This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research Volume Title: National Income and Capital Formation, 1919-1935 Volume Author/Editor: Simon Kuznets Volume Publisher: NBER Volume ISBN: 0-87014-031-0 Volume URL: http://www.nber.org/books/kuzn37-1 Publication Date: 1937 Chapter Title: Distribution According to Industrial Origin Chapter Author: Simon Kuznets Chapter URL: http://www.nber.org/chapters/c5447 Chapter pages in book: (p. 12 - 22) tween the changes in the average per capita income for the two halves of the post-War period and the corresponding changes in the average income per gainfully occupied and per consuming unit are similarly small, but significant.

# III DISTRIBUTION ACCORDING TO INDUSTRIAL ORIGIN

# **1 MEANING OF CLASSIFICATION**

THE distribution of the national product according to industrial origin reveals in which industries the net and gross supply of commodities and services are produced. Tables 2 and 3 indicate, in dollar volumes and in percentages of the total, the amounts the various branches of the productive system contribute to gross and net national product. But the procedure by which these estimates have been obtained allows also the apportionment of income payments to individuals by the industrial characteristics of the enterprises making them. Accordingly, Table 4 gives the distribution of aggregate income payments to individuals by industrial sources.

The industrial divisions distinguished in Tables 2, 3 and 4 call for little explanation. Construction refers to contract construction alone, and does not include income originating in construction activities undertaken by business enterprises and public agencies on their own account. The transportation and other public utilities group includes throughout the following subdivisions: (a) electric light and power and manufactured gas; (b) steam railroads, Pullman and express; (c) other transportation, including pipe lines, street railways and water transportation; (d) communication, including telephone and telegraph.<sup>8</sup> Trade covers both the wholesale and retail branches of distribution. The finance group covers: (a) commercial banking; (b) insurance, both life and other; (c) real estate. Real estate includes, in addition to income arising from management and handling of real estate units by corporations especially engaged in that field, all net rents to individuals owning real estate, whether in cash received by individual owners from tenants or imputed to owners of non-farm residential units who reside on their property.9

<sup>9</sup> In the distribution by type of income rents appear as a separate type. But since rents cannot be apportioned by the industrial

Government covers not only the Federal government but also all other governmental units in the United States, including income originating in public education and the Post Office. Service covers the numerous branches of service activities: religious, professional, domestic, personal, recreation and amusement, and business. The miscellaneous group is a catch-all for the various activities that cannot be measured separately and properly under the relevant division. It includes such highly dissimilar enterprises as truck and bus transportation, taxicabs, and brokerage houses.

The estimates in Table 3 were obtained by adding to income payments to individuals made by enterprises in each industrial division the net savings of these enterprises. But to get an adequate measure of business savings the available data from accounting records on business profit and loss after payment of dividends must be adjusted in several ways; and some of the adjustments can be made only for the national income total as a whole or for the major industrial divisions.10 Thus the correction for the difference between depreciation charges in cost and reproduction prices can be made only for national income as a whole, not for the various industrial divisions. For this reason, Table 3 includes an item of net business savings that is uncorrected for the disparity between depreciation and depletion charges at book value and at reproduction prices; and the total (line 11) differs in that respect from national income in current prices as shown in Table 1. However, this adjustment is relatively minor, and the effect of its omission on the distribution by industrial sources is insignificant.

The measures in Table 2 were obtained by adding to those in Table 3 the estimated volume of fixed capital consumption; and since most of the measures in Table 3 assume that depreciation and

<sup>8</sup> Estimates of national income and its elements originating in these subdivisions, as well as in the subdivisions of the finance group listed below, are given in Appendix Tables I and II.

characteristics of the enterprises that pay them, they have to be treated in the industrial classification as entrepreneurial income payments in the real estate industry.

<sup>&</sup>lt;sup>10</sup> For a more detailed discussion of these adjustments see Section IV.

depletion charges are based on book value rather than on current reproduction prices, the volume of capital consumption added to them to obtain the entries in Table 2 was also based upon the same assumption.11 But since the estimates of capital consumption are based on data different from those underlying the measures of net income, the industrial divisions for the two sets of measures are not strictly comparable. However, sizable differences in scope are present for only three industrial divisions: transportation and other public utilities, finance, and miscellaneous. The measures of capital consumption for transportation and other public utilities cover not only the four subdivisions mentioned above but also such relatively minor fields as aerial transportation, bus lines, and cartage and storage (included in the national income classification under miscellaneous). Similarly under finance, the measures of capital consumption include, besides the three subdivisions noted above, such enterprises as stock and bond brokers, sales finance companies, and loan companies (included in the national income classification under miscellaneous). The effect is to exaggerate in Table 2 the values shown for the transportation and other public utilities and the finance groups, if they are understood, as they should be, to comprise the subdivisions indicated in Appendix Table I and noted at the beginning of this Section; and to underestimate the value shown for the division of miscellaneous industries. But the distortion is hardly significant, except for the miscellaneous division, which, in any case, has little independent value in the industrial classification. It would scarcely affect the broad conclusions revealed by the distribution according to industrial origin; and with reference to these broad conclusions the classifications in Tables 2, 3 and 4 can be considered as practically identical.

# **2** DISTRIBUTION IN CURRENT PRICES

The industrial divisions in Tables 2, 3 and 4 are assembled in three major groups. Group I, comprising agriculture, mining, manufacturing and construction, may be characterized as the industries <sup>11</sup> For this reason, gross national product in Table 2 (line 11) and in Table 1 are equal. Gross national product would be the same, whether we add to national income, corrected for the disparity between depreciation and depletion charges based on book value and on current reproduction price, estimates of capital consumption that assume current reproduction price as the basis; or whether we add to national income, unadjusted for the disparity just mentioned, estimates of capital consumption that assume book value as the basis; see also Appendix D. dealing primarily and largely with the production of commodities. Group II, comprising transportation and other public utilities and trade, may be characterized as commodity handling. This characterization, while true of trade, is only roughly true of transportation and other public utilities because even steam railroads carry passengers and the activities of such divisions as communication can hardly be classified as commodity handling. Still, the preponderant part of even the combined transportation and other public utilities group is de voted to commodity handling, rather than to commodity production or the provision of services to individuals. Group III, comprising finance, government, service and miscellaneous, may be characterized broadly as service industries; and while it includes some commodity handling under miscellaneous, the relative share of this activity or of commodity production is probably very small.

Table 3, Part B, reveals that a large share of total national income arises from activities that do not constitute either production or handling of new commodities; on the average, these account together for slightly over 61 per cent of national income. The rest is accounted for largely by activities that are either services by individuals to other individuals or to society as a whole, services rendered by highly durable commodities to individuals, or services rendered in connection with the production and handling of commodities but so distinct from them as to constitute a separate industry.

The industrial distribution of aggregate income payments to individuals (Table 4, Part B), when studied for the same three broad industrial groups, does not differ materially from that of national income. When an arithmetic mean of the percentage shares is taken for the period as a whole, the average share in the aggregate income payments to individuals is: Group I, 37 per cent; Group II, 24 per cent; Group III, 39 per cent. Similar average percentages for the percentage distribution of national income are 37, 25, and 39, respectively; the differences between the two sets of averages are insignificant. Nor does any significant difference appear when we consider the distribution of gross national product: the average share of Group I in Table 2, Part B, is 38 per cent; of Group II, 24 per cent; of Group III, 39 per cent.

As among the three groups, there were clear-cut differences in the movement over the period as a whole (see Chart 2). Whether expressed in percentages of the national product or of aggregate income payments, the relative share of the commodTable 2

# DISTRIBUTION OF GROSS NATIONAL PRODUCT ACCORDING TO INDUSTRIAL ORIGIN, 1919-1934

Part A. Absolute Figures

# (millions of dollars)

		1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
	1 Agriculture	JZ,778	10,578	7,556	7,037	7,888	8,523	9,028	8,578	8,517	8,646	8,616	6,810	4,624	3,212	4,035	5,287
	2 Mining	2,340	3,121	2,251	2,014	2,888	2,497	2,546	2,821	2,429	2,158	2,386	1,865	1,188	783	782	1,383
	3 Manufacturing	17,322	21,200	13,914	14,565	18,357	17,150	18,482	20,054	19,147	19,989	21,984	18 <b>,</b> 373	12,972	8,049	8,389	11,372
[1,	4 Construction	1,564	2,342	1,975	1,985	2,690	2,974	3,051	3,230	3,240	3,213	3,224	2,785	1,816	816	592	874
4]	5 Transportation and other public utilities	6,359	7,798	6,807	6,683	7,586	7,661	8,220	8,679	8,652	8,966	9,524	8,764	7,541	5,944	5,595	5,670
	6 Trade	10,367	11,851	10,000	8,870	10,435	10,124	10,539	11,936	10,942	11,422	11,729	11,469	9,372	6,517	5,312	6,305
	7 Finance	7,786	8,926	8,482	9,002	9,756	10,497	10,862	11,254	11,610	12,517	12,625	11,389	9,339	7,290	6,486	6,662
	8 Government	1,368	7,427	6,571	6,961	7,603	7,826	8,108	8,658	9,085	9,080	9,137	167,8	7,239	6,407	7,602	8,440
	9 Service	6,503	7,129	6,528	7,853	8,451	8,986	9,811	10,618	10,278	10,997	11,577	10,490	8,951	6,788	6,481	7,607
	10 Miscellaneous	2,334	2,481	2,075	2,209	2,590	2,633	2,878	3,084	3,038	3,258	3,079	2,213	1,885	1,538	1,361	2,250
	11 Total <sup>2</sup>	68,750	82,836	66,148	67,186	78,215	161,87	83,414	88,780	86,778	90,051	93,640	82,724	64,752	47,201	46,538	55,76 <del>4</del>
	12 Group I (1–4)	34,004	37,241	25,696	25,600	31,824	31,144	33,107	34,684	33,334	34,006	36,209	29,833	20,600	12,860	13,798	18,915
	13 Group II (5 and 6)	16,725	19,649	16,807	15,553	18,022	17,785	18,758	20,615	19,594	20,388	21,253	20,233	16,914	12,461	10,907	11,975
	14 Group III (7-10)	17,991	25,964	23,656	26,025	28,400	29,942	31,660	33,615	34,011	35,852	36,418	32,883	27,415	22,022	21,932	<b>24</b> ,959
	<sup>1</sup> The grand totals in this and subsequent tables are additions of the totals of each industrial branch. are primarily in thousands of dollars. Hence the rounded figures given here for the individual indust totals shown.	this and isands of	subseque	nt table . Hence	s are add the rou	iltions ( nded fign	of the to tres give	otals of in here	each ind	tables are additions of the totals of each industrial branch. The Hence the rounded figures given here for the individual industries	branch. 1 indust	The ries	1ncome subt do not alwa	subtotals by industrial branches always add up exactly to the	y industi up exact	rial brar Ly to the	Iches

<sup>2</sup>Inclusive of non-allocable items of capital consumption consisting of fire losses and depreciation on passenger cars used for business.

1934 9.5 2.5 1.6 11.3 11.9 13.6 4.0 100.0 33.9 21.4 20.4 10.2 15.1 29.6 8.7 1.7 18.0 **1.**3 12.0 11.4 13**.**9 16**.**3 13**.**9 2.9 100.0 23.4 1933 12.6 6.8 1.7 13.8 13.5 14.3 100.0 27.2 26.3 1932 1.7 17.0 15.4 3.2 1.8 11.6 100.0 7.1 20.02 2.8 14.4 14.4 11.1 13.8 2.9 31.7 26.1 1931 8.2 2.2 3.4 10.6 13.8 13.7 10.6 12.6 2.7 100.0 36.0 24.4 1930 22.1 9.2 2.5 23.4 3.4 10.1 12.5 13.4 9.7 12.3 3.3 100.0 38.6 22.6 1929 9.6 2.4 22.1 3.6 6**°**6 7.21 13.9 10.1 12.2 3.6 100.0 37.7 22.6 1928 38.3 22.5 9**°**8 2.8 22.0 3.7 10.0 J2.6 13.4 10.4 11.8 3.5 100.0 1927 9.6 3.6 23.2 1926 3.2 22.6 9.8 13.4 9.7 11.9 3,5 100.0 39.0 12.7 3.0 9**°**8 100.0 39.6 22.5 1925 10.8 22.1 3.7 12.6 13.0 9.7 11.7 3.4 10**.**8 39.5 22.5 3.2 3.8 12.8 13.3 6**°**6 100.0 21.7 9.7 11.4 3**.**3 1924 3.7 23.5 1923 10.1 3.4 9.7 13**.**3 12.5 9.7 10.8 3.3 100.0 40.7 23.0 10**.**5 3.0 3.0 6°0 13.2 100.0 23.2 1922 21.7 13.4 10.4 7.II 3.3 38.1 21.0 3.0 6**°**6 6**°**6 38.8 11.4 3.4 10.3 15.1 12.8 100.0 25.4 1921 3.1 12**.**8 3**.**8 25.6 2.8 **0°** 8.6 100.0 44.9 9.4 14.3 10.8 3.0 23.7 1920 18.6 2.0 9.5 100.0 49.5 24.3 3.4 25.2 2.3 9**.**3 11.3 1919 15.1 3.4 5 Transportation and other public utilities 6) 13 Group II (5 and 3 Manufacturing 12 Group I (1-4) 10 Miscellaneous 4 Construction 1 Agriculture 8 Government 7 Finance 9 Service 2 Mining 11 Total<sup>1</sup> 6 Trade

<sup>1</sup>Exclusive of the non-allocable items which range from less than 0.1 per cent of -0.3 per cent of the totals.

44.7

47.0

46.5

42.2

39.6

38.8

39.7

39.1

37.8

37.9

38.0

36.3

38.7

35.8

31.3

26.2

14 Group III (7-10)

[15]

Part B. Percentage Distribution

5 Transportation and other	L L						2						101 0				100
public utilities	989 <b>,</b> 6	7,461	5,389 7,461 5,571 5,228 7,089 7,127 7,524 7,934 7,934 7,934 8,9145 8,919 7,719 5,393 4,860 4,963 4,554 4,991	6,228	680 <b>°</b> /.	121,7	1,5524	1,934	858,1	8,043	CTC B	CT7.67	0,095	4,860	4,585	4,054	4 <b>,</b> 991
6 Trade	10,115	11,587	10,115 11,587 9,692	8,562	160,01	8,562 10,091 9,742 10,082 11,486 10,465 10,895 11,177 10,901 8,789 6,006 4,846	0,082	11,486	10,465	10,895	11,177	10,901	8,789	6,006	4,846	5,819	6,863
7 Finance	5,397	5,918	5,397 5,918 6,299	6,810	7,363	6,810 7,363 7,997 8,304 8,489 8,786 9,551 9,541 8,344 6,644 4,906 4,171	8,304	8,489	8,786	9,551	9,541	8,344	6,644	4,906	4,171	4,193	4,643
8 Government	923	6,906	923 6,906 6,151 6,555	6,555	7,153	7,361 7,628 8,144 8,531 8,505 8,535 8,184 6,641 5,859	7,628	8,144	8,531	8,505	8,535	8,184	6,641	5,859	7,020	7,793	7,719
9 Service	6,413	7,022	6,413 7,022 6,408	7,691	8,290	8,798 9,611 10,195 10,015 10,693 11,224 10,136 8,602 6,375	9,611	10,195	10,015	10,693	11,224	10,136	8,602	6,375	6,111 7,236		8,261
10 Miscellaneous	2,264	2,416	2,264 2,416 2,014	2,159	2,538	2,607 2,861 3,083 3,034 3,257 3,077 2,211	2,861	3,083	3,034	3,257	3,077	2,211	1,883	1,537 1,361		2,248	2,397
ll Total	61,842	74,969	61,842 74,969 59,393 60,254 70,799 71,257 75,621 80,192 78,128 80,970 84,111 73,297 56,000 39,184 38,824 47,834 53,110	60,254	1 667, 07	71,257	5,621	30,192	78,128	80,970	84,111	73,297	26,000	39,184	38,824	17,834	3,110
12 Group I (1-4)	30,740	33,659	30,740 33,659 22,457 22,248 28,274 27,624 29,510 30,861 29,459 30,027 32,044 25,805 17,045 9,641 10,733 15,891 18,236	22,248	28,274	27,624	39,510 3	30,861	29 <b>,</b> 459	30,027	32,044	25,805	17,045	9,641	10,733	15,891	8,236
13 Group II (5 and 6)	16,104	19,048	16,104 19,048 16,063 14,791 17,181 16,869 17,706 19,420 18,303 18,938 19,690 18,616 15,184 10,866 9,430 10,473 11,854	14,791	17,181	16,869	7,706	19,420	18,303	18,938	19,690	18,616	15,184	10,866	9,430	10,473	.1,854
14 Group III (7~10)	14,998	22,262	14,998 22,262 20,872 23,21	23,215	25,344	36,764 2	8,405	39,911	30,367	32,005	32,377	28,875	23,770	18,677	18,662	15 25,344 26,764 28,405 29,911 30,367 32,005 32,377 28,875 23,770 18,677 18,662 21,469 23,020	3,020

Part A. Absolute Figures

DISTRIBUTION OF NATIONAL INCOME ACCORDING TO INDUSTRIAL ORIGIN, 1919-1935

Table 3

(millions of dollars)

1,116 4,696

1,007

503 6,644

4,276

3,080

2,182 503

3,488 872

5,510 1,471

7,231

7,282

7,199

7,294

7,769

7,325

6,690

5,828

6,226

8,986

11,236

1 Agriculture 2 Mining

2,508 1,709 1,430

1,832

3 Manufacturing 4 Construction

[16]

1935

1934

1933

1932

1931

1930

1929

1928

1927

1926

1925

1924

1923

1922

1921

1920

1919

9,814 11,546

6,248 708

16,171 19,907 12,627 13,079 16,784 15,598 16,833 18,151 17,186 17,927 19,828 16,179 10,997

2,183 1,810 1,954 2,288 1,945 1,719 1,893

878

795

506

2,646 1,688

3,100 3,091

3,129

3,128

2,955

2,617 2,892

2,258 1,895 1,910

1,501

<sup>1</sup>Not adjusted for the disparity between depreciation and depletion at cost prices and at current reproduction prices.

Part B. Percentage Distribution

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
l Agriculture	18 <b>.</b> 2	12.0	10.5	9.7	9.4	10.3	10.3	9.1	9.2	0*6	8.6	7.5	6.2	5.6	7.9	6*8	8.8
2 Mining	3.0	3.3	2.9	2.4	3.1	2.5	2.°6	2.9	2.5	2.1	2.3	2.0	<b>1.</b> 6	1.3	1.3	2.1	2.1
3 Manufacturing	26.1	26.6	21.3	21.7	23.7	21.9	22.3	22.6	22.0	22.1	23.6	22.1	19.6	15.9	17.1	20.5	21.7
4 Construction	2.4	3.0	3.2	3.2	3.7	4.1	3.9	3.9	4.0	3.8	3.7	3.6	3.0	<b>1.</b> 8	1.3	1.7	1.7
5 Transportation and other public utilities	9.7	10 <b>.</b> 0	7.0I	10.3	10.01	10.01	10.1	<b>6</b> •6	10.01	<b>6°</b> 6	10.1	10.5	11.4	12.4	8 <b>.</b> 11	9.7	9.4
6 Trade	16.4	15.5	16 <b>.</b> 3	14.2	14.3	13.7	13.3	14.3	13.4	13.5	13.3	14.9	15.7	15.3	12.5	12.2	12.9
7 Finance	8.7	7.9	10.6	11.3	10.4	11.2	0.11	10.6	11.2	11.8	11.3	11.4	9.II.9	12.5	10.7	8.8	8.7
8 Government	1.5	8°5	10.4	10.9	10.1	10.3	10.1	10.2	10.9	10.5	10.1	11.2	11 <b>.</b> 9	15.0	18.1	16.3	14.5
9 Service	10.4	9.4	10 <b>.</b> 8	12.8	7.11	12.3	12.7	12.7	12 <b>.</b> 8	13.2	13.3	13.8	15.4	16.3	15.7	15.1	15.6
10 Miscellaneous	3.7	3.2	3.4	3.6	3.6	3.7	3.8	3.8	3.9	4.0	3.7	3.0	3.4	3.9	3.5	4.7	4.5
[17] Total	100.0	100.0 100.0 100.0 100.0	100.0		100.0	100.0	0°00T	100 <b>.</b> 0	100°0	0°001	100 <b>.</b> 0	100.0	0.00I	100 <b>.</b> 0	100°0	100.0	0°00I
12 Group I (1-4)	49.7	4 <b>4</b> .9	37.8	36.9	39.9	38.8	39.0	38.5	37.7	37.1	38.1	35.2	30.4	24.6	27.6	33.2	34.3
13 Group II (5 and 6)	26.0	25.4	27.0	24.5	24.3	23.7	23.4	24.2	23.4	23.4	23.4	25.4	27.1	27.7	24.3	21.9	22.3
14 Group III (7–10)	24.3	29.7	35.1	38.5	35.8	37.6	37.6	37.3	38.9	39.5	38.5	39.4	42.4	47.7	48.1	44.9	43.3
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	1919	1920 ·	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
I Agriculture	8,480	9,757	6,592	6,350	7,022	7,094	7,197	7,351	7,333	7,328	7,354	6,617	5,258	4,041	3,813	4,152	4,545
2 Mining	1,796	2,494	1,796 2,494 1,861 1,703	1,703	2,428	2,099	2,054	2,382	2,111	1,886	2,059	1,712	1,186	664	064	1,111	1,167
3 Manufacturing	14,292	16,780	14,292 16,780 11,732 12,255 15,262 14,553 15,383 16,168 16,260	12,255	15,262	14,553	15,383	16, 168	16,260	16,893 18,035		15,864 12,288	12,288	8,567	8,516	10,509 ]	11,710
4 Construction	1,541	2,093	1,541 2,093 1,623 1,975	1,975	2,657	2,702	2,852	2,951	2,909	3,063	3,031	2,518	1,644	833	794	938	908
5 Transportation and other public utilities	5,867	5,867 7,287	6,059	6,014	6,690	6,751	6,956	7,243	7,378 7,405		7,777 7,498	7,498	6,554	5,306	4,803	4,964	5,205
6 Trade	8,034	9,039	7,676	8,032	8,802	9,029	9,478	9,970	9,807	9,807 10,030 10,650 10,178	0,650	10,178	8,926	7,016	6,239	6,749	7,117
7 Finance	5,193	5,874	5,193 5,874 6,223 6,806	6,806	7,390	7,939	8,232	8,375	8,626	9,208	9,698	8,714	7,280	5,653	4,771	4,528	4,780
8 Government	5,202	5,202 5,299	5,492 5,553	5,553	5,728	5,896	6,058	6,267	6,514	6,514 6,741 7,028	7,028	7,209	7,341	7,265	7,838	8,974	9,364
9 Service	5,202	6,302	5,202 6,302 6,050 7,250	7,250	7,502	8,191	8,953	9,241	9,495	9,495 10,097 10,751	0,751	9,975	9,092	7,806	8,115	8,130	9,023
10 Miscellaneous	1,893	2,130	1,893 2,130 1,868 2,103	2,103	2,375	2,508	2,759	2,874	2,948	3,173	3,425	3,334	2,996	2,499	2,200	2,330	2,468
11 Total	57,499	67,056	57,499 67,056 55,177 58,041 65,854 66,763 69,921 72,823 73,381 75,823 79,808 73,620 62,565 49,785 47,880 52,385 56,287	58,041	65,854	66,763	69,921	72,823	73,381	75,823 7	19,808	73,620	32,565	19,785	47,880	52,385 E	6,287
12 Group I (1-4)	26,108	31,124	26,108 31,124 21,809 22,283 27,368 26,448 27,486 28,853 28,613 29,170 30,479 26,711 20,376 14,240 13,913 16,710 18,330	22,283	27,368	26,448	27,486	28,853	28,613	39,170	50 <b>,</b> 479	36,711	30,376	14,240	13,913	16,710	8,330
13 Group II (5 and 6)	13,901	16,326	13,901 16,326 13,735 14,046 15,492 15,780 16,433 17,213 17,185 17,434 18,427 17,676 15,480 12,322 11,042 11,713 12,322	14,046	15,492	15,780	16,433	17,213	17,185	17,434	8,427	17,676	15,480	12,322	11,042	11,713	2,322
14 Group III (7-10)	17,489	19,605	17,489 19,605 19,633 21,712 22,994 24,534 26,002 26,757 27,583 29,218 30,902 29,233 26,710 23,223 22,924 23,962 25,635	21,712	22,994	24,534	26,002	26,757	27,583 2	39,218	50,902	39,233 2	36,710 2	23,223	22,924	23,962 2	5,635

DISTRIBUTION OF AGGREGATE INCOME PAYMENTS TO INDIVIDUALS ACCORDING TO INDUSTRIAL ORIGIN, 1919-1935

Table 4

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Part A. Absolute Figures

(millions of dollars)

[18]

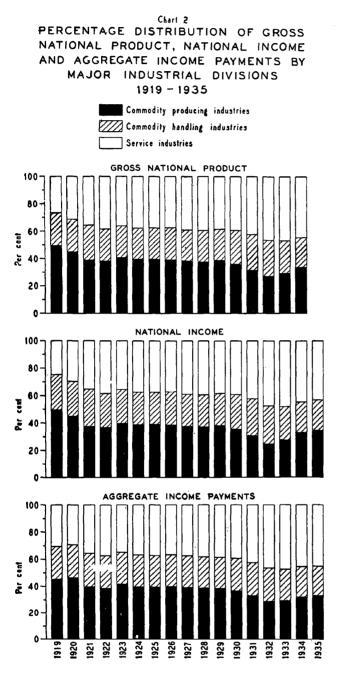
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Percentage
<b>"</b>
Part

	1919	1920	1921 15	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
l Agriculture	14.7	14.6	11.9	10.9	10.7	10 <b>.</b> 6	10.3	10.1	10.0	9.7	ನ್ ರ	0•6	8.⊈	8.1	8.0	7.9	8,1
2 Mining	3.1	3.7	3.4	°.3	3.7	3.1	2.9	3.3	2.9	, <b>2.</b> 5	2 <b>.</b> 6	2.3	1.9	1 <b>.</b> 6	1.6	2.1	2.1
3 Manufacturing	24.9	25.0	21.3	21.1	23.2	21.8	22.0	22.2	22.2	22.3	22.6	21.5	19.6	17.2	17.8	20.1	20.8
4 Construction	2.7	3.1	2.9	3.4	4.0	4.0	4.1	4.1	4.0	4.0	3.8	3.4	2.6	1.7	1.7	1.8	1.6
5 Transportation and other public utilities	10 <b>-</b> 2	10.3	0.11	10.4	10.2	1.01	0°0	С, С	10.1	ດ) ເງ	2°-3 0	20.0L	10.5	10.7	10.01	0°2	0) 0)
6 Trade	14.0	13.5	13.9	13.8	13.4	13.5	13.6	13.7	13.4	13.2	13.3	13.8	14•3	14.1	13•0	12.9	12.6
7 Finance	<b>0</b> •0	8•8	11.3	11.7	11.2	11.9	11.8	11.5	11.8	12.1	12.2	8.LL	11.6	11.4	10.0	8.6	8•5
8 Government	<b>0°</b> 6	7.9	10.0	9.6	8.7	8•8	8.7	8.6	8.9	8 <b>.</b> 9	8•8	9•8	7.11	14.6	16.4	17.1	16.6
9 Service	<b>0°</b> 6	9.4	11.0	12.5	11.4	12 <b>.</b> 3	12.8	12.7	12.9	13.3	13.5	13.5	14.5	15.7	16.9	15•5	16.0
10 Miscellaneous	3.3	3.2	3.4	3.6	3.6	3.8	3.9	3.9	4•0	4.2	4.3	4.5	4.8	5.0	4.6	4.4	4.4
11 Total	100.0	100.0	100.0 100.0 100.0 100	°.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
12 Group I (1-4)	45.4	46 •4	39.5	38.4	41.6	39•6	39.3	39•6	39 •0	38.5	38.2	36 • 3	32.6	28.6	29.1	31.9	32.6
13 Group II (5 and 6)	24.2	24.3	24.9	24.2	23.5	23.6	23.5	23.6	23.4	23.0	23.1	24.0	24.7	24.8	23.1	22.4	21.9
14 Group III (7-10)	30.4	29.2	35.6	37.4	34.9	36.7	37.2	36•7	37.6	38.5	38.7	39.7	42.7	46.6	47.9	45.7	45.6
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[19]

# NATIONAL INCOME AND CAPITAL FORMATION

ity producing branches declined. Most of the decline occurred from 1919 to 1921 and from 1929 to 1932, but there was a downward drift even from 1923 to 1929; and inspection of the percentages for each industrial division in this group shows that in three—agriculture, mining, and manufacturing



-this downward movement in the percentage share of gross and net national product and of aggregate income payments is clearly and consistently present. Only in construction, owing to the long swing characteristic of the industry, is this declining trend in relative importance not obvious. The share of the national product or of aggregate income payments to individuals accounted for by commodity handling', on the contrary, does not decline. It varies somewhat from year to year, both for the group as a whole and for its two divisions, but reveals no definite trend over the period. The distinct and different trends in the shares of the various industrial branches included under transportation and other public utilities over the period (e.g., the growth in the importance of electric light and power and gas, and of communications, and the decline in that of steam railroads and other transportation) are canceled when the branches are combined.

The share of each important subdivision of the service industries—finance, government, and service—rose distinctly over the period. The conclusion is thus unavoidable that the development of the economic system since the War has meant, as far as the composition of the national product in current prices is concerned, a shift from the production of commodities to service activities that are significantly different in character and industrial organization from the production and handling of commodities.

## 3 DISTRIBUTION IN 1929 PRICES

Are the changes in the industrial distribution of the totals in Tables 2-4 due to the differential movement of prices for various groups of commodities and services, or would they persist even with the dollar volumes adjusted for changes in the specific price levels? While data are scanty, some attempt to adjust for price changes can be made with reference to the broad industrial distribution of gross national product and of national income.

In Bulletin 59 (May 4, 1936) we presented indexes of physical volume of output in several industrial branches, and indicated under what assumptions they were a good approximation to the changes in income produced in these branches in terms of a constant price level (see Appendix Table 2, p. 24, and discussion on p. 5). These assumptions can easily be modified to apply to gross income originating in industrial branches, 'gross' in the sense used in the present discussion.

Bulletin 59 provides indexes of the movement of net and gross income, in constant prices, originating in each of the four divisions of Group I (agriculture, mining, manufacturing, and construction). If these indexes, in terms of the level for 1919-34 as 100, are converted to the 1929 level as 100 and multiplied: (a) by income originating in each of the four divisions in Group I in 1929 (Table 3), and then added, the result would be annual estinates of the part of national income, in 1929 prices, originating in commodity producing industries; b) by gross income originating in each of the four livisions in Group I in 1929 (Table 2), and then added, the result would be annual estimates of the part of gross national product in 1929 prices originating in the commodity producing industries. These results are entered in Table 5. We have also,

### Table 5

# DISTRIBUTION OF GROSS NATIONAL PRODUCT AND NATIONAL INCOME IN 1929 AND CURRENT PRICES BY ORIGIN IN COM-MODITY PRODUCING AND IN OTHER INDUSTRIES, 1919–1934

Part A Gross National Product

ABSOLUTE TOTALS

	ABSOLUTE					
	IN 1929				DISTRIBUTION	
	PRODUCT ORIGI	NATING IN		PRICES		NT PRICES
	COMMODITY		COMMODITY		COMMODITY	
	PROLUCING	OTHER	PRODUCING	OTHER	PRODUCING	OTHER
YEAR	INDUSTRIES (millions o	INDUSTRIES	INDUSTRIES	INDUSTRIES	INDUSTRIES 1	INDUSTRIES 1
YEAR	(1)	(2)	(3)	(4)	(5)	(6)
1919	25,589	38,386	40.0	60.0	49.5	50.5
1920	26,822	40,065	40.1	59.9	45.0	55.0
1921	22,759	39,792	36.4	63.6	38.8	61.2
1922	27,282	41,200	39.8	60.2	38.1	61.9
1923	30,270	47,141	39.1	60.9	40.7	59.3
1924	29,534	48,738	37.7	62.3	39.5	60.5
1925	31,589	50,238	38.6	61.4	39.7	60.3
1926	33,099	53,263	38.3	61.7	39.1	60.9
1927	33,030	52,760	38.5	61.5	38.4	61.6
1928	35,182	54,986	39.0	61.0	37.8	62.2
1929	36,209	57,414	38.7	61.3	38.7	61.3
1930	31,991	52,881	37.7	62.3	36.1	63.9
1931	28.887	43,762	39.8	60.2	31.8	68.2
1932	23,277	34,979	40.0	60.0	27.2	72.8
1933	24,483	35,999	40.5	59.5	29.6	70.4
1934	25,322	43,602	36.7	63.3	<b>33.9</b>	66.1
Average	,					
1919-26			38.8	61.2	41.3	58. <b>7</b>
Average						
1927-34			38.9	61.1	34.2	65.8
		Part B	National In	come		
1919	22,560	33,285	40.4	59.6	51.3	<b>48.7</b>
1920	23,621	35,137	40. <b>2</b>	59.8	46.5	53.5
1921	20,048	34,706	36.6	63.4	<b>3</b> 8.5	61.5
1922	24,104	36,206	40.0	60.0	37.3	62.7
1923	26,731	42,349	38.7	61.3	40.6	59.4
1924	26,069	43,798	37.3	62.7	39.3	60.7
1925	27.933	45,164	38.2	61.8	39.4	60.6
1926	29,252	47,687	38.0	62.0	38.8	61.2
1927	29.209	47,140	38.3	61.7	38.0	62.0
1928	31,137	49,215	38.8	61.2	37.3	62.7
1929	32.044	51,363	38.4	61.6	38.4	61.6
1930	28.238	46,408	37.8	62.2	35.4	64.6
1931	25.403	37,136	40.6	59.4	30.4	69.6
1932	20 359	28,201	41.9	58.1	24.3	75.7
1933	21 441	29,557	42.0	58.0	27.3	72.7
1934	22 216	37,056	37.5	62.5	33.2	66.8
Average						-
1919-26			38.7	61.3	41.5	58.5
Average						0010
1927-34			39.4	60.6	33.0	67.0
			0011	00.0	0010	0.10

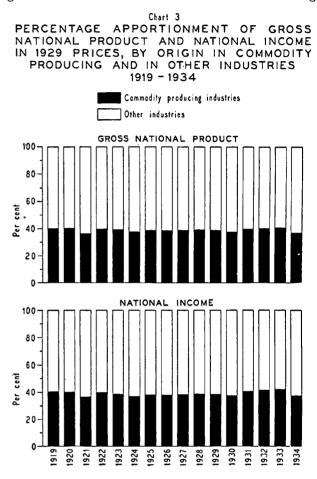
<sup>1</sup> The percentages in Part A differ from those in Table 2, Part B, because of the inclusion here of non-allocable items with 'other' industries. The percentages in Part B differ from those in Table 3, Part B, because total national income distributed here, in contrast to that in Table  $\frac{1}{5}$ , has been adjusted for the disparity between depreciation and depletion deductions in cost prices and in current reproduction prices.

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from Table 1, the annual volume of gross and net national product in 1929 prices. By subtracting (b), i.e., the part originating in the commodity producing industries, from total gross national product in 1929 prices, we obtain the part in 1929 prices originating in all the other industries. Also, by subtracting (a), i.e., the part originating in the commodity producing industries, from total net national product or national income in 1929 prices, we obtain the part in 1929 prices originating in all the other industries. The latter subtraction involves some inconsistency since the national income figure in Table 1 has been adjusted for the disparity between depreciation and depletion charges on a book value and a current reproduction price basis, an adjustment that could not be made for the industrial divisions of the national total. But the adjustment is small and could scarcely affect the comparison between net income originating in the commodity producing industries and national income, both in constant prices. Accordingly, Table 5 presents this rough apportionment of gross and net national product into two major industrial groups: commodity producing industries and all other industries (see also Chart 3).

This adjustment for price changes is admittedly rough. While the adjusted estimates of gross and net national product, and of the parts originating in the commodity producing industries, may themselves be tolerably reliable, the derivation of the shares, in 1929 prices, of 'other industries' by subtraction makes the latter estimates bear the brunt of errors in both the total and the subtrahend. But the primary emphasis here is on the broad movement of the percentage distribution; and this movement is, perhaps, not too greatly affected by the crudities of the procedure.

It appears from Table 5 and Chart 3 that when the national product totals and those shares that originate in the commodity producing and other industries are adjusted for changes in prices, the tendency for the share of the former to decline disappears completely. If the estimates underlying Table 5 are to be trusted, the apparent decline over the period in the relative share of the commodity producing industries in the economic system, as measured by the industrial distribution of the national product, was due exclusively to the decline in the prices of commodities which was greater than in the prices of services. This conclusion checks with general impressions concerning the price movements of various categories of economic goods since the War. There is little doubt that ag



ricultural products and other basic commodities declined more appreciably in price than transpor tation, distributive, financial and other services That this difference in the price change was so sub stantial as to create the downward movement of the share in the national product, in current prices, o the commodity producing industries is indicated by Tables 2, 3 and 5. But in view of the slender basis upon which the difficult adjustment for price changes rests, it is perhaps best to leave this conclu sion as a tentative suggestion deserving further ex ploration.