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CHAPTER 26

SUMMARY OF PART II

§ 26a. The Total Income of the United States, 1910 to 1919

The total income of the United States, as computed in the preceding sections, may now be summarized on page 331.

§ 26b. The Degree of Error in the Estimate

It is advisable to repeat the caution that these amounts are all estimates constructed from a large amount of data of varying reliability. Table 26B shows first the range within which the income for each year probably lies. This range was estimated in the same way that the mathematical "probable error" is computed, but it was not possible to do this, in mathematical terms. It is, therefore, to be regarded simply as a guessed at "probable error." Next, is shown the greatest error that could be reasonably expected, on the assumption that each item varied according to the widest indications from the figures as given, and that all these variations were in the same direction. Thus is indicated the outside limits within which the National Income must fall, if all the errors judged possible by the Bureau have been committed, and committed with no offsetting of one error by another. Evidently, the chances that this has actually occurred are extremely small.

TABLE 26A

INCOME OF THE PEOPLE OF THE UNITED STATES ACCORDING TO THE ESTIMATE BY INCOMES RECEIVED

1910 to 1920

Year	Income of persons receiving under \$2,000		Income of persons receiving over \$2,000		Total number of persons (Thousands)	Total individual income (Billions of dollars)	Corporate surplus (Billions of dollars)	Total national income
	Amount (Billions of dollars)	Persons (Thousands)	Amount (Billions of dollars)	Persons (Thousands)				
1910.....	\$20.2	32,412	\$ 9.8	1,411	33,823	\$30.0	\$1.2	\$31.2
1911.....	20.6	32,973	9.6	1,379	34,352	30.2	0.9	31.1
1912.....	21.6	33,399	9.9	1,411	34,810	31.5	0.9	32.4
1913.....	22.3	33,635	10.2	1,443	35,078	32.5	1.0	33.5
1914.....	22.3	33,422	9.9	1,444	34,866	32.2	0.5	32.7
1915.....	22.9	32,907	11.4	2,008	34,915	34.3	1.6	35.9
1916.....	26.2	34,906	15.6	2,748	37,654	41.8	3.9	45.7
1917.....	29.8	34,520	20.9	4,213	38,733	50.7	3.4	54.1
1918.....	37.0	35,961	23.3	4,961	40,922	60.3	1.7	62.0
1919.....	39.5	33,913	25.3	5,608	39,521	64.8	2.0	66.8
1920.....	43.8	34,076					1.0	

TABLE 26B

THE RANGE WITHIN WHICH THE INCOME OF THE PEOPLE OF THE UNITED STATES PROBABLY LIES

1910 to 1919

(Billions of dollars)

Year	Final estimate	Probable range within which the actual income falls	Estimated range beyond which actual income cannot reasonably lie
1910.....	31.2	30.0-32.4	25.9-36.5
1911.....	31.1	29.8-32.4	25.9-36.3
1912.....	32.4	31.1-33.7	27.2-37.6
1913.....	33.5	32.2-34.8	27.9-39.1
1914.....	32.7	31.4-34.0	26.7-38.7
1915.....	35.9	34.6-37.2	29.7-42.1
1916.....	45.7	44.3-47.1	40.5-50.9
1917.....	54.1	52.5-55.6	46.9-61.2
1918.....	62.0	60.1-63.5	53.5-70.2
1919.....	66.8	64.2-68.5	58.6-73.1
1920.....			

§ 26c. Percentage Division of Number of Persons Having over \$2,000 and Under \$2,000 Income per Year

The percentage of persons having incomes over and under \$2,000 and the percentage of the total income which they received is next shown:—

TABLE 26C

PERCENTAGE OF PERSONS HAVING INCOMES OVER AND UNDER \$2,000 AND PERCENTAGE OF THE TOTAL INCOME WHICH THEY RECEIVED

1910 to 1919

Year	Per cent of total persons having incomes		Per cent of income received by persons having	
	Over \$2,000	Under \$2,000	Over \$2,000	Under \$2,000
1910.....	4%	96%	33%	67%
1911.....	4	96	32	68
1912.....	4	96	31	69
1913.....	4	96	31	69
1914.....	4	96	31	69
1915.....	6	94	33	67
1916.....	7	93	37	63
1917.....	11	89	41	59
1918.....	12	88	39	61
1919.....	14	86	39	61
1920.....				

It will be seen that while the percentage of persons having incomes over \$2,000 increased from about 4 per cent in 1910 to 1914, to about 14 per cent in 1919, the percentage of the income which they received increased only from about 32 per cent to about 40 per cent during this period. The increase in the number of persons having incomes over \$2,000 is doubtless closely connected with the rise in prices, and does not denote a corresponding improvement in their well-being.

§ 26d. The Percentage of the Total Income Obtained by the Highest 5 Per Cent of Income Receivers

Using this table as a basis, and checking with the work in Part III, it is possible to make a conjectural estimate of the percentage of the total income which the highest 5 per cent of income receivers obtained.

The method employed has been to subtract from the number of persons having incomes over \$2,000 such a number as will reduce the remainder to 5 per cent of the gainfully employed. The average income of those who are subtracted is then computed in accordance with the distribution of the entire income as shown in Part III. While no claim to strict accuracy can be made for the results, the error is probably not sufficient to alter the trend shown. This percentage is shown including and excluding farmers because for many purposes farmers make a class apart from the remainder of the industrial community. Corporate surplus is left out of this computation for it is not possible to locate the recipients with any degree of accuracy (see Table 26D).

§ 26e. The Position of the Farmer

The per cent of the National Income which was received by farmers each year is next shown. The number of farmers was reported in 1910 as 6,361,000 and in 1920 as 6,460,000—a gain which is so small as to be practically negligible (see Table 26E).

§ 26f. Income in Each Year in Terms of Constant Purchasing Power

Did the income of the country increase during the decade when measured in terms of serviceable goods? In order to answer this question satisfactorily a rather elaborate computation has been found necessary. There is no satisfactory price index which can be applied indiscriminately to all products; indeed, the variations of price changes in different classes of commodities is a striking feature of the decade. In order to meet this difficulty, the income of the country was divided into four classes:—

1. Expenditures by persons having incomes over \$2,000.
2. Expenditures by persons having incomes under \$2,000.

TABLE 26D

PER CENT OF TOTAL INCOME OBTAINED BY THE HIGHEST FIVE PER CENT OF INCOME RECEIVERS

1913 to 1919

Year	Including farmers		Per cent of total	Excluding farmers		Per cent of total
	Total individual income	Estimated income received by highest 5 per cent of income receivers		Total individual income	Estimated income received by highest 5 per cent of income receivers	
1913	\$32.5	\$10.6	33%	\$28.3	\$ 9.9	35%
1914	32.2	10.3	32	28.0	9.6	34
1915	34.3	11.1	31	29.6	10.4	35
1916	41.8	14.3	34	36.0	12.8	36
1917	50.7	14.7	29	41.9	13.6	33
1918	60.2	15.4	25	49.7	13.9	28
1919	64.7	15.5	24	53.8	14.4	27
1920						

TABLE 26E

PER CENT OF THE NATIONAL INCOME RECEIVED BY FARMERS

Year	Total national income	Farmers' income	Percentage of national income received by farmers
	(Billions of dollars)		
1910.....	\$31.2	\$ 3.95	12.7
1911.....	31.1	3.70	11.9
1912.....	32.4	4.00	12.3
1913.....	33.5	4.20	12.5
1914.....	32.7	4.20	12.8
1915.....	35.9	4.70	13.1
1916.....	45.7	5.80	12.7
1917.....	54.1	8.80	16.3
1918.....	62.0	10.45	16.9
1919.....	66.8	10.85	16.2
1920.....		7.20	

3. War expenditures.

4. Construction expenditures.

For each of these divisions, the most plausible index number was found:

1. An index number of costs of living of persons having incomes over \$2,000 was constructed by the Bureau. (Chap. 2, § 2c.)

2. For persons with incomes less than \$2,000, the index number of the cost of living of the Bureau of Labor Statistics, *Monthly Labor Review*, June, 1920, p. 79, was used. The figures used are for June of each year. The years 1910 to 1912 have been compiled by this Bureau on a basis comparable to that used by the Bureau of Labor Statistics. (Chap. 2, § 2b.)

3. An index number was constructed from selected items of materials used in war, as estimated by the War Industries Board. (*History of Prices During the War*, 1919.)

4. An index number of construction was obtained from the American Telephone and Telegraph Company.

These index numbers cannot well be carried back of the year 1913. Prior to that year, the data are too uncertain to permit of even the crude methods employed for the later years. However, the general price level did not alter greatly during the years 1910 to 1913, so that an application of any legitimate index number of prices and any reasonable subdivision of the income would not alter the final result to any marked degree.

Taking 1913 as the basic year, computation gives the National Income for each year in terms of dollars of constant purchasing power as shown in Table 26G.

TABLE 26F

CONJECTURAL EXPENDITURE OF THE ANNUAL INCOME, AND PRICE INDEX FOR EACH TYPE OF EXPENDITURE

Year	Total income	Expenditures by persons having incomes over \$2,000		Expenditures by persons having incomes under \$2,000		Expenditures for war		Expenditures for construction	
		Billions of dollars	Price index	Billions of dollars	Price index	Billions of dollars	Price index	Billions of dollars	Price index
1910	\$31.2	\$ 6.0	99	\$19.6	98			\$5.6	97
1911	31.1	6.0	99	20.1	98			5.0	97
1912	32.4	6.0	100	20.8	99			5.6	99
1913	33.5	6.1	100	21.6	100			5.8	100
1914	32.7	5.8	101	21.8	101	\$ 0.7	93	4.4	100
1915	35.9	7.0	100	22.5	103	2.0	101	4.4	103
1916	45.7	10.0	108	24.7	110	4.5	135	6.5	126
1917	54.1	14.0	123	27.6	129	9.5	188	3.0	155
1918	62.0	15.0	141	30.7	158	14.6	195	1.7	172
1919	66.8	16.5	165	34.8	177	9.0	200	6.5	191
1920			191 ^a		205 ^b				252

^a Same ratio of increase as shown in price index for expenditures by persons having under \$2,000.

^b Average of December, 1919, June and December, 1920, June being the high point for the year.

TABLE 26G

NATIONAL INCOME AT PRICE LEVEL OF 1913

(Base Year: 1913)

1910 to 1919

Year	Total income (Billions of dollars)	Weighted index number of prices	Income at price level of 1913 (Billions of dollars)
1910.....	\$31.2	98.0	\$31.8
1911.....	31.1	98.0	31.7
1912.....	32.4	99.1	32.7
1913.....	33.5	100.0	33.5
1914.....	32.7	100.6	32.5
1915.....	35.9	102.3	35.1
1916.....	45.7	113.7	40.2
1917.....	54.1	136.1	39.7
1918.....	62.0	160.7	38.6
1919.....	66.8	177.7	37.6
1920.....			

§ 26g. The Average Income per Capita in Each Year

The next table shows the average income per capita of the entire population and of the gainfully employed. The entire population has been interpolated according to a method devised by Mr. King, of which the details are shown in Chapter 2, § 2a.

The number of the "gainfully employed" is uncertain, owing to the divergent ways of counting the persons included under agricultural labor. It seems certain that different standards have been used by the Census enumerators in determining whether a housewife or member of the family who helps in the fields intermittently or only for a few days during the harvest season should or should not be included. On account of this difficulty (and it appears to invalidate any close comparison between the totals of 1910 and the estimated totals of 1920), the number of farm laborers has been kept at a constant figure. In a measure, this comes nearer expressing the truth than any other arbitrary interpretation, for there is much evidence to indicate that during 1916 to 1919, when farm laborers were drafted into other industries, their places were taken by members of the family who are normally not included among the gainfully employed. This view was taken by Mr. Gray Silver in explaining the large increase of farmers' income in the years 1917 to 1919.¹

The number of gainfully employed which is presented is the number *actually* employed in each year, as distinguished from the number attached

¹ See Vol. I, page 38.

to the industry. The former number is always smaller than the latter, and in times of depression is apt to be considerably smaller. It reflects in a broad way the changes in degree of unemployment.¹

The results are presented in several ways: (1) per capita income for the whole population, (2) per capita income for the gainfully employed, and (3) both sets of per capita figures are given first in money of current and second in money of constant purchasing power. Needless to say, changes in economic welfare are best approximated by the figures from which the price fluctuations have been eliminated.

TABLE 36H

PER CAPITA INCOME AND ITS PURCHASING POWER AT THE PRICE LEVEL OF 1913

Year	Income per capita of the entire population			Income per capita of the gainfully employed		
	Number of persons	Income per capita	Purchasing power at 1913 price level	Number of persons	Income per capita	Purchasing power at 1913 price level
	(Millions)	(Dollars)		(Millions)	(Dollars)	
1910 ...	92.23	\$338	\$345	33.82	\$ 923	\$ 940
1911 ...	93.81	332	338	34.35	907	923
1912 ...	95.34	340	343	34.81	931	939
1913 ...	97.28	344	344	35.08	955	955
1914 ...	99.19	330	328	34.87	936	932
1915 ...	100.43	357	349	34.91	1,028	1,005
1916 ...	101.72	449	395	37.65	1,214	1,068
1917 ...	103.06	525	385	38.73	1,397	1,025
1918 ...	104.18	595	371	40.92	1,515	943
1919 ...	104.85	637	359	39.52	1,690	951
1920 ...						

¹ In comparing it to the Census figures our figures for the number of gainfully employed for 1910 and in 1920, two items should be kept in mind: (1) The Census includes 3,100,000 farm laborers working on home farms, who are not included here. (2) The Census figures include all those attached to an industry, whereas only those actually at work are included here. We estimated that about 3 per cent are normally unemployed, that is to say, about one million persons.