Volume Title: Employment Hours and Earnings in Prosperity and Depression, United States, 1920-1922

Volume Author/Editor: Wilford Isbell King

Volume Publisher: NBER

Volume ISBN: 0-87014-004-3

Volume URL: http://www.nber.org/books/king23-1

Publication Date: 1923

Chapter Title: Introduction to "Employment Hours and Earnings in Prosperity and Depression, United States, 1920-1922"

Chapter Author: Wilford Isbell King

Chapter URL: http://www.nber.org/chapters/c4865

Chapter pages in book: (p. 9 - 21)

EMPLOYMENT HOURS AND EARNINGS IN PROSPERITY AND DEPRESSION

UNITED STATES, 1920–1922

CHAPTER I

INTRODUCTION

Students of American labor problems have long been hampered by the lack of any comprehensive data on employment, hours, and earnings. There has been no lack of isolated studies pertaining to these fields but these studies have covered different phases of different industries at different periods. The reports on hours worked have not always corresponded to the records of pay. Rarely indeed has one been able to obtain a fair comparison of conditions in a series of industries. Our knowledge concerning the total effect of a depression upon employment has been painfully incomplete. Because of these reasons, everyone who has tried to piece together the available fragments and thus make a composite picture of the situation of the employed classes has felt the crying need of a study which would treat all industries in a uniform manner.

The investigation authorized by the Committee on Unemployment and Business Cycles appointed by President Harding's Conference on Unemployment made it possible to obtain this much-needed information. When the National Bureau of Economic Research was entrusted with the task of studying the relationship of unemployment to the business cycle, the Staff of the Bureau laid plans at once to draw as complete a picture as possible of employment conditions throughout the country.

The data presented in the succeeding chapters were all secured from questionnaires, the three types of which are here shown.

The first schedule was designed to secure directly from employees information showing the time they lost through various causes, their hours of work, pay, family income, and income per ammain.[1] The needed informa-

[1] An ammain is defined as *a gross demand for articles of consumption having a total money value equal to that demanded by the average male in the given class at the age when his total requirements for expense of maintenance reach a maximum.* For a discussion of this unit and its uses in measuring the relative needs of different classes of the population, see *The U. S. Public Health Reports*, Nov. 26, 1920, or *The Journal of Political Economy*, July, 1921, p. 571.

Form U 2 — The Bureau of the Census in co-operation with the President's Conference

IMPORTANT:—It is not expected that you will be able to fill out the following table with exactness, but it is very important recollection of the informant will answer our needs. Do not fail to fill this schedule merely because the precise facts are unob

APPROXIMATE OCCUPATIONAL RECORD SINCE MARCH 1, 1920, OF PRESENT MEMBERS (INCLUDING SALARY AT SOME DATE SINCE MARCH 1, 1920

HEAD OF HOUSEHOLD: Name

ADDRESS: No. and Street

(a) MEMBERS OF HOUSEHOLD (of All Ages) NOT GAINFULLY EMPLOYED AT ANY TIME SINCE MARCH 1, 1920

Name	Do Not Write in This Column	Age	Sex (M or F)	Single, Married, Widowed, or Divorced	(b) Relationship to Head of Household

OTHER RESIDENCES

Number and Street	Post Office

(y) MEMBERS OF PRESENT HOUSEHOLD GAINFULLY EMPLOYED NOW OR SINCE MARCH 1, 1920

OCCUPATIONS

Name	Do Not Write in This Column	Age	Sex (M or F)	Single, Married, Widowed, or Divorced	(b) Relationship to Head of Household	(g) Period: Year	(h) Period: Months	(i) Chief Industry in which Employed During Period	(j) Chief Occupation During Period	(k) On Which: Because of Strike	(m) On Which: Because Sick
1.						1920	Mar.-Apr.-May				
						1921	Mar.-Apr.-May				
						1921	June-July-Aug.				
						1921	Sept.-Oct.-Nov.				
						1921-2	Dec.-Jan.-Feb.				
2.						1920	Mar.-Apr.-May				
						1921	Mar.-Apr.-May				
						1921	June-July-Aug.				
						1921	Sept.-Oct.-Nov.				
						1921-2	Dec.-Jan.-Feb.				
3.						1920	Mar.-Apr.-May				
						1921	Mar.-Apr.-May				
						1921	June-July-Aug.				
						1921	Sept.-Oct.-Nov.				
						1921-2	Dec.-Jan.-Feb.				
4.						1920	Mar.-Apr.-May				
						1921	Mar.-Apr.-May				
						1921	June-July-Aug.				
						1921	Sept.-Oct.-Nov.				
						1921-2	Dec.-Jan.-Feb.				
5.						1920	Mar.-Apr.-May				
						1921	Mar.-Apr.-May				
						1921	June-July-Aug.				
						1921	Sept.-Oct.-Nov.				
						1921-2	Dec.-Jan.-Feb.				

PERSON FILLING THIS SCHEDULE

Name.....
No. and Street.....
Post Office.....
County.....
State.....

Enter Any Notes Here or on Back of Schedule

Leave all the spaces to the Right Blank

Mail this schedule to W. I. King, 175 Ninth Avenue, New York, N. Y.

n Unemployment and the National Bureau of Economic Research
hat the part of the record dealing with Occupations and Earnings be COMPLETE. Approximate answers based upon the best
ainable. When in doubt, read the instructions on the accompanying sheet.

ODGERS) OF A HOUSEHOLD, ONE OR MORE MEMBERS OF WHICH HAVE WORKED FOR WAGES OR

P. O.	Co.	State

F HEAD OF HOUSEHOLD SINCE MARCH 1, 1920

State	Period Residence Continued	
	From	To

(c) Net Family Income in 1921 from Sources Other Than Wages or Salaries

(d) Business..................$..............
(e) Property..................$..............
(f) Cow, Garden, etc.....$..............

Total......................$..............

ND EARNINGS OF GAINFULLY EMPLOYED MEMBERS OF THE HOUSEHOLD

(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)	Do not write in these columns			
NUMBER OF WORKING DAYS						HOURS PER WEEK					F	G	H	J
o Work Was Performed							When Working Every Regular Working Day				r×w / 6	s×t / 6	F / G	F×x
Be-cause no Work was Avail-able	Because Work was not Desired	Because of Other Reasons	Total Days not Worked (k+m+n+o+p)	On which Part or Full Time was Worked	Total Working Days in Period (q + r)	Nominal Full Time in Hours per Week	Average Hours Over-time per Week	Average Hours per Week Lost Through Short Time	Average Hours Actually Worked (t + u — v)	Average Earn-ings per Hour When Working				
					78									
					78									
					78									
					76									
					74									
					78									
					78									
					78									
					76									
					74									
					78									
					78									
					78									
					76									
					74									
					78									
					78									
					78									
					76									
					74									
					78									
					78									
					78									
					76									
					74									

THE UNITED STATES DEPARTMENT OF AGRICULTURE in Cooperation with THI

RECORD OF EMPLOY

NAME OF FARMER.....ADDRESS: Pos

It is not expected that you will be able to fill out the following tables with exactnes upon your best recollection will be entirely satisfactory. Do not fail to fill this schedul

Please enter in the following spaces a record of the principal occupations followe or over except those who have during the entire time been engaged in household

OCCUPATIONS FOLLOWED SINCE JANUARY 1, 1920, BY THE FARMEI

Name of Farmer and of Members of His Family	Age	Sex	NAME OF PRINCIPAL OCCUPATION			
			1920			
			1st Quarter	2d Quarter	3d Quarter	4th Quarter
.....Farmer....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....

RECORD OF FARMER'S HIRED EMPLOYEES AT DIFFERENT

Note: Kindly indicate those periods in which no employees were

Sex		
MALE	Hired by Month	Average Number of Persons of This Class in Your Employ*..... Average Pay Per Employee **Per Month**, Including Value of Board, Housing, etc., Furnished Average Number of **Hours** Worked **Per Week** Per Employee..... .....Do not write on this line..... .....Do not write on this line.....
	Hired by Day	Average Number of Persons of This Class in Your Employ*..... Average Pay Per Employee **Per Day**, Including Value of Board, Housing, etc., Furnished ..... Average Number of **Days** Worked **Per Week** Per Employee..... Average Number of **Hours** Worked **Per Week** Per Employee..... .....Do not write on this line..... .....Do not write on this line.....
FEMALE	Hired by Week	Average Number of Persons of This Class in Your Employ*..... Average Pay Per Employee **Per Week**, Including Value of Board, Housing, etc., Furnished.. Average Number of **Hours** Worked **Per Week** Per Employee..... .....Do not write on this line..... .....Do not write on this line.....
	Hired by Day	Average Number of Persons of This Class in Your Employ*..... Average Pay Per Employee **Per Day**, Including Value of Board, Housing, etc.. Furnished ... Average Number of **Days** Worked **Per Week** Per Employee..... Average Number of **Hours** Worked **Per Week** Per Employee..... .....Do not write on this line..... .....Do not write on this line.....

*If, for example, you had two employees for one-third of the quarter, the average number employed for the quarter should be entered as 3/3.

U1

Mail this schedule in enclosed official envelope t

BUREAU OF THE CENSUS and THE NATIONAL BUREAU OF ECONOMIC RESEARCH

MENT FURNISHED BY

Office..... County..... State.....

but it is very important that the record be COMPLETE. Approximate answers based merely because you cannot remember the precise facts.

since January 1, 1920, by yourself or other members of your family now 16 years of age duties in your home.

AND BY MEMBERS OF HIS FAMILY OVER 16 YEARS OLD

AT EACH PERIOD (for example, farmer, teacher, merchant, student, mason)

1921				1922
1st Quarter	2d Quarter	3d Quarter	4th Quarter	1st Quarter

PERIODS SINCE JANUARY 1, 1920

hired by entering ciphers in the proper spaces

1920				1921				1922
1st Quar.	2d Quar.	3d Quar.	4th Quar.	1st Quar.	2d Quar.	3d Quar.	4th Quar.	1st Quar.

Date of This Report.....

Name of Person Making This Report.....

The Bureau of Markets and Crop Estimates, Washington, D. C.

Form U3 Bureau of the Census, in cooperation with President Harding

RECORD OF EMPLOYMENT GIVEN BY THE MERCHANT, TRADESMAN, FARMER DESCRIBE

NOTE:—It is better to use a separate schedule for each distinct establishment, factory, or plant.

Name of Business Man or Concern.....Address

It is not expected that you will be able to fill out the following tables with exactness but it will be accurate enough for our needs. Do not fail to fill this schedule merely because the precis

Please enter in the following spaces a record of the principal occupations followed sinc those who have during the entire time been engaged in housework in his own home.

OCCUPATIONS FOLLOWED SINCE JANUARY 1, 1920, BY THE EMPLOYE

Names of Employer and of Members of His Family	Age	Sex	NAME OF PRINCIPAL OCC		
			1920		
			1st Quarter	2d Quarter	3d Quarter
.....Employer					

RECORD OF EMPLOYEES HIRED BY THE GIVEN EMPLOYER O

NOTE:—Kindly indicate those periods in which no employees were hired by entering ciphers in the proper spaces.

Fill that ONE of the forms given below which can best be estimated from the memory or records of the employer—either I, II, III, or IV		1st Quarter	2d Quarter
I	(A) Full Time Hours per Week for Average Employee		
	(B) Number of Employees on Pay Roll—Average for Quarter		
	(C) Average Hours Actually Worked per Week per Employee		
	(D) Average Actual Pay per Week per Employee		
	(E) Enumerator need not compute this. D ÷ C		
	(J) Enumerator need not compute this. B × C × G		
II	(A) Full Time Hours per Week for Average Employee		
	(B) Number of Employees on Pay Roll—Average for Quarter		
	(C) Average Hours Actually Worked per Week per Employee		
	(D) Enumerator need not compute this. C × E		
	(E) Average Rate of Pay per Hour per Employee		
	(J) Enumerator need not compute this. B × C × G		
III	(A) Full Time Hours per Week for Average Employee		
	(F) Total Wages and Salaries Paid During Entire Quarter		
	(G) Number of Weeks in the Quarter	13	13
	(H) Total Wages and Salaries Paid per Week. F ÷ G		
	(B) Number of Employees on Pay Roll—Average for Quarter		
	(D) Enumerator need not compute this. H ÷ B		
	(E) Average Rate of Pay per Hour per Employee		
	(C) Enumerator need not compute this. D ÷ E		
	(J) Enumerator need not compute this. F ÷ E		
IV	(A) Full Time Hours per Week for Average Employee		
	(B) Number of Employees on Pay Roll—Average for Quarter		
	(J) Total Employee-Hours Worked During Entire Quarter		
	(F) Total Wages and Salaries Paid During Entire Quarter		
	(E) Enumerator need not compute this. F ÷ J		
	(C) Enumerator need not compute this. (J ÷ G) ÷ B		
	(D) Enumerator need not compute this. E × C		

Person Filling This Schedule: Name.....Address, No. and Street.....

Date of this Report.....1922 Mail this schedule to W. I. King, Special Agent of the Census, 175 Nint

onference on Unemployment and The National Bureau of Economic Research.

ONTRACTOR, MANUFACTURER, OR OTHER BUSINESS MAN OR BUSINESS CONCERN ELOW

Nature of Business.....

treet and No.....P. O.....State.....

ery important that the record be *complete.* The informant can usually give careful estimates which acts are unobtainable.

anuary 1, 1920, by the given employer or by members of his family now 16 years of age or over, except

IIMSELF AND BY MEMBERS OF HIS FAMILY OVER 16 YEARS OLD

ATION AT EACH PERIOD

	1921				1922
4th Quarter	1st Quarter	2d Quarter	3d Quarter	4th Quarter	1st Quarter

NTERPRISE AT DIFFERENT PERIODS SINCE JANUARY 1, 1920

0		1921				1922
3d Quarter	4th Quarter	1st Quarter	2d Quarter	3d Quarter	4th Quarter	1st Quarter
13	13	13	13	13	13	13

.....Post Office.....Co.....State.....

venue, N. Y. City.

tion was so detailed that it was impracticable to collect it without the aid of trained enumerators. An effort to obtain an adequate number of voluntary workers who would canvass employees and secure records of their employment and wages met with but limited success. Since the funds available did not permit of the hiring of a large number of enumerators, this inquiry was not pushed and the number of well-filled schedules turned in was not sufficient to constitute a very reliable sample. However, the data obtained by this method have some value, inasmuch as they tend to confirm the conclusions based upon a study of the tables derived from the other types of schedules.[1]

In only one respect did a difficulty of interpretation arise. Column (s) calls for "Total Working Days in Period." This number is evidently more or less variable, for some persons work five days weekly and others six or seven. The five day week of school teachers was the most common source of confusion. However, this difficulty was not serious, as the schedule editors usually found data from which to draw conclusions concerning the actual state of affairs.

The second questionnaire was distributed through the courtesy of the Federal Bureau of Markets and Crop Estimates to its Township Crop Reporters. It asked for the occupations followed during the last two years by members of farmers' families and also for the number of employees hired by each farmer, the hours they worked, and the wages they received. Some 8,500 schedules were returned, most of which were found to contain usable information.

This questionnaire proved satisfactory except for the fact that while it asked for a statement of wages, including board, lodging, etc., it did not call for a separate estimate of the value of board, lodging, etc., furnished. Under the circumstances, it is impossible to detect the error if a farmer failed to follow instructions and did not include perquisites with wages. Through such oversights a certain degree of error may have crept into the resulting tabulations.[2]

The third questionnaire which asked employers in other industries to furnish information similar to that requested of farmers, developed one serious and unexpected defect. The term "Full Time Hours Per Week for Average Employee" proved to be ambiguous. It therefore was found necessary to explain to many informants that this phrase was intended to signify an ideal full-time standard when the plant was in operation rather than the number of hours that the men actually worked or the time that the plant was running. One or two informants felt that the word "Hired" could mean only *taken on* and never *kept in employ*. For some purposes, it

[1] See pages 70–73.

[2] For a fuller discussion of this point, see Chapter V, pages 135–140.

would have been advantageous had the informants been asked to state whether the figures furnished were or were not taken from actual records. However, in most instances, the nature of the returns seems to indicate their origin. The accuracy of the returns would have been increased—especially in the field of domestic and personal service—if employers had been asked to include as wages the value of any perquisites furnished. The crowded condition of this schedule made it difficult, however, to follow the example set in the report form for farmers by inserting such instructions to the informants. Aside from these points, the schedule seems wholly satisfactory. Its strong features are its completeness and the four optional forms which make it adaptable to the different types of accounts kept by various business men.

Assistance in the distribution of this questionnaire came from many sources. The United States Bureau of the Census gave prompt and effective aid. Numerous teachers of economics and a few other teachers and their students, a considerable number of secretaries of Chambers of Commerce, and a large number of individual business men devoted much time, effort, and money to assisting in the collection of the information.

The Bureau of Railway Economics furnished practically complete data for the railways. The United States Chamber of Commerce circularized its members in behalf of the study. In addition to such voluntary efforts, paid enumerators obtained numerous records from employers in the cities of New York, Chicago, and St. Louis. In all, nearly 3,000 satisfactory records were obtained, covering all sections of the United States and most important fields of industry. The schedules were edited and verified by the National Bureau of Economic Research, but the Bureau of the Census assumed the burden of tabulating the data.

Manifestly, a large proportion of all the records received, especially in the case of smaller concerns, rests upon estimates rather than upon actual accounts. The estimates, however, relate to things concerning which the employer, as a rule, is keenly interested and fully informed; hence there is little reason to suppose that accidental errors in the estimates have materially affected the accuracy of the averages. The belief that the estimates are substantially accurate is supported by the fact that, in almost every industry, the reported data show but a small scatter. In order to test the matter objectively, several groups of schedules were divided into two classes: first, those evidently derived from actual accounts; second, those based upon estimates. This division could not be made with absolute accuracy but, in most instances, the character of the figures on the schedule indicated whether accounts or estimates had been used by the informant. The general tendency is for large concerns to depend upon records and small enterprises to rely upon estimates, hence only six industrial groups were

found which contained enough schedules to give any hope of obtaining statistical regularity and, even in these six groups, the number of informants furnishing data from records was seldom over thirty and in some instances considerably less. In the case of the Food, Beverage, and Tobacco factories, one concern owning half a dozen factories dominated the entire group that apparently used actual records in making up their reports. The schedules from the other industrial groups constituted fairer samples, though smaller than might be desired. The quotients obtained by using the number of employee hours worked in the peak quarter of 1920 as a divisor and the number of employee hours worked in the corresponding quarter of 1921 as a dividend are shown below:

	Number of employees per enterprise	Ratios based upon	
		Records	Estimates
Food, Beverage, and Tobacco Factories	21–100	.79	.88
Metal and Miscellaneous Factories	Over 100	.54	.49
Transportation	21–100	.97	.90
Wholesale Dealers	21–100	.86	.91
Retail Dealers	21–100	.95	.95
Retail Dealers	Over 100	.95	.97

While there is considerable divergence in some instances, there appears to be no constant tendency for the *estimates* to run either higher or lower than those figures secured from informants possessing actual *records*. There is, then, no reason for believing that the use of estimates has biased the results.

Another question of moment is whether enough reports have been deliberately falsified to vitiate the averages. We have no guarantee, of course, that such falsification has not taken place, but it is believed that the fact that the schedules were obtained under the auspices of the Bureau of the Census and that assurance was given to informants that all information would be considered confidential has minimized any tendency to falsification which might have existed. The similarity of the items in the reports received from different employers in the same business leads one to believe that the results are reasonably dependable.

It also is worthy of mention that schedules collected from similar establishments by hired enumerators and those collected by mail lead to identical conclusions regarding tendencies within any given field of employment. The pay roll data secured from factories show the same general trend that appears in similar records published by governmental departments, both State and Federal.

It is highly probable that the *changes* shown by the data are much more typical than are the absolute sizes of some of the quantities. In many instances, for example, an employer cannot estimate very accurately the absolute number of hours worked per week by his employees, but he is likely to know just about how much the average working day has increased or diminished in a given period. On the whole, then, the evidence seems to be sufficient to warrant the conclusion that the results of this inquiry indicate reasonably well the fluctuations that have occurred between January 1, 1920, and March 31, 1922.

Records were secured from employers who hire about one-tenth of all the employees in the United States. However, the proportion differs radically in different industries, a fact that is illustrated by the entries in Table I. Under these circumstances, a simple total or average of all the samples would be highly misleading. To secure significant results, it has, therefore, been necessary to weight all of the items according to the importance of the fields which they represent. The process followed has been first to estimate the ratio of the total number of employees in the United States falling in the given category on August 15, 1920, to the number who on the same date were working for the reporting employers, and then to multiply all items of earnings or hours by these ratios. In this manner, a record is obtained which portrays, as accurately as the data will permit, the results for the Continental United States. Owing to the paucity of existing information concerning the number of employees working for large and for small scale enterprises in such fields as the hand trades, public, domestic, and professional service, or commerce and trade, the weights used may sometimes be very faulty, but, fortunately, the nature of the data is such that it is almost certain that errors arising from this source will not invalidate any of the major conclusions of the study.

Clearly, the degree of reliance which can be placed upon the figures for any group in any industry depends largely upon the size and nature of the sample secured. The necessity of giving full information prevented many concerns from making returns, but since there was obviously no point in adding another fragmentary report to the long list of such studies already existing, it was necessary to secure records only from those informants who could furnish complete data. While this requirement materially lessened the number of reports sent in, the handicap was not great enough to prevent the return by several industries of sufficient schedules to furnish what appear to be entirely adequate samples. True, in the fields of building and construction, other hand trades, and public and professional service, the samples are too small to justify placing much faith in the estimates derived therefrom. The same may be said of the estimates for large-scale agricultural undertakings, and small-scale mining, transportation, financial, and

TABLE I

AN ESTIMATE OF THE PER CENTS OF ALL EMPLOYEES IN THE VARIOUS INDUSTRIAL FIELDS WHO WERE WORKING ON AUGUST 15, 1920, FOR THE EMPLOYERS FROM WHOM REPORTS WERE RECEIVED

Industry	Size of Enterprise as Measured by the Number of Employees	Number of Complete Reports Received	Estimated Thousands of Employees Actually Working in Entire U. S.	Number Employed by Employers Responding to This Inquiry	Estimated Per Cent of All Employees Working for Reporting Employers
All Industries	**Any Number**	**9,289**	**29,180**	**3,146,682**	**10.784**
	Less than 21	7,996	10,110	25,113	0.248
	21 to 100	642	4,630	36,521	0.789
	Over 100	651	14,440	3,085,048	21.364
Agriculture	**Any Number**	**6,481**	**2,300[a]**	**14,705**	**0.639**
	Less than 21	6,474	2,120	14,171	0.668
	21 to 100	6	130	272	0.209
	Over 100	1	50	262	0.524
Extraction of Minerals	**Any Number**	**49**	**1,120[a]**	**56,771**	**5.068**
	Less than 21	6	60	26	0.0433
	21 to 100	7	140	320	0.228
	Over 100	36	920	56,425	6.133
Factory Work	**Any Number**	**866**	**11,370[a]**	**581,879**	**5.118**
	Less than 21	249	1,360	2,672	0.196
	21 to 100	248	1,950	16,902	0.867
	Over 100	369	8,060	562,305	6.976
Building and Construction	**Any Number**	**72**	**1,600[c]**	**1,400**	**0.0875**
	Less than 21	60	570	497	0 0872
	21 to 100	10	530	462	0.0871
	Over 100	2	500	441	0.0882
Other Hand Trades	**Any Number**	**109**	**550[c]**	**1,370**	**0.249**
	Less than 21	91	280	439	0.156
	21 to 100	16	160	630	0.393
	Over 100	2	110	301	0.273
Transportation	**Any Number**	**164**	**3,420[a]**	**2,301,636**	**67.299**
	Less than 21	51	400	549	0.137
	21 to 100	58	220	3,361	0.153
	Over 100	55	2,800	2,297,726	82.062
Commerce and Trade	**Any Number**	**1,273**	**2,600[b]**	**137,202**	**5.277**
	Less than 21	904	1,650	5,558	0.337
	21 to 100	235	400	11,256	2.814
	Over 100	134	550	120,388	21.889
Finance	**Any Number**	**109**	**400[b]**	**29,758**	**7.439**
	Less than 21	50	150	483	0.322
	21 to 100	37	100	2,061	2.061
	Over 100	22	150	27,214	18.142
Public and Professional Service	**Any Number**	**20**	**3,000[c]**	**2,454**	**0.0818**
	Less than 21	12	1,600	87	0.00544
	21 to 100	5	400	188	0.047
	Over 100	3	1,000	2,179	0.2179
Domestic and Personal Service	**Any Number**	**146**	**2,820[b]**	**19,507**	**0.691**
	Less than 21	99	1,920	631	0.0328
	21 to 100	20	600	1,069	0.178
	Over 100	27	300	17,807	5.936

[a] Estimates of number of employees and their apportionment probably close to the truth.
[b] Total number of employees approximately correct, but apportionment may be widely in error.
[c] Estimates very rough.

personal-service enterprises. On the other hand, the sample records from ordinary sized farms, large-scale concerns engaged in mining, transportation, finance, and personal service, and all sizes of factories and commercial enterprises seem large enough to warrant considerable reliance upon the approximate accuracy of the results. The railway figures are the most complete, covering all railroads in Class I—a group conducting some 97 per cent of all railway operations in the country. The geographical distribution of the questionnaires returned appears to be satisfactory since, in most industries, it accords reasonably well with the actual distribution of the enterprises in question.

As previously stated, the object of this volume is to present a general picture of the conditions of employees throughout the United States and the effect upon them of a severe depression such as occurred in 1921. The form in which the figures are presented serves this end. Of course, it is possible that the changes accompanying this particular depression are radically different from those which have characterized other supposedly similar periods. The reader can form his own opinion on this score. At any rate, the figures give a picture of industry in one boom and in one depression and in the transition period connecting them. Later studies will doubtless show which of the phenomena observed characterize all such phases of the economic cycle. If any of the characteristics are typical, it may be possible to carry back the record to earlier periods through the use of index numbers. At least, a study like this furnishes a foundation for further work along similar lines.