PART II

ESTIMATED AMOUNTS OF PER CAPITA EARNINGS

CHAPTER III

ACTUAL AND FULL-TIME MONEY EARNINGS

This and the three following chapters deal with estimated dollar amounts of earnings. They have nothing whatever to do with relative fluctuations in earnings, which are discussed in Part III. Some cautions are necessary at the outset: The amounts reported are estimated amounts. This qualification must be borne carefully in mind; indeed it must be confessed at the outset that the results here presented, which purport to show amounts of per capita earnings, as contrasted with relative changes in earnings, are subject to a margin of error which, while it has not been possible to measure it closely, is probably all too large, certainly larger than is the case with *changes* in earnings. Although the precise degree of error can not be measured accurately, it is possible to identify some of the different channels through which errors may easily have crept into the analysis.

SOURCES OF ERROR

All of the estimates of amounts of earnings are derived, in the first place, from reported amounts of average weekly earnings, presented in Census Bulletin 93 for the busiest week in the year 1904, as explained in Chapter XIV. The first step in the attempt to arrive at the amount of average annual earnings is to expand, by use of an unemployment correction factor, the averages of weekly earnings in Census Bulletin 93 to estimated amounts of full-time weekly earnings. Obviously, some error may enter at this point because of inaccurate estimates as to the amount of unemployment among those attached to each industry in the week of 1904 which was the busiest week for that industry.

The next step, which consists in multiplying these full-time weekly earnings figures by 51, to get an estimate of full-time annual earnings, involves possibilities of some error, but it is not believed in this case to be serious. Having estimated amounts of average annual earnings for 1904, the corresponding annual averages for other census years, prior and subsequent to 1904, are derived by application, to the 1904 item, of the curve of change made up of index numbers of census average wages,[1] which, it is believed, very faithfully reflect *changes* in full-time annual earnings. To the extent that this assumption is correct there is little or no error involved in passing in this way

[1] See initial paragraph, Ch. XIII, p. 269.

from the estimate of full-time annual earnings for 1904 to similar estimates for other census years; to the extent that this assumption is invalid there may be appreciable error in the amounts for the other census years.

The procedure just described covers all of the steps involved in arriving at estimates of full-time annual earnings. But the expression "full-time annual earnings" being almost a flat contradiction in terms, it is necessary to take the additional step (the final one so far as money earnings are concerned) of discounting these full-time amounts with a unemployment correction ratio (which will be referred to in these pages as the "fraction of full employment" or the "ratio of actual to full employment").[2] It is quite clear from the rather involved analysis by which these ratios of actual to full employment are derived, that there is in this process of cutting full-time down to actual earnings, a source of what may be very considerable error; certainly the cumulation of the possible errors in the preceding steps, in their effect upon the final estimates of actual money earnings per capita, may be so large as seriously to impugn the value of these estimates. Empirical tests of these estimates, however, by comparison with such other estimates of money earnings per capita in corresponding industries as are available, seem to indicate that they are reasonably dependable.

The last step of all, so far as our estimates of amounts of per capita earnings are concerned, is that of deflating money earnings to real earnings, in order to facilitate comparisons of the purchasing power of earnings received by manufacturing wage earners at different periods of time. This process of deflation, which puts the earnings of pre-war years on a comparable basis with earnings of postwar years, is a possible source of additional error. The extent of this error depends, of course, upon the accuracy of the cost of living data utilized in this analysis. Fortunately it is possible, at any rate within any one geographic region, to use the same cost of living figures for all different industries; because there is, in the cost of living, nothing like the wide differences between industries that appear in connection with the amount of employment. It seems reasonable to conclude that there is no greater error contained in the figures for real earnings than in the corresponding figures for money earnings.

Probably the largest single source of error in the estimates of amounts of earnings, is the ratio of actual to full employment used to reduce full-time to actual earnings. As is more fully explained in Chapter XVI, there were two different series of ratios developed in the course of our search for a satisfactory series of fractions of full employment, to-wit, the series derived by Method A and the

[2] See Ch. XVI.

series derived by Method B. The ratios derived by Method A show in most industries much larger amounts of unemployment than do those of Method B. The margin of difference between the results of Method A and the results of Method B, for all industries combined, is about 18 per cent. The margin of difference between the amounts of unemployment shown in the different selected industries by the two methods, ranges from no difference at all in printing and publishing, to the other extreme represented by five industries in the miscellaneous group, where the margin of difference between the two series amounts to about 34 per cent. But neither Method A nor Method B was taken as a final estimate of the ratio of actual to full employment; the series of ratios finally determined upon was constructed by taking the arithmetic means of ratios derived by Methods A and B, respectively, for each of the different industry groups, and in a similar fashion ratios for geographic divisions were derived by striking an average between Methods A and B. It follows that the possible margin of error at this point, for all industries, may be very closely represented by the margins between the final ratio and the Method A ratio, which usually represents the minimum, on the one hand, and the Method B ratio, which usually represents the maximum, on the other hand. This margin of difference, for all industries combined, is 9 per cent and the range among the different industries runs from zero to 17 per cent.

The range in terms of dollars of per capita earnings between what may fairly be taken as representing the points, respectively, above which average wages can hardly have risen, and below which they can hardly have dropped, is indicated in Table 34, which shows for all industries combined and for each year, including intercensal years interpolated between 1899 and 1925, the final estimates of money earnings (in the center column) and on either side of it the maximum and minimum amounts calculated by Methods A and B, respectively.[8] It would appear from these figures, to take for illustration the figures for census years, that in 1899, the average earnings for all industries combined, could not have been less than $406 a year, or more than $486 a year. The final estimate as between these extremes is $446. In 1914 it would seem that average earnings must have fallen somewhere between $524 and $628, in 1919 between $1,103 and $1,321, and in 1925 between $1,276 and $1,528.

In using and interpreting the figures given in the tables in this and the following three chapters, the reader should be careful not to take the dollar sums reported as representing precise sums accurate to the last dollar of average earnings; that is to say, the units digit at the

[8] A similar comparison of high, low, and final estimates is made, for certain selected industries, in Table 13, p. 42, above.

extreme left in each item should be taken less seriously than the tens digit to the left of it and the latter digit less seriously than the digit still further to the left. For example, the estimated average of money earnings for all industries combined for 1923 is $1,317. This sum is probably fairly accurate to the nearest tens of dollars; certainly one would be rash to bet on its being accurate to the last dollar represented in the figure. The degree of accuracy which the figures presume to have would perhaps be better reflected if the last digit in each item were entirely dropped and the boxheading changed to read "Earnings per capita (in tens of dollars)."

TABLE 34.—HIGH, LOW, AND FINAL ESTIMATES OF ACTUAL ANNUAL MONEY EARNINGS, PER CAPITA, IN THE UNITED STATES, ALL INDUSTRIES COMBINED, EACH YEAR: 1899–1925

[Figures for census years in bold-faced type]

YEAR	ESTIMATES OF ACTUAL MONEY EARNINGS PER CAPITA			YEAR	ESTIMATES OF ACTUAL MONEY EARNINGS PER CAPITA		
	Minimum 9 per cent lower (Method A)	Final estimate	Maximum 9 per cent higher (Method B)		Minimum 9 per cent lower (Method A)	Final estimate	Maximum 9 per cent higher (Method B)
1899	**$406**	**$446**	**$486**	1913	$561	$617	$673
1900	409	449	489	1914	**524**	**576**	**628**
1901	429	471	513	1915	553	608	663
1902	452	497	542	1916	699	768	837
1903	453	498	543	1917	783	860	937
1904	**440**	**483**	**526**	1918	1,005	1,104	1,203
1905	488	536	584	1919	**1,103**	**1,212**	**1,321**
1906	517	568	619	1920	1,354	1,488	1,622
1907	527	579	631	1921	**953**	**1,047**	**1,141**
1908	451	496	541	1922	1,066	1,171	1,276
1909	**507**	**557**	**607**	1923	**1,198**	**1,317**	**1,436**
1910	509	559	609	1924	1,192	1,310	1,423
1911	486	534	582	1925	**1,276**	**1,402**	**1,528**
1912	539	592	645				

ACTUAL EARNINGS AND "FULL-TIME" EARNINGS

A general summary of the results of the estimates of the amounts of earnings for all industries combined, and with intercensal years interpolated, is given in Table 35 which shows on the left annual per capita earnings in current dollars, both hypothetical full-time and actual. On the right hand are shown corresponding figures representing the purchasing power (at the 1914 price level) of both hypothetical full-time and actual earnings. "Hypothetical full-time earnings" are inserted, not because they have any importance in themselves, but in order to reveal the very considerable absolute differences between the amounts of real earnings which would be received by the average wage earners were there no unemployment and no sickness or enforced or voluntary absence for other reasons, and the amounts which they are estimated actually to have received. As in the case of the undeflated figures, this margin between the two

series, though considerable at all times, varies widely as between periods of prosperity and succeeding periods of depression. In 1921, for example, actual real earnings were $595 per capita, according to the figures in Table 35, whereas full-time real earnings per capita, if there had been full-time employment for all attached to the manufacturing industries, would have been $831.

This chapter is concerned only with the type of earnings represented by the two columns at the left of Table 35; that is to say, with full-time and actual money earnings. A comparison is made between these two forms of money earnings in Table 36, which reports by sex and age groups for all industries combined and for each of the census years covered in the inquiry, the dollar amounts

TABLE 35.—ESTIMATED AMOUNTS OF ANNUAL EARNINGS, PER CAPITA, IN MANUFACTURING INDUSTRIES, IN THE UNITED STATES, EACH YEAR: 1899–1927

[Figures for census years in bold-faced type]

YEAR	ANNUAL EARNINGS PER CAPITA				YEAR	ANNUAL EARNINGS PER CAPITA			
	Nominal (current dollars)		"Real" (purchasing power at 1914 prices)			Nominal (current dollars)		"Real" (purchasing power at 1914 prices)	
	Hypothetical full-time	Actual	Hypothetical full-time	Actual		Hypothetical full-time	Actual	Hypothetical full-time	Actual
1899	**$525**	**$446**	**$710**	**$603**	1914	**$719**	**$576**	**$719**	**$576**
1900	544	449	716	591	1915	732	608	747	620
1901	552	471	708	604	1916	846	768	791	718
1902	566	497	708	621	1917	980	860	760	667
1903	579	498	789	593	1918	1,284	1,104	818	703
1904	**590**	**483**	**711**	**582**	1919	**1,433**	**1,212**	**801**	**677**
1905	602	536	725	646	1920	1,722	1,488	840	726
1906	626	568	728	660	1921	**1,462**	**1,047**	**831**	**595**
1907	650	579	714	636	1922	1,424	1,171	858	705
1908	643	496	739	570	1923	**1,566**	**1,317**	**927**	**839**
1909	**643**	**557**	**739**	**640**	1924	1,560	1,310	923	776
1910	654	559	711	608	1925	**1,582**	**1,402**	**931**	**823**
1911	662	534	697	562	1926	1,610	1,436	931	830
1912	684	592	713	617	1927	1,612	1,373	943	805
1913	712	617	719	623					

of per capita earnings. It is obvious enough from the figures in this table that the actual earnings received by the wage earner are lower by a wide margin than the corresponding earnings which he would have received if he had worked full time. Since there is seldom or never a time when all employees attached to industry are employed regularly throughout the year, it follows that full-time earnings throw little or no light upon the welfare of wage earners. The thing that is important to them and important, moreover, to anyone who is interested in the incomes of this section of the population, is the actual labor income received. The welfare and progress of the wage-earning classes are reflected in these figures on actual earnings. Full-time earnings are roughly equivalent to annual rates

of pay, and it is notorious that rates of pay, whether yearly or hourly, throw little light upon the amounts actually received in wages. Changes in rates, of course, other things being equal, produce corresponding changes in earnings, but rate changes constitute only one of the factors entering into earnings, another equally important one being the condition of business; that is to say, the extent of unemployment. Wage rates may remain the same and at the same time there may take place a reduction in employment and that brings about reductions in earnings despite the stability of rates. It is true that there are some industries, particularly those which are known to be relatively stable, such as the printing and publishing of newspapers, that run very steadily and in these industries full-time money earnings are less inadequate as indicators of the incomes of their wage earners than is true of most industries. Moreover, in manufacturing industries generally, it is true that figures for hypothetical full-time earnings have some value in indicating the maximum beyond which it is impossible for annual earnings to go without either a change in rates or a considerable amount of overtime. The other types of changes, which might allow of expansion in earnings, have been assumed to have had maximum play. If a worker got full-time earnings, in other words, there could have been no unemployment and no sickness involving loss of pay. Consequently, the only way in which full-time money earnings can be increased is by an increase in the rates of wages. It is with this idea of furnishing some such general notion of this essentially hypothetical, and probably unattainable, maximum per capita sum that we present the figures in Table 37 showing full-time earnings in each census year, classified according to geographic regions and divisions. There is evident in these figures, what will appear in all of our other regional classifications, namely: A wide difference between the Northeast, South, and West sections of the country, the amounts of earnings

TABLE 36.—ESTIMATED AMOUNTS OF FULL-TIME AND ACTUAL ANNUAL MONEY EARNINGS, PER CAPITA, IN THE UNITED STATES, BY SEX AND AGE GROUPS, CENSUS YEARS: 1899–1923

GROUP AND TYPE OF EARNINGS	1899	1904	1909	1914	1919	1921	1923
All groups:							
Full-time earnings	$525	$590	$643	$719	$1,433	$1,462	$1,548
Actual earnings	446	483	557	576	1,212	1,047	1,398
Men:							
Full-time earnings	587	659	729	804	1,601	1,634	1,726
Actual earnings	498	540	631	644	1,354	1,170	1,562
Women:							
Full-time earnings	314	353	391	430	858	875	925
Actual earnings	267	289	339	344	726	627	837
Children:							
Full-time earnings	179	200	222	244	487	497	525
Actual earnings	152	164	192	195	412	356	475

being highest in the West, followed closely by the Northeast, and at a wide distance by the South, in which region the amounts of earnings run a very poor third and are far lower than in either of the other two regions.

Table 38 makes a comparison for each of the 41 selected industries of estimated amounts of actual and full-time money earnings.[4] It is evident upon inspection of the figures for the different selected industries that there is a wide variation in the margins by which actual earnings fall short of hypothetical full-time earnings. This variation is widest in periods of business depression like 1914 and 1921, but even in such periods it is evident that wage earners in such industries as printing and publishing suffered a very much smaller reduction in earnings because of unemployment than did their fellows in industries like the manufacture of steam-railroad cars. In that

TABLE 37.—ESTIMATED AMOUNTS OF FULL-TIME MONEY EARNINGS, PER CAPITA, IN THE UNITED STATES, BY GEOGRAPHIC REGIONS AND DIVISIONS, CENSUS YEARS: 1899–1923

REGION	1899	1904	1909	1914	1919	1921	1923
UNITED STATES	$525	$590	$643	$719	$1,433	$1,462	$1,545
NORTHEAST	554	608	663	742	1,472	1,521	1,692
New England	512	556	601	651	1,263	1,291	1,396
Middle Atlantic	553	601	655	709	1,474	1,509	1,774
East North Central	562	647	698	815	1,604	1,662	1,798
West North Central	552	635	686	775	1,371	1,555	1,511
SOUTH	371	447	478	550	1,163	1,100	1,105
South Atlantic	356	418	456	531	1,183	1,087	1,091
East South Central	391	471	480	551	1,125	1,078	1,111
West South Central	435	543	549	636	1,189	1,206	1,152
WEST	659	814	887	936	1,612	1,685	1,701
Mountain	742	883	892	971	1,546	1,713	1,661
Pacific	633	791	907	926	1,629	1,677	1,717

industry hypothetical full-time earnings in 1921 were $1,748, while estimated actual earnings were $869, less than one-half the hypothetical full-time average. Of course, even in periods of prosperity the stable industries show some unemployment, when we think of full employment involving, as it naturally should, the continuous employment of all the wage earners attached to the industry. Thus, in the prosperous year of 1919 even in the printing and publishing of newspapers the average wage earner received only $1,330 a year, whereas if he had been employed full time he would have received $1,442. In less stable industries in that year the situation is, of course, much worse. Thus in the automobile industry in 1919 hypothetical full-time earnings, or wage rates, were $1,739, while the average earnings estimated to have been actually received were $1,278. Other industries in that year of prosperity which reflect considerable deductions in earnings because of unemployment were

[4] The figures for actual earnings for 1919 are shown graphically in fig. 1, p. 36.

electrical machinery, apparatus, and supplies; railroad repair shops; steel shipbuilding; woolen and worsted goods; and men's and women's clothing.

TABLE 38.—ESTIMATED AMOUNTS OF FULL-TIME AND ACTUAL ANNUAL MONEY EARNINGS, PER CAPITA, BY SELECTED INDUSTRIES, MALE WAGE EARNERS, CENSUS YEARS: 1899–1925

INDUSTRY AND TYPE OF EARNINGS	1899	1904	1909	1914	1919	1921	1923	1925
All industries:								
Full time	$587	$659	$729	$804	$1,601	$1,034	$1,726	
Actual	498	540	631	644	1,354	1,170	1,562	
Bread and other bakery products:								
Full time	579	667	740	773	1,399	1,665	1,652	1,721
Actual	430	548	616	591	1,157	1,264	1,282	1,298
Flour-mill and gristmill products:								
Full time	582	588	629	718	1,294	1,411	1,377	1,441
Actual	432	483	523	549	1,070	1,071	1,069	1,087
Confectionery:								
Full time	594	638	690	792	1,411	1,628	1,709	1,716
Actual	461	484	546	642	1,174	1,236	1,345	1,448
Slaughtering and meat packing:								
Full time	613	681	722	790	1,627	1,634	1,581	1,655
Actual	491	575	591	613	1,484	1,278	1,451	1,402
Liquors, malt:								
Full time	690	767	805	912	1,403	1,687	1,640	
Actual	598	683	697	794	1,249	1,277	1,561	
Mineral and soda waters:								
Full time	482	524	545	593	975	1,159	1,183	
Actual	408	465	451	512	866	875	1,121	
Tobacco, cigars and cigarettes:								
Full time	536	564	586	648	1,094	1,106	1,135	1,162
Actual	441	468	479	529	907	898	947	978
Carpets and rugs, other than rag:								
Full time	547	582	652	657	1,484	1,763	1,933	1,804
Actual	453	474	561	547	1,195	1,361	1,664	1,521
Shirts:								
Full time	574	598	664	711	1,261	1,417	1,423	1,387
Actual	476	487	571	592	1,015	1,094	1,225	1,092
Clothing, men's:								
Full time	670	744	833	893	2,017	2,180	2,157	2,083
Actual	555	606	716	743	1,624	1,683	1,857	1,639
Clothing, women's:								
Full time	652	741	852	911	1,970	2,140	2,224	2,319
Actual	541	604	733	758	1,586	1,652	1,915	1,825
Cotton manufactures:								
Full time	425	452	520	574	1,220	1,184	1,260	1,193
Actual	366	380	450	497	1,043	984	1,090	1,015
Dyeing and finishing textiles, exclusive of that done in textile mills:								
Full time	556	567	624	664	1,327	1,475	1,500	1,548
Actual	461	462	537	552	1,068	1,139	1,292	1,224
Knit goods:								
Full time	472	492	556	639	1,170	1,318	1,397	1,461
Actual	391	401	478	532	942	1,017	1,203	1,150
Silk goods, including throwsters:								
Full time	587	618	710	797	1,569	1,717	1,856	1,984
Actual	487	504	611	663	1,263	1,326	1,598	1,561
Woolen and worsted goods:								
Full time	470	512	563	629	1,330	1,422	1,530	1,623
Actual	306	392	479	477	954	1,054	1,281	1,115
Boots and shoes, not including rubber boots and shoes:								
Full time	620	697	752	829	1,505	1,686	1,683	1,652
Actual	549	597	680	695	1,342	1,354	1,511	1,371
Leather, tanned, curried, and finished:								
Full time	514	565	616	677	1,451	1,406	1,469	1,503
Actual	427	453	522	532	1,223	1,042	1,510	1,103
Furniture:								
Full time	581	646	724	801	1,454	1,648	1,729	1,777
Actual	469	518	594	616	1,192	1,239	1,617	1,734
Lumber and timber products:								
Full time	428	542	520	596	1,220	1,030	1,153	1,154
Actual	346	435	426	458	1,090	775	1,078	1,126
Lumber, planing-mill products, not including planing mills connected with sawmills:								
Full time	556	654	719	811	1,327	1,549	1,622	1,661
Actual	449	525	590	624	1,088	1,165	1,517	1,621
Paper and wood pulp:								
Full time	474	551	606	683	1,350	1,373	1,418	1,471
Actual	447	505	583	615	1,284	1,164	1,462	1,414

TABLE 38.—ESTIMATED AMOUNTS OF FULL-TIME AND ACTUAL ANNUAL MONEY EARNINGS, PER CAPITA, BY SELECTED INDUSTRIES, MALE WAGE EARNERS, CENSUS YEARS: 1899–1925—Continued

INDUSTRY AND TYPE OF EARNINGS	1899	1904	1909	1914	1919	1921	1923	1925
Printing and publishing, book and job:								
Full time	652	732	806	908	1,516	1,977	2,066	2,174
Actual	587	639	739	780	1,398	1,771	2,012	2,044
Printing and publishing, newspapers and periodicals:								
Full time	639	743	818	928	1,442	1,946	2,042	2,236
Actual	575	649	750	797	1,330	1,744	1,989	2,111
Chemicals:								
Full time	(1)	588	641	735	1,411	1,353	1,433	1,558
Actual	(1)	534	567	641	1,256	1,026	1,360	1,382
Petroleum refining:								
Full time	615	669	789	856	1,705	1,819	1,744	1,800
Actual	657	586	671	750	1,473	1,339	1,606	1,627
Brick and tile, pottery, terra-cotta, and fire-clay products:								
Full time	465	567	629	703	1,287	1,401	1,525	1,559
Actual	365	498	576	565	1,187	1,100	1,504	1,503
Glass:								
Full time	713	820	796	919	1,583	1,755	1,739	1,755
Actual	635	695	637	802	1,420	1,341	1,664	1,650
Iron and steel, blast furnaces:								
Full time	590	678	800	969	2,216	1,972	2,020	1,946
Actual	478	507	661	680	1,777	1,158	1,768	1,611
Iron and steel, steel works and rolling mills:								
Full time	703	748	860	958	2,155	1,751	2,096	2,102
Actual	570	560	710	673	1,728	1,028	1,834	1,740
Foundry and machine-shop products:								
Full time	736	809	874	954	1,828	1,820	2,022	2,103
Actual	590	603	711	674	1,450	1,103	1,733	1,722
Rubber tires, tubes, and rubber goods, not elsewhere classified:								
Full time	635	713	856	999	2,105	2,041	2,168	2,374
Actual	437	469	627	657	1,513	1,237	1,667	1,792
Smelting and refining:								
Full time	652	749	779	839	1,409	1,318	1,484	1,461
Actual	509	576	616	619	1,084	742	1,244	1,159
Automobile bodies and parts:								
Full time	(1)	600	702	810	1,495	1,554	1,709	1,812
Actual	(1)	421	539	605	1,099	836	1,369	1,491
Automobiles:								
Full time	689	710	759	987	1,739	1,818	1,989	2,031
Actual	509	498	583	737	1,278	978	1,593	1,672
Cars, steam-railroad, not including operations of railroad companies:								
Full time	590	694	728	888	1,741	1,748	1,872	1,790
Actual	365	389	430	535	1,182	869	1,387	1,257
Railroad repair shops—electric:								
Full time	790	806	814	895	1,580	1,822	1,790	1,886
Actual	600	590	650	655	1,226	1,035	1,516	1,516
Railroad repair shops—steam:								
Full time	701	761	815	876	1,797	2,056	1,882	1,849
Actual	532	557	651	641	1,394	1,168	1,594	1,487
Agricultural implements:								
Full time	601	660	706	891	1,531	1,637	1,637	1,630
Actual	413	434	517	586	1,101	992	1,259	1,231
Shipbuilding, steel:								
Full time	589	640	691	844	1,765	1,663	1,663	1,677
Actual	405	421	507	555	1,269	1,008	1,279	1,266
Electrical machinery, apparatus, and supplies:								
Full time	605	658	704	776	1,401	1,506	1,627	1,684
Actual	416	433	516	511	1,007	913	1,251	1,271

[1] No data.

In Table 39 are given the ratios of actual and full-time earnings for each of 12 selected industries for each year since 1914, the data for intercensal years being interpolated after the fashion explained in Chapter XIX. The absolute amounts of actual and full-time earnings, respectively—from which amounts the ratios in Table 39 were calculated—are shown in Figures 14A and 14B for each year from

FULL-TIME AND ACTUAL MONEY EARNINGS, PER CAPITA,

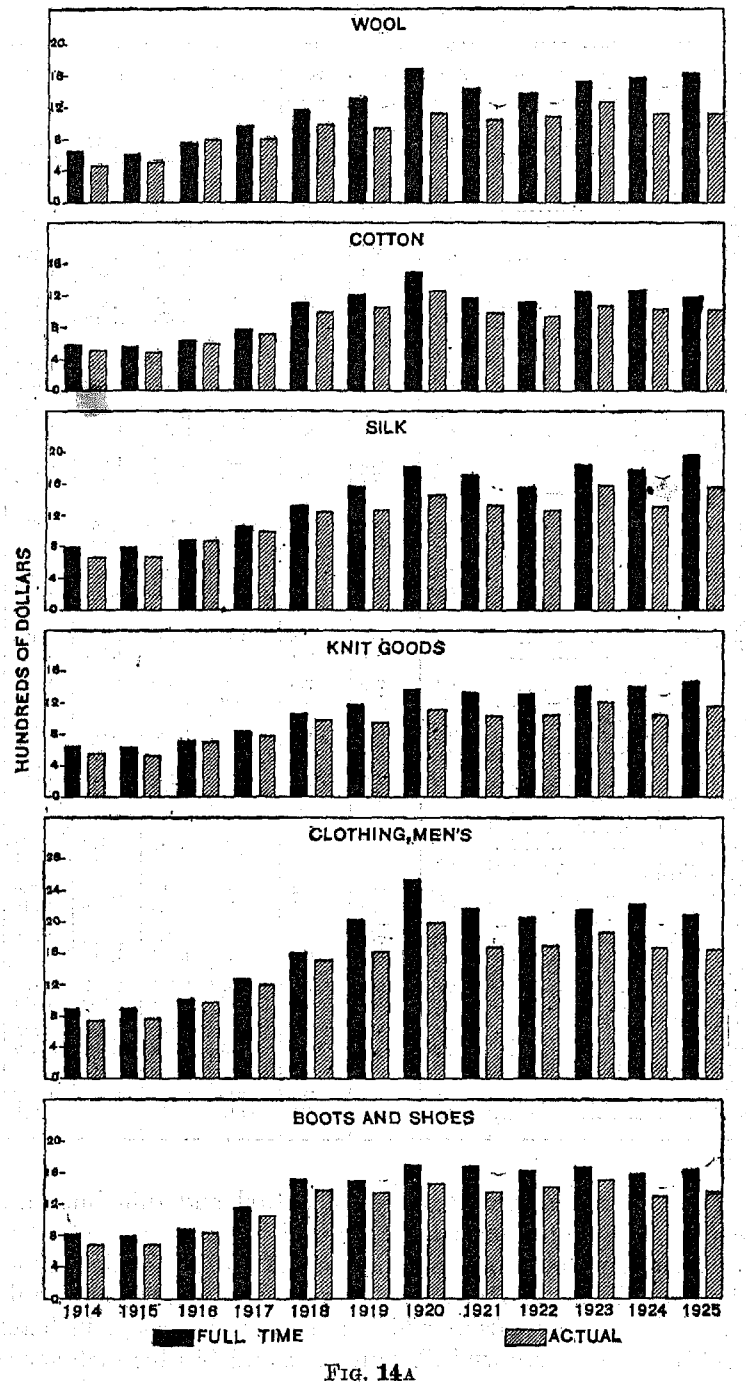

FIG. 14A

12 SELECTED INDUSTRIES, EACH YEAR: 1914–1925

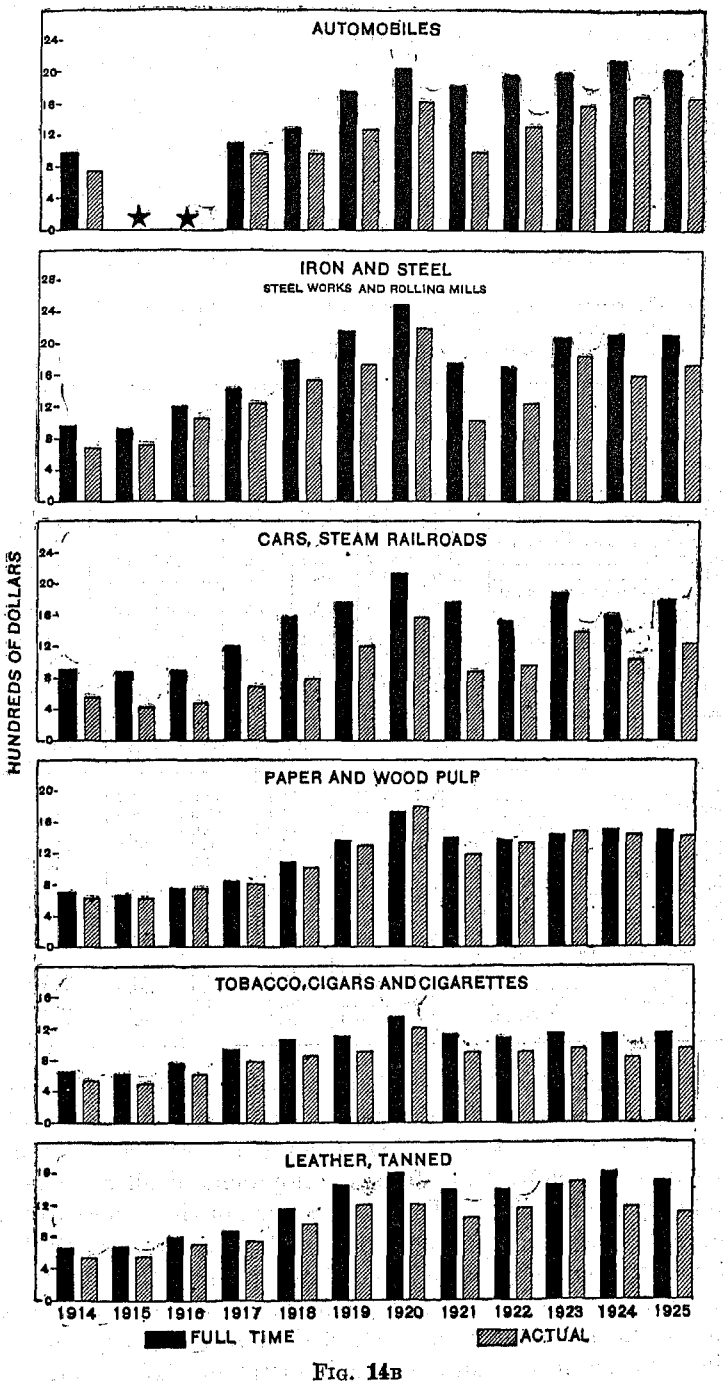

FIG. 14B

1914 to 1925, inclusive. Having the data for intercensal years as well as census years, it is possible to see more clearly the effect upon earnings of fluctuations in business conditions. Census years do not always fall at the apex of full activity in business, or at the bottom of the trough of depression in business. Annual figures bring us somewhat closer to a complete picture of the ups and downs of employment and the consequent ups and downs of earnings.

It is noticeable that there are one or two cases where the figures show actual earnings in excess of full-time earnings. An instance of this is the paper and wood pulp industry in 1920. This is

TABLE 39.—ESTIMATED PERCENTAGES OF ACTUAL TO FULL-TIME MONEY EARNINGS, PER CAPITA, FOR SELECTED INDUSTRIES, MALE WAGE EARNERS, 1899, 1904, 1909, AND FOR EACH YEAR 1914–1925

INDUSTRY	1899	1904	1909	1914	1915	1916	1917	1918
Woolen and worsted goods	65.1	76.6	85.1	75.8	80.0	103.0	85.0	84.5
Cotton manufactures	86.1	84.1	86.5	86.6	86.5	90.6	91.5	90.5
Silk goods, not including throwsters	83.0	81.6	86.1	83.2	84.9	98.5	94.5	93.5
Knit goods	82.8	81.5	86.0	83.2	85.0	98.5	94.5	93.5
Clothing, men's	82.8	81.5	86.0	83.2	85.0	98.5	94.5	93.5
Boots and shoes, not including rubber boots and shoes	88.5	85.7	90.4	83.8	86.5	94.5	91.5	89.5
Automobiles	73.9	70.1	76.8	74.7	----	----	90.0	75.5
Iron and steel, steel works and rolling mills	81.1	74.9	82.6	70.3	78.0	89.4	87.0	86.0
Cars, steam-railroad, not including operations of railroad companies	61.9	56.1	59.1	60.2	48.5	55.5	57.5	51.0
Paper and wood pulp	94.3	91.7	96.2	90.0	93.0	100.0	97.0	95.0
Tobacco, cigars and cigarettes	82.3	83.0	81.7	81.6	77.5	81.0	84.5	81.5
Leather, tanned, curried, and finished	83.1	80.2	84.7	78.6	81.5	89.0	86.0	84.5

INDUSTRY	1919	1920	1921	1922	1923	1924	1925
Woolen and worsted goods	71.7	66.5	74.1	78.0	83.7	71.0	68.7
Cotton manufactures	85.5	85.0	83.1	85.0	86.5	82.0	85.1
Silk goods, not including throwsters	80.5	80.0	77.2	80.0	85.9	74.9	78.7
Knit goods	80.5	80.0	77.2	80.0	85.9	75.0	78.7
Clothing, men's	80.5	78.0	77.2	82.0	86.0	75.1	78.7
Boots and shoes, not including rubber boots and shoes	89.2	85.5	80.3	87.5	90.0	82.3	83.0
Automobiles	73.5	80.0	53.8	67.5	80.1	67.9	82.3
Iron and steel, steel works and rolling mills	80.2	87.5	58.7	73.5	87.3	75.0	82.8
Cars, steam-railroad, not including operations of railroad companies	67.9	74.0	49.7	62.5	74.2	63.0	70.2
Paper and wood pulp	95.1	103.0	84.8	97.0	103.0	90.8	96.1
Tobacco, cigars and cigarettes	82.9	89.5	81.2	83.0	83.1	78.7	84.2
Leather, tanned, curried, and finished	84.3	76.0	74.1	83.5	102.8	73.2	73.4

probably explained by the fact that the year 1920 for the paper and wood pulp industry was the peak year of employment, and in this industry the amount of employment was so great as to amount to more than the equivalent of the employment of all attached to that industry for full time. This does not mean that there was not any unemployment in the paper and wood pulp industry in 1920. There was undoubtedly some unemployment but the amount of overtime worked was evidently so great that it more than compensated for the unemployment due to short-time operation or unemployment in any other form. In the same industry in 1916 it seems that

the figures for actual earnings are exactly the same as those for full-time earnings, namely, $733. The year 1916 was, of course, also one of prosperity. Possibly there was exceptional prosperity in the paper and wood pulp industry, and although there was unemployment in the industry, it was evidently compensated for by the amount of overtime put in, so that actual amount of employment distributed among all those engaged in the industry was equivalent to the amount of employment necessary to give each one of those attached to the industry regular work throughout that year. If the 1923 figures can be trusted, we have a third instance in the paper and wood pulp industry where actual earnings did not fall short of full-time earnings. In 1923 actual earnings were $1,462 and full-time earnings were $1,418, indicating more than the equivalent of full-time employment for all attached to the industry. Another case of the same sort occurs in the leather industry, and this also is for the year 1923, the figures indicating that average actual earnings were $1,510, whereas full-time earnings were only $1,469. The reason for this situation is undoubtedly the same as in the case of the paper and wood pulp industry.[5]

[5] The National Bureau of Economic Research reports (in Employment, Hours, and Earnings in Prosperity and Depression, pp. 49–52) the following percentages of full time worked in the paper and printing group in 1920; first quarter, 98.7; second quarter, 98.6; third quarter, 98; fourth quarter, 98.5. In June, 1923, in New York, the leading State in the paper and pulp industry, 36 per cent of the workers in that industry worked overtime, while 44 per cent worked full time, 12 per cent 5 days a week, 4 per cent 4 days a week, and 4 per cent 3 days or less. 2, Industrial Bull., 214 (1923). In the United States as a whole there were in 1923 only a very small proportion of the workers in the paper and pulp industry unemployed; the census returns for that year show that the minimum monthly number employed was 95.8 per cent of the maximum number.

In the report of its Industrial Survey in 1918 and 1919, the United States Bureau of Labor Statistics reported that for 1919 the per cent of full time worked was 92 for male employees in the leather industry and 101.2 for male employees in the paper and pulp industry. 10, Monthly Labor Review, 1177–79 (May, 1920).

Chapter IV

ESTIMATED AMOUNTS OF MONEY EARNINGS

In the preceding chapter we were concerned with full-time earnings, so called, and with the relation between such earnings and the actual earnings received under conditions of employment, health, etc., prevailing from year to year. Obviously "full-time earnings" are not comparable with earnings actually received. The former are annual rates and are, in some respects, comparable with other time rates such as hourly and weekly rates of wages. In this and the following chapter we leave behind us this somewhat spurious form of earnings and concern ourselves entirely with earnings in the proper sense of the term. This present chapter deals with amounts of money earnings; it is followed by a chapter devoted to the "real" amounts obtained by deflating the money sums with the cost of living index. The subject of full-time earnings, so called, is introduced again in Chapter VI in order to compare the purchasing power of those earnings with the purchasing power of earnings actually received.

In Chapters XV and XVI there is given a detailed description of the method by which amounts of actual earnings are estimated from corresponding amounts of full-time earnings. It is not necessary, therefore, to introduce at this point any discussion of the technique followed in arriving at the figures presented in the following tables. However, before proceeding to discuss the estimated amounts of earnings, it may be helpful to give some indication of the possible margin of error to which these final estimates of amounts of earnings probably are subject. This will be done by indicating the range above and below the final estimate and comprehended between the minimum estimate of earnings calculated by Method A and the maximum estimate of the amount of earnings calculated by Method B, both of which methods are fully described in Chapter XVI. As already stated, the final estimates have been made by striking an average between the estimates arrived at by the two methods. The difference, therefore, between the final estimate and either the maximum or minimum is one-half of the total range between them. In the case of all industries combined, for the United States as a whole, the mean earnings calculated by Method A are 9 per cent lower than the final estimates; the maximum earnings calculated by Method B, for all industries combined, are 9 per cent

higher than the final estimates. The three estimates, high, low, and final, have been set side by side in Table 34. Taking the amounts for 1923 for illustration, our final estimate is $1,398, the minimum estimate $1,272, and the maximum $1,530. For reasons explained elsewhere and which inhere in the two methods of computation referred to, it is believed that the first figure is an amount below which it is not likely that average earnings could have fallen, and that the latter amount is a sum above which it is very unlikely that the average earnings could possibly have risen. In other words, the minimum estimate was made on the basis of an assumption which at each step resolved all doubts in favor of procedure which would involve low earnings, while the maximum estimate was calculated similarly on the principle of resolving all doubts in favor of the choice which meant higher earnings. It was not, of course, expected that the mistakes on either side would cancel each other in the end, but it is believed that the final estimates arrived at by averaging the minimum and maximum estimates, probably indicate the true amounts of average earnings, for all industries combined, within a margin of error of 9 per cent. That margin, as elsewhere recognized, is wider for certain of the selected industries and for some of them it is narrower, the range in this percentage of probable error among the selected industries being from 1 per cent to 17 per cent.

SUMMARIES FOR CENSUS YEARS

A summary for each manufactures census year for the country as a whole, of the amounts of earnings per capita in each sex and age group and in all groups combined is given in Table 40. This table reflects the extremely wide margins between earnings in the different sex and age groups. It is perhaps not realized, however, that the differences in amounts of earnings between men and women and between women and children are as great as seems to be indicated by these figures. By and large, the average wages of male workers in manufacturing industries seem to be somewhat greater than the

TABLE 40.—ESTIMATED ANNUAL AMOUNTS OF MONEY EARNINGS, PER CAPITA, IN THE UNITED STATES, ALL INDUSTRIES COMBINED, BY SEX AND AGE GROUPS, CENSUS YEARS: 1899–1923

CENSUS YEAR	All groups	Men 16 years of age and over	Women 16 years of age and over	Children under 16 years of age
1899	$446	$498	$267	$152
1904	483	540	289	164
1909	557	631	339	192
1914	576	644	344	195
1919	1,212	1,354	726	412
1921	1,047	1,170	627	356
1923	1,398	1,562	837	475

sums of the averages of the earnings of women and children. In the case of no one census year shown in Table 40 does the sum of the averages for women and children equal the average wage for men.[1]

REGIONAL DIFFERENCES IN MONEY EARNINGS

In Table 41 are given the estimated amounts of per capita money earnings of manufacturing wage earners in the United States, classified by geographic regions, for each manufactures census year from 1899 to 1923, inclusive. The figures are for all sex and age groups combined. It is to be carefully borne in mind in examining the figures in Table 41 and in the tables following it, that the figures given are estimates and are not presumed to be accurate to the last dollar. It should further be borne in mind that each figure is an average and that as an average it necessarily covers what undoubtedly

TABLE 41.—ESTIMATED AMOUNTS OF MONEY EARNINGS, PER CAPITA, IN THE UNITED STATES, BY GEOGRAPHIC REGIONS AND DIVISIONS, ALL SEX AND AGE GROUPS COMBINED, CENSUS YEARS: 1899–1923

REGION	1899	1904	1909	1914	1919	1921	1923
UNITED STATES	$446	$483	$557	$576	$1,212	$1,047	$1,317
NORTHEAST	457	497	572	597	1,385	1,053	1,431
New England	422	454	518	524	1,188	893	1,181
Middle Atlantic	466	491	565	571	1,387	1,044	1,501
East North Central	464	529	602	656	1,509	1,150	1,521
West North Central	455	519	591	624	1,290	1,076	1,278
SOUTH	307	357	403	430	959	768	975
South Atlantic	295	334	385	415	976	759	962
East South Central	324	376	405	430	928	752	980
West South Central	360	434	463	497	981	842	1,016
WEST	579	690	795	776	1,412	1,249	1,594
Mountain	652	749	799	805	1,354	1,269	1,556
Pacific	556	671	813	768	1,427	1,243	1,609

are very wide variations in earnings between different individuals whose earnings enter into the average. On the other hand, these averages are not derived from samples; they represent all of the wage earners in manufacturing industries in the United States (with the unimportant exception, involving an inappreciable proportion of the wage earners, of establishments having products valued at less than $5,000). The figures given in Table 41 show that there is a wide difference in amounts of earnings between different geographic divisions, the most outstanding fact being that earnings in the South are lower by a very considerable margin than are earnings for corresponding years in the other two regions of the country. In the Northeast the series of amounts begin in 1899 with $457 and run irregularly to a peak of $1,385 in 1919, drops to $1,053 in 1921 and rise to a new high level of $1,431 in 1923. In the West, they run from $579 in

[1] Further comparison between the earnings of men and women in individual industries is made in Table 44, p. 110.

1899 irregularly up to $1,412 in 1919, drop to $1,249 in 1921 and rise to a new high level of $1,594 in 1923. In direct contrast to this we find in the South that per capita earnings in 1899 were only $307, and that from that census year they show an irregular increase to a peak of $959 in 1919, a decline to $768 in 1921 and a final rise to a new high level of $975 in 1923.

The margin between the West and the Northeast is narrower than between either of those two regions and the South. The West shows the highest earnings in the country. It should be noted that the figures for the United States as a whole show a very marked recovery in 1923 from the low amounts of earnings in 1921, and that all of the geographic divisions shared in a greater or less degree in this recovery. These recent fluctuations, as well as earlier ones of lesser magnitude, are, of course, discussed in Part III in connection with changes in earnings.

Further scrutiny of the figures in Table 41 for the nine geographic divisions indicates that there is, on the whole, less difference in the amounts of per capita earnings between geographic divisions within the three grand divisions than between each of those three divisions. The two geographic divisions in the western region, the three divisions in the southern region and, with one possible exception, the four divisions in the northeastern region run, respectively, fairly close together. The most noticeable exception appears to be New England in the northeastern region where average per capita money earnings in each census year were considerably lower than in the other three geographic divisions in the northeast region. There is a similar difference, though less marked, between the West South Central division and the other two southern divisions, distinctly in favor of the West South Central division. It is the South in the strict sense of the southeast region of the United States that makes up the great low-earnings area of the country. When we get into the southwest, earnings exhibit an appreciable tendency toward the higher wages of the West and North.

Probably the regional classification shown in Table 41 is more significant and revealing than are separate figures for each of the 48 States. It may, nevertheless, be useful to supplement the regional figures with results for the separate States and these latter results, therefore, are presented in Table 42 (p. 107). It is evident at once that there are few States in which the average for the geographic division closely reflects the earnings in the State. Wyoming is a striking example. In that State the estimated money earnings were $2,014 for 1919 and $1,933 for 1921. The corresponding figures for the geographic division of which Wyoming is a part—the Mountain division—are $1,354 and $1,269, respectively. Arizona, at least in 1919, furnishes another instance of this intraregional variation.

It is noteworthy that the range of variation as between the States appears to have been unusually wide in the census years 1919 and 1921. Moreover, it would appear that one may rely more confidently upon the geographic division averages for the years prior to 1919 than for that and following census years.[2]

The results shown for the separate States, when compared with similar results for the 41 selected industries shown later, will demonstrate quite conclusively that geographic differences in wages are not only not insignificant, but are quite comparable with industrial differences. Indeed, on the face of the returns here presented, it will probably appear to the casual reader that there is a wider range between States than between industries. This probably is an illusion, but when all is said, it remains very evident that there is a tremendous variation in the amounts of earnings between different sections of the country.

The figures of Table 42 for the year 1923 have been made the basis of the frontispiece map on page 2.[3] It shows only two States—Georgia and South Carolina—in the lowest earnings group (under $700). In the next to the lowest group ($700–$800) are two more Southern States—North Carolina and Mississippi. In the next higher group ($800–$900) is Arkansas. In the $900 group are all the remaining Southern States except Texas. In the $1,000–$1,100 group are New Hampshire, Virginia, and Texas. The $1,100 group includes Maine, Vermont, Massachusetts, Rhode Island, Maryland, and Kentucky. The $1,200 group includes Iowa, Missouri, South Dakota, Kansas, Delaware, and Utah. In the $1,300 bracket are Connecticut, New York, Pennsylvania, Wisconsin, Minnesota, Nebraska, Oklahoma, and New Mexico; in the $1,400 group, New Jersey, Indiana, North Dakota, District of Columbia, West Virginia, Colorado, and Oregon; and in the highest earnings group (over $1,500) all of the remaining Rocky Mountain and Pacific States and the three Middle Western States of Michigan, Illinois, and Ohio.

INDUSTRIAL DIFFERENCES IN MONEY EARNINGS

By a method of interpolation, elsewhere described, it has been possible to interlard the census year estimates of per capita earnings with corresponding estimates of amounts of earnings for intercensal

[1] See Table 54, p. 123, where nominal hourly earnings are shown by geographic divisions.

[2] The same map appears below (fig. 20, p. 141) as a part of the insert series of three maps reflecting per capita real earnings in 1899, 1914, and 1923.

years.[4] The results for each of 12 selected industries are shown in Table 43. The introduction of the figures for the intercensal years shows that the peak year of money earnings, in the case of all

TABLE 42.—ESTIMATED AMOUNTS OF AVERAGE MONEY EARNINGS, ALL INDUSTRIES COMBINED, BY STATES, CENSUS YEARS: 1899–1923

STATE	1899	1904	1909	1914	1919	1921	1923
United States	$446	$483	$557	$576	$1,212	$1,047	$1,317
Maine	375	442	503	526	1,241	947	1,157
New Hampshire	386	425	484	506	1,101	853	1,091
Vermont	386	435	509	530	1,111	873	1,107
Massachusetts	432	455	519	530	1,186	899	1,189
Rhode Island	402	432	502	502	1,105	875	1,145
Connecticut	467	486	554	546	1,283	893	1,388
New York	455	489	573	573	1,330	1,073	1,383
New Jersey	460	489	558	564	1,387	1,041	1,425
Pennsylvania	464	494	563	574	1,462	1,013	1,392
Ohio	468	527	611	643	1,565	1,129	1,527
Indiana	460	501	576	636	1,412	1,107	1,426
Illinois	502	572	646	687	1,470	1,207	1,528
Michigan	427	492	576	703	1,653	1,237	1,675
Wisconsin	436	502	577	603	1,346	1,006	1,318
Minnesota	479	546	628	655	1,338	1,122	1,321
Iowa	422	480	577	642	1,331	1,100	1,290
Missouri	452	515	576	593	1,197	1,020	1,236
North Dakota	496	585	672	726	1,381	1,208	1,491
South Dakota	521	579	684	696	1,447	1,177	1,272
Nebraska	474	539	598	659	1,442	1,138	1,307
Kansas	471	525	609	609	1,359	1,101	1,297
Delaware	407	433	503	495	1,446	917	1,201
Maryland	365	402	466	499	1,268	915	1,148
District of Columbia	449	510	598	588	1,093	1,149	1,457
Virginia	320	352	386	430	1,048	847	1,047
West Virginia	393	480	544	601	1,260	1,129	1,410
North Carolina	183	227	270	297	753	550	736
South Carolina	184	214	271	303	747	540	678
Georgia	234	279	333	337	800	586	699
Florida	351	413	467	480	1,031	772	980
Kentucky	362	401	441	474	977	911	1,164
Tennessee	316	359	387	414	842	725	911
Alabama	303	366	414	437	994	732	998
Mississippi	297	372	381	390	892	605	789
Arkansas	287	380	390	416	844	628	811
Louisiana	359	438	449	480	959	762	938
Oklahoma	373	493	557	592	1,175	1,115	1,376
Texas	415	455	519	533	1,010	934	1,095
Montana	744	919	942	880	1,415	1,229	1,614
Idaho	605	748	783	914	1,530	1,366	1,719
Wyoming	701	795	892	871	2,014	1,933	2,128
Colorado	644	715	770	748	1,209	1,261	1,484
New Mexico	498	616	657	691	1,195	946	1,305
Arizona	745	816	888	870	2,099	1,226	1,524
Utah	500	603	707	720	1,102	1,138	1,292
Nevada	753	897	968	991	1,483	1,521	1,914
Washington	587	700	797	787	1,589	1,174	1,623
Oregon	501	636	752	727	1,471	1,106	1,482
California	555	669	798	772	1,341	1,304	1,641

of the 12 industries, except automobile manufacturing and knit goods, was either 1920 or 1923. In these two industries 1925 appears to have been the peak year.

[4] The estimate for 1927 is not based directly upon the census returns which at this writing were not yet tabulated for that year. The method of interpolation is explained in Ch. XIX.

TABLE 43.—ESTIMATED AMOUNTS OF MONEY EARNINGS, PER CAPITA, FOR EACH OF 12 INDUSTRIES, EACH YEAR, 1899–1927, MALE WAGE EARNERS

[Manufactures census years in bold-faced type]

YEAR	Woolen and worsted goods	Cotton manufactures	Silk goods	Knit goods	Clothing, men's	Boots and shoes
1899	$306	$366	$487	$391	$555	$549
1900	315	392	453	392	565	541
1901	395	394	450	390	572	567
1902	401	414	516	396	596	598
1903	386	425	531	400	591	598
1904	392	380	504	401	606	597
1905	451	378	542	503	628	630
1906	525	424	555	433	657	663
1907	549	483	605	438	670	699
1908	463	475	575	[1] 368	650	694
1909	479	450	611	478	716	680
1910	481	450	610	493	802	687
1911	479	446	620	502	861	688
1912	498	486	629	521	838	691
1913	469	517	672	526	859	696
1914	477	497	663	532	743	695
1915	487	481	677	539	750	687
1916	780	585	883	702	982	842
1917	800	711	992	776	1,195	1,050
1918	985	1,006	1,230	979	1,503	1,372
1919	954	1,043	1,263	942	1,624	1,342
1920	1,123	1,267	1,458	1,109	1,979	1,459
1921	1,054	984	1,326	1,017	1,683	1,354
1922	1,073	956	1,250	1,034	1,697	1,420
1923	1,281	1,090	1,598	1,203	1,857	1,511
1924	1,118	1,037	1,328	1,051	1,688	1,312
1925	1,115	1,015	1,561	1,150	1,639	1,371
1926	1,117	1,015	1,567	1,197	1,598	1,361
1927	1,128	1,048	1,580	1,237	1,590	1,360

YEAR	Automobiles[2]	Iron and steel, steel works and rolling mills	Cars, steam-railroad	Paper and wood pulp	Tobacco, cigars and cigarettes	Leather, tanned
1899	$509	$570	$365	$447	$441	$427
1900	514	604	402	465	454	444
1901	537	467	420	469	450	440
1902	567	513	464	492	476	438
1903	569	507	449	487	471	453
1904	498	560	389	505	468	453
1905	553	661	467	515	465	453
1906	585	663	436	550	467	557
1907	650	717	447	566	482	548
1908	629	549	397	512	487	525
1909	583	710	430	583	479	522
1910	665	731	387	589	489	525
1911	618	753	490	595	498	532
1912	600	781	550	606	508	527
1913	659	774	563	612	524	538
1914	737	673	535	615	529	532
1915	[3] 649	712	417	600	481	538
1916	[3] 650	1,064	473	733	612	704
1917	965	1,236	678	797	777	734
1918	954	1,531	789	1,000	850	978
1919	1,278	1,728	1,182	1,284	907	1,223
1920	1,618	2,187	1,560	1,760	1,206	1,214
1921	978	1,028	809	1,164	808	1,042
1922	1,328	1,248	949	1,315	899	1,174
1923	1,593	1,834	1,387	1,462	947	1,510
1924	1,715	1,604	1,030	1,429	836	1,197
1925	1,672	1,740	1,257	1,414	978	1,103
1926	1,617	1,768	1,273	1,442	1,000	1,116
1927 [4]	1,601	1,738	1,301	1,428	989	1,103

[1] The estimate for 1908 is arrived at by applying to the estimate for 1907 the percentage of decline for "All industries," 1907 to 1908.

[2] Intercensal year data to 1907 based on "All industries combined."

[3] Based on Massachusetts data only.

[4] The figures for 1927, in this and other tables that present data for these 12 selected industries, have been exterpolated from the estimates for 1925; with the aid of the indexes of employment and of pay rolls published by the United States Bureau of Labor Sitatistics.

The earnings figures which are shown separately for the 12 industries are reported in annual form throughout the period from 1899 to 1925. There are evident marked variations between the different industries in respect to amounts of earnings. The differences between industries, moreover, are themselves subject to wide fluctuations. The degree to which unemployment affected the different industries, therefore subtracting from earnings, is apparent on the face of the figures. The industry in which earnings were most seriously reduced in the precipitate drop from the peak of prosperity in 1920 to the depression of 1921 was the iron and steel industry. In that industry earnings appear in 1921 to have been less than one-half their amount in 1920. The automobile, car-building, and paper and wood pulp industries were also hard hit. Differences of like nature appear also in the process of recovery from the depression in 1921 on through 1922 and 1923. Annual fluctuations in money earnings were much less wide in the pre-war years; fairly large differences are noticeable, however, at the depressions of 1904 and 1908. It should be noted that the pre-war intercensal estimates of the amounts of earnings are subject to an even wider margin of error than the corresponding estimates of the war and postwar periods.[5]

It is worth noting, perhaps, that at least two of the industries whose wage earners suffered most in reduction of earnings in the depression of 1921 (automobiles and iron and steel) show average earnings received by their employees considerably higher than the average for all industries. The wage earners in the men's clothing industry, however, not only escaped without such a serious reduction in earnings as befell iron and steel workers, but it appears from these estimates that throughout the 10-year period their average annual earnings have been considerably higher than the average—higher, indeed, in most of the census years than have been earnings of workers in either the automobile or iron and steel industry. It is to be remembered in making these comparisons between separate industries and the general figures for all industries combined, that the data for all industries represent in every case not an average of whatever selected industries are shown, whether 12 or 41 in number, but all of the manufacturing industries covered by the census; that is to say, the figures for all industries combined include in most of the tables many more industries than are shown separately in any of them. Exceptions are the tables of index numbers which report changes in earnings in the 6 industrial divisions and 14 groups of industries and, of course, those tables which report earnings by States or geographic regions.

A more comprehensive industrial classification of American manufacturing industries is shown in Table 44, wherein are given the estimated amounts of money earnings per capita for men and women,

[5] For an explanation of the method by which the pre-war intercensal estimates have been calculated, see Ch. XIX.

all industries combined, and in 18 of the 41 selected industries. Figures in this table, however, do not constitute a continuous annual series, but are available only for the manufactures census years from and including 1899. The 18 industries shown in the table are the

TABLE 44.—ESTIMATED AMOUNTS OF ACTUAL MONEY EARNINGS, PER CAPITA, IN THE UNITED STATES, BY SELECTED INDUSTRIES AND BY SEX, CENSUS YEARS: 1899–1925[1]

INDUSTRY AND SEX	1899	1904	1909	1914	1919	1921	1923	1925
All industries:								
Men	$498	$540	$631	$644	$1,354	$1,170	$1,562	-------
Women	267	289	339	344	726	627	837	-------
Bread and other bakery products:								
Men	430	548	616	591	1,157	1,264	1,282	$1,298
Women	202	258	290	278	546	596	604	611
Confectionery:								
Men	461	484	546	642	1,174	1,236	1,345	1,448
Women	213	225	253	297	544	572	616	672
Mineral and soda waters:								
Men	408	465	451	512	866	875	1,121	-------
Women	207	236	229	260	440	445	569	-------
Tobacco, cigars and cigarettes:								
Men	441	468	479	529	907	898	947	978
Women	244	259	266	294	540	499	525	543
Carpets and rugs, other than rag:								
Men	453	474	561	547	1,195	1,361	1,664	1,521
Women	290	304	359	350	766	872	1,067	974
Shirts:								
Men	476	487	571	592	1,015	1,094	1,225	1,092
Women	259	265	310	322	554	595	667	593
Clothing, men's:								
Men	555	606	716	743	1,624	1,683	1,857	1,639
Women	259	283	335	346	757	784	865	765
Clothing, women's:								
Men	541	604	733	758	1,586	1,652	1,915	1,825
Women	285	319	387	400	838	872	1,010	963
Cotton manufactures:								
Men	366	380	450	497	1,043	984	1,090	1,015
Women	286	297	351	388	816	770	854	793
Dyeing and finishing textiles, exclusive of that done in textile mills:								
Men	461	462	537	552	1,068	1,139	1,292	1,224
Women	279	279	323	333	646	687	779	740
Knit goods:								
Men	391	401	478	532	942	1,017	1,203	1,150
Women	263	269	321	357	632	682	808	771
Silk goods, including throwsters:								
Men	487	504	611	663	1,263	1,326	1,598	1,561
Women	287	297	360	391	745	783	942	922
Woolen and worsted goods:								
Men	306	392	479	477	954	1,054	1,281	1,115
Women	220	281	343	343	685	759	918	799
Boots and shoes, not including rubber boots and shoes:								
Men	549	597	680	695	1,342	1,354	1,511	1,371
Women	352	382	435	444	859	866	966	877
Printing and publishing, book and job:								
Men	587	639	739	780	1,398	1,771	2,012	2,044
Women	296	323	373	394	706	894	1,000	1,033
Printing and publishing, newspapers and periodicals:								
Men	575	649	750	797	1,330	1,744	1,989	2,111
Women	259	292	338	359	599	787	894	952
Glass:								
Men	635	695	637	802	1,420	1,341	1,664	1,650
Women	208	227	208	262	464	438	544	540
Electrical machinery, apparatus, and supplies:								
Men	416	433	516	511	1,007	913	1,251	1,271
Women	225	234	279	276	545	494	674	688

[1] The estimated amounts of actual money earnings of men in the other 23 industries are shown in Table 38, p.96.

ones wherein there are an appreciable number of women wage earners, and for which, on that account, estimates have been made of average earnings of women as well as of men. In the 23 industries omitted from the table, practically all of the wage earners are men.

A comparison of the earnings of women with the earnings of men reflects the same disparity in the amounts of their earnings as was shown in Table 40 above, but the extent of this disparity is, of course, vastly different in different industries. Thus, for example, in 1919 the per capita earnings of men in the glass industry were more than three times the per capita earnings of the women employed in that industry; whereas in electrical machinery, apparatus, and supplies, the per capita earnings of men in that same year were not quite twice the per capita earnings of women. In cotton manufactures—a low-wage industry for men—the earnings of women more nearly approximated the earnings of men than in most other industries; in 1919 the average for women was $816, whereas that for men was $1,043. The wide differences which exist in the glass and electrical machinery industries are, no doubt, largely due to the fact that the women in those trades are unskilled or semiskilled, while the men are very highly skilled. In reality then the differences are often attributable less to the sex factor than to degree of skill.

Taking leave of any comparisons between the sexes, and looking into the relations shown in Table 44 between the different industries on the basis of the figures for the earnings of the men in those industries, we find here again as in Table 43 an extremely wide variation in earnings among the industries. That there are also wide differences in the course of earnings over the 27-year period covered is also evident even from these absolute figures. These changes in the trend of earnings in the different industries, however, will be discussed in a later chapter in connection with the relative fluctuations in labor incomes.

Twenty-four of the 41 selected industries have been selected for the purpose of a comparison designed to show the degree of uniformity, or otherwise, of earnings in the same industry in different parts of the country. For this purpose each of the 24 industries is reported in Table 45 for two of the States in which it is most strongly developed. Generally, choice has been made, in respect to each industry, of those two States in which that industry had the largest number of employees in 1919. In a few cases, however, in order to present comparisons between States somewhat widely separated geographically, the first and third, or second and fourth States were taken instead of the two leading States. If the present estimates are tolerably near the truth, it would appear from the figures in Table 45 that geographic differences in earnings are not alone due to the industrial specialization of certain States. It does not always follow, apparently, that because high wages are paid in some particular industry in one section of the country, that those same high wages will be paid to those engaged in that industry in another section of the country. The tendency, of course, with our modern marketing system distributing goods over national and even international areas,

is to widen the area of competition and therefore to unify labor as well as other cost items for employers. But there are evidently persistent factors which counteract the tendency to uniformity, such as differences in the cost of living, differences in the quality of labor, and real and persistent limitations upon the area of competition. At any rate, whatever the causes, it appears that the earnings of workers in the tobacco industry in Pennsylvania are much lower than the earnings of the workers in that industry in Florida, despite the fact that for industry as a whole the earnings of wage earners are lower in Florida than in Pennsylvania. The difference in favor of Florida seems to persist all the way through the period from 1899 to 1921. In the case of men's clothing, however, the differences between New York and Illinois are in some census years favorable to New York and in other years favorable to Illinois. In the case of woolen and worsted goods, and also in the case of the agricultural implement industry, there is practically no difference between the amounts of wages in the different regions. This may not, possibly, be significant in the case of agricultural implements since the two States concerned are not widely separated. There appears to be, in fact, a tendency, which is natural enough, for earnings to vary more widely, within the same industry, between the more widely separated States. When New York is compared with Maine in the paper and wood pulp industry, the amounts of earnings show up appreciably higher for Maine than for New York. Still more noticeable, when Louisiana is compared with Washington in the lumber and timber products industry, the State of Washington, as we should expect, shows very much higher average earnings than the State of Louisiana. In such a case as this last, the difference is probably attributable primarily to the fact that Washington is in the West and Louisiana is in the South; that is to say, the low-wage tendency in the South and the high-wage tendency in the Northwest easily overcome any force which might work toward uniformity in the earnings of lumber and timber workers wherever employed.

Table 45 presents comparative earnings in identical industries for the different States for men only; similar data for 14 of the industries shown in Table 45 are given in Table 46 for women alone. Almost the first thing one notices in the latter table is that although earnings in the tobacco industry are on a different level in Pennsylvania from earnings in Florida, the difference is not uniformily in favor of Florida as it appeared to be in the case of men wage earners. It was favorable to Florida during the period from 1899 to 1914, but for the census years 1919 and 1921 it appears that women workers in the tobacco industry have fared better in Pennsylvania than they fared in Florida. Other differences of the same sort appear in the table, but on the whole, the results for women correspond fairly closely with the results shown in the table for men.

TABLE 45.—ESTIMATED AMOUNTS OF MONEY EARNINGS, PER CAPITA, IN 24 SELECTED INDUSTRIES, BY SELECTED STATES, *MEN*: 1899–1921

INDUSTRY AND STATE	1899	1904	1909	1914	1919	1921
Tobacco, cigars and cigarettes:						
Florida	$466	$561	$563	$587	$970	$905
Pennsylvania	357	375	383	389	839	768
Clothing, men's:						
New York	597	599	689	685	1,675	1,696
Illinois	535	649	657	788	1,777	1,948
Clothing, women's:						
New York	591	618	756	775	1,703	1,783
Illinois	592	809	930	983	1,902	1,938
Cotton manufactures:						
Massachusetts	402	405	500	512	1,097	1,035
North Carolina	212	253	334	370	886	728
Knit goods:						
Pennsylvania	412	427	490	574	1,036	1,186
New York	412	413	519	540	967	1,075
Shirts:						
New York	501	488	592	583	1,108	1,219
Pennsylvania	571	624	710	719	1,096	1,198
Silk goods, including throwsters:						
Pennsylvania	374	433	552	623	1,189	1,307
New Jersey	524	526	660	725	1,363	1,385
Woolen goods:						
Massachusetts	378	417	475	510	1,075	1,089
Pennsylvania	425	418	507	546	1,244	1,148
Worsted goods:						
Massachusetts	432	447	542	580	1,144	1,173
Pennsylvania	433	463	532	586	1,307	1,253
Boots and shoes, not including rubber boots and shoes:						
Massachusetts	560	619	692	726	1,289	1,311
Missouri	492	582	694	666	1,093	1,268
Leather, tanned, curried, and finished:						
Massachusetts	456	467	522	552	1,161	1,109
Pennsylvania	414	448	515	557	1,247	1,127
Furniture:						
New York	455	491	548	556	1,095	1,174
Michigan	395	456	522	568	1,105	1,201
Lumber and timber products:						
Washington	559	676	746	753	1,570	1,155
Louisiana	322	451	433	505	1,013	717
Lumber, planing-mill products, not including planing mills connected with saw-mills:						
New York	463	529	588	603	1,129	1,282
California	598	741	864	839	1,288	1,363
Paper and wood pulp:						
New York	397	449	509	538	1,149	1,141
Maine	425	497	594	615	1,230	1,267
Printing and publishing, newspapers and periodicals:						
New York	701	773	875	919	1,419	1,813
Illinois	486	637	675	701	1,129	1,588
Printing and publishing, book and job:						
New York	617	637	729	758	1,451	1,739
Illinois	584	684	781	860	1,564	1,792
Glass:						
Pennsylvania	638	756	715	759	1,525	1,292
West Virginia	560	810	856	868	1,683	1,632
Iron and steel, blast furnaces:						
Pennsylvania	463	502	635	727	1,776	1,167
Alabama	285	394	602	563	1,470	1,006
Iron and steel, steel works and rolling mills:						
Pennsylvania	519	516	643	646	1,616	918
Ohio	553	599	719	731	1,778	1,004
Foundry and machine-shop products:						
Ohio	531	563	676	692	1,449	1,026
New York	592	601	722	727	1,409	1,040
Agricultural implements:						
Illinois	464	519	601	722	1,201	980
Indiana	452	485	550	596	1,321	846
Electrical machinery, apparatus, and supplies:						
New York	461	462	581	555	1,045	768
Illinois	476	516	716	743	1,177	1,122
Chemicals:						
New Jersey	537	559	624	671	1,288	1,167
New York	503	557	611	669	1,394	1,093

TABLE 46.—ESTIMATED AMOUNTS OF ACTUAL MONEY EARNINGS, PER CAPITA, IN 14 SELECTED INDUSTRIES, BY SELECTED STATES, *WOMEN*: 1899–1921

INDUSTRY AND STATE	1899	1904	1909	1914	1919	1921
Tobacco, cigars and cigarettes:						
Florida	$238	$287	$288	$300	$496	$463
Pennsylvania	218	228	233	236	510	468
Clothing, men's:						
New York	305	305	351	349	854	865
Illinois	262	318	321	385	868	952
Clothing, women's:						
New York	347	362	443	455	998	1,046
Illinois	253	346	398	420	813	829
Cotton manufactures:						
Massachusetts	320	322	398	407	874	824
North Carolina	153	184	242	268	642	527
Knit goods:						
Pennsylvania	250	259	298	349	629	720
New York	322	323	405	422	756	840
Shirts:						
New York	305	297	360	354	674	741
Pennsylvania	214	234	266	269	412	450
Silk goods, including throwsters:						
Pennsylvania	232	267	342	385	735	808
New Jersey	358	360	451	495	930	946
Woolen goods:						
Massachusetts	280	309	352	379	797	808
Pennsylvania	284	280	339	365	832	769
Worsted goods:						
Massachusetts	286	296	359	384	758	777
Pennsylvania	267	285	328	361	806	772
Boots and shoes, not including rubber boots and shoes:						
Massachusetts	373	413	461	484	861	875
Missouri	323	383	456	437	718	833
Printing and publishing, newspapers and periodicals:						
New York	311	344	389	409	630	806
Illinois	204	267	283	294	472	605
Printing and publishing, book and job:						
New York	336	348	397	413	791	947
Illinois	268	313	358	394	715	821
Glass:						
Pennsylvania	248	294	278	295	593	502
West Virginia	127	183	194	197	381	370
Electrical machinery, apparatus, and supplies:						
New York	230	231	289	277	521	383
Illinois	256	277	384	399	631	602

FREQUENCY DISTRIBUTION OF INDUSTRIES

The figures that have been presented in certain of the preceding tables to show the amounts of money earnings per capita in the 41 selected industries and in the 48 States, are not easily grasped as to their general drift even with the help of charts. For this reason the device of the frequency distribution has been utilized. The results of the application of this device to the data on money earnings of male wage earners are presented in Table 47. The statistical unit in this table is the industry, or rather its industry average. This industry average is an estimated sum purporting to represent the per capita annual earnings received by the workers in an industry. For example, in Table 47, it appears that in 1899 there was one industry (in this case it happens to be woolen and worsted goods) in which the average (i. e., the per capita) annual money earnings fell between $300 and $325. The table was constructed by drawing off on cards the estimated amounts of earnings, using one card for

each industry, and then, for each census year, arranging the cards in the order of the increasing amounts of these earnings. The number of cards in each classified group was then indicated in the table.

There are very definitely evident in Table 47 two main concentration groups, one representing the period of relatively low money earnings from 1899 to 1914, and the other group, including the census years 1919, 1921, and 1923, covering a shorter period, wherein very

TABLE 47.—FORTY-ONE SELECTED INDUSTRIES ARRANGED ACCORDING TO THE ESTIMATED AMOUNTS OF PER CAPITA MONEY EARNINGS OF ADULT MALE WORKERS IN EACH INDUSTRY, CENSUS YEARS: 1899–1923

MONEY EARNINGS PER CAPITA	NUMBER OF INDUSTRIES[1]								MONEY EARNINGS PER CAPITA	NUMBER OF INDUSTRIES[1]			
	1899[2]	1904	1909	1914	1919	1921	1923	All yrs.		1919	1921	1923	All yrs.
$300–$324	1							1	$1,075–$1,099	3	1	2	6
$325–$349	1							1	$1,100–$1,124	1	2	1	4
$350–$374	3							3	$1,125–$1,149		1		1
$375–$399	1	3						4	$1,150–$1,174	2	4		6
$400–$424	4	3						7	$1,175–$1,199	4			4
$425–$449	7	3	2					12	$1,200–$1,224	1		1	2
$450–$474	4	6	2	1				13	$1,225–$1,249	2	3	2	7
$475–$449	4	5	3	2				14	$1,250–$1,274	3	1	2	6
$500–$524	2	4	5	2				13	$1,275–$1,299	2	2	4	8
$525–$549	3	3	3	6				15	$1,300–$1,324				
$550–$574	2	2	3	3				10	$1,325–$1,349	2	3	1	6
$575–$559	4	5	6	3				18	$1,350–$1,374		2	2	4
$600–$624	1	3	3	6				13	$1,375–$1,399	2		1	3
$625–$649	1	2	2	3				8	$1,400–$1,424	1			1
$650–$674	1		4	5				10	$1,425–$1,449				
$675–$699		2	2	2				6	$1,450–$1,474	2		2	4
$700–$724			3					3	$1,475–$1,499	1			1
$725–$749			2	2		1		5	$1,500–$1,524	1		5	6
$750–$774			1	2				3	$1,525–$1,549				
$775–$799				3		1		4	$1,550–$1,574			1	1
$800–$824				1				1	$1,575–$1,599	1		3	4
$825–$849						1		1	$1,600–$1,624	1		2	3
$850–$874					1	1		2	$1,625–$1,649				
$875–$899						2		2	$1,650–$1,674		1	3	4
$900–$924					1	1		2	$1,675–$1,699		1		1
$925–$949					1		1	2	$1,700–$1,724				
$950–$974					1			1	$1,725–$1,749	1	1	1	3
$975–$999						3		3	$1,750–$1,774		1	1	2
$1,000–$1,024					3	2		5	$1,775–$1,799	1			1
$1,025–$1,049					1	4		5	$1,800–$2,024			5	5
$1,050–$1,074					2	2	1	5					

[1] The figures indicate the number of industries in which the estimated average of annual money earnings falls within the class limits indicated in the scale at the left.

[2] Thirty-nine industries; no data available in 1899 census for "Automobiles, bodies and parts"; and "Chemicals."

much higher money earnings were paid. Not only were the money earnings in this latter period very much higher but it appears that there was less uniformity among the industries. It is, of course, possible that this difference in the spread as between the two periods is more apparent than real. The reason for entertaining some doubt on this point has to do with the character of the unit. That unit is an average, and a frequency distribution of these averages is, in effect, an attempt to average averages, and such an attempt is

scarcely justifiable if there is any other way in which our objective can be reached.

It is because of the fact that the final and indivisible unit, behind which this inquiry can not go, since the basic material does not allow of it, is the census average wage,[1] that it has seemed necessary to use it even in the somewhat dubious way in which we are using it now. At the same time the limitations of the resulting figures should be clearly realized. Each one of the figures in Table 47 is an average which may contain actual sums of earnings received by individual wage earners, transcending either the upper or the lower limits of the class to which it refers, possibly even transcending both. For example, in 1914 it appears that in 6 of the 41 selected industries the per capita earnings were between $525 and $550 a year. Each one of those six averages may have contained numerous wage earners having during the year 1914 earnings above $550 and numerous others may have had during the year earnings below $525. Therefore the wider spread of the figures at the latter part of the period can at best be considered merely presumptive evidence of a lower degree of uniformity in earnings. To the degree that actual individual earnings within the individual establishments and within the individual industries cluster closely around the average, to that degree does the indicated range of the figures in Table 47 reflect differences in uniformity between individual wage earners.

In Table 48 a summary is made of the 285 industry averages, showing the pre-war period separately from the postwar period. Even the larger brackets used in Table 47 fail to bring out any distinct central tendency for the period as a whole. However, when pre-war and postwar periods are grouped separately, fairly definite

TABLE 48.—DISTRIBUTION OF 162 INDUSTRY AVERAGES (OF MONEY EARNINGS) IN THE PRE-WAR, AND 123 INDUSTRY AVERAGES IN THE POSTWAR, PERIODS, ACCORDING TO THE ESTIMATED PER CAPITA AMOUNTS OF MONEY INCOME

MONEY INCOME PER CAPITA (DOLLARS)	DISTRIBUTION OF INDUSTRY AVERAGES			MONEY INCOME PER CAPITA (DOLLARS)	DISTRIBUTION OF INDUSTRY AVERAGES	
	1899, 1904, 1909, and 1914	1919, 1921, and 1923	All census years		1919, 1921, and 1923	All census years
Total cases	162	123	285	$1,100–$1,199	15	15
				$1,200–$1,299	23	23
$300–$399	9		9	$1,300–$1,399	13	13
$400–$499	46		46	$1,400–$1,499	6	6
$500–$599	56		56	$1,500–$1,599	11	11
$600–$699	37		37			
				$1,600–$1,699	8	8
$700–$799	13	2	15	$1,700–$1,799	6	6
$800–$899	1	5	6	$1,800–$1,899	2	2
$900–$999		8	8	$1,900–$1,999	2	2
$1,000–$1,099		21	21	$2,000–$2,099	1	1

[1] See initial paragraph, Ch. XIII, p. 269.

modes appear. It would perhaps be fair to say for the earlier period that the "style in averages" of money earnings was then between $500 and $600; for the later period one is scarcely warranted in saying that there was any definite style; if there was any such it would appear to lie between $1,000 and $1,300.

PERCENTILE DISTRIBUTIONS

At the same time that Table 47 was prepared, the cards used in its construction and in the preparation of similar tables in later chapters were handled in a slightly different fashion to obtain the results shown in Table 49 which (by the arrangement used in Table 25, above) reports the median, decil, and extreme averages of annual money earnings for each census year. The figures in each census-

TABLE 49.—MEDIAN, DECIL, AND EXTREME INDUSTRY AVERAGES OF ANNUAL MONEY EARNINGS,[1] CENSUS YEARS: 1899–1925

[This table is based on arrays of the 41 industry averages. When the series of averages of annual earnings for any year is arranged in order of increasing (or decreasing) amounts, the decils are spotted as the particular averages in the array which divide the whole number of averages for that year into 10 equal parts]

	1899 [2]	1904	1909	1914	1919	1921	1923	1925 [2]
Highest average	$657	$695	$750	$802	$1,777	$1,771	$2,012	$2,111
Ninth decil	590	606	711	758	1,513	1,361	1,857	1,792
Eighth decil	555	590	671	695	1,420	1,326	1,667	1,672
Seventh decil	509	560	637	663	1,330	1,239	1,606	1,621
Sixth decil	478	525	611	641	1,263	1,165	1,561	1,516
Median	461	504	583	616	1,223	1,103	1,504	1,448
Fourth decil	447	483	561	591	1,174	1,042	1,369	1,371
Third decil	430	465	523	552	1,088	1,017	1,282	1,257
Second decil	408	434	507	532	1,043	978	1,251	1,160
First decil	365	401	451	511	954	869	1,121	1,092
Lowest average	306	380	426	458	866	742	947	978

[1] Of male wage earners. [2] Thirty-nine industries.

year column are obtained directly from cards bearing the estimated amounts of per capita earnings, one card being allotted to an industry and the cards being arranged, as explained above, in the order of increasing amounts of earnings. The table is then constructed by first transferring, to the line marked "lowest average," on the table, the amount found on the lowest card, then the amount on the card which occupies a position one-tenth of the way through the pack, in this case the fourth card; then the amount found on the card which occupies a position three-tenths of the way through the pack; then the amount found on the card which occupies a position four-tenths of the way through the pack; then the amount entered on the midmost card, this being the median average (if such a phrase may be permitted) and so on through the pack until the last card is reached, which card will, of course, bear the highest amount of earnings of all of the 41 industries. The cards are rearranged for each of the census years and the results transcribed in the same way for

the successive census years, the deciles being spotted as the particular averages in the array which divide the whole number of averages for that year into 10 equal parts. Here again allowance should be made for the fact that the figures in the table are, after a fashion, averages of averages. Despite this anomalous character, it is believed that they throw some light on the degree of concentration, or absence of it, in the amounts of per capita earnings. The general drift underlying the figures in Table 49 is brought out somewhat more clearly, perhaps, by Figure 15, on the opposite page.

If the reporting of each of the 41 industries for each census year from 1899 to 1923 results in an array of figures difficult to size up at a glance, so also must corresponding arrays involving the 48 States be difficult to grasp. In Tables 50, 51, and 57, therefore, the distribution of State averages of money earnings per capita is shown in the way already described for industry averages. Table 57, on pages 126 and 127, below, shows, for the 48 States and the District of Columbia, their distribution and the distribution of the wage earners employed within their several boundaries according to the estimated amounts of money earnings, per capita, for all industries combined. In the first column, for each census year, is given the distribution of States and in the footnotes the names of the States are listed. This notation of the identity of the States is included in order to make it possible to judge of the industrial importance of the groups of States in the frequency distribution. Thus, in 1899, the two States wherein per capita money earnings in all industries combined were between $150 and $200 were North Carolina and South Carolina, two States of relatively little importance industrially. If one of those States had been New York, that would of course have meant, in terms of numbers of wage earners, a decided concentration of earnings in this very low group. As a matter of fact, a little study of the figures in Table 57 will show that in each census year there is a rather marked concentration of wage earners at central points in the distributions. This concentration is much more complete in the pre-war, than in the postwar census years. In 1899 we find that the per capita earnings received by 52.3 per cent of all manufacturing wage earners, employed in 12 States, were between $450 and $500; in 1904 the greatest concentration was in the same income class, with 52.6 per cent of the wage earners in 10 States falling within the class; in 1909 the style in per capita earnings moved up a couple of notches, to the $550–$600 group, in which 49.5 per cent of the wage earners (and 12 States) were included; in 1914 the mode was at the same level as in 1909, but with more dispersion; 36 per cent of the wage earners in 6 States getting per capita incomes between $550 and $600.

As already stated, the postwar census years 1919, 1921, and 1923 are marked by a much wider scattering of per capita earnings. In

1919 one-fourth of the wage earners were employed in five States where the per capita earnings were between $1,300 and $1,350; another one-fourth of them were employed in four States where the per capita earnings were between $1,450 and $1,500. In 1921, 23

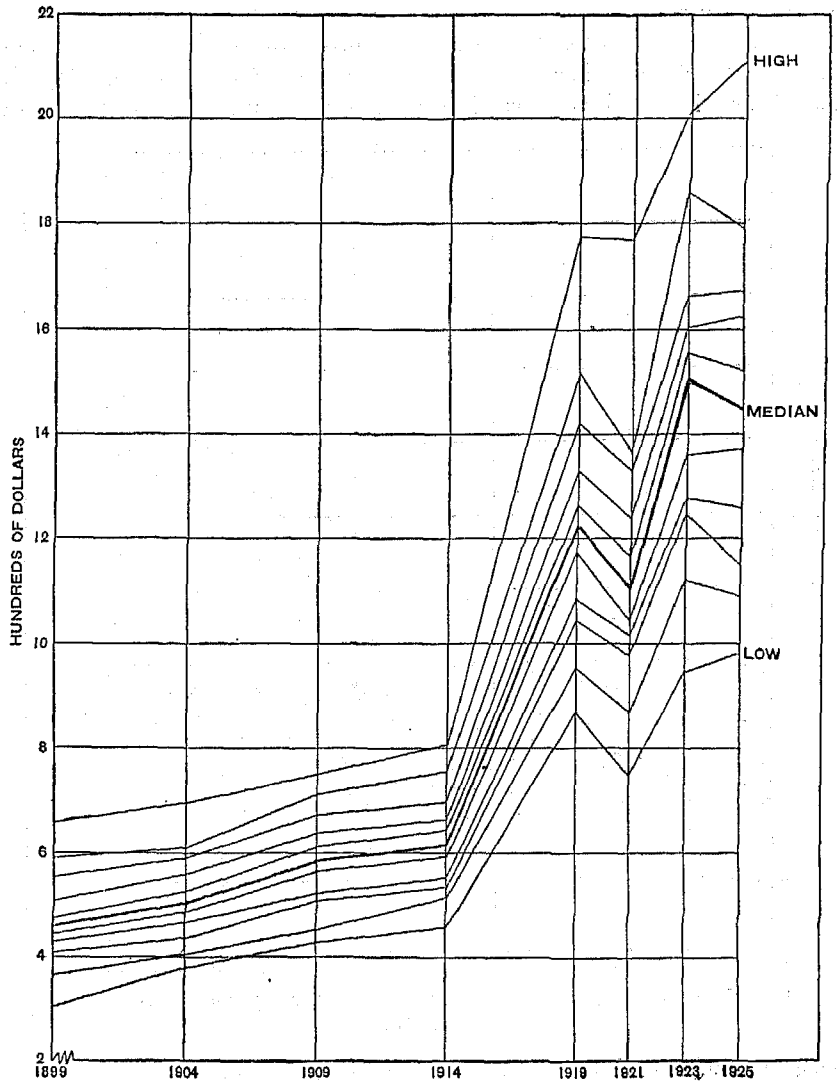

FIG. 15.—MEDIAN, DECIL, AND EXTREME INDUSTRY AVERAGES OF MONEY EARNINGS: 1899–1925

per cent of the wage earners were employed in four States where per capita earnings were between $1,000 and $1,050. In 1923, 26 per cent of the wage earners were employed in three States where per capita earnings were between $1,350 and $1,400. *It is apparent*

from Table 57, what was noticed about Table 47, that there is a marked division of the concentration array. As before, the postwar earnings seem to be less closely grouped about a typical average.

The median, decil, and extreme State averages of money earnings are presented in Table 50, and shown graphically in Figure 16. The range of figures seems to reinforce the impression, which has remained somewhat nebulous because of the character of the unit employed, that there is a wider variation as between different States than

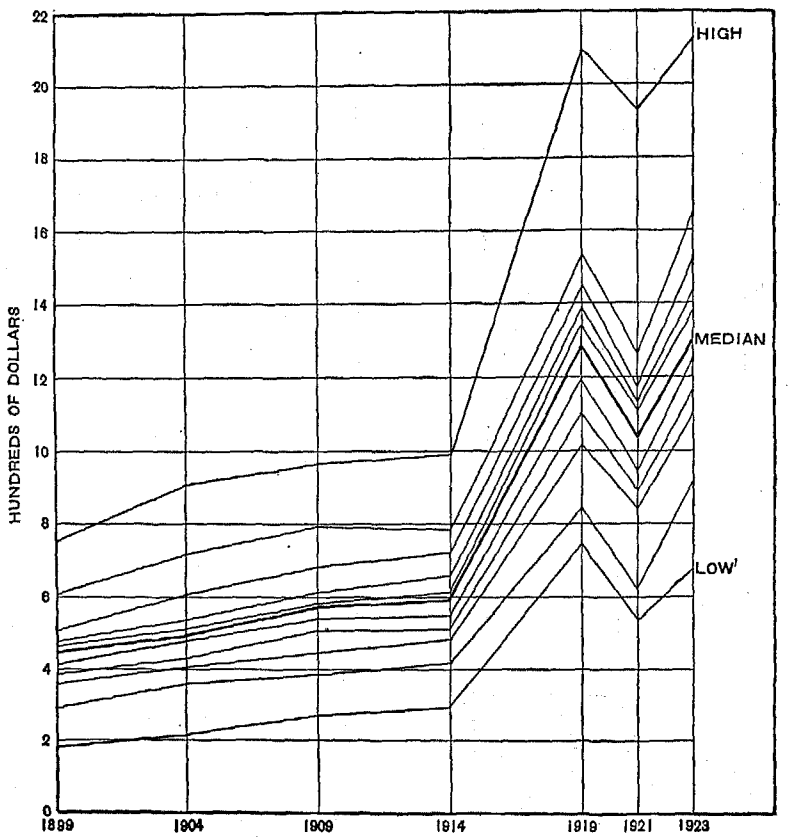

FIG. 16.—MEDIAN, DECIL, AND EXTREME STATE AVERAGES OF MONEY EARNINGS: 1899–1923

between different industries. Table 51 is a summary of the distribution of 196 State averages from the pre-war period and 147 from the postwar period. The difference between the distribution of earnings classified on the industry basis, and their classification on the regional basis, is indicated in summary Table 52, which is made up of the summary columns of Tables 48 and 52. The fluctuating character of our medium of exchange makes it altogether very unlikely that there would be a very pronounced approach to normal distribution

in the case of money earnings, when that distribution involves the consolidation of earnings items over a period of time as long as that here under consideration. Consequently any further discussion of frequency distribution will be deferred to later chapters, wherein similar distributions are made of items of real earnings, which by their very nature lend themselves more readily to comparisons over long periods of time.

TABLE 50.—MEDIAN, DECIL, AND EXTREME STATE AVERAGES OF MONEY EARNINGS, CENSUS YEARS: 1899–1923

[This table is based on arrays of the 49 State averages. When the series of State averages of annual money earnings is arranged in the order of their increasing (or decreasing) amounts, the decils are spotted as the particular averages in the array which divide the whole number of averages for that year into 10 equal parts]

	1899	1904	1909	1914	1919	1921	1923
Highest average	$753	$919	$968	$991	$2,099	$1,933	$2,128
Ninth decil	605	715	797	787	1,530	1,261	1,641
Eighth decil	501	603	684	720	1,447	1,177	1,524
Seventh decil	474	539	611	659	1,387	1,129	1,426
Sixth decil	460	502	577	609	1,338	1,106	1,376
Median	449	492	573	592	1,283	1,041	1,297
Fourth decil	415	480	544	546	1,195	946	1,244
Third decil	386	435	503	506	1,102	899	1,157
Second decil	359	402	449	480	1,019	847	1,091
First decil	207	359	386	414	844	628	911
Lowest average	183	214	270	297	747	540	678

TABLE 51.—DISTRIBUTION OF 343 STATE AVERAGES OF MONEY EARNINGS IN PRE-WAR AND POSTWAR PERIODS

MONEY EARNINGS PER CAPITA (DOLLARS)	DISTRIBUTION OF STATE AVERAGES			MONEY EARNINGS PER CAPITA (DOLLARS)	DISTRIBUTION OF STATE AVERAGES	
	1899, 1904, 1909, and 1914	1919, 1921, and 1923	All census years		1919, 1921, and 1923	All census years
Total cases	196	147	343	$1,100–$1,149	18	18
				$1,150–$1,199	8	8
$150–$199	4		4	$1,200–$1,249	8	8
$200–$249	2		2	$1,250–$1,299	10	10
$250–$299	5		5	$1,300–$1,349	10	10
$300–$349	6		6			
$350–$399	19		19	$1,350–$1,399	8	8
				$1,400–$1,449	8	8
$400–$449	24		24	$1,450–$1,499	8	8
$450–$499	30		30	$1,500–$1,549	5	5
$500–$549	26	1	27	$1,550–$1,599	2	2
$550–$599	23	2	25			
$600–$649	15	2	17	$1,600–$1,649	3	3
				$1,650–$1,699	2	2
$650–$699	9	2	11	$1,700–$1,749	1	1
$700–$749	12	4	16	$1,750–$1,799		
$750–$799	9	4	13	$1,800–$1,849		
$800–$849	3	4	7			
$850–$899	4	7	11	$1,850–$1,899		
				$1,900–$1,949	2	2
$900–$949	3	8	11	$1,950–$1,999		
$950–$999	2	5	7	$2,000–$2,049	1	1
$1,000–$1,049		8	8	$2,050–$2,099	1	1
$1,050–$1,099		4	4	$2,100–$2,149	1	1

TABLE 52.—COMPARISON OF DISTRIBUTION OF 285 INDUSTRY AVERAGES AND 343 STATE AVERAGES OF MONEY EARNINGS, PER CAPITA, ALL CENSUS YEARS COMBINED: 1899–1923

ANNUAL MONEY EARNINGS (DOLLARS)	DISTRIBUTION OF—		PERCENTAGE DISTRIBUTION		ANNUAL MONEY EARNINGS (DOLLARS)	DISTRIBUTION OF—		PERCENTAGE DISTRIBUTION	
	Industry averages	State averages	Industry averages	State averages		Industry averages	State averages	Industry averages	State averages
Total cases	285	343	100.0	100.0	$1,100–$1,199	15	26	5.3	8.0
					$1,200–$1,299	23	18	8.0	5.0
$100–$199	----	4	----	1.3	$1,300–$1,399	13	18	4.6	5.0
$200–$299	----	7	----	2.0	$1,400–$1,499	6	16	2.0	5.0
$300–$399	9	25	3.0	7.7	$1,500–$1,599	11	7	4.0	2.0
$400–$499	46	54	16.0	15.5					
$500–$599	56	51	19.6	15.0	$1,600–$1,699	8	5	2.8	1.5
					$1,700–$1,799	6	1	2.0	.2
$600–$699	37	28	13.0	8.2	$1,800–$1,899	2	0	.7	.0
$700–$799	15	29	5.3	8.8	$1,900–$1,999	2	2	.7	.5
$800–$899	6	18	2.0	5.3	$2,000–$2,099	1	2	.3	.5
$900–$999	8	18	2.8	5.0	$2,100–$2,199	----	1	----	.2
$1,000–$1,099	21	12	7.3	3.9					

PER CAPITA HOURLY EARNINGS

For the most part, the results presented in this monograph are put in the form of annual earnings. However, as a by-product of the first attempts to devise an adequate employment index for discounting full-time earnings, we have some data on prevailing hours worked per week. These, in conjunction with our data on full-time weekly earnings have made it possible to compute, in the manner described in Chapter XVIII, nominal, hourly earnings per capita. These estimates, classified by sex and age groups for each census year, are given in Table 53. The figures reveal the same wide differences between the earnings of men, women, and children as were revealed in the corresponding tables showing annual earnings by sex and age groups. They also show the very large increases in nominal hourly earnings which have taken place since 1899. These increases do not exactly correspond to the increases in annual earn-

TABLE 53.—ESTIMATED AMOUNTS OF NOMINAL HOURLY EARNINGS, PER CAPITA, IN THE UNITED STATES, ALL INDUSTRIES COMBINED, BY SEX AND AGE GROUPS, CENSUS YEARS: 1899–1921

CENSUS YEAR	HOURLY EARNINGS			
	All groups	Men 16 years of age and over	Women 16 years of age and over	Children under 16
	CENTS PER HOUR			
1899	17.3	19.29	10.33	5.9
1904	20.0	22.30	11.95	6.8
1909	22.2	24.79	13.28	7.5
1914	25.6	28.62	15.32	8.7
1919	55.3	61.81	33.11	18.8
1921	57.0	63.69	34.12	19.4

ings, because annual earnings are affected by unemployment, whereas hourly earnings are not so affected. The working hour is a definite length of time. It is the only unit of time payment which accurately measures time expended in labor; the day is vague because a workday may be a 6-hour day, an 8-hour day or a 12-hour day; the week is equally vague for similar reasons; the month is a period which may include a varying number of working days and finally, to an even greater extent, the year represents an unknown quantity so far as the amount of labor time included in it is concerned. When the hour is taken as the unit of earnings, it becomes synonymous with rates; that is to say, hourly earnings are the same as hourly rates, and the amount of time at different periods reflects simultaneously changes in hourly earnings and changes in hourly rates.

In Table 54 nominal hourly earnings are summarized for the nine geographic divisions, in Table 55 hourly earnings are reported by

TABLE 54.—ESTIMATED AMOUNTS OF NOMINAL HOURLY EARNINGS IN THE UNITED STATES, ALL INDUSTRIES COMBINED, BY GEOGRAPHIC DIVISIONS, CENSUS YEARS: 1899–1921

GEOGRAPHIC DIVISION	1899	1904	1909	1914	1919	1921
	CENTS PER HOUR					
United States	17.26	19.96	22.19	25.60	55.30	57.00
New England	17.16	19.21	21.15	23.59	49.94	51.55
Middle Atlantic	18.39	20.58	22.82	25.62	58.25	60.26
East North Central	18.54	21.94	24.10	29.16	61.31	64.15
West North Central	18.26	21.61	23.81	27.52	52.21	59.80
South Atlantic	11.28	13.64	15.18	18.04	43.38	40.23
East South Central	12.28	15.23	15.84	18.65	39.89	38.65
West South Central	13.57	17.46	17.99	21.30	42.48	43.46
Mountain	24.21	29.71	30.58	34.32	58.29	65.24
Pacific	20.96	26.97	30.53	33.06	67.26	69.96

selected industries for male wage earners and in Table 56 corresponding capita hourly earnings for women wage earners in such of the 41 selected industries as have been reported for women. In both Table 55 and Table 56 an extremely wide variation is evident not only between successive periods of time, but also, even more noticeably, between different industries. Both of these sorts of variation are to be expected. It seems evident that the variation in the amounts of hourly earnings is really less than is shown for the same industries in tables already given for annual earnings. In the case of both men and women, one would scarcely look for as much in hourly earnings as one would expect to prevail in annual earnings, if only because of the fact that annual earnings are subject to certain disturbing factors to which hourly earnings are not liable, such as the vicissitudes of the business cycle, with the attendant unemployment, irregular employment, and short time which these fluctuations produce.

TABLE 55.—ESTIMATED AMOUNTS OF NOMINAL HOURLY EARNINGS, BY SELECTED INDUSTRIES, MEN WAGE EARNERS ONLY, CENSUS YEARS: 1899–1921

INDUSTRY	1899	1904	1909	1914	1919	1921
	CENTS PER HOUR					
All industries	19.3	22.3	24.8	28.6	61.8	63.7
Bread and other bakery products	17.69	21.27	18.90	27.30	54.33	64.65
Flour-mill and gristmill products	22.23	23.20	25.24	29.25	57.53	63.45
Confectionery	19.80	22.00	24.19	28.32	54.04	61.76
Liquors, malt	25.15	28.90	30.82	36.81	57.41	69.47
Mineral and soda waters	15.84	17.82	18.82	20.82	36.08	44.03
Tobacco, cigars and cigarettes	18.34	19.93	21.06	24.41	43.09	23.64
Carpets and rugs, other than rag	17.94	19.71	44.52	23.83	57.97	70.26
Shirts	19.53	21.04	23.74	26.42	51.84	58.61
Clothing, men's	23.32	26.82	30.54	40.38	90.27	97.83
Clothing, women's	23.11	27.09	31.69	35.30	88.17	95.80
Cotton manufactures						
Dyeing and finishing textiles, exclusive of that done in textile mills	18.02	19.01	21.23	23.53	52.78	58.17
Knit goods	15.47	16.54	18.91	22.86	45.25	50.87
Silk goods, including throwsters	20.00	21.55	22.97	28.56	63.82	69.42
Woolen and worsted goods						
Boots and shoes, not including rubber boots and shoes	22.61	26.03	28.57	32.41	65.61	73.79
Leather, tanned, curried, and finished	16.64	18.89	20.95	23.50	56.44	54.25
Furniture	19.49	22.34	25.51	22.61	54.78	64.03
Lumber and timber products	13.66	17.66	17.14	19.61	42.64	36.01
Lumber, planing-mill products, not including planing mills connected with sawmills	19.02	22.65	25.22	20.17	49.04	60.28
Paper and wood pulp	14.40	17.32	19.40	22.52	51.22	51.67
Printing and publishing, book and job	23.54	27.83	32.64	37.34	62.07	84.10
Printing and publishing, newspapers and periodicals	24.76	29.49	32.92	37.62	58.65	80.53
Chemicals		20.29	22.48	26.07	57.68	57.79
Petroleum refining	20.48	23.01	27.61	30.21	68.63	73.35
Brick and tile, terra-cotta, and fire-clay products						
Glass	24.70	29.32	28.96	34.44	64.56	71.74
Iron and steel, blast furnaces	15.15	18.01	21.60	27.50	69.31	61.77
Iron and steel, steel works and rolling mills	21.48	23.62	27.61	31.83	76.68	79.84
Foundry and machine-shop products	24.50	28.32	30.81	34.33	70.27	71.79
Automobile bodies and parts		20.12	23.95	28.94	57.81	60.24
Automobiles	23.16	24.68	26.83	36.58	68.75	72.59
Cars, steam-railroad, not including operations of railroad companies	19.11	23.49	25.05	31.26	66.55	66.80
Electric-railroad repair shops	25.11	26.48	27.21	30.68	58.69	68.05
Steam-railroad repair shops	23.05	26.19	28.43	31.74	70.74	80.62
Agricultural implements	19.73	22.39	24.38	31.48	57.18	63.67
Shipbuilding, steel	19.49	21.88	24.05	32.01	79.20	73.59
Electrical machinery, apparatus, and supplies	20.64	23.20	25.23	28.44	55.97	61.28

TABLE 56.—ESTIMATED AMOUNTS OF NOMINAL HOURLY EARNINGS, BY SELECTED INDUSTRIES, FOR WOMEN WAGE EARNERS ONLY, CENSUS YEARS: 1899–1921

INDUSTRY	1899	1904	1909	1914	1919	1921
	CENTS PER HOUR					
All industries	10.3	12.0	13.3	15.3	33.1	34.1
Bread and other bakery products	8.33	10.02	11.74	12.85	25.69	30.46
Confectionery	9.17	10.19	11.20	13.12	25.04	28.61
Mineral and soda water	8.04	9.05	9.56	12.17	18.32	22.36
Tobacco, cigars and cigarettes	10.17	11.06	11.70	13.55	23.92	24.35
Carpets and rugs, other than rag	11.49	12.63	14.39	15.27	37.13	46.87
Shirts	10.62	11.45	12.92	14.38	28.26	31.90
Clothing, men's	11.35	12.50	14.24	15.18	39.59	47.80
Clothing, women's	12.21	14.31	16.74	18.64	46.58	50.59
Dyeing and finishing textiles	10.88	11.47	12.81	14.20	31.85	35.11
Knit goods	10.38	11.10	12.69	15.35	30.37	34.13
Silk goods	11.81	12.72	14.60	15.03	37.68	40.99
Boots and shoes, not including rubber boots and shoes	13.81	15.90	17.44	19.80	40.04	45.05
Printing and publishing, book and job	11.88	14.05	16.49	18.85	31.34	42.47
Printing and publishing, newspapers and periodicals	11.17	13.30	14.84	16.96	26.45	36.31
Glass	7.93	9.41	9.29	11.05	20.72	23.03
Electrical machinery, apparatus, and supplies	11.16	12.55	13.66	15.40	30.28	33.15

TABLE 57.—THE 48 STATES AND THE DISTRICT OF COLUMBIA, AND THE WAGE EARNERS EMPLOYED THEREIN, DISTRIBUTED ACCORDING TO THE AMOUNT OF ANNUAL MONEY EARNINGS, PER CAPITA, ALL INDUSTRIES COMBINED, MANUFACTURES CENSUS YEARS: 1899–1923

ANNUAL MONEY EARNINGS PER CAPITA (DOLLARS)	NUMBER OF STATES IN EACH EARNINGS GROUP AND PERCENTAGE BORNE BY AGGREGATE AVERAGE NUMBER OF WAGE EARNERS IN THAT GROUP OF STATES TO TOTAL NUMBER OF WAGE EARNERS IN ALL MANUFACTURING INDUSTRIES							
	1899		1904		1909		1914	
	States[1]	Per cent	States[2]	Per cent	States[3]	Per cent	States[4]	Per cent
$150–$199	[a] 2	2.24	[a] 2	2.05				
$200–$249	[b] 1	1.58	[b] 1	1.72				
$250–$299	[c] 2	1.00						
$300–$349	[d] 3	3.32			[a] 2	2.94	[a] 1	1.94
$350–$399	[e] 9	8.61	[c] 5	5.03	[b] 1	1.58	[b] 2	2.50
					[c] 4	4.08	[c] 1	.66
$400–$449	[f] 8	19.83	[d] 9	9.89	[d] 3	3.23	[d] 4	4.24
$450–$499	[g]12	52.31	[e]10	52.60	[e] 3	3.69	[e] 5	4.71
$500–$549	[h] 4	7.93	[f] 8	17.10	[f] 7	14.72	[f] 7	17.26
$550–$599	[i] 2	2.35	[g] 3	7.02	[g]12	49.50	[g] 6	36.02
$600–$649	[j] 2	.75	[h] 3	.55	[h] 4	16.02	[h] 6	15.32
$650–$699			[i] 1	1.89	[i] 3	.15	[i] 5	8.98
$700–$749	[k] 3	.29	[j] 3	1.29	[j] 1	.18	[j] 5	4.90
$750–$799	[l] 1	.01	[k] 1	.03	[k] 5	3.75	[k] 2	2.94
$800–$849			[l] 1	.09	[l] 2	.14		
$850–$899			[m] 1	.01			[l] 3	.33
$900–$949			[n] 1	.16	[m] 1	.18	[m] 1	.13
$950–$999					[n] 1	.03	[n] 1	.05
Total number of wage earners, all manufacturing industries	4,712,763		5,468,383		6,615,046		7,036,247	

(See pages 126 and 127 for footnotes.)

TABLE 57.—THE 48 STATES AND THE DISTRICT OF COLUMBIA, AND THE WAGE EARNERS EMPLOYED THEREIN, DISTRIBUTED ACCORDING TO THE AMOUNT OF ANNUAL MONEY EARNINGS, PER CAPITA, ALL INDUSTRIES COMBINED, MANUFACTURES CENSUS YEARS: 1899–1923—Continued

ANNUAL MONEY EARNINGS PER CAPITA (DOLLARS)	NUMBER OF STATES IN EACH EARNINGS GROUP AND PERCENTAGE BORNE BY AGGREGATE AVERAGE NUMBER OF WAGE EARNERS IN THAT GROUP OF STATES TO TOTAL NUMBER OF WAGE EARNERS IN ALL MANUFACTURING INDUSTRIES					
	1919		1921		1923	
	States[1]	Per cent	States[2]	Per cent	States[3]	Per cent
$500–$549			[a] 1	1.10		
$550–$599			[b] 2	3.37		
$600–$649			[c] 2	1.09		
$650–$699					[a] 2	2.67
$700–$749	[a] 1	0.87	[d] 2	2.28	[b] 1	1.98
$750–$799	[b] 1	1.73	[e] 2	2.00	[c] 1	.62
$800–$849	[c] 2	2.41	[f] 1	1.27	[d] 1	.51
$850–$899	[d] 2	1.18	[g] 5	14.34		
$900–$949			[h] 6	5.08	[e] 2	2.29
$950–$999	[c] 3	3.02			[f] 2	1.99
$1,000–$1,049	[f] 3	3.31	[i] 4	22.95	[g] 1	1.27
$1,050–$1,099	[g] 1	.10	[j] 1	14.40	[h] 2	2.03
$1,100–$1,149	[h] 4	3.03	[k]11	15.36	[i] 3	3.37
$1,150–$1,199	[i] 3	8.23	[l] 2	1.19	[j] 3	9.44
$1,200–$1,249	[j] 1	.97	[m] 4	12.01	[k] 3	5.50
$1,250–$1,299	[k] 4	6.06	[n] 2	.44	[l] 4	1.71
$1,300–$1,349	[l] 5	21.69	[o] 1	2.86	[m] 4	4.42
$1,350–$1,399	[m] 4	8.45	[p] 1	.16	[n] 3	25.85
$1,400–$1,449	[n] 5	4.03			[o] 3	9.69
$1,450–$1,499	[o] 4	20.34			[p] 4	1.22
$1,500–$1,549	[p] 1	.15	[q] 1	.03	[q] 3	15.41
$1,550–$1,599	[q] 2	9.49				
$1,600–$1,649					[r] 3	4.26
$1,650–$1,699	[r] 1	5.18			[s] 1	5.74
$1,700–$1,749					[t] 1	.19
$1,750–$1,799						
$1,800–$1,849						
$1,850–$1,899						
$1,900–$1,949			[r] 1	.10	[u] 1	.05
$1,950–$1,999						
$2,000–$2,049	[s] 1	.07				
$2,050–$2,099	[t] 1	.09				
$2,100–$2,149					[v] 1	.08
Total number of wage earners, all manufacturing industries	9,096,372		6,946,570		8,778,156	

[1] The States represented by the numbers in this column are:
- [a] North Carolina, South Carolina.
- [b] Georgia.
- [c] Arkansas, Mississippi.
- [d] Alabama, Virginia, Tennessee.
- [e] Florida, Louisiana, Kentucky, Maryland, Maine, Oklahoma, New Hampshire, Vermont, West Virginia.
- [f] Rhode Island, Delaware, Texas, Michigan, Massachusetts, Wisconsin, District of Columbia, Iowa.
- [g] Missouri, New York, New Jersey, Indiana, Pennsylvania, Connecticut, Ohio, Kansas, Nebraska, Minnesota, North Dakota, New Mexico.
- [h] Utah, Oregon, Illinois, South Dakota.
- [i] California, Washington.
- [j] Colorado, Idaho.
- [k] Wyoming, Montana, Arizona.
- [l] Nevada.

[2] The States represented by the numbers in this column are:
- [a] North Carolina, South Carolina.
- [b] Georgia.
- [c] Virginia, Tennessee, Alabama, Mississippi, Arkansas.
- [d] Maryland, Kentucky, Florida, New Hampshire, Rhode Island, Delaware, Vermont, Louisiana, Maine.
- [e] Massachusetts, Texas, West Virginia, Iowa, Connecticut, New Jersey, New York, Michigan, Pennsylvania, Oklahoma.
- [f] Indiana, Wisconsin, District of Columbia, Missouri, Kansas, Ohio, Nebraska, Minnesota.
- [g] Illinois, South Dakota, North Dakota.
- [h] Utah, New Mexico, Oregon.
- [i] California.
- [j] Washington, Colorado, Idaho.
- [k] Wyoming.
- [l] Arizona.
- [m] Nevada.
- [n] Montana.

[5] The States represented by the numbers in this column are:
- [a] North Carolina, South Carolina.
- [b] Georgia.
- [c] Mississippi, Virginia, Tennessee, Arkansas.
- [d] Alabama, Kentucky, Louisiana.
- [e] Maryland, New Hampshire, Florida.
- [f] Rhode Island, Maine, Delaware, Vermont, Massachusetts, Texas, West Virginia.
- [g] Connecticut, New Jersey, Oklahoma, Pennsylvania, Indiana, New York, Missouri, Michigan, Wisconsin, Louisiana, Nebraska, District of Columbia.
- [h] Kansas, Ohio, Minnesota, Illinois.
- [i] New Mexico, North Dakota, South Dakota.
- [j] Utah.
- [k] Oregon, Colorado, Idaho, Washington, California.
- [l] Arizona, Wyoming.
- [m] Montana.
- [n] Nevada.

[6] The States represented by the numbers in this column are:
- [a] North Carolina.
- [b] South Carolina, Georgia.
- [c] Mississippi.
- [d] Tennessee, Arkansas, Virginia, Alabama.
- [e] Kentucky, Florida, Louisiana, Delaware, Maryland.
- [f] Rhode Island, New Hampshire, Maine, Vermont, Massachusetts, Texas, Connecticut.
- [g] New Jersey, New York, Pennsylvania, District of Columbia, Missouri, Oklahoma.
- [h] West Virginia, Wisconsin, Kansas, Indiana, Ohio, Iowa.
- [i] Minnesota, Nebraska, Illinois, New Mexico, South Dakota.
- [j] Michigan, Utah, North Dakota, Oregon, Colorado.
- [k] California, Washington.
- [l] Wyoming, Montana, Arizona.
- [m] Idaho.
- [n] Nevada.

[7] The States represented by the numbers in this column are:
- [a] South Carolina.
- [b] North Carolina.
- [c] Georgia, Tennessee.
- [d] Arkansas, Mississippi.
- [e] Louisiana, Kentucky, Alabama.
- [f] Texas, Florida, Virginia.
- [g] District of Columbia.
- [h] New Hampshire, Utah, Rhode Island, Vermont.
- [i] Oklahoma, Massachusetts, New Mexico.
- [j] Maine.
- [k] West Virginia, Maryland, Connecticut, Colorado.
- [l] New York, Minnesota, California, Wisconsin, Iowa.

Footnote [5]—Continued.
- [m] Kansas, North Dakota, Missouri, New Jersey.
- [n] Indiana, Montana, Nebraska, Delaware, South Dakota.
- [o] Pennsylvania, Oregon, Nevada, Illinois.
- [p] Idaho.
- [q] Ohio, Washington.
- [r] Michigan.
- [s] Wyoming.
- [t] Arizona.

[8] The States represented by the numbers in this column are:
- [a] South Carolina.
- [b] North Carolina, Georgia.
- [c] Mississippi, Arkansas.
- [d] Tennessee, Alabama.
- [e] Louisiana, Florida.
- [f] Virginia.
- [g] New Hampshire, Vermont, Rhode Island, Connecticut, Massachusetts.
- [h] Maryland, Delaware, Kentucky, Texas, New Mexico, Maine.
- [i] Wisconsin, Pennsylvania, Missouri, New Jersey.
- [j] New York.
- [k] Kansas, Oregon, Indiana, Minnesota, Oklahoma, Ohio, West Virginia, Utah, Nebraska, District of Columbia, Iowa.
- [l] Washington, South Dakota.
- [m] Illinois, Arizona, Montana, Michigan.
- [n] Colorado, North Dakota.
- [o] California.
- [p] Idaho.
- [q] Nevada.
- [r] Wyoming.

[9] The States represented by the numbers in this column are:
- [a] South Carolina, Georgia.
- [b] North Carolina.
- [c] Mississippi.
- [d] Arkansas.
- [e] Tennessee, Louisiana.
- [f] Florida, Alabama.
- [g] Virginia.
- [h] New Hampshire, Texas.
- [i] Vermont, Rhode Island, Maryland.
- [j] Maine, Kentucky, Massachusetts.
- [k] Missouri, Connecticut, Delaware.
- [l] South Dakota, Iowa, Utah, Kansas.
- [m] New Mexico, Nebraska, Wisconsin, Minnesota.
- [n] Oklahoma, New York, Pennsylvania.
- [o] West Virginia, New Jersey, Indiana.
- [p] District of Columbia, Oregon, Colorado, North Dakota.
- [q] Ohio, Arizona, Illinois.
- [r] Montana, Washington, California.
- [s] Michigan.
- [t] Idaho.
- [u] Nevada.
- [v] Wyoming.

Chapter V

ESTIMATED AMOUNTS OF REAL EARNINGS

Although they are more significant than wage rates, the money earnings of wage earners, so far as their economic welfare is concerned, are relatively meaningless over long periods of time. It is a commonplace that it is not so much the number of dollars in his pay envelope that counts in the industrial worker's estimate of his own economic well-being as it is the amount of the necessities and comforts of life which he can buy with the accumulation of the money sums which find their way into his pay envelopes in the course of a year of Saturday nights. The natural wages of labor, or its natural earnings, are the pounds of food, the suits of clothes, and the amount and kind of shelter which the wage earner can buy with the money income received for his labor.

It is with the object, then, of measuring the purchasing power of money earnings that the figures presented in this chapter, as well as in Chapter IX in Part III, have been brought together. The standard indexes of the United States Bureau of Labor Statistics, reflecting fluctuations in retail food prices and in the total cost of living, are used as deflation coefficients for the reduction of money earnings to units of uniform purchasing power. The price level which has been taken as a standard in making this deflation is that of 1914. The price level of the year 1913 has been very commonly used for the purpose, notably by the Federal bureau itself. The latter year has the merit of being a year in which there was, by and large, no great extreme of either prosperity or depression. The year 1914 was, on the whole, one of depression and is not, therefore, the best year for the present purposes. But 1913 seems to be unavailable because it was not a census year, and in respect of a large part of this analysis, only census years are included. So far as prevailing business conditions are concerned, it would have been better, perhaps, to have taken the year 1919. However, despite the advantages of the latter year, it was decided to use 1914, because it fell in the middle of the quarter-century period here under review and, what is probably more important, it comes just at the beginning of a period of extraordinarily rapid increase in general prices, including the price of labor.

A summary, showing the amounts in deflated dollars of per capita earnings in the United States as a whole, for all industries combined, by sex and age groups, and for each census year since 1899 is given

in Table 58. These figures represent the numbers of dollars which would have been received in earnings each different census year if the retail price level of 1914 had prevailed throughout the 27-year period from 1899 to 1925. They are, in other words, dollars of constant purchasing power. A comparison of figures in Table 58 with the analogous data for money earnings (Table 40) in the preceding chapter, will show at once how misleading are the dollar amounts presented in the latter table. Thus, the per capita average of $1,398 of money earnings are shown by the figures in Table 58 to be sufficient, at the price level of 1914, to purchase only $836 worth of goods and services. At the other end of the period, in 1899, the per capita average of $446, for all groups and industries combined, would purchase as large a volume of goods as $669 in 1914. It is obvious also that this process of deflation makes a very different showing as to the degree and even as to the direction of change in the real earnings of labor. This relative aspect of the matter, however, is reserved for discussion in a later chapter.

TABLE 58.—THE PURCHASING POWER, IN TERMS OF THE 1914 DOLLAR, OF ANNUAL MONEY INCOME, PER CAPITA, IN THE UNITED STATES, BY SEX AND AGE GROUP, CENSUS YEARS: 1899–1923

CENSUS YEAR	All manufacturing wage earners	Men	Women	Children
1899	$603	$373	$361	$205
1904	582	651	348	198
1909	640	725	390	221
1914	576	644	344	195
1919	677	756	406	230
1921	595	665	356	202
1923	839	924	495	281

A reference to the second and fourth columns of Table 35 in the last chapter will show these census year averages of real and money earnings fitted into a continuous series with the aid of interpolated averages for intercensal years.

REGIONAL DIFFERENCES IN REAL EARNINGS

A different sort of summary of our results on real earnings is given in Table 59. This table shows, for all industries combined, the distribution of the 48 States and the District of Columbia on the basis of the estimated per capita real earnings prevailing in each jurisdiction. The figures given are derived in the same way as described in the preceding chapter for Table 50, except that the arrangement is on the basis of decreasing amounts of "real" instead of money earnings. The meanings of the figures can perhaps be made clearer by use of an illustration. In 1899 the State in which average real earnings per capita were lower than in any other State had per capita

earnings amounting to $247. In the State in which the highest per capita average earnings appear to have been received, those earnings amounted to $1,018. With the States arranged in the order of decreasing average earnings, the midmost State was spotted and the average amount of earnings in it listed in the table as the median item—$607. In similar fashion, the so-called decil items were spotted—that is to say, the items corresponding to States occupying positions in the array of States at points which separate the total number of States into 10 equal parts. The figures serve to show how wide a variation of earnings among States is concealed in the average for the United States as a whole. Unfortunately, of course, they tell us nothing about the other unknown variations, which must be present both in the case of States and of industries—the highly important variations between the amounts received by individual wage earners. The data of Table 59 are charted in Figure 17.

The same arrays of the average earnings items for different States, which were used in construction of Table 59, were utilized in putting together a somewhat more detailed showing of State variations in the purchasing power of manufacturing labor incomes. The results are given in Table 60. The figures given in the left-hand column, under each census year, are the numbers of States in which per capita real earnings fell within the limits indicated by the brackets at the left of the Table. The names of the States represented by these figures are given in a footnote. These frequency distributions put the record for the whole 25-year period on a basis which makes possible some inferences regarding the economic well-being of the manufacturing labor class during the last 25 years.

TABLE 59.—MEDIAN, DECIL, AND EXTREME STATE AVERAGES OF REAL EARNINGS, PER CAPITA, IN EACH CENSUS YEAR: 1899–1923

	1899	1904	1909	1914	1919	1921	1923
Highest average {State	Nev.	Mont.	Nev.	Nev.	Ariz.	Wyo.	Wyo.
Highest average {Amount	$1,018	$1,107	$1,113	$991	$1,173	$1,098	$1,259
Ninth decil	870	901	917	787	874	720	971
Eighth decil	678	742	813	720	817	686	902
Seventh decil	647	658	722	659	789	647	844
Sixth decil	627	614	663	609	749	629	818
Median average[1]	607	598	659	592	717	591	772
Fourth decil	561	578	625	546	668	538	731
Third decil	522	524	578	506	616	511	679
Second decil	485	484	516	480	569	481	620
First decil	401	433	444	414	472	357	480
Lowest average {Amount	247	258	310	297	417	307	401
Lowest average {State	N. C.	S. C.	N. C.	N. C.	S. C.	S. C.	S. C.
United States (average)	$603	$582	$640	$576	$677	$595	$839

[1] 1899, District of Columbia; 1904, Michigan; 1909, New York; 1914, Oklahoma; 1919, Connecticut; 1921, New Jersey; 1923, New Mexico.

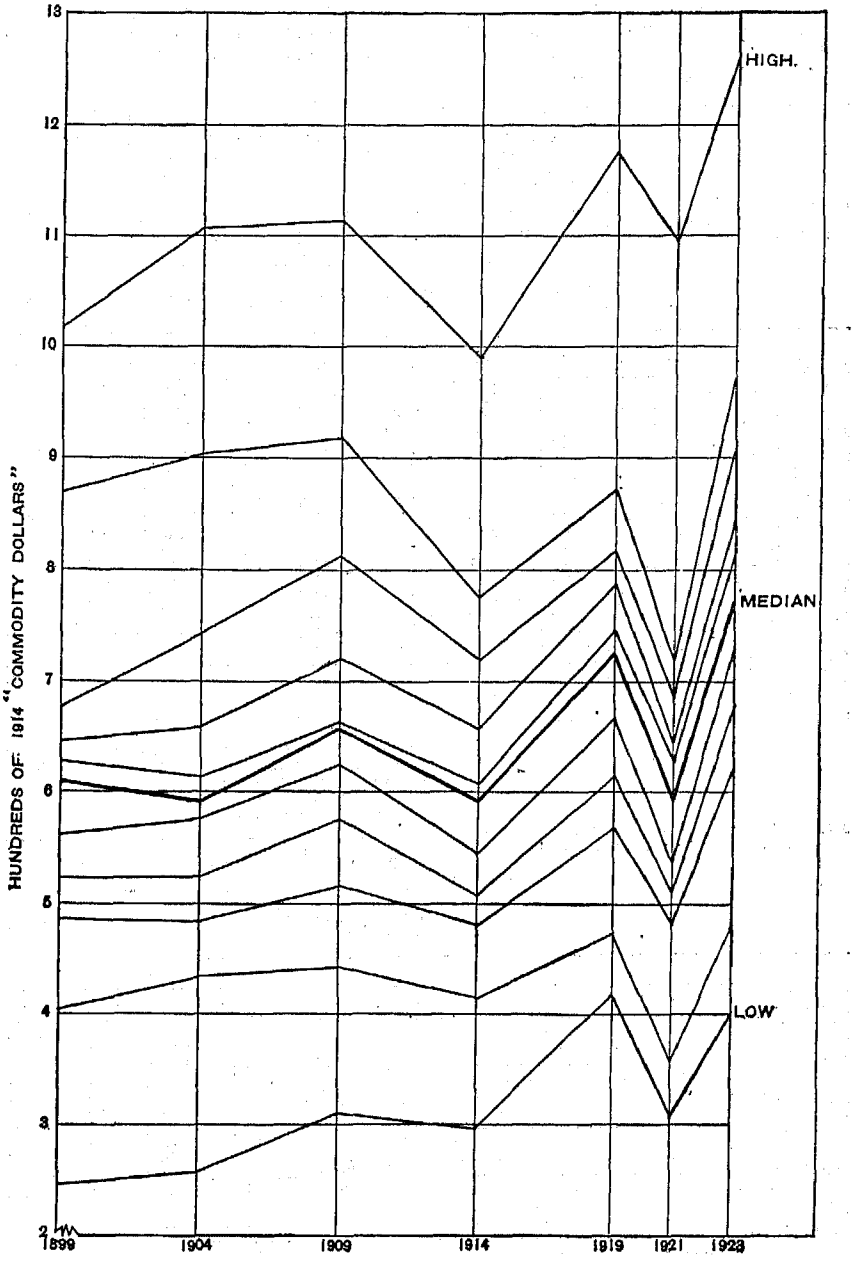

FIG. 17.—MEDIAN, DECIL, AND EXTREME STATE AVERAGES OF REAL EARNINGS, PER CAPITA, CENSUS YEARS: 1899–1923

TABLE 60.—THE 48 STATES AND THE DISTRICT OF COLUMBIA ARRANGED ACCORDING TO THE PURCHASING POWER, PER CAPITA, OF THE MONEY EARNINGS OF THEIR MANUFACTURING WAGE EARNERS. ALL INDUSTRIES COMBINED, CENSUS YEARS: 1899–1923

ANNUAL "REAL" EARNINGS PER CAPITA (IN DOLLARS OF 1914 PURCHASING POWER)	NUMBER OF STATES IN EACH EARNINGS GROUP AND PERCENTAGE BORNE BY AGGREGATE AVERAGE NUMBER OF WAGE EARNERS IN THAT GROUP OF STATES, TO THE TOTAL NUMBER OF WAGE EARNERS IN ALL MANUFACTURING INDUSTRIES							
	1899		1904		1909		1914	
	Number [1]	Per cent	Number [2]	Per cent	Number [3]	Per cent	Number [4]	Per cent
$200–$249	[a] 2	2.24						
$250–$299			[a] 2	2.65			[a] 1	1.94
$300–$349	[b] 1	1.58	[b] 1	1.70	[a] 2	2.94	[b] 2	2.50
$350–$399	[c] 1	.50			[b] 1	1.58	[c] 1	.60
$400–$449	[d] 4	3.82	[c] 4	4.43	[c] 4	4.08	[d] 4	4.24
$450–$499	[e] 4	4.65	[d] 4	4.18	[d] 1	1.09	[e] 5	4.71
$500–$549	[f] 6	5.82	[e] 8	16.14	[e] 4	4.64	[f] 7	17.26
$550–$599	[g] 6	17.51	[f] 8	42.77	[f] 7	14.94	[g] 6	36.12
$600–$649	[h] 11	52.67	[g] 7	15.83	[g] 5	22.56	[h] 6	15.32
$650–$699	[i] 5	7.97	[h] 3	8.26	[h] 8	27.99	[i] 5	8.98
$700–$749	[j] 1	.06	[i] 3	.24	[i] 4	16.02	[j] 5	4.90
$750–$799	[k] 2	2.35	[j] 1	.34	[j] 3	.15	[k] 2	2.04
$800–$849	[l] 1	.28	[k] 2	2.72	[k] 1	.18		
$850–$899	[m] 1	.47	[l] 1	.40	[l] 2	.85	[l] 3	.33
$900–$949	[n] 1	.04	[m] 1	.06	[m] 3	2.90	[m] 1	.13
$950–$999			[n] 2	.12			[n] 1	.05
$1,000–$1,049	[o] 3	.26			[n] 2	.14		
$1,050–$1,099			[o] 1	.01	[o] 1	.18		
$1,100–$1,149			[p] 1	.16	[p] 1	.03		
$1,150–$1,199								
$1,200–$1,249								
$1,250–$1,299								

ANNUAL "REAL" EARNINGS PER CAPITA (IN DOLLARS OF 1914 PURCHASING POWER)	NUMBER OF STATES IN EACH EARNINGS GROUP AND PERCENTAGE BORNE BY AGGREGATE AVERAGE NUMBER OF WAGE EARNERS IN THAT GROUP OF STATES, TO THE TOTAL NUMBER OF WAGE EARNERS IN ALL MANUFACTURING INDUSTRIES					
	1919		1921		1923	
	Number [5]	Per cent	Number [6]	Per cent	Number [7]	Per cent
$200–$249						
$250–$299						
$300–$349			[a] 4	5.08		
$350–$399			[b] 1	.48		
$400–$449	[a] 3	3.96	[c] 4	4.28	[a] 3	4.65
$450–$499	[b] 3	2.23	[d] 4	4.23	[b] 2	1.13
$500–$549	[c] 2	1.84	[e] 8	16.46	[c] 1	1.21
$550–$599	[d] 4	4.49	[f] 4	22.95	[d] 3	3.07
$600–$649	[e] 5	3.15	[g] 11	29.64	[e] 3	3.30
$650–$699	[f] 5	11.34	[h] 6	8.94	[f] 5	5.17
$700–$749	[g] 8	24.85	[i] 4	7.68	[g] 3	10.10
$750–$799	[h] 6	12.45	[j] 1	.16	[h] 8	6.11
$800–$849	[i] 7	21.11			[i] 7	38.27
$850–$899	[j] 3	9.64	[k] 1	.03	[j] 4	1.22
$900–$949	[k] 1	5.18			[k] 3	15.41
$950–$999					[l] 4	9.98
$1,000–$1,049					[m] 1	.19
$1,050–$1,099			[l] 1	.10		
$1,100–$1,149	[l] 1	.07			[n] 1	.05
$1,150–$1,199	[m] 1	.09				
$1,200–$1,249					[o] 1	.09
$1,250–$1,299						

(See next page for footnotes.)

[1] The States represented by the numbers in this column are:
- [a] North Carolina, South Carolina.
- [b] Georgia.
- [c] Arkansas.
- [d] Alabama, Mississippi, Tennessee, Virginia.
- [e] Florida, Kentucky, Louisiana, Maryland.
- [f] Maine, New Hampshire, Oklahoma, Rhode Island, Vermont, West Virginia.
- [g] Delaware, Iowa, Massachusetts, Michigan, Texas, Wisconsin.
- [h] Connecticut, District of Columbia, Missouri, Indiana, Kansas, Minnesota, Nebraska, New Jersey, New York, Ohio, Pennsylvania.
- [i] Illinois, New Mexico, North Dakota, Oregon, Utah.
- [j] South Dakota.
- [k] California, Washington.
- [l] Idaho.
- [m] Colorado.
- [n] Wyoming.
- [o] Montana, Nevada, Arizona.

[2] The States represented by the numbers in this column are:
- [a] *North Carolina, South Carolina.*
- [b] Georgia.
- [c] Alabama, Mississippi, Tennessee, Virginia.
- [d] Arkansas, Florida, Kentucky, Maryland.
- [e] Delaware, Louisiana, Maine, Massachusetts, New Hampshire, Rhode Island, Texas, Vermont.
- [f] Connecticut, Iowa, Michigan, New Jersey, New York, Oklahoma, Pennsylvania, West Virginia.
- [g] District of Columbia, Indiana, Kansas, Missouri, Nebraska, Ohio, Wisconsin.
- [h] Illinois, Minnesota, South Dakota.
- [i] New Mexico, North Dakota, Utah.
- [j] Oregon.
- [k] California, Washington.
- [l] Colorado.
- [m] Idaho.
- [n] Arizona, Wyoming.
- [o] Nevada.
- [p] Montana.

[3] The States represented by the numbers in this column are:
- [a] North Carolina, South Carolina.
- [b] Georgia.
- [c] Arkansas, Mississippi, Tennessee, Virginia.
- [d] Alabama.
- [e] Florida, Kentucky, Louisiana, Maryland.
- [f] Delaware, Maine, Massachusetts, New Hampshire, Rhode Island, Texas, Vermont.
- [g] Connecticut, New Jersey, Oklahoma, Pennsylvania, West Virginia.
- [h] District of Columbia, Indiana, Iowa, Michigan, Missouri, Nebraska, New York, Wisconsin.
- [i] Illinois, Kansas, Minnesota, Ohio.
- [j] New Mexico, North Dakota, South Dakota.
- [k] Utah.
- [l] Colorado, Oregon.
- [m] California, Idaho, Washington.
- [n] Arizona, Wyoming.
- [o] Montana.
- [p] Nevada.

[4] The States represented by the numbers in this column are:
- [a] North Carolina.
- [b] Georgia, South Carolina.
- [c] Mississippi.
- [d] Alabama, Arkansas, Tennessee, Virginia.
- [e] Delaware, Florida, Kentucky, Louisiana, Maryland.
- [f] Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Texas, Vermont.

Footnote [4]—Continued.
- [g] District of Columbia, Missouri, New Jersey, New York, Oklahoma, Pennsylvania.
- [h] Indiana, Kansas, Louisiana, Ohio, West Virginia, Wisconsin.
- [i] Illinois, Minnesota, Nebraska, New Mexico, South Dakota.
- [j] Colorado, Michigan, North Dakota, Oregon, Utah.
- [k] California, Washington.
- [l] Arizona, Montana, Wyoming.
- [m] Idaho.
- [n] Nevada.

[5] The States represented by the numbers in this column are:
- [a] Georgia, North Carolina, South Carolina.
- [b] Arkansas, Mississippi, Tennessee.
- [c] Kentucky, Louisiana.
- [d] Alabama, Florida, Texas, Virginia.
- [e] District of Columbia, New Hampshire, Rhode Island, Utah, Vermont.
- [f] Maine, Massachusetts, Missouri, New Mexico, Oklahoma.
- [g] California, Colorado, Connecticut, Iowa, Maryland, Minnesota, New York, West Virginia.
- [h] Indiana, Kansas, Montana, New Jersey, North Dakota, Wisconsin.
- [i] Delaware, Illinois, Nebraska, Nevada, Oregon, Pennsylvania, South Dakota.
- [j] Idaho, Ohio, Washington.
- [k] Michigan.
- [l] Wyoming.
- [m] Arizona.

[6] The States represented by the numbers in this column are:
- [a] Georgia, Mississippi, North Carolina, South Carolina.
- [b] Arkansas.
- [c] Alabama, Florida, Louisiana, Tennessee.
- [d] New Hampshire, Rhode Island, Virginia, Vermont.
- [e] Connecticut, Delaware, Kentucky, Maine, Massachusetts, Maryland, New Mexico, Texas.
- [f] Missouri, New Jersey, Pennsylvania, Wisconsin.
- [g] Indiana, Iowa, Kansas, Minnesota, Nebraska, *New York, Ohio, Oklahoma, Oregon, Utah,* West Virginia.
- [h] Arizona, District of Columbia, Illinois, Montana, South Dakota, Washington.
- [i] California, Colorado, Michigan, North Dakota.
- [j] Idaho.
- [k] Nevada.
- [l] Wyoming.

[7] The States represented by the numbers in this column are:
- [a] Georgia, North Carolina, South Carolina.
- [b] Arkansas, Mississippi.
- [c] Tennessee.
- [d] Alabama, Florida, Louisiana.
- [e] New Hampshire, Texas, Virginia.
- [f] Kentucky, Maine, Maryland, Rhode Island, Vermont.
- [g] Delaware, Massachusetts, Missouri.
- [h] Iowa, Kansas, Minnesota, Nebraska, New Mexico, South Dakota, Utah, Wisconsin.
- [i] Connecticut, Indiana, New Jersey, New York, Oklahoma, Pennsylvania, West Virginia.
- [j] Colorado, *District of Columbia, North Dakota,* Oregon.
- [k] Arizona, Illinois, Ohio.
- [l] California, Michigan, Montana, Washington,
- [m] Idaho.
- [n] Nevada.
- [o] Wyoming.

INDUSTRIAL DIFFERENCES IN REAL EARNINGS

More important than the two foregoing summaries of State averages in the amounts of real earnings are those which show the industry variations. Table 25 (p. 69) shows the results for each of the 41 selected industries, arranged in each census year in the order of decreasing real earnings per capita. The results show what wide differences even in average real earnings actually existed among the different industries. In 1921, for example, the per capita average amount of real earnings was estimated to be $595. This amount is shown by the figures in Table 25 to cover industries in which the corresponding industry averages range from the lowest industry average of $422 for smelting and refining, copper, lead, and zinc to the highest average of $1,006 for printing and publishing, book and job.

The more detailed frequency distributions for each census year are given in Table 61. As before, the number of industries falling within each real earnings group is given in the left-hand column under each year, and the percentage of all wage earners employed in those industries in the columns to the right. Lists to identify the separate industries in each group in the left-hand columns are given in footnotes to the table.

TABLE 61.—THE 41 SELECTED INDUSTRIES, ARRANGED ACCORDING TO THE PURCHASING POWER, PER CAPITA, OF THE MONEY EARNINGS OF THEIR MANUFACTURING WAGE EARNERS, ALL INDUSTRIES COMBINED, CENSUS YEARS: 1899–1925

ANNUAL "REAL" EARNINGS PER CAPITA (DOLLARS)	NUMBER OF INDUSTRIES IN EACH EARNINGS GROUP AND PERCENTAGE BORNE BY AGGREGATE AVERAGE NUMBER OF WAGE EARNERS IN THAT GROUP OF INDUSTRIES TO THE TOTAL NUMBER OF WAGE EARNERS IN ALL MANUFACTURING INDUSTRIES							
	*1899		1904		1909		1914	
	Number [1]	Per cent	Number [2]	Per cent	Number [3]	Per cent	Number [4]	Per cent
$400–$424	[a] 1	2.67						
$425–$449								
$450–$474	[b] 1	8.77	[a] 3	9.08			[a] 1	6.82
$475–$499	[c] 3	9.38	[b] 1	1.90	[a] 2	11.15	[b] 2	7.85
$500–$524			[c] 5	12.61	[b] 2	5.93	[c] 2	1.90
$525–$549	[d] 2	2.43	[d] 1	1.05	[c] 1	1.95	[d] 6	6.87
$550–$574	[c] 3	2.07	[c] 5	4.77	[d] 2	5.07	[c] 3	2.59
$575–$599	[f] 5	5.69	[f] 3	1.38	[d] 3	2.51	[f] 3	3.19
$600–$624	[g] 5	4.42	[g] 6	7.57	[f] 4	3.35	[g] 6	7.02
$625–$649	[h] 3	3.46	[h] 2	2.15	[g] 2	1.17	[h] 3	6.05
$650–$674	[i] 2	2.84	[i] 2	5.82	[h] 5	4.25	[i] 5	11.30
$675–$699	[j] 2	.57	[j] 3	5.07	[i] 3	5.00	[j] 2	3.14
$700–$724	[k] 1	3.68	[k] 3	3.44	[j] 4	3.86		
$725–$749	[l] 2	4.79	[l] 3	13.41	[k] 3	5.65	[k] 2	3.60
$750–$774	[m] 2	6.45	[m] 1	1.60	[l] 2	.79	[l] 2	2.76
$775–$799	[n] 3	10.88	[n] 1	1.77	[m] 1	3.00	[m] 3	4.12
$800–$824	[o] 2	.99	[o] 1	.88	[n] 4	15.38	[n] 1	1.06
$825–$849								
$850–$874	[p] 1	1.12	[p] 1	1.17	[o] 2	3.96		
$875–$899	[q] 1	.26			[p] 1	1.64		
$900–$924								
$925–$949								
$950–$974								
$975–$999								
$1,000–$1,024								

* Only 39 industries reported for 1899. Data for "Automobiles, bodies and parts" and "Chemicals" being unavailable.

(See pages 136 and 137 for footnotes.)

TABLE 61.—THE 41 SELECTED INDUSTRIES, ARRANGED ACCORDING TO THE PURCHASING POWER, PER CAPITA, OF THE MONEY EARNINGS OF THEIR MANUFACTURING WAGE EARNERS, ALL INDUSTRIES COMBINED, CENSUS YEARS: 1899–1925—Continued

ANNUAL "REAL" EARNINGS PER CAPITA (DOLLARS)	NUMBER OF INDUSTRIES IN EACH EARNINGS GROUP AND PERCENTAGE BORNE BY AGGREGATE AVERAGE NUMBER OF WAGE EARNERS IN THAT GROUP OF INDUSTRIES TO THE TOTAL NUMBER OF WAGE EARNERS IN ALL MANUFACTURING INDUSTRIES							
	1899		1904		1909		1914	
	Number [1]	Per cent	Number [2]	Per cent	Number [3]	Per cent	Number [4]	Per cent
$1,025–$1,049								
$1,050–$1,074								
$1,075–$1,099								
$1,100–$1,124								
$1,125–$1,149								
$1,150–$1,174								
$1,175–$1,199								
$1,200–$1,224								
$1,225–$1,249								
Total	39	70.47	41	74.27	41	74.66	41	68.27
Not covered in this report		29.53		25.73		25.34		31.73
Total wage earners, all manufacturing industries	4,712,763		5,468,383		6,615,046		7,036,247	

ANNUAL "REAL" EARNINGS PER CAPITA (DOLLARS)	NUMBER OF INDUSTRIES IN EACH EARNINGS GROUP AND PERCENTAGE BORNE BY AGGREGATE AVERAGE NUMBER OF WAGE EARNERS IN THAT GROUP OF INDUSTRIES TO THE TOTAL NUMBER OF WAGE EARNERS IN ALL MANUFACTURING INDUSTRIES							
	1919		1921		1923		† 1925	
	Number [5]	Per cent	Number [6]	Per cent	Number [7]	Per cent	Number [8]	Per cent
$400–$424			[a] 1	0.27				
$425–$449			[b] 1	5.24				
$450–$474								
$475–$499	[a] 1	0.19	[c] 3	1.86				
$500–$524	[b] 1	1.53	[d] 2	4.24				
$525–$549	[e] 2	3.73						
$550–$574	[d] 3	8.06	[e] 4	9.98	[a] 1	1.48		
$575–$599	[e] 3	6.03	[f] 6	9.91			[a] 2	6.99
$600–$624	[f] 4	3.43	[g] 2	1.16				
$625–$649	[g] 1	1.56	[h] 3	6.36	[b] 3	11.69	[b] 3	1.60
$650–$674	[h] 5	4.33	[i] 4	8.47	[c] 1	.21	[e] 2	7.62
$675–$699	[i] 3	1.52					[d] 2	2.62
$700–$724	[j] 5	9.34	[j] 4	5.88	[d] 1	2.21	[e] 2	1.18
$725–$749	[k] 1	1.32	[k] 2	1.95	[e] 4	4.06	[f] 3	3.89
$750–$774	[l] 1	2.32	[l] 5	6.42	[f] 4	5.37	[g] 1	1.91
$775–$799	[m] 3	7.53			[g] 1	.72		
$800–$824	[n] 2	5.96			[h] 3	3.58	[h] 2	3.13
$825–$849	[o] 2	3.10					[i] 2	2.92
$850–$874					[i] 2	2.89	[j] 1	.76
$875–$899	[p] 1	1.82			[j] 5	6.41	[k] 5	10.24
$900–$924	[q] 1	1.93			[k] 1	.13	[l] 1	1.58
$925–$949			[m] 1	2.09	[l] 3	9.74	[m] 1	.35
$950–$974	[r] 1	4.12	[n] 1	2.38	[m] 2	2.68	[n] 4	5.02
$975–$999	[s] 1	.46	[o] 1	1.55	[n] 3	2.80	[o] 1	2.36
$1,000–$1,024			[p] 1	1.74			[p] 3	11.32
$1,025–$1,049					[o] 2	5.53		
$1,050–$1,074							[q] 2	2.89
$1,075–$1,099					[p] 2	6.64		
$1,100–$1,124								
$1,125–$1,149					[q] 1	1.52		
$1,150–$1,174								
$1,175–$1,199					[r] 2	2.81		
$1,200–$1,224							[r] 1	1.59
$1,225–$1,249							[s] 1	1.40
Total	41	68.28	41	69.50	41	70.47	39	69.37
Not covered in this report		31.72		30.50		29.53		30.63
Total wage earners, all manufacturing industries	9,096,372		6,946,570		8,778,173		8,384,261	

† Only 39 industries reported for 1925. Data for "Mineral and soda waters" and "Liquors, malt," being unavailable.

(See pages 136 and 137 for footnotes.)

[1] The industries represented by the figures in this column are:
- [a] Woolen and worsted goods.
- [b] Lumber and timber products.
- [c] Brick and tile, pottery, terra-cotta, and fire-clay products; Cars, steam-railroad, not including operations of railroad companies; Cotton manufactures.
- [d] Knit goods; Shipbuilding, steel.
- [e] Agricultural implements; Electrical machinery, apparatus, and supplies; Mineral and soda waters.
- [f] Bread and other bakery products; Flour-mill and gristmill products; Leather, tanned, curried, and finished; Rubber tires, tubes, and rubber goods, not elsewhere specified; Tobacco, cigars and cigarettes.
- [g] Carpets and rugs, other than rag; Confectionery; Dyeing and finishing textiles, exclusive of that done in textile mills; Lumber, planing-mill products, not including planing mills connected with sawmills; Paper and wood pulp.
- [h] Furniture; Iron and steel, blast furnaces; Shirts.
- [i] Silk goods, including throwsters; Slaughtering and meat packing.
- [j] Automobiles; Smelting and refining, copper, lead, and zinc.
- [k] Cars and general shop construction and repairs by steam-railroad companies.
- [l] Boots and shoes, not including rubber boots and shoes; Clothing, women's.
- [m] Clothing, men's; Iron and steel, steel works and rolling mills.
- [n] Foundry and machine-shop products; Printing and publishing, book and job; Printing and publishing, newspapers and periodicals
- [o] Cars and general shop construction and repairs by electric-railroad companies; Liquors, malt.
- [p] Glass.
- [q] Petroleum, refining.

[2] The industries represented by the figures in this column are:
- [a] Cars, steam-railroad, not including operations of railroad companies; Woolen and worsted goods.
- [b] Knit goods.
- [c] Agricultural implements; Automobiles, bodies and parts; Electrical machinery, apparatus, and supplies; Lumber and timber products; Shipbuilding, steel.
- [d] Leather, tanned, curried, and finished.
- [e] Carpets and rugs, other than rag; Dyeing and finishing textiles, exclusive of that done in textile mills; Mineral and soda waters; Rubber tires, tubes, and rubber goods, not elsewhere specified; Tobacco, cigars and cigarettes.
- [f] Confectionery; Flour-mill and gristmill products; Shirts.
- [g] Automobiles; Brick and tile, pottery, terra-cotta and fire-clay products; Furniture; Iron and steel, blast furnaces; Paper and wood pulp; Silk goods, including throwsters.
- [h] Chemicals; Lumber, planing-mill products, not including planing mills connected with sawmills.
- [i] Bread and other bakery products; Cars and general shop construction and repair by steam-railroad companies.
- [j] Iron and steel, steel works and rolling mills; Slaughtering and meat packing; Smelting and refining, copper, lead, and zinc.
- [k] Boots and shoes, not including rubber boots and shoes; Petroleum refining; Cars and general shop construction and repairs by electric-railroad companies.
- [l] Clothing, men's; Clothing, women's; Foundry and machine-shop products.
- [m] Printing and publishing, book and job.
- [n] Printing and publishing, newspapers and periodicals.
- [o] Liquors, malt.
- [p] Glass.

[3] The industries represented by figures in this column are:
- [a] Cars, steam-railroad, not including operations of railroad companies; Lumber and timber products.
- [b] Cotton manufactures; Mineral and soda waters.
- [c] Knit goods.
- [d] Tobacco, cigars and cigarettes; Woolen and worsted goods.
- [e] Agricultural implements; Electrical machinery, apparatus, and supplies; Shipbuilding, steel.
- [f] Automobiles, bodies and parts; Dyeing and finishing textiles, exclusive of that done in textile mills; Flour-mill and gristmill products; Leather, tanned, curried, and finished.
- [g] Carpets and rugs, other than rag; Confectionery.
- [h] Automobiles; Brick and tile, pottery, terra-cotta and fire-clay products; Chemicals; Paper and wood pulp; Shirts.
- [i] Furniture; Lumber, planing-mill products, not including planing mills connected with sawmills; Slaughtering and meat packing.
- [j] Bread and other bakery products; Rubber tires, tubes, and rubber goods, not elsewhere specified; Silk goods, including throwsters; Smelting and refining, copper, lead, and zinc.
- [k] Glass; Cars and general shop construction and repairs by electric-railroad companies; Cars and general shop construction and repairs by steam-railroad companies.
- [l] Iron and steel, blast furnaces; Petroleum refining.
- [m] Boots and shoes, not including rubber boots and shoes.
- [n] Clothing, men's; Foundry and machine-shop products; Iron and steel, steel works and rolling mills; Liquors, malt.
- [o] Clothing, women's; Printing and publishing, book and job.
- [p] Printing and publishing, newspapers and periodicals.

[4] The industries represented by figures in this column are:
- [a] Lumber and timber products.
- [b] Cotton manufactures; Woolen and worsted goods.
- [c] Electrical machinery, apparatus, and supplies; Mineral and soda waters.
- [d] Carpets and rugs, other than rag; Cars, steam-railroad, not including operations of railroad companies; Flour-mill and gristmill products; Leather, tanned, curried, and finished; Knit goods; Tobacco, cigars and cigarettes.
- [e] Brick and tile, pottery, terra-cotta and fire-clay products; Dyeing and finishing textiles, exclusive of that done in textile mills; Shipbuilding, steel.
- [f] Agricultural implements; Bread and other bakery products; Shirts.
- [g] Automobiles, bodies and parts; Furniture; Lumber, planing-mill products, not including planing mills connected with sawmills; Smelting and refining, copper, lead, and zinc; Paper and wood pulp; Slaughtering and meat packing.
- [h] Cars and general shop construction and repairs by steam-railroad companies; Chemicals; Confectionery.
- [i] Cars and general shop construction and repairs by electric-railroad companies; Foundry and machine-shop products; Iron and steel, steel works and rolling mills; Rubber tires, tubes, and rubber goods, not elsewhere specified; Silk goods, including throwsters.
- [j] Boots and shoes, not including rubber boots and shoes; Iron and steel, blast furnaces.
- [k] Automobiles; Clothing, men's.
- [l] Clothing, women's; Petroleum refining.
- [m] Liquors, malt; Printing and publishing, book and job; Printing and publishing, newspapers and periodicals.
- [n] Glass.

[5] The industries represented by figures in this column are:
- [a] Mineral and soda waters.
- [b] Tobacco, cigars and cigarettes.
- [c] Knit goods; Woolen and worsted goods.
- [d] Electrical machinery, apparatus, and supplies; Lumber and timber products; Shirts.
- [e] Cotton manufactures; Flour-mill and gristmill products; Dyeing and finishing textiles, exclusive of that done in textile mills.
- [f] Agricultural implements; Automobiles, bodies and parts; Lumber, planing-mill products, not including planing mills connected with sawmills; Smelting and refining, copper, lead, and zinc.
- [g] Bread and other bakery products.
- [h] Brick and tile, pottery, terra-cotta, and fire-clay products; Carpets and rugs, other than rag; Cars, steam-railroad, not including operations of railroad companies; Confectionery; Furniture.
- [i] Leather, tanned, curried, and finished; Liquors, malt; Cars and general shop construction and repairs by electric-railroad companies.
- [j] *Automobiles; Chemicals; Paper and wood* pulp; Shipbuilding, steel; Silk goods, including throwsters.
- [k] Printing and publishing, newspapers and periodicals.
- [l] Boots and shoes, not including rubber boots and shoes.
- [m] Glass; Printing and publishing, book and job; Cars and general shop construction and repairs by steam-railroad companies.
- [n] Foundry and machine-shop products; Petroleum refining.
- [o] Rubber tires, tubes, and rubber goods, not elsewhere specified; Slaughtering and meat packing.
- [p] Clothing, women's.
- [q] Clothing, men's.
- [r] Iron and steel, steel works and rolling mills.
- [s] Iron and steel, blast furnaces.

[6] The industries represented by the figures in this column are:
- [a] Smelting and refining, copper, lead, and zinc.
- [b] *Lumber and timber products.*
- [c] Automobiles, bodies and parts; Cars, steam-railroad, not including operation of railroad companies; Mineral and soda waters.
- [d] Electrical machinery, apparatus, and supplies; Tobacco, cigars and cigarettes.
- [e] Automobiles; Agricultural implements; Cotton manufactures; Shipbuilding, steel.
- [f] Cars and general shop construction and repairs by electric-railroad companies; Chemicals; Iron and steel, steel works and rolling mills; Leather, tanned, curried, and finished; Knit goods; Woolen and worsted goods.
- [g] Flour-mill and gristmill products; Shirts.
- [h] Brick and tile, pottery, terra-cotta and fire-clay products; Dyeing and finishing textiles, exclusive of that done in textile mills; Foundry and machine-shop products.
- [i] Cars and general shop construction and repairs by steam-railroad companies; Iron and steel, blast furnaces; Lumber, planing-mill products, not including planing mills *connected with sawmills; Paper and wood* pulp.
- [j] Bread and other bakery products; Confectionery; Furniture; Rubber tires, tubes, and rubber goods not elsewhere specified.
- [k] Liquors, malt; Slaughtering and meat packing.
- [l] Boots and shoes, not including rubber boots and shoes; Carpets and rugs, other than rag; Glass; Petroleum refining; Silk goods, including throwsters.
- [m] Clothing, women's.
- [n] Clothing, men's.
- [o] Printing and publishing, newspapers and periodicals.
- [p] Printing and publishing, book and job.

[7] The industries represented by the figures in this column are:
- [a] Tobacco, cigars and cigarettes.
- [b] *Cotton manufactures; Flour-mill* and gristmill products; Lumber and timber products.
- [c] Mineral and soda waters.
- [d] Knit goods.
- [e] Agricultural implements; Electrical machinery, apparatus, and supplies; Shirts; Smelting and refining, copper, lead, and zinc.
- [f] Bread and other bakery products; Dyeing and finishing textiles, exclusive of that done in textile mills; Shipbuilding, steel; Woolen and worsted goods.
- [g] Confectionery.
- [h] Automobiles, bodies and parts; Cars, steam-railroad not including operations of railroad companies; Chemicals.
- [i] Paper and wood pulp; Slaughtering and meat packing.
- [j] Boots and shoes, not including rubber boots and shoes; Brick and tile, pottery, terra-cotta and fire-clay products; Cars and general shop construction and repairs by electric-railroad companies; Leather, tanned, *curried, and finished; Lumber, planing-*mill products, not including planing mills connected with sawmills.
- [k] Liquors, malt.
- [l] Automobiles; Cars and general shop construction and repairs by steam-railroad companies; Silk goods including throwsters.
- [m] Furniture; Petroleum refining.
- [n] Carpets and rugs, other than rag; Glass; Rubber tires, tubes, and rubber goods not elsewhere specified.
- [o] Foundry and machine shop products; Iron and steel, blast furnaces.
- [p] Clothing, men's; Iron and steel, steel works and rolling mills.
- [q] Clothing, women's.
- [r] Printing and publishing, book and job; Printing and publishing newspapers and periodicals.

[8] The industries represented by the figures in this column are:
- [a] Cotton manufactures; Tobacco, cigars and cigarettes.
- [b] *Flour-mill and gristmill products; Leather,* tanned, curried, and finished; Shirts.
- [c] Lumber and timber products; Woolen and worsted goods.
- [d] Knit goods; Smelting and refining, copper, lead, and zinc.
- [e] Agricultural implements; Dyeing and finishing textiles, exclusive of that done in textile mills.
- [f] Cars, steam-railroad, not including operations of railroad companies; Electrical machinery, apparatus, and supplies; Shipbuilding, steel.
- [g] Bread and other bakery products.
- [h] Boots and shoes, not including rubber boots and shoes; Chemicals.
- [i] Paper and wood pulp; Slaughtering and meat packing.
- [j] Confectionery.
- [k] Automobiles, bodies and parts; Brick and tile, pottery, terra-cotta and fire-clay products; Carpets and rugs, other than rag; Cars and general shop construction and repairs by *electric-railroad companies;* Cars and general shop construction and repairs by steam-railroad companies.
- [l] Silk goods, including throwsters.
- [m] Iron and steel, blast furnaces.
- [n] Clothing, men's; Glass; Lumber, planing-mill products, not including planing mills connected with sawmills; Petroleum refining.
- [o] Automobiles.
- [p] Foundry and machine-shop products; Furniture; Iron and steel, steel works and rolling mills.
- [q] Clothing, women's; Rubber tires, tubes, and rubber goods not elsewhere specified.
- [r] Printing and publishing, book and job.
- [s] Printing and publishing, newspapers and periodicals.

Taking any one census year by itself, there does not appear to be a very great degree of concentration; there is more scatter in evidence as between industries than as between States—not much more, however. What concentration exists is brought out more definitely in the summary of all of the industry averages which is given in Table 62. Alongside of the summary of industry averages is placed a corresponding summary of the 343 State averages from Table 60. Both distributions show, in the form of quite pronounced modes, that the largest number of industry averages fall in the earnings class $600 to $650, and the largest number of State averages fall in the same class. There is evidently a very definite concentration between $600 and $650—dollars, be it remembered, of the purchasing power of money in 1914.

TABLE 62.—DISTRIBUTION OF 324 INDUSTRY AVERAGES AND 343 STATE AVERAGES OF REAL EARNINGS, PER CAPITA, ALL INDUSTRIES COMBINED: 1899–1925

"REAL" EARNINGS PER CAPITA (1914=100)	Industry averages (based on 41 selected industries)	State averages (48 States and District of Columbia)	"REAL" EARNINGS PER CAPITA (1914=100)	Industry averages (based on 41 selected industries)	State averages (48 States and District of Columbia)
Total cases	324	343	$700–$749	40	28
			$750–$799	30	23
$200–$249		2	$800–$849	22	18
$250–$299		3	$850–$899	17	15
$300–$349		10	$900–$949	8	10
$350–$399		4	$950–$999	14	7
$400–$449	3	26			
			$1,000–$1,049	6	6
$450–$499	17	23	$1,050–$1,099	4	3
$500–$549	24	30	$1,100–$1,149	1	4
$550–$599	46	38	$1,150–$1,199	2	1
$600–$649	47	48	$1,200–$1,249	2	1
$650–$699	41	37	$1,250–$1,299		

REAL EARNINGS IN THE SEVERAL STATES

The remaining tables of this chapter present the results relating to real per capita earnings in a somewhat more detailed fashion, on the basis of regional and industrial divisions. Table 68 presents a classification of amounts of per capita earnings, for all industries combined, by geographic regions and divisions, and by States. This table shows no less emphatically than did the analogous one in the preceding chapter, the vast difference in the amounts of earnings between the three grand divisions of the country. Even in their present form of absolute amounts, the figures reveal some important differences in respect to the trend of earnings. This feature of the problem, however, can be discussed more appropriately at a later point where index numbers are available. The figures of Table 68 for the three grand divisions are plotted in Figure 18. The figures for each of the 48 States and the District of Columbia are put in

graphic form in Figures 19 and 20. The results here seem, at first blush, to reflect a greater degree of uniformity in earnings than in the State figures given in Table 42 in the preceding chapter. This, however, is an illusion caused by the wide fluctuation in the purchasing power of money. An examination of the figures for the different States in any one census year will show quite as large differences

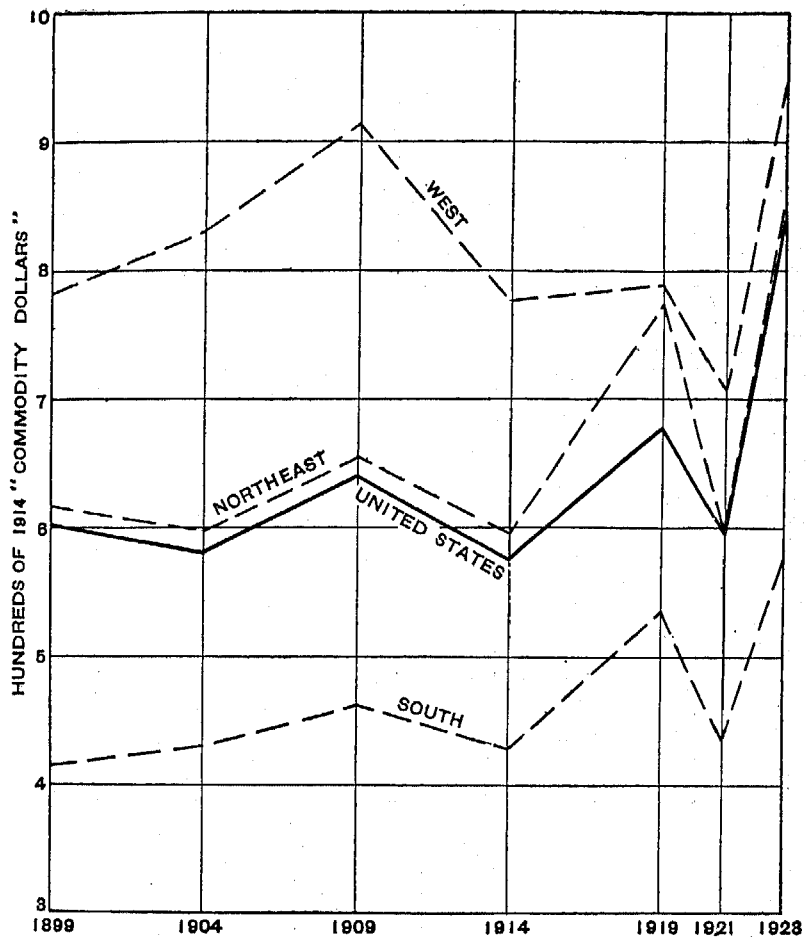

FIG. 18.—REAL INCOMES, PER CAPITA, BY GEOGRAPHIC REGIONS, CENSUS YEARS: 1899–1923

between States as in the earlier Table 42. Comparisons between different census years naturally show amounts of earnings more nearly the same, as would be expected after deflation. After deflation it appears very definitely that the natural earnings of labor in 1919 were not three times as great as were those natural earnings in 1899, as would seem to be indicated by figures given in Table 42,

which showed for the United States as a whole that money earnings were $446 in 1899 and $1,317 in 1923. When these two sums are both deflated it is found that the 1923 figure is scarcely more than

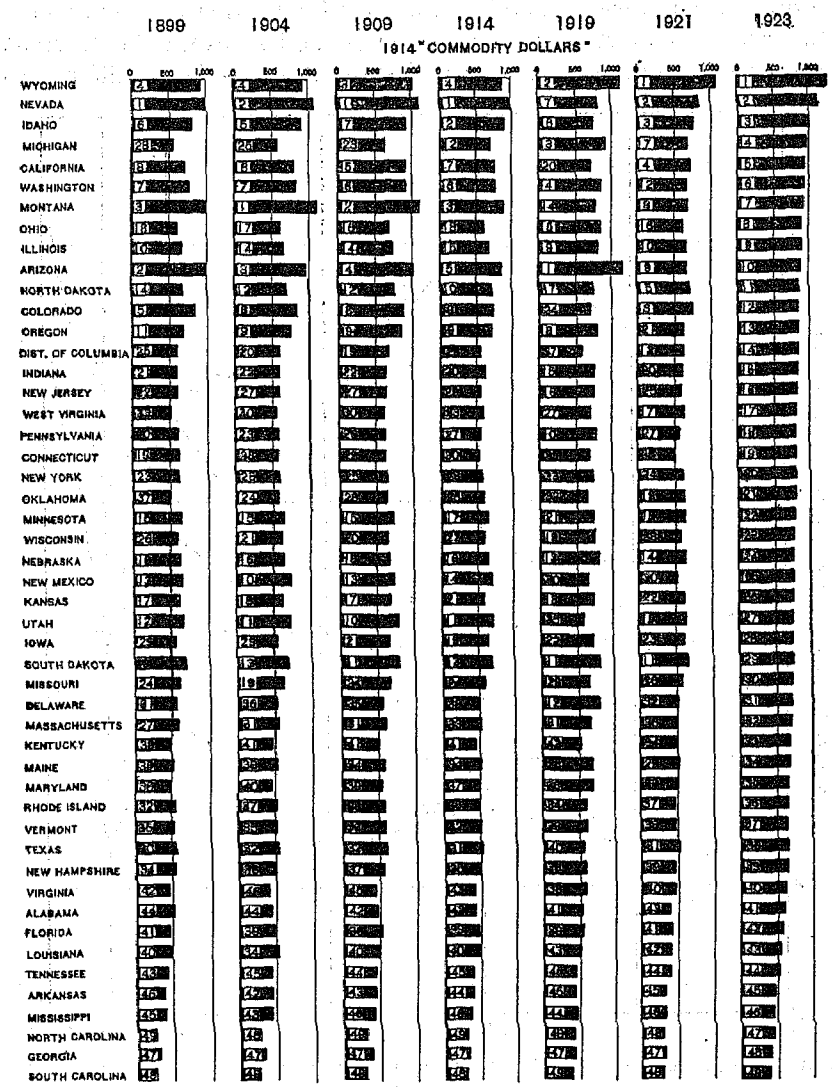

FIG. 19.—AMOUNTS OF REAL INCOME, PER CAPITA, BY STATES, CENSUS YEARS: 1899–1923

one-third again as large as the 1899 figure, the two sums being, respectively, $603 and $839.

The estimates in Table 68 of average annual real earnings for the census years 1899, 1914, and 1923 are transposed in Table 71 to the 1923 base and used in this form in construction of the three maps in

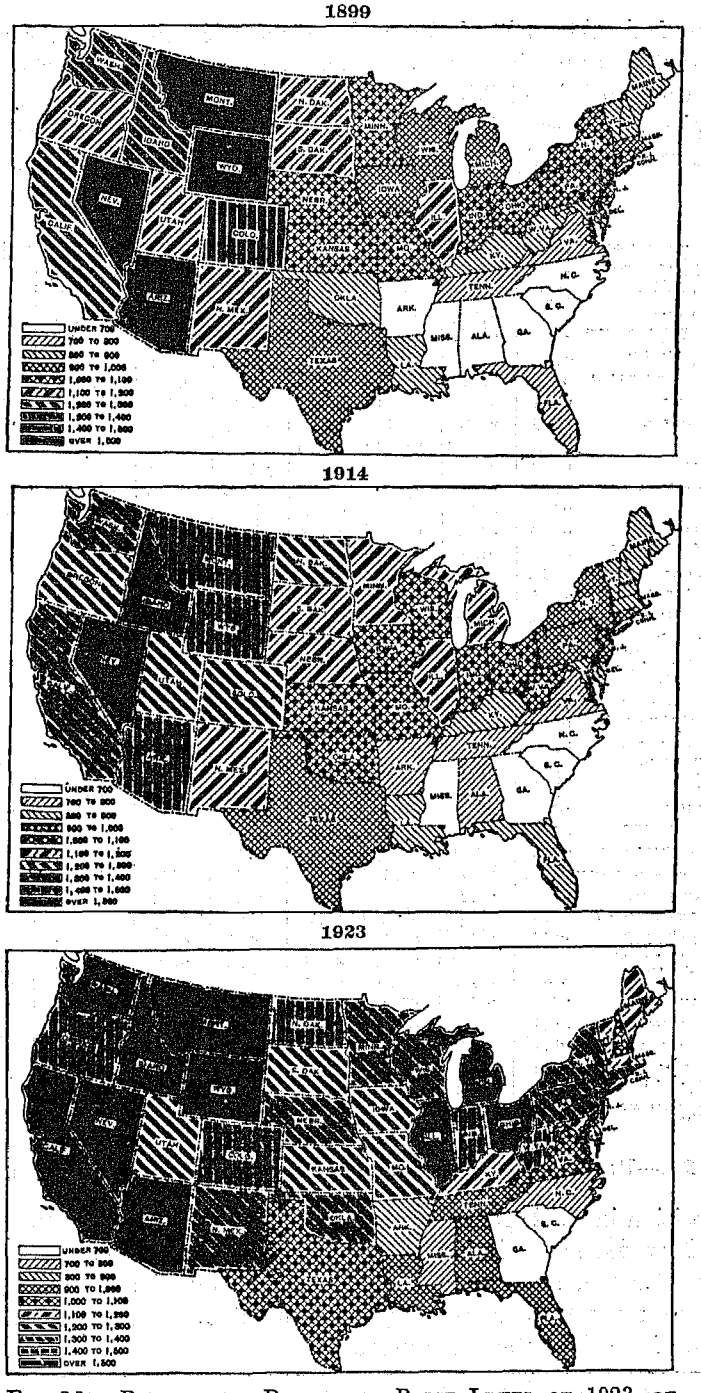

FIG. 20.—PURCHASING POWER, AT PRICE LEVEL OF 1923, OF MANUFACTURING LABOR INCOMES, PER CAPITA: 1899, 1914, AND 1923

Figure 20.[1] At each of these three censuses the West, especially the Rocky Mountain section, appears as the region of highest earnings; the South is, strikingly, an area of low earnings; the Northeast occupies an intermediate position. All three regions reflect lowest earnings in 1914, highest in 1923. The only State which maintained

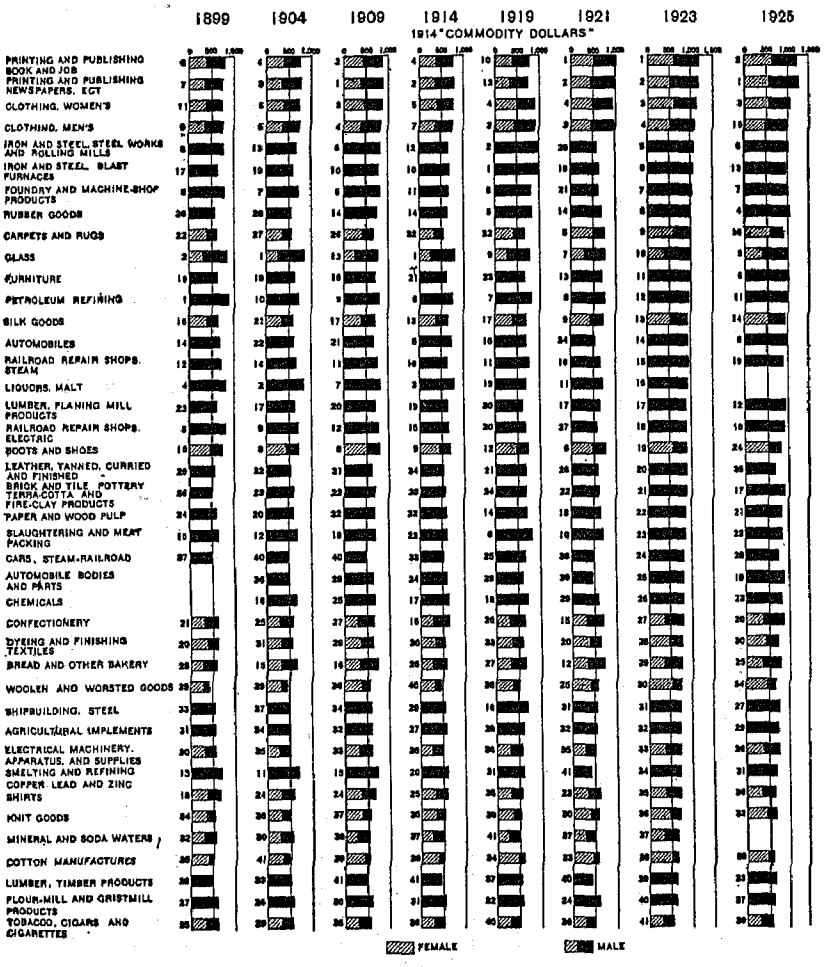

FIG. 21.—REAL INCOME, PER CAPITA, BY INDUSTRY AND BY SEX: 1899–1925

its position in the highest earnings bracket in each of the three years was Nevada, an unimportant State as a manufacturing center. South Carolina and Georgia, at the other end of the scale, are the only States which consistently remained in the lowest-earnings bracket in each of the three years.

[1] The map for 1923 appears as frontispiece and indicates State averages of money earnings in that year.

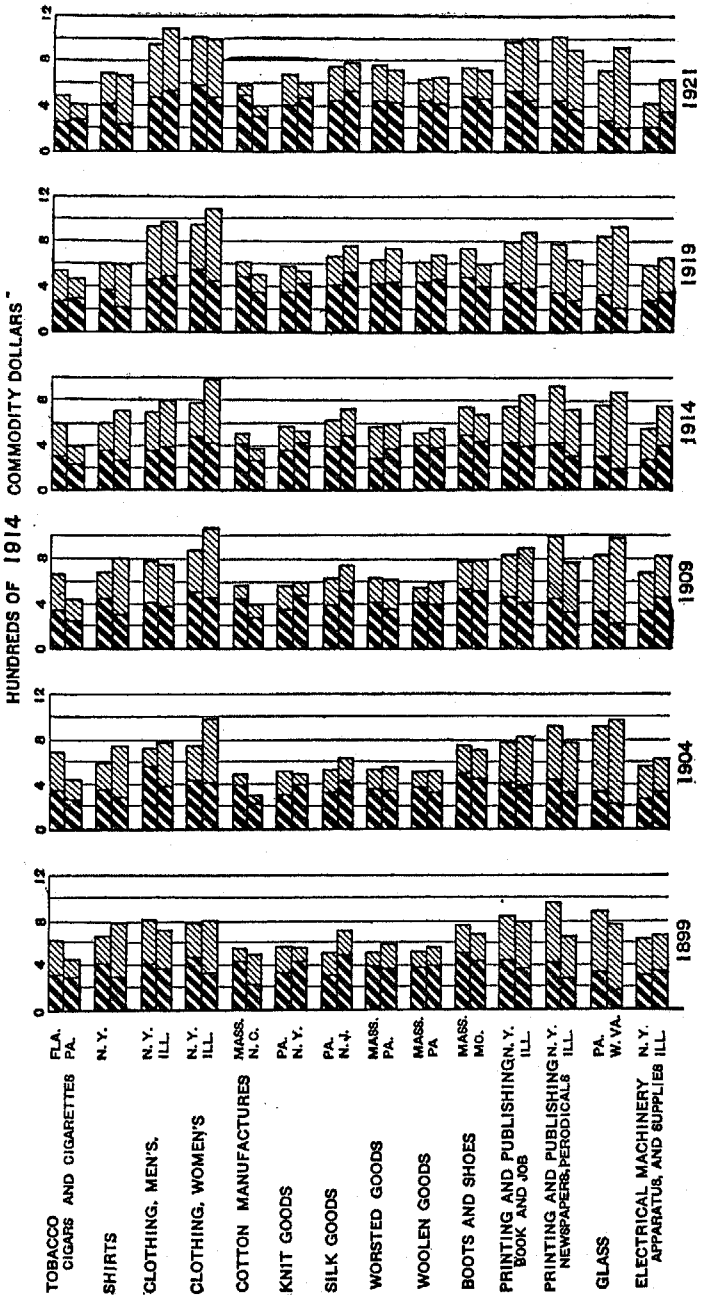

FIG. 22.—REAL INCOME, PER CAPITA, OF MALE AND FEMALE WAGE EARNERS IN TWO LEADING STATES IN EACH OF 14 SELECTED INDUSTRIES, CENSUS YEARS: 1899–1923

ANNUAL FLUCTUATIONS IN REAL EARNINGS

Up to this point most of the data presented in this chapter have referred to census years only. In Table 63 it has been possible to show the per capita amounts of real earnings for each year from 1899 to 1927 in each of 12 of our 41 selected industries.[2] It is evident from the results for the interpolated years in this table that in all or most of these industries the interpolated years reflect economic

TABLE 63.—PURCHASING POWER (AT 1914 PRICES) OF MANUFACTURING LABOR INCOMES, PER CAPITA, IN THE UNITED STATES, FOR ALL INDUSTRIES COMBINED AND FOR EACH OF 12 SELECTED INDUSTRIES, EACH YEAR: MALE WAGE EARNERS, 1899–1927

YEAR	All industries [1]	Woolen goods	Cotton manufactures	Silk goods	Knit goods	Clothing, men's	Boots and shoes	Automobiles	Iron and steel, steel works	Cars, steam railroad	Paper and wood pulp	Tobacco, cigars, and cigarettes	Leather, tanned
1899	$603	$414	$495	$658	$528	$750	$742	$688	$770	$493	$604	$596	$577
1900	591	414	516	596	516	743	712	676	795	529	612	597	584
1901	604	506	505	577	500	733	727	688	599	538	601	577	564
1902	621	501	518	645	495	745	748	709	641	580	615	595	548
1903	593	460	506	632	476	704	712	677	604	535	580	551	539
1904	582	472	458	607	483	730	719	600	675	469	608	564	546
1905	*646*	*543*	*455*	*653*	*714*	*757*	*759*	*666*	*796*	*563*	*620*	*590*	*546*
1906	660	610	493	645	503	764	771	680	771	507	640	543	648
1907	636	603	531	665	481	736	768	714	788	491	622	530	602
1908	570	532	546	661	423	747	798	723	631	456	589	560	603
1909	640	551	517	702	549	823	782	670	816	494	670	551	600
1910	608	523	489	663	536	872	747	723	795	421	640	532	571
1911	562	504	469	653	528	906	724	651	793	516	626	524	560
1912	617	519	500	655	543	873	720	625	814	582	631	529	649
1913	623	474	522	679	531	868	703	666	782	569	618	529	643
1914	576	477	497	663	532	743	695	737	673	535	615	529	532
1915	620	497	491	691	550	774	701	[2] 662	727	426	612	491	549
1916	718	729	547	825	656	918	787	[2] 636	994	442	685	572	658
1917	667	620	551	769	602	926	821	748	958	526	618	602	569
1918	703	627	641	783	624	957	874	608	975	503	637	541	623
1919	677	533	583	706	526	907	750	714	965	660	717	507	683
1920	726	548	618	711	541	965	712	789	1,067	761	859	588	692
1921	595	599	559	753	578	956	769	556	584	494	661	510	592
1922	705	646	576	753	623	1,022	855	800	752	572	792	542	707
1923	839	758	645	946	712	1,099	894	943	1,085	821	865	560	893
1924	776	662	614	786	622	999	776	1,015	949	609	846	495	708
1925	825	656	597	918	676	964	806	984	1,024	739	832	575	649
1926	830	646	587	906	692	924	787	935	1,022	736	834	578	645
1927	805	660	613	924	723	930	795	936	1,016	761	835	578	645

[1] Includes the 12 industries listed and 321 other manufacturing industries reported by the census.
[2] Derived from Massachusetts data on automobiles.

variations which one could not possibly estimate on the basis of known earnings amounts for the census years. Nor is it much easier, for that matter, to estimate *changes* from year to year on the basis of known quinquennial changes derived from census records. This subject will be discussed more fully in a later chapter.

The amounts of real earnings per capita for each one of the 41 selected industries are given in Table 69. The table shows, as before,

[2] The data of this table are shown in graphic form in fig. 6, pp. 58 and 59.

the deflated amounts, based on the 1914 price level, for each census year since 1899. The only feature of this table which it seems necessary to discuss is the relationship between per capita earnings of male and female wage earners. The figures, it should be noted, are in no case for both sexes combined. Where no women employees are shown, the figures are for male employees only, and in these cases the industries almost without exception employed only an inappreciable proportion of women. Where a considerable proportion of women are employed, separate per capita earnings have been calculated, and they are shown in another table for 18 of the industries. As has been remarked already in connection with a similar classification of money earnings, there is in addition to the wide difference between the earnings of men and the earnings of women, a large variation in the extent of these differences as between the various industries. The margins between the amounts shown, in respect to time, character of industry, or sex are all somewhat more clearly revealed in Figure 21 which is based upon Table 69 and in which the industries are ranked, in each census year, in the order of decreasing real earnings in 1923. There is evident a great deal of shift of position among the different industries from one census year to another, but in spite of this shifting it is roughly true that the industries in which wage earners got relatively high amounts of earnings in 1899 were the industries in which they got high amounts of earnings in 1921 and, per contra, the low-earnings industries of 1899 in general have proved to be the industries low in earnings in 1923.

Since geographic differences are so important it does not seem quite sufficient to show merely variations between regions for all industries and variations for all industries between regions. In each of these types of classification there are concealed differences which it is desirable to reveal. When we consolidate all of the manufacturing industries for the comparison of earnings in different localities, we are left in the dark as to whether for the individual industries, or some of them, the earnings are the same or much the same regardless of locality. When we consolidate geographic regions and classify the different industries separately, we find ourselves in a similar difficulty. For example, earnings for manufacturing industries generally are distinctly higher, as has been shown in preceding tables, in Pennsylvania than in Florida; yet in the tobacco industry it appears that per capita earnings have been for each census year in our quarter-century period higher in Florida than in Pennsylvania. To bring out such situations as this separate figures have been computed for two of the leading States for each of 24 of our 41 selected industries, as explained in the preceding chapter, and the results in the form of real earnings are presented in Table 70. In the case of 14 of the 24 industries, it has been possible to compute separately

for each of the two leading States the per capita earnings of male and female employees. The data of Table 70, which shows earnings separately for each sex, are put into graphic form in Figure 22. In this chart one naturally follows up the difference, just adverted to, between the earnings of wage earners in the tobacco industries and workers in the same industry in Pennsylvania. The results already given indicate that earnings have all along been higher in Florida than in Pennsylvania. Is this difference present in the case of both male and female workers? The data of Table 70 indicate that it is largely true of both sexes, but that the difference in favor of Florida is less pronounced in the case of women than in the case of men, and that in the year 1919 the per capita earnings of women in the industry were somewhat higher in Pennsylvania than in Florida, being $285 in the former, as compared with $277 in the latter State. Such cases as this are important as throwing light upon the parallelism which we have taken for granted in the changes which have taken place in the earnings of men as compared with women. Figures for the tobacco industry in Table 70 justify some concern as to the validity of such a theory, although it is not believed that they entirely controvert it. It will be seen from the general run of the figures in the same table that in the majority of the census years the earnings of women remain in a fairly constant position in relation to the earnings of men. This point can be given fuller and more intelligent treatment in connection with the earnings data after they are thrown into the form of relatives; any discussion of this point, therefore, may well be deferred.

The remaining four tables in this chapter correspond in arrangement to the four tables at the end of the preceding chapter, which present statistics on hourly earnings. In the preceding chapter these earnings were nominal hourly earnings. Here they have been deflated and are shown on the basis of uniform purchasing power, with 1914 as the standard.

The figures summarized for all industries and all regions, by sex and age groups are presented in Table 64 and for geographic regions in Table 65. The first of the two tables again reflects the difference between men, women and children that were first shown in the preceding chapter. They also show how greatly money rates are reduced by the process of deflation. Table 53 showed hourly earnings per capita for all groups in 1921 to be 57 cents; Table 64 shows that 57 cents in 1921 would buy about as much as 32 cents would buy in 1914. The average hourly earnings of men in 1921 were 64 cents, which had the purchasing power of 36 cents in 1914. When the deflated figures for women and children are taken, or, in the South, even the figures for all sex and age groups combined, one

can not fail to be impressed by the very low purchasing power revealed by the figures.

The amounts of real hourly earnings for each census year since 1899 and for 34 of our selected industries are shown in Table 66. In Table 67, 16 of these industries are still further divided in order to indicate the real hourly earnings of men and women separately.

TABLE 64.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF NOMINAL HOURLY EARNINGS, IN THE UNITED STATES, ALL INDUSTRIES COMBINED, BY SEX AND AGE GROUPS, CENSUS YEARS: 1899–1921

CENSUS YEAR	SEX AND AGE GROUP			
	All groups	Men over 16	Women over 16	Children under 16
	CENTS PER HOUR			
1899	23	26	14	8
1904	24	27	14	8
1909	26	28	15	9
1914	26	29	15	9
1919	31	35	19	11
1921	32	36	19	11

TABLE 65.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF NOMINAL HOURLY EARNINGS IN THE UNITED STATES, ALL INDUSTRIES COMBINED, BY GEOGRAPHIC DIVISIONS, CENSUS YEARS: 1899–1921

GEOGRAPHIC DIVISION	1899	1904	1909	1914	1919	1921
	CENTS PER HOUR					
United States	23	24	26	26	31	32
New England	23	23	24	24	28	29
Middle Atlantic	25	25	26	26	33	34
East North Central	25	26	28	29	24	36
West North Central	25	26	27	28	29	34
South Atlantic	15	16	17	18	24	23
East South Central	17	18	18	19	22	22
West South Central	18	21	21	21	24	25
Mountain	33	36	35	34	33	37
Pacific	28	32	35	34	38	40

TABLE 66.—PURCHASING POWER (AT 1914 PRICES) OF NOMINAL HOURLY EARNINGS OF MALE WAGE EARNERS, BY SELECTED INDUSTRIES, CENSUS YEARS: 1899–1921

INDUSTRY	1899	1904	1909	1914	1919	1921
	CENTS PER HOUR					
All industries	26.1	26.9	28.5	28.6	34.5	36.2
Bread and other bakery products	23.9	25.6	21.7	27.3	30.3	36.7
Flour-mill and gristmill products	30.0	27.9	29.0	29.2	32.1	36.0
Confectionery	26.7	26.5	27.8	28.3	30.1	35.0
Liquors, malt	33.9	34.8	35.4	36.8	32.0	39.4
Mineral and soda waters	21.4	21.4	21.6	20.8	20.1	25.0
Tobacco, cigars and cigarettes	24.7	24.0	24.2	24.4	24.0	13.4
Carpets and rugs, other than rag	24.2	23.7	51.1	23.8	32.3	39.9
Shirts	26.3	25.3	27.2	26.4	28.9	33.3
Clothing, men's	31.5	32.3	35.1	40.3	50.4	55.5
Clothing, women's	31.2	32.6	36.4	35.3	49.2	54.4
Dyeing and finishing textiles, exclusive of that done in textile mills	24.3	22.9	24.4	23.5	29.4	33.0
Knit goods	20.9	19.9	21.7	22.8	25.2	28.9
Silk goods, including throwsters	27.0	25.9	26.4	28.5	35.6	39.4
Boots and shoes, not including rubber boots and shoes	30.5	31.3	32.8	32.4	36.6	41.9
Leather, tanned, curried, and finished	22.4	22.7	24.0	23.5	31.5	30.8
Furniture	26.3	26.9	29.3	22.6	30.6	36.3
Lumber, timber products	18.4	21.2	19.7	19.6	23.8	20.4
Lumber, planing-mill products, not including planing mills connected with sawmills	25.7	27.2	28.9	20.1	27.9	34.2
Paper and wood pulp	19.4	20.8	22.3	22.5	28.6	29.3
Printing and publishing, book and job	31.8	33.5	37.5	37.3	34.6	47.7
Printing and publishing, newspapers and periodicals	33.4	35.5	37.8	37.6	32.7	45.7
Chemicals		24.4	25.8	26.0	32.2	32.8
Petroleum refining	27.6	27.7	31.7	30.2	38.3	41.6
Glass	33.3	35.3	33.2	34.4	36.0	40.7
Iron and steel, blast furnaces	20.4	21.7	24.8	27.5	38.7	35.1
Iron and steel, steel works and rolling mills	29.0	28.4	31.7	31.8	42.8	45.3
Foundry and machine-shop products	33.1	34.1	35.4	34.3	39.2	40.7
Automobile bodies and parts		24.2	27.5	28.0	32.3	34.2
Automobiles	31.3	29.7	30.8	36.5	38.4	41.2
Cars, steam-railroad, not including operations of railroad companies	25.8	28.3	28.7	31.2	37.1	37.9
Railroad repair shops—electric	33.9	31.9	31.2	30.6	32.7	38.6
Railroad repair shops—steam	31.1	31.5	32.6	31.7	39.5	45.8
Agricultural implements	26.6	26.9	28.0	31.4	31.9	36.1
Shipbuilding, steel	26.3	26.3	27.6	32.0	44.2	41.8
Electrical machinery, apparatus, and supplies	27.8	27.9	29.0	28.4	31.2	34.8

TABLE 67.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF NOMINAL HOURLY EARNINGS OF MALE AND FEMALE WAGE EARNERS IN 16 SELECTED INDUSTRIES, CENSUS YEARS: 1899–1921

INDUSTRY	1899	1904	1909	1914	1919	1921
	CENTS PER HOUR					
All industries:						
Male	26.1	26.9	28.5	28.6	34.5	36.2
Female	14.0	14.4	15.3	15.3	18.5	19.4
Bread and other bakery products:						
Male	23.9	25.6	21.7	27.3	30.3	36.7
Female	11.2	12.0	13.4	12.8	14.3	17.3
Confectionery:						
Male	26.7	26.5	27.8	28.3	30.1	35.0
Female	12.3	12.2	12.8	13.1	13.9	16.2

TABLE 67.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF NOMINAL HOURLY EARNINGS OF MALE AND FEMALE WAGE EARNERS IN 16 SELECTED INDUSTRIES, CENSUS YEARS: 1899–1921—Continued

INDUSTRY	1899	1904	1909	1914	1919	1921
	CENTS PER HOUR					
Mineral and soda waters:						
Male	21.4	21.4	21.6	20.8	20.1	25.0
Female	10.8	10.9	10.9	12.1	10.2	12.7
Tobacco, cigars and cigarettes:						
Male	24.7	24.0	24.2	24.4	24.0	13.4
Female	13.7	13.3	13.4	13.5	13.3	13.8
Carpets and rugs, other than rag:						
Male	24.2	23.7	51.1	23.8	32.3	39.9
Female	15.5	15.2	16.5	15.2	20.7	26.6
Shirts:						
Male	26.3	25.3	27.2	26.4	28.9	33.3
Female	14.3	13.8	14.8	14.3	15.7	18.1
Clothing, men's:						
Male	31.5	32.3	35.1	40.3	50.4	55.5
Female	15.3	15.0	16.3	15.1	22.1	27.1
Clothing, women's:						
Male	31.2	32.6	36.4	35.3	49.2	54.4
Female	16.5	17.2	19.2	18.6	26.0	28.7
Dyeing and finishing textiles, exclusive of that done in textile mills:						
Male	24.3	22.9	24.4	23.5	29.4	33.0
Female	14.7	13.8	14.7	14.2	17.7	19.9
Knit goods:						
Male	20.9	19.9	21.7	22.8	25.2	28.9
Female	14.0	13.3	14.5	15.3	16.9	19.3
Silk goods, including throwsters:						
Male	27.0	25.9	26.4	28.5	35.6	39.4
Female	15.9	15.3	16.7	15.0	21.0	23.2
Boots and shoes, not including rubber boots and shoes:						
Male	30.5	31.3	32.8	32.4	36.6	41.9
Female	18.6	19.1	20.0	19.8	22.3	25.6
Printing and publishing, book and job:						
Male	31.8	33.5	37.5	37.3	34.6	47.7
Female	16.0	16.9	18.9	18.8	17.5	24.1
Printing and publishing, newspapers and periodicals:						
Male	33.4	35.5	37.8	37.6	32.7	45.7
Female	15.0	16.0	17.0	16.9	14.7	20.6
Glass:						
Male	33.3	35.3	33.2	34.4	36.0	40.7
Female	10.7	11.3	10.6	11.0	11.5	13.0
Electrical machinery, apparatus, and supplies:						
Male	27.8	27.9	29.0	28.4	31.2	34.8
Female	15.0	15.1	15.7	15.4	16.9	18.8

TABLE 68.—ESTIMATED AMOUNTS OF REAL EARNINGS, PER CAPITA, ALL INDUSTRIES COMBINED, BY GEOGRAPHIC REGIONS AND DIVISIONS, AND BY STATES, CENSUS YEARS: 1899–1923

[Based on purchasing power of the dollar in 1914]

REGION, DIVISION, AND STATE	1899	1904	1909	1914	1919	1921	1923
UNITED STATES	$603	$582	$640	$576	$677	$595	$839
NORTHEAST	618	599	657	597	774	598	847
New England	570	547	595	524	664	507	699
Middle Atlantic	616	592	649	571	775	593	888
East North Central	627	637	692	656	843	653	900
West North Central	615	625	679	624	721	611	756
SOUTH	415	430	463	430	536	436	577
South Atlantic	399	402	443	415	545	431	569
East South Central	438	453	466	430	518	427	580
West South Central	486	523	532	497	548	478	601
WEST	782	831	914	776	789	710	943
Mountain	881	902	918	805	756	721	921
Pacific	751	808	934	768	797	706	952

TABLE 68.—ESTIMATED AMOUNTS OF REAL EARNINGS, PER CAPITA, ALL INDUSTRIES COMBINED, BY GEOGRAPHIC REGIONS AND DIVISIONS, AND BY STATES, CENSUS YEARS: 1899–1923—Continued

REGION, DIVISION, AND STATE	1899	1904	1909	1914	1919	1921	1923
NEW ENGLAND	$570	$547	$595	$524	$664	$507	$699
Maine	507	533	578	526	693	538	685
New Hampshire	522	512	556	506	615	485	646
Vermont	522	524	585	530	621	496	655
Massachusetts	584	548	597	530	663	511	704
Rhode Island	543	520	577	502	617	497	678
Connecticut	631	586	637	546	717	507	821
MIDDLE ATLANTIC	616	592	649	571	775	593	888
New York	615	589	659	573	743	610	818
New Jersey	622	589	641	564	775	591	843
Pennsylvania	627	595	647	574	817	576	824
EAST NORTH CENTRAL	627	637	692	656	843	653	900
Ohio	632	635	702	643	874	641	904
Indiana	622	604	662	636	789	629	844
Illinois	678	689	743	687	821	686	904
Michigan	577	593	662	703	923	703	991
Wisconsin	589	605	663	603	752	572	780
WEST NORTH CENTRAL	615	625	679	624	721	611	756
Minnesota	647	658	722	655	747	638	782
Iowa	570	578	663	642	744	625	763
Missouri	611	620	662	593	669	580	731
North Dakota	670	705	772	726	772	720	882
South Dakota	704	698	786	696	808	669	753
Nebraska	641	649	687	659	806	647	773
Kansas	636	633	700	609	759	626	767
SOUTH ATLANTIC	399	402	443	415	545	431	569
Delaware	550	522	578	495	808	521	711
Maryland	493	484	536	499	708	520	679
District of Columbia	607	614	687	588	611	653	862
Virginia	432	424	444	430	585	481	620
West Virginia	531	578	625	601	704	641	834
North Carolina	247	273	310	297	421	313	436
South Carolina	249	258	311	303	417	307	401
Georgia	316	336	383	337	447	333	414
Florida	474	498	537	480	576	439	580
EAST SOUTH CENTRAL	438	453	466	430	518	427	580
Kentucky	489	483	507	474	546	518	689
Tennessee	427	433	445	414	470	412	539
Alabama	409	441	476	437	555	416	591
Mississippi	401	448	438	390	498	344	467
WEST SOUTH CENTRAL	486	523	532	497	548	478	601
Arkansas	388	458	448	416	472	357	480
Louisiana	485	528	516	480	536	433	555
Oklahoma	504	594	640	592	656	634	814
Texas	561	548	597	533	569	531	648
MOUNTAIN	881	902	918	805	756	721	921
Montana	1,005	1,107	1,083	880	791	698	955
Idaho	818	901	900	914	855	776	1,017
Wyoming	947	958	1,025	871	1,125	1,008	1,259
Colorado	870	861	885	748	726	716	878
New Mexico	673	742	755	691	668	538	772
Arizona	1,007	983	1,021	870	1,173	697	902
Utah	676	727	813	720	616	647	764
Nevada	1,018	1,081	1,113	991	828	864	1,133
PACIFIC	751	808	934	768	797	706	952
Washington	793	843	916	787	888	667	960
Oregon	677	766	864	727	822	628	877
California	750	806	917	772	749	741	971

TABLE 69.—ESTIMATED AMOUNTS OF "REAL" EARNINGS, PER CAPITA, IN THE UNITED STATES, BY SELECTED INDUSTRIES AND BY SEX, CENSUS YEARS: 1899–1925

INDUSTRY AND SEX	1899	1904	1909	1914	1919	1921	1923	1925
Bread and other bakery products:								
Male	$581	$660	$708	$591	$646	$718	$759	$764
Female	273	311	333	278	305	339	357	359
Flour-mill and grain-mill products:								
Male	584	582	601	549	598	609	633	639
Confectionery:								
Male	623	583	628	642	656	702	796	852
Female	288	271	291	297	304	325	364	395
Slaughtering and meat packing:								
Male	664	693	679	613	829	726	859	825
Liquors, malt:								
Male	808	823	801	794	698	726	924	-------
Mineral and soda waters:								
Male	551	560	518	512	484	497	663	-------
Female	280	284	263	260	246	253	337	-------
Tobacco, cigars and cigarettes:								
Male	596	564	551	529	507	510	560	575
Female	330	312	306	294	302	284	311	319
Carpets and rugs, other than rag:								
Male	612	571	645	547	668	773	985	895
Female	392	366	413	350	428	495	631	573
Shirts:								
Male	643	587	656	592	567	622	725	642
Female	350	319	356	322	309	338	395	349
Clothing, men's:								
Male	750	730	823	743	907	956	1,099	964
Female	350	341	385	346	423	445	512	450
Clothing, women's:								
Male	731	728	843	758	886	939	1,133	1,074
Female	385	384	445	400	468	495	598	566
Cotton manufactures:								
Male	495	458	517	497	583	559	645	597
Female	386	358	403	388	456	438	505	466
Dyeing and finishing textiles, exclusive of that done in textile mills:								
Male	623	557	617	552	597	647	704	720
Female	377	336	371	333	361	390	461	435
Knit goods:								
Male	528	483	549	532	526	578	712	676
Female	355	324	369	357	353	388	478	454
Silk goods, including throwsters:								
Male	658	607	702	663	706	753	946	918
Female	388	358	414	391	416	445	557	542
Woolen and worsted goods:								
Male	414	472	551	477	533	599	758	656
Female	297	339	394	343	383	431	543	470
Boots and shoes, not including rubber boots and shoes:								
Male	742	719	782	695	750	769	894	806
Female	476	460	500	444	480	492	572	516
Leather, tanned, curried, and finished:								
Male	577	546	600	532	683	592	893	649
Furniture:								
Male	634	624	683	616	666	704	957	1,020
Lumber and timber products:								
Male	468	524	490	458	559	440	638	662
Lumber, planing-mill products, not including planing mills connected with sawmills:								
Male	607	633	678	624	608	662	898	954
Paper and wood pulp:								
Male	604	608	670	615	717	661	865	832
Printing and publishing, book and job:								
Male	793	770	849	780	781	1,006	1,191	1,202
Female	400	389	429	394	394	508	592	608
Printing and publishing, newspapers and periodicals:								
Male	777	782	862	797	743	991	1,177	1,242
Female	350	352	389	359	335	447	529	560
Chemicals:								
Male	-------	643	652	641	702	583	805	813
Petroleum refining:								
Male	888	706	771	750	823	761	950	957
Brick and tile, terra-cotta, and fire-clay products:								
Male	493	600	662	565	663	625	890	884
Glass:								
Male	858	837	732	802	793	762	985	971
Female	281	273	239	262	259	249	322	318

TABLE 69.—ESTIMATED AMOUNTS OF "REAL" EARNINGS, PER CAPITA, IN THE UNITED STATES, BY SELECTED INDUSTRIES AND BY SEX, CENSUS YEARS: 1899–1925—Continued

INDUSTRY AND SEX	1899	1904	1909	1914	1919	1921	1923	1925
Iron and steel, blast furnaces:								
Male	$646	$611	$760	$680	$993	$668	$1,046	$948
Iron and steel, steel works and rolling mills:								
Male	770	675	816	673	965	584	1,085	1,024
Foundry and machine-shop products:								
Male	797	727	817	674	810	627	1,025	1,013
Smelting and refining, copper, lead, and zinc:								
Male	688	694	708	619	606	422	736	682
Automobile bodies and parts:								
Male		507	620	605	614	475	810	877
Automobiles:								
Male	688	600	670	737	714	556	943	984
Cars, steam-railroad, not including operations of railroad companies:								
Male	493	469	494	535	660	494	821	739
Railroad repair shops—electric:								
Male	811	711	747	655	685	588	897	892
Railroad repair shops—steam:								
Male	719	671	748	641	779	664	943	875
Agricultural implements:								
Male	558	523	594	586	615	564	745	724
Rubber tires, tubes, and rubber goods:								
Male	591	565	721	657	845	703	986	1,054
Shipbuilding, steel:								
Male	547	507	583	555	709	573	757	745
Electrical machinery, apparatus, and supplies:								
Male	562	522	593	511	563	519	740	748
Female	304	282	321	276	304	281	399	405

TABLE 70.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF PER CAPITA MONEY EARNINGS OF MALE AND FEMALE WAGE EARNERS IN TWO LEADING STATES, IN SELECTED INDUSTRIES, CENSUS YEARS: 1899–1921

SELECTED INDUSTRY	CENSUS YEAR AND SEX											
	1899		1904		1909		1914		1919		1921	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Tobacco, cigars and cigarettes:												
Florida	$630	$322	$676	$346	$647	$331	$587	$300	$542	$277	$514	$263
Pennsylvania	482	295	452	275	440	268	389	236	469	285	436	266
Clothing, men's:												
New York	807	412	722	367	792	403	685	349	936	477	964	491
Illinois	723	354	782	383	755	369	788	385	993	485	1,107	541
Clothing, women's:												
New York	799	469	745	436	869	509	775	455	951	558	1,013	594
Illinois	800	342	975	417	1,069	457	983	420	1,063	454	1,101	471
Cotton manufactures:												
Massachusetts	543	432	488	388	575	457	512	407	613	488	588	468
North Carolina	286	207	305	222	384	278	370	268	495	359	414	299
Knit goods:												
Pennsylvania	557	338	514	312	563	343	574	349	579	351	674	409
New York	557	435	498	389	597	466	540	422	540	422	611	477
Shirts:												
New York	677	412	588	358	680	414	583	354	619	377	693	421
Pennsylvania	772	289	752	282	816	306	719	269	612	230	681	256
Silk goods, including throwsters:												
Pennsylvania	505	314	522	322	634	393	623	385	664	411	743	459
New Jersey	708	484	634	434	759	518	725	495	761	520	787	538
Woolen goods:												
Massachusetts	511	378	502	372	546	405	510	379	601	445	619	459
Pennsylvania	574	384	504	337	583	390	546	365	695	466	652	437

TABLE 70.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF PER CAPITA MONEY EARNINGS OF MALE AND FEMALE WAGE EARNERS IN TWO LEADING STATES, IN SELECTED INDUSTRIES, CENSUS YEARS: 1899–1921—Continued

SELECTED INDUSTRY	CENSUS YEAR AND SEX											
	1899		1904		1909		1914		1919		1921	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Worsted goods:												
Massachusetts	$584	$386	$539	$357	$623	$413	$580	$384	$639	$423	$666	$441
Pennsylvania	585	361	558	343	611	377	586	361	730	450	712	439
Boots and shoes, not including rubber boots and shoes:												
Massachusetts	757	504	746	498	795	530	726	484	720	481	745	497
Missouri	665	436	701	461	798	524	666	437	611	401	720	473
Leather, tanned, curried, and finished:												
Massachusetts	616	-----	563	-----	600	-----	552	-----	649	-----	630	-----
Pennsylvania	559	-----	540	-----	592	-----	557	-----	697	-----	640	-----
Furniture:												
New York	615	-----	592	-----	630	-----	556	-----	612	-----	667	-----
Michigan	534	-----	549	-----	600	-----	568	-----	617	-----	682	-----
Lumber and timber products:												
Washington	755	-----	814	-----	857	-----	753	-----	877	-----	656	-----
Louisiana	435	-----	543	-----	498	-----	505	-----	566	-----	407	-----
Lumber, planing-mill products, not including planing mills connected with sawmills:												
New York	626	-----	637	-----	676	-----	603	-----	631	-----	728	-----
California	808	-----	893	-----	993	-----	839	-----	720	-----	774	-----
Paper and wood pulp:												
New York	536	-----	541	-----	585	-----	538	-----	642	-----	648	-----
Maine	574	-----	599	-----	683	-----	615	-----	687	-----	720	-----
Printing and publishing, newspapers and periodicals:												
New York	947	420	931	414	1,006	447	919	409	793	352	1,030	458
Illinois	657	276	767	322	776	325	701	294	631	264	902	378
Printing and publishing, book and job:												
New York	834	454	767	419	838	456	758	413	811	442	988	538
Illinois	789	362	824	377	898	411	860	394	874	399	1,018	466
Glass:												
Pennsylvania	862	335	911	354	822	320	759	295	852	331	734	285
West Virginia	757	172	976	220	984	223	868	197	940	213	927	210
Iron and steel, blast furnaces:												
Pennsylvania	626	-----	605	-----	730	-----	727	-----	992	-----	663	-----
Alabama	385	-----	475	-----	692	-----	563	-----	821	-----	572	-----
Iron and steel, steel works and rolling mills:												
Pennsylvania	701	-----	622	-----	739	-----	646	-----	903	-----	522	-----
Ohio	747	-----	722	-----	826	-----	731	-----	993	-----	570	-----
Foundry and machine-shop products:												
Ohio	718	-----	678	-----	777	-----	692	-----	809	-----	583	-----
New York	800	-----	724	-----	830	-----	727	-----	787	-----	591	-----
Agricultural implements:												
Illinois	627	-----	625	-----	691	-----	722	-----	671	-----	557	-----
Indiana	611	-----	584	-----	632	-----	596	-----	738	-----	481	-----
Electrical machinery, apparatus, and supplies:												
New York	623	311	557	278	668	332	555	277	584	291	436	218
Illinois	643	346	622	334	823	441	743	399	658	353	638	342
Chemicals:												
New Jersey	726	-----	673	-----	717	-----	671	-----	720	-----	603	-----
New York	680	-----	671	-----	702	-----	669	-----	779	-----	621	-----

TABLE 71.—PURCHASING POWER, AT PRICES OF 1923, OF ESTIMATED AMOUNTS OF MANUFACTURING LABOR INCOMES, PER CAPITA, BY STATES: 1899, 1914, AND 1923

[Ranked by amounts of earnings in 1923]

STATE	1899	1914	1923	STATE	1899	1914	1923
United States	$1,014	$976	$1,317	New Mexico	$1,132	$1,171	$1,305
Wyoming	1,593	1,476	2,128	Kansas	1,070	1,032	1,297
Nevada	1,711	1,680	1,914	Utah	1,136	1,220	1,292
Idaho	1,375	1,549	1,719	Iowa	959	1,088	1,290
Michigan	970	1,192	1,675	South Dakota	1,184	1,180	1,272
California	1,261	1,308	1,641	Missouri	1,027	1,005	1,236
Washington	1,334	1,334	1,623	Delaware	925	839	1,201
Montana	1,691	1,492	1,614	Massachusetts	982	898	1,189
Illinois	1,141	1,164	1,528	Kentucky	823	803	1,164
Ohio	1,064	1,090	1,527	Maine	852	892	1,157
Arizona	1,693	1,475	1,524	Maryland	830	846	1,148
North Dakota	1,127	1,231	1,491	Rhode Island	914	851	1,145
Colorado	1,464	1,268	1,484	Vermont	877	898	1,107
Oregon	1,139	1,232	1,482	Texas	943	903	1,095
District of Columbia	1,020	997	1,457	New Hampshire	877	858	1,091
Indiana	1,045	1,078	1,426	Virginia	727	727	1,047
New Jersey	1,045	956	1,425	Alabama	689	741	998
West Virginia	893	1,017	1,410	Florida	798	814	980
Pennsylvania	1,055	973	1,392	Louisiana	816	814	938
Connecticut	1,061	925	1,388	Tennessee	718	702	911
New York	1,034	971	1,383	Arkansas	652	705	811
Oklahoma	848	1,003	1,376	Mississippi	675	661	789
Minnesota	1,089	1,110	1,321	North Carolina	416	503	736
Wisconsin	991	1,022	1,318	Georgia	532	571	699
Nebraska	1,077	1,117	1,307	South Carolina	418	514	678

CHAPTER VI

COMPARISON OF THE PURCHASING POWER OF ACTUAL AND FULL-TIME EARNINGS

The material presented in this chapter runs closely parallel with that given in Chapter III. The earlier chapter made a comparison between the money amounts of actual and full-time earnings and this present chapter proposes to make a similar comparison between the "real" amounts, or purchasing power, of actual and full-time earnings. In Table 72 the annual series of deflated earnings, both full-time and actual, is given for the United States as a whole, all industries combined. The discrepancy between actual and hypothetical full-time earnings varies widely between successive years with, as we should naturally expect, a closer approximation of actual to full-time earnings in such years of prosperity as 1920 than in depression years like 1914 and 1921.

TABLE 72.—PURCHASING POWER OF ACTUAL AND FULL-TIME EARNINGS, IN THE UNITED STATES, ALL INDUSTRIES COMBINED, EACH YEAR: 1899–1927

YEAR	PURCHASING POWER OF—		YEAR	PURCHASING POWER OF—	
	Full-time earnings	Actual earnings		Full-time earnings	Actual earnings
1899	$710	$603	1914	$719	$576
1900	716	591	1915	747	620
1901	708	604	1916	791	718
1902	708	621	1917	760	667
1903	789	593	1918	818	703
1904	711	582	1919	801	677
1905	725	646	1920	840	726
1906	728	660	1921	831	595
1907	714	636	1922	858	705
1908	739	570	1923	927	839
1909	739	645	1924	923	776
1910	711	608	1925	931	825
1911	697	562	1926	931	830
1912	713	617	1927	943	805
1913	719	623			

COMPARISON OF SEX AND AGE GROUPS

A summary for census years, classified by sex and age groups, is given in Table 73. Judging from these figures there would seem to be no great difference as between men and women employees, or

between women and children, in respect to the proportion of purchasing power lost because of failure to work full time. There seems to be a slight difference in favor of women and children as compared with men; that is to say, it would appear that in the case of men the loss in purchasing power because of the discrepancy between actual and full-time employment is somewhat greater than in the case of women and children.

TABLE 73.—PURCHASING POWER (AT 1914 PRICES) OF ACTUAL AND FULL-TIME EARNINGS, PER CAPITA, IN THE UNITED STATES, ALL INDUSTRIES COMBINED, BY SEX AND AGE GROUPS, CENSUS YEARS: 1899–1923

YEAR AND TYPE OF ANNUAL EARNINGS	All wage earners	Men	Women	Children
1899—Full-time earnings	$710	$793	$429	$242
Actual earnings	603	673	361	205
1904—Full-time earnings	711	794	425	241
Actual earnings	582	651	348	198
1909—Full-time earnings	739	838	449	255
Actual earnings	640	725	390	221
1914—Full-time earnings	719	804	430	244
Actual earnings	576	644	344	195
1919—Full-time earnings	801	894	479	272
Actual earnings	677	756	406	195
1921—Full-time earnings	831	928	497	282
Actual earnings	595	665	356	230
1923—Full-time earnings	927	1,021	547	311
Actual earnings	839	924	495	281

REGIONAL DIFFERENCES IN LOST TIME

A summary, by geographic regions, is given in Table 74. This table gives the deflated amounts corresponding to the full-time money sums shown in Table 33 alongside the figures showing the purchasing power of actual earnings. These figures show large variations in the amount of purchasing power that is lost because of unemployment and irregular employment. The dollar amounts by which this loss is represented are, of course, smaller in the South than in the North, where earnings are higher, but they constitute on the whole, at least as large a proportion of actual earnings as in the West and Northeast. The loss of such large proportions of hypothetical full-time earnings in 1921 in the South Atlantic division—about 30 per cent; in the Middle Atlantic division, in the same year, 31 per cent—can be afforded least of all by industrial workers in the South, because of the very fact of their lower actual earnings, which forces them, of course, nearer to the line of bare subsistence and doubtless make necessary for them a distinctly lower standard of living. Obviously, wage earners who are working on a full-time yearly

(salary) scale of around $600 can less afford to lose nearly one-third of that sum through failure to secure full-time employment than their fellow workers of the Middle Atlantic division can spare one-third of their full-time yearly scale of around $800.

TABLE 74.—PURCHASING POWER (AT 1914 PRICES) OF ACTUAL AND FULL-TIME PER CAPITA EARNINGS, ALL INDUSTRIES COMBINED, BY GEOGRAPHIC DIVISIONS, CENSUS YEARS: 1899–1923

GEOGRAPHIC DIVISIONS AND TYPE OF EARNINGS	1899	1904	1909	1914	1919	1921	1923
UNITED STATES							
Full-time earnings	$710	$711	$739	$719	$801	$831	$927
Actual earnings	603	582	640	576	677	595	839
NORTHEAST							
New England:							
Full-time earnings	692	670	691	651	706	734	826
Actual earnings	570	547	595	524	664	507	699
Middle Atlantic:							
Full-time earnings	747	724	753	709	823	857	1,050
Actual earnings	616	592	649	571	775	593	888
East North Central:							
Full-time earnings	759	780	802	815	896	944	1,064
Actual earnings	627	637	692	656	843	653	900
West North Central:							
Full-time earnings	746	765	789	775	766	884	894
Actual earnings	615	625	679	624	721	611	756
SOUTH							
South Atlantic:							
Full-time earnings	481	504	524	531	661	618	646
Actual earnings	399	402	443	415	545	431	569
East South Central:							
Full-time earnings	528	567	552	551	628	612	657
Actual earnings	438	453	466	430	518	427	580
West South Central:							
Full-time earnings	588	654	631	636	664	685	682
Actual earnings	486	523	532	497	548	478	601
WEST							
Mountain:							
Full-time earnings	1,003	1,064	1,025	971	864	973	983
Actual earnings	831	902	918	805	756	721	921
Pacific:							
Full-time earnings	855	953	1,043	926	910	963	1,016
Actual earnings	751	808	934	768	797	706	952

VARIATIONS AMONG THE INDUSTRIES

Comparisons similar to those which have been made in the foregoing summary tables are given in considerably greater detail for our selected industries, or for those for which data are available, in Tables 75 and 76. The former makes the comparison for male wage earners and the latter for female wage earners. These tables correspond to similar tables in Chapter III, the only difference being that in these present tables the figures are deflated so that the comparisons run between dollar amounts having uniform purchasing power. The data of Table 75 are shown in graphic form in Figure 23.

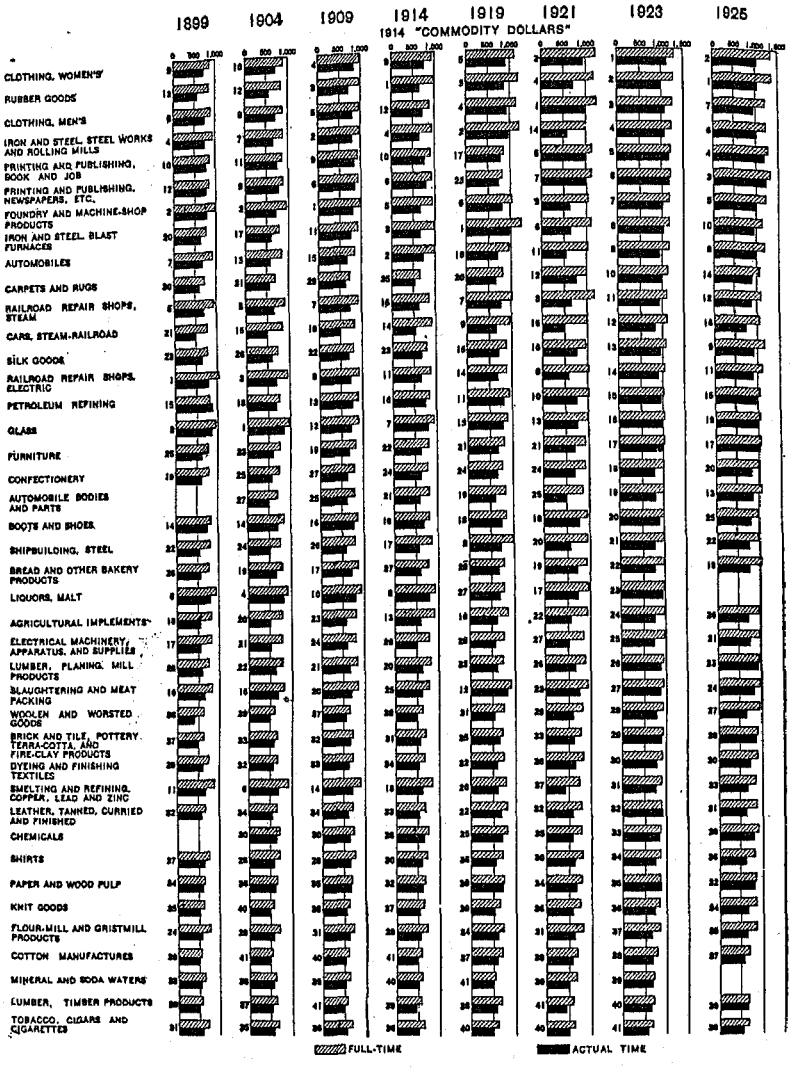

FIG. 23.—PURCHASING POWER OF ACTUAL AND FULL-TIME EARNINGS, PER CAPITA, BY SELECTED INDUSTRIES, MALE WAGE EARNERS

TABLE 75.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF ACTUAL AND FULL-TIME PER CAPITA EARNINGS, BY INDUSTRIES, FOR MALE WAGE EARNERS, CENSUS YEARS: 1899–1925

INDUSTRY AND TYPE OF EARNINGS	1899	1904	1909	1914	1919	1921	1923	1925
Bread and other bakery products:								
Full-time earnings	$782	$804	$851	$773	$782	$946	$978	$1,012
Actual earnings	581	660	708	591	646	718	759	764
Flour-mill and gristmill products:								
Full-time earnings	786	708	723	718	723	802	815	848
Actual earnings	584	582	601	549	598	609	633	639
Confectionery:								
Full-time earnings	803	769	793	792	788	925	1,011	1,009
Actual earnings	623	583	628	642	656	702	796	852
Slaughtering and meat packing:								
Full-time earnings	828	820	830	790	909	928	936	974
Actual earnings	664	693	679	613	829	726	859	825
Liquors, malt:								
Full-time earnings	932	924	925	912	784	959	970	-------
Actual earnings	808	823	801	794	698	726	924	-------
Mineral and soda waters:								
Full-time earnings	651	631	626	593	545	659	700	-------
Actual earnings	551	560	518	512	484	497	663	-------
Tobacco, cigars and cigarettes:								
Full-time earnings	724	680	674	648	611	628	672	684
Actual earnings	596	564	551	529	507	510	560	575
Carpets and rugs, other than rag:								
Full-time earnings	739	701	749	657	829	1,002	1,144	1,061
Actual earnings	612	571	645	547	668	773	985	895
Shirts:								
Full-time earnings	776	720	763	711	704	805	842	816
Actual earnings	643	587	656	592	567	622	725	642
Clothing, men's:								
Full-time earnings	905	896	957	893	1,127	1,239	1,276	1,225
Actual earnings	750	730	823	743	907	956	1,099	964
Clothing, women's:								
Full-time earnings	881	893	979	911	1,101	1,216	1,316	1,364
Actual earnings	731	728	843	758	886	939	1,133	1,074
Cotton manufactures:								
Full-time earnings	574	545	598	574	682	673	746	702
Actual earnings	495	458	517	497	583	559	645	597
Dyeing and finishing textiles, exclusive of that done in textile mills:								
Full-time earnings	751	683	717	664	741	838	888	911
Actual earnings	623	557	617	552	597	647	764	720
Knit goods:								
Full-time earnings	638	593	639	639	654	749	827	859
Actual earnings	528	483	549	532	526	578	712	676
Silk goods, including throwsters:								
Full-time earnings	793	745	816	797	877	976	1,098	1,167
Actual earnings	658	607	702	663	706	753	946	918
Woolen and worsted goods:								
Full-time earnings	635	617	647	629	743	808	905	955
Actual earnings	414	472	551	477	533	599	758	656
Boots and shoes, not including rubber boots and shoes:								
Full-time earnings	838	840	864	829	841	958	996	972
Actual earnings	742	719	782	695	750	769	894	806
Leather, tanned, curried, and finished:								
Full-time earnings	695	681	708	677	811	799	869	884
Actual earnings	577	546	600	532	683	592	893	649
Furniture:								
Full-time earnings	785	778	832	801	812	936	1,023	1,045
Actual earnings	634	624	683	616	666	704	957	1,020
Lumber, timber products:								
Full-time earnings	578	653	598	596	682	585	682	679
Actual earnings	468	524	490	458	559	440	638	662
Lumber, planing-mill products:								
Full-time earnings	751	788	826	811	741	880	960	977
Actual earnings	607	633	678	624	608	662	898	954
Paper and wood pulp:								
Full-time earnings	641	664	697	683	754	780	839	865
Actual earnings	604	608	670	615	717	661	865	832
Printing and publishing, book and job:								
Full-time earnings	881	882	926	908	847	1,123	1,222	1,279
Actual earnings	793	770	849	780	781	1,006	1,191	1,202
Printing and publishing, newspapers and periodicals:								
Full-time earnings	864	895	940	928	806	1,106	1,208	1,315
Actual earnings	777	782	862	797	743	991	1,177	1,242
Chemicals:								
Full-time earnings	-------	708	737	733	788	769	848	916
Actual earnings	-------	643	652	641	702	583	805	813

TABLE 75.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF ACTUAL AND FULL-TIME PER CAPITA EARNINGS, BY INDUSTRIES, FOR MALE WAGE EARNERS, CENSUS YEARS: 1899–1925—Continued

INDUSTRY AND TYPE OF EARNINGS	1899	1904	1909	1914	1919	1921	1923	1925
Petroleum refining:								
Full-time earnings	$831	$806	$907	$856	$953	$1,034	$1,032	$1,059
Actual earnings	888	706	771	750	823	761	960	957
Brick and tile, pottery, terra-cotta, and fire-clay products:								
Full-time earnings	628	683	723	703	719	796	902	917
Actual earnings	493	600	662	565	663	625	800	884
Glass:								
Full-time earnings	964	988	915	919	884	907	1,029	1,032
Actual earnings	858	837	732	802	793	702	985	971
Iron and steel, blast furnaces:								
Full-time earnings	797	817	920	969	1,238	1,120	1,195	1,145
Actual earnings	646	611	760	680	993	658	1,046	948
Iron and steel, steel works and rolling mills:								
Full-time earnings	950	901	989	958	1,204	995	1,240	1,236
Actual earnings	770	675	816	673	995	584	1,085	1,024
Foundry and machine-shop products:								
Full-time earnings	995	975	1,005	954	1,021	1,034	1,196	1,237
Actual earnings	797	727	817	674	810	627	1,025	1,013
Smelting and refining, copper, lead, and zinc:								
Full-time earnings	881	902	895	839	787	749	878	859
Actual earnings	688	694	708	619	666	422	736	682
Automobile bodies and parts:								
Full-time earnings	-------	723	807	810	835	883	1,011	1,066
Actual earnings	-------	507	620	605	614	475	810	877
Automobiles:								
Full-time earnings	931	855	872	987	972	1,033	1,177	1,195
Actual earnings	688	600	670	737	714	556	943	984
Cars, steam-railroad, not including operations of railroad companies:								
Full-time earnings	797	836	837	888	973	993	1,108	1,053
Actual earnings	493	469	494	535	660	494	821	739
Railroad repair shops—electric:								
Full-time earnings	1,068	971	936	895	883	1,035	1,059	1,109
Actual earnings	811	711	747	655	685	588	807	802
Railroad repair shops—steam:								
Full-time earnings	947	917	937	876	1,004	1,168	1,114	1,088
Actual earnings	719	671	748	641	770	664	943	875
Agricultural implements:								
Full-time earnings	812	795	811	801	855	930	969	959
Actual earnings	558	523	594	586	615	564	745	724
Rubber goods:								
Full-time earnings	858	859	984	999	1,176	1,100	1,283	1,306
Actual earnings	591	565	721	657	845	703	986	1,054
Shipbuilding, steel:								
Full-time earnings	796	771	704	844	986	945	984	986
Actual earnings	547	507	583	555	709	573	757	745
Electrical machinery, apparatus, and supplies:								
Full-time earnings	818	793	809	776	783	856	963	991
Actual earnings	562	522	593	511	563	519	740	748

TABLE 76.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF ACTUAL AND FULL-TIME PER CAPITA EARNINGS, BY INDUSTRIES, FOR FEMALE WAGE EARNERS, CENSUS YEARS: 1899–1923

INDUSTRY AND TYPE OF EARNINGS	1899	1904	1909	1914	1919	1921	1923
Bread and other bakery products:							
Full-time earnings	$368	$378	$400	$304	$369	$446	$460
Actual earnings	273	311	333	278	305	339	357
Confectionery:							
Full-time earnings	372	357	367	307	365	428	463
Actual earnings	288	271	291	207	304	325	364
Mineral and soda waters:							
Full-time earnings	331	320	318	301	277	335	354
Actual earnings	280	284	263	260	240	253	337
Tobacco, cigars and cigarettes:							
Full-time earnings	401	377	375	360	340	349	373
Actual earnings	-------	-------	-------	294	-------	-------	-------

TABLE 76.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF ACTUAL AND FULL-TIME PER CAPITA EARNINGS, BY INDUSTRIES, FOR FEMALE WAGE EARNERS, CENSUS YEARS: 1899–1923—Continued

INDUSTRY AND TYPE OF EARNINGS	1899	1904	1909	1914	1919	1921	1923
Carpets and rugs, other than rag:							
Full-time earnings	$473	$449	$480	$421	$531	$642	$733
Actual earnings	392	366	413	350	428	495	631
Shirts:							
Full-time earnings	422	392	415	387	384	438	459
Actual earnings	350	319	356	322	309	338	395
Clothing, men's:							
Full-time earnings	422	418	447	416	525	577	595
Actual earnings	350	341	385	346	423	445	512
Clothing, women's:							
Full-time earnings	465	471	517	481	582	642	694
Actual earnings	385	384	445	400	468	495	598
Cotton manufactures:							
Full-time earnings	449	425	467	449	533	526	584
Actual earnings	386	358	403	388	456	438	505
Dyeing and finishing textiles, exclusive of that done in textile mills:							
Full-time earnings	454	413	433	401	448	506	536
Actual earnings	377	336	371	333	361	390	461
Knit goods:							
Full-time earnings	428	398	429	429	439	502	555
Actual earnings	355	324	369	357	353	388	478
Silk goods, including throwsters:							
Full-time earnings	468	440	482	470	517	576	647
Actual earnings	388	358	414	391	416	445	557
Woolen and worsted goods:							
Full-time earnings	457	442	464	452	534	580	649
Actual earnings	297	339	394	343	383	431	543
Boots and shoes, not including rubber boots and shoes:							
Full-time earnings	536	537	553	530	538	613	637
Actual earnings	476	460	500	444	480	492	572
Printing and publishing, book and job:							
Full-time earnings	445	446	468	459	428	567	608
Actual earnings	400	389	429	394	394	508	592
Printing and publishing, newspapers and periodicals:							
Full-time earnings	389	404	424	418	303	499	543
Actual earnings	350	352	389	369	335	447	529
Glass:							
Full-time earnings	315	323	299	300	289	326	336
Actual earnings	281	273	239	262	259	249	322
Electrical machinery, apparatus, and supplies:							
Full-time earnings	442	429	438	420	423	463	519
Actual earnings	304	282	321	276	304	281	399

REGIONAL VARIATIONS IN SELECTED INDUSTRIES

One further basis of classification is utilized in measuring these differences between the purchasing power of actual and full-time earnings, namely, industry and location. These figures for each of 24 selected industries in two leading States are presented in Table 77, the money earnings counterpart of which has not been included in Chapter III. It is evident that the loss in purchasing power reflected by the difference between the actual and full-time deflated dollar amounts shown in Table 77 is not at all uniform for the same industry in different parts of the country. Thus, in the tobacco industry in the year 1921, when wage earners evidently received higher earnings per capita in Florida than in Pennsylvania, there was a greater loss involved, both relative and absolute, in the purchasing power of earnings in Florida than in Pennsylvania. The absolute loss, measured by the difference between the full-time and actual-time amounts

was, in Florida, 134 deflated dollars; in Pennsylvania it was 87 deflated dollars. The percentage of full-time purchasing power which was lost was 21 per cent in Florida and 18 per cent in Pennsylvania.

It is probably true, unfortunately, that in manufacturing industry generally there is not evident any consistent long-time trend toward the closing up of the gap between actual and full-time earnings by elimination of the causes for the existence of that gap, namely, unemployment and irregular employment. It is evident from the figures of Table 76, however, that in some of the industries represented, there has been appreciable improvement in this respect. Such improvement appears to have taken place in the printing and publishing industry (book and job), and in the paper and wood pulp industry. Unhappily, however, other industries such as chemicals, cotton manufactures, and woolen goods, show a tendency toward a greater loss in purchasing power attributable to lost time.

TABLE 77.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF ACTUAL AND FULL-TIME EARNINGS, PER CAPITA, OF MALE WAGE EARNERS, IN 2 LEADING STATES, IN EACH OF 24 SELECTED INDUSTRIES, CENSUS YEARS: 1899–1921

INDUSTRY AND STATE	CENSUS YEAR AND TYPE OF EARNINGS											
	1899		1904		1909		1914		1919		1921	
	Full-time	Actual	Full-time	Actual	Full-time	Actual	Full-time	Actual	Full-time	Actual	Full-time	Actual
Tobacco, cigars and cigarettes:												
Florida	$799	$630	$828	$676	$798	$647	$735	$587	$637	$542	$648	$514
Pennsylvania	582	482	525	452	516	440	462	389	523	469	523	436
Clothing, men's:												
New York	962	807	875	722	910	792	813	685	1,148	936	1,234	964
Illinois	862	723	948	782	868	755	936	788	1,218	993	1,417	1,107
Clothing, women's:												
New York	951	799	902	745	999	869	921	775	1,167	951	1,297	1,013
Illinois	954	800	1,182	975	1,229	1,069	1,167	983	1,304	1,063	1,410	1,101
Cotton manufactures:												
Massachusetts	642	543	602	488	644	575	605	512	681	613	702	588
North Carolina	395	286	428	305	510	384	508	370	703	495	612	414
Knit goods:												
Pennsylvania	664	557	623	514	647	563	682	574	710	579	863	674
New York	664	557	604	498	685	597	641	540	663	540	782	611
Shirts:												
New York	807	677	712	588	782	680	692	583	760	619	887	693
Pennsylvania	919	772	911	752	938	816	854	719	751	612	872	681
Silk goods, including throwsters:												
Pennsylvania	603	505	633	522	730	634	740	623	815	664	951	743
New Jersey	845	708	769	634	872	759	861	725	934	761	1,008	787
Woolen goods:												
Massachusetts	608	511	608	502	628	546	606	510	737	601	793	619
Pennsylvania	685	574	611	504	670	583	649	546	853	695	835	652
Worsted goods:												
Massachusetts	696	584	653	539	716	623	689	580	784	639	853	666
Pennsylvania	697	585	676	558	702	611	696	586	896	730	911	712
Boots and shoes, other than rubber boots and shoes:												
Massachusetts	901	757	904	746	914	795	862	726	884	720	954	745
Missouri	792	665	851	701	917	798	791	666	749	611	922	720

TABLE 77.—PURCHASING POWER (AT 1914 PRICES) OF ESTIMATED AMOUNTS OF ACTUAL AND FULL-TIME EARNINGS, PER CAPITA, OF MALE WAGE EARNERS, IN 2 LEADING STATES, IN EACH OF 24 SELECTED INDUSTRIES, CENSUS YEARS: 1899–1921—Continued

INDUSTRY AND STATE	CENSUS YEAR AND TYPE OF EARNINGS											
	1899		1904		1909		1914		1919		1921	
	Full-time	Actual	Full-time	Actual	Full-time	Actual	Full-time	Actual	Full-time	Actual	Full-time	Actual
Leather, tanned, curried, and finished:												
Massachusetts	$734	$616	$682	$563	$600	$600	$656	$552	$796	$649	$807	$630
Pennsylvania	608	559	654	540	680	592	662	557	855	697	820	640
Furniture:												
New York	841	615	814	592	847	630	798	556	823	612	980	667
Michigan	730	534	755	549	808	600	815	568	831	617	1,002	682
Lumber and timber products:												
Washington	886	755	964	814	993	857	928	753	1,015	877	828	656
Louisiana	543	435	683	543	611	498	663	505	696	566	547	407
Lumber planing-mill products, not including planing mills connected with sawmills:												
New York	854	626	876	637	910	676	865	603	849	631	1,069	728
California	949	808	1,057	893	1,149	993	1,035	839	833	720	977	774
Paper and wood pulp:												
New York	619	536	642	541	662	585	650	538	727	642	787	648
Maine	662	574	711	599	774	683	744	615	778	687	875	720
Printing and publishing, newspapers and periodicals:												
New York	1,092	947	1,106	931	1,139	1,006	1,111	919	898	793	1,252	1,030
Illinois	757	657	912	767	878	776	848	701	715	631	1,097	902
Printing and publishing, book and job:												
New York	962	834	912	767	949	838	916	758	918	811	1,201	988
Illinois	911	789	978	824	1,017	898	1,040	860	989	874	1,237	1,018
Glass:												
Pennsylvania	991	862	1,004	911	900	822	891	759	945	852	956	734
West Virginia	885	757	1,096	976	1,098	984	1,037	868	1,063	940	1,230	927
Iron and steel, blast furnaces:												
Pennsylvania	828	626	830	605	918	730	999	727	1,285	992	1,174	663
Alabama	507	385	647	475	863	692	767	563	1,055	821	1,003	572
Iron and steel, steel works and rolling mills:												
Pennsylvania	930	701	854	622	930	739	887	646	1,169	903	923	522
Ohio	989	747	992	722	1,040	826	1,004	731	1,287	993	1,010	570
Foundry and machine-shop products:												
Ohio	950	718	931	678	977	777	950	692	1,049	809	1,032	583
New York	1,059	800	995	724	1,044	830	999	727	1,020	787	1,046	591
Agricultural implements:												
Illinois	830	627	859	625	869	691	992	722	869	671	985	557
Indiana	809	611	802	584	795	632	819	596	956	738	851	481
Electrical machinery, apparatus, and supplies:												
New York	824	623	765	557	840	668	762	555	756	584	773	436
Illinois	853	643	854	622	1,034	823	1,021	743	851	658	1,128	638
Chemicals:												
New Jersey	832	726	742	673	785	717	788	671	798	720	864	663
New York	780	680	740	671	769	702	785	669	864	779	809	621