968
7	plus corporate self-employed	<u>-743</u>	<u>743</u>
8	Total number of self-employed	5,848	5,711

Sources: line

- 1 and 2 Same as Table 6, lines 1 and 2.
- 3 80 per cent of Table 6, line 3 with an extra adjustment for the OBE series because some part-time proprietors are excluded; 20 per cent for CPS.
- 4 Same as Table 6, line 3. 80 per cent of the hours of proprietors with secondary jobs were estimated to be in self-employment.
- 5 Same as Table 6, line 4.
- 6 Line 1 minus line 2 plus line 3 minus lines 4 and 5.
- 7 Same as line 2.
- 8 Line 6 plus line 7.

Chart 1  
OBE and CPS-Lebergott Number of Nonagricultural Self-Employed, 1929-65



Source: Stanley Lebergott, Manpower in Economic Growth New York: McGraw-Hill Book Company, 1964, Table A-3, U.S. President, Manpower Report of the President, March, 1966, Table A-9; U.S. Office of Business Economics, U.S. Income and Output, Tables VI-13 and VI-16, and SCB, July 1962 and July 1964; U.S. Office of Business Economics, The National Income and Product Accounts of the United States, 1929-1965, Statistical Tables, Tables 6.4 and 6.6