

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Shares of Upper Income Groups in Income and Savings

Volume Author/Editor: Simon Kuznets, assisted by Elizabeth Jenks

Volume Publisher: NBER

Volume ISBN: 0-87014-054-X

Volume URL: <http://www.nber.org/books/kuzn53-1>

Publication Date: 1953

Chapter Title: Appendix 5

Chapter Author: Simon Kuznets, Elizabeth Jenks

Chapter URL: <http://www.nber.org/chapters/c3069>

Chapter pages in book: (p. 411 - 434)

Appendix 5

Section A

SAMPLE CALCULATION OF ADJUSTMENT FOR
FAMILY STATUS, 1929

Section B

MODIFICATION OF ADJUSTMENT FOR FAMILY STATUS
FOR LIMITED SIZE OF TAX RETURN POPULATION

Section C

ADJUSTMENTS FOR THE MAXIMUM EFFECT OF
UNWARRANTED INCLUSIONS AND DEDUCTIONS

Section D

MODIFICATION OF ADJUSTMENT FOR UNWARRANTED
DEDUCTIONS FOR LIMITED SIZE OF TAX RETURN POPULATION

I ADJUSTMENT OF BASIC VARIANT FOR TOTAL POPULATION (concl.)

b Cumulation of Tax Return Population and Its Income Taking Account of Family Status

	Pop. in Part a, Col. 3 & 10, Cumulated by Rank in Col. 8 & 13 (1)	Col. 1 as % of Total Pop. (2)	Log of Col. 2 (3)	Income in Part a, Col. 6 & 11, Cumulated by Rank in Col. 8 & 13 (\$000) (4)	Col. 4 as % of Individuals' Total Income Receipts (5)	Log of Col. 5 (6)
1	67,177	0.055	-1.25964	2,191,676	2.732	0.43648
2	76,161	0.063	-1.20066	2,283,774	2.846	0.45423
3	946,207	0.777	-0.10958	10,701,409	13.338	1.12509
4	957,201	0.786	-0.10458	10,803,087	13.465	1.12921
5	971,695	0.798	-0.09800	10,922,125	13.613	1.13395
6	991,977	0.814	-0.08938	11,066,870	13.794	1.13969
7	1,021,600	0.839	-0.07624	11,247,618	14.019	1.14672
8	1,084,733	0.890	-0.05061	11,568,843	14.419	1.15894
9	1,219,747	1.001	0.00043	12,110,243	15.094	1.17880
10	1,387,516	1.139	0.05652	12,678,893	15.803	1.19874
11	1,601,537	1.315	0.11893	13,330,592	16.615	1.22050
12	2,051,115	1.684	0.22634	14,594,232	18.190	1.25983
13	2,349,573	1.929	0.28533	15,401,090	19.196	1.28321
14	2,400,430	1.970	0.29447	15,535,987	19.364	1.28700
15	2,820,416	2.315	0.36455	16,517,356	20.587	1.31359
16	3,483,706	2.859	0.45621	17,902,762	22.314	1.34858
17	4,150,029	3.406	0.53224	19,195,732	23.925	1.37885
18	5,549,582	4.555	0.65849	21,345,443	26.605	1.42496
19	7,293,734	5.987	0.77721	23,634,449	29.458	1.46920
20	8,321,255	6.830	0.83442	24,698,672	30.784	1.48833
21	8,556,654	7.023	0.84652	24,905,858	31.042	1.49195
22	9,265,975	7.606	0.88116	25,391,914	31.648	1.50035

Calculation of Adjusted Income Share of Top 1 Percent

Log 1 is zero, falling between lines 8 and 9 of column 3

a Log 1 minus line 8, column 3 = 0.05061

b Line 9, column 3, minus log 1 = 0.00043

c a + b = 0.05104

d a ÷ c = .9916

e Difference between lines 8 and 9 of column 6 = 0.01986

f d × e = 0.01969

g Log of percentage of income corresponding to log of top 1 percent of total population = line 8 of column 6 + f = 1.17863

h Antilog of g = 15.088%

For notes see page 416.

II ADJUSTMENT OF BASIC VARIANT FOR NONFARM POPULATION
 a Tax Return Population and Its Income by Family Status Groups

NET INCOME CLASS, TAX DEFINITION	F A M I L Y			R E T U R N S			R A N K O F P E R		
	Population Represented (2)	Total (\$000) (3)	Per capita (\$) (4)	Economic Income Per capita (\$) (5)	COL. 4 IN ARRAY OF COL. 4 & 8 FROM HIGHEST TO LOWEST (6)	S I N G L E P E R S O N	R E T U R N S	Economic Income Total (\$000) (7)	Per capita (\$) (8)
\$11,000 & over	750,316	7,967,017	10,618	10,618	3	60,209	2,113,449	35,102	1
10,000-11,000	119,730	450,618	3,764	3,764	11	6,968	78,227	11,227	2
9,000-10,000	167,769	568,650	3,389	3,389	12	8,984	92,098	10,251	4
8,000- 9,000	214,021	651,699	3,045	3,045	13	10,994	101,678	9,248	5
7,000- 8,000	298,458	806,858	2,703	2,703	15	14,494	119,038	8,213	6
6,000- 7,000	419,986	981,369	2,337	2,337	17	20,282	144,745	7,137	7
5,000- 6,000	666,323	1,292,970	1,940	1,940	19	29,623	180,748	6,102	8
4,000- 5,000	1,399,553	2,149,711	1,536	1,536	20	63,133	321,225	5,088	9
3,000- 4,000	1,744,152	2,289,006	1,312	1,312	21	135,014	541,400	4,010	10
2,000- 3,000	1,027,521	1,064,223	1,036	1,036	22	449,578	1,263,640	2,811	14
1,000- 2,000	709,321	486,056	685	685	24	663,290	1,385,406	2,089	18
Under 1,000	235,399	207,186	880	880	23	50,857	134,897	2,652	16

For notes see page 416.

II ADJUSTMENT OF BASIC VARIANT FOR NONFARM POPULATION (concl.)

b Cumulation of Tax Return Population and Its Income Taking Account of Family Status

	Population in Part a, Col. 2 & 6, Cumulated by Rank in Col. 5 & 9 (1)	Col. 1 as % of Nonfarm Population (2)	Log of Col. 2 (3)	Income in Part a, Col. 3 & 7, Cumulated by Rank in Col. 5 & 9 (\$000) (4)	Col. 4 as % of Income of Nonfarm Population (5)	Log of Col. 5 (6)
1	60,209	0.066	-1.18046	2,113,449	2.964	0.47188
2	67,177	0.073	-1.13668	2,191,676	3.073	0.48756
3	817,493	0.892	-0.04964	10,158,693	14.245	1.15366
4	826,477	0.902	-0.04479	10,250,791	14.374	1.15758
5	837,471	0.914	-0.03905	10,352,469	14.517	1.16188
6	851,965	0.930	-0.03152	10,471,507	14.683	1.16681
7	872,247	0.952	-0.02136	10,616,252	14.886	1.17278
8	901,870	0.984	-0.00700	10,797,000	15.140	1.18013
9	965,003	1.053	0.02243	11,118,225	15.590	1.19285
10	1,100,017	1.201	0.07954	11,659,625	16.349	1.21349
11	1,219,747	1.331	0.12418	12,110,243	16.981	1.22996
12	1,387,516	1.515	0.18041	12,678,893	17.779	1.24991
13	1,601,537	1.748	0.24254	13,330,592	18.693	1.27168
14	2,051,115	2.239	0.35005	14,594,232	20.464	1.31099
15	2,349,573	2.565	0.40909	15,401,090	21.596	1.33437
16	2,400,430	2.620	0.41830	15,535,987	21.785	1.33816
17	2,820,416	3.079	0.48841	16,517,356	23.161	1.36476
18	3,483,706	3.803	0.58013	17,902,762	25.104	1.39974
19	4,150,029	4.530	0.65610	19,195,732	26.917	1.43003
20	5,549,582	6.058	0.78233	21,345,443	29.931	1.47612
21	7,293,734	7.962	0.90102	23,634,449	33.141	1.52037
22	8,321,255	9.083	0.95823	24,698,672	34.633	1.53949
23	8,556,654	9.340	0.97035	24,905,858	34.924	1.54312
24	9,265,975	10.114	1.00492	25,391,914	35.605	1.55151

Calculation of Adjusted Income Share of Top 1 Percent

Log 1 is zero, falling between lines 8 and 9 of column 3

a Log 1 minus line 8, column 3 = 0.00700

b Line 9, column 3, minus log 1 = 0.02243

c a + b = 0.02943

d a ÷ c = .2379

e Difference between lines 8 and 9 of column 6 = 0.01272

f d × e = 0.00303

g Log of percentage of income corresponding to log of top 1 percent of nonfarm population = line 8 of column 6 + f = 1.18316

h Antilog of g = 15.246%

For notes see page 416.

*Notes to Section A***I Adjustment of Basic Variant for Total Population***Column*

Part a

- 2, 3, 9, 10 Table 111: columns 4, 6, 5, and 7 respectively.
- 4 Table 112: column 9 divided by column 2.
- 5 From *Statistics of Income, 1929*, Basic Table 5.
- 6 Column 4 multiplied by column 5.
- 7 Column 6 divided by column 3.
- 11 Column 9 of Table 112 minus column 6.
- 12 Column 11 divided by column 10.

Part b

- 2 For total population see Table 69, column 5.
- 5 For total income receipts of individuals see Table 114, column 12.

II Adjustment of Basic Variant for Nonfarm Population*Column*

Part a

- 2-4, 6-8 Columns 3, 6, 7, 10-12 of Part Ia extended to show the \$10,000-11,000 net income class separately.

Part b

- 2, 5 For nonfarm population and its income see Table 115, columns 1 and 2.

I ADJUSTMENT OF BASIC VARIANT FOR TOTAL POPULATION (concl.)

b Modification for 6th and 7th Percentage Band

	Actual Adjustment for Family Status 2nd & 3rd 6th & 7th Percentage Band	Coverage of Tax Return Pop. in Excess of 7 Percent of Total Pop. (% of total pop.)	Theoretical Value of Col. 2 Derived from 2 Point Line of Regression	Col. 2 minus Col. 4 (5)	Deviation of Col. 2 from 1925-39 Av. (-0.658) (6)	Theoretical Deviation of Col. 2 Derived from 3 Point Line of Regression	Col. 6 minus Col. 7 (8)	Av. Level of Adj. for Family Status for 6th & 7th Percentage Band 1919-24 & 1925-39 Modified (9)	Col. 2 Modified (col. 5 & 8 + col. 9) (10)
1919	0.543	4.830	-0.136	0.038	-0.108	0.055	-0.143	0.485	0.485
1920	0.904	9.280	0.241	-0.152	-0.119	-0.017	-0.101	0.295	0.295
1921	1.288	6.591	0.013	-0.199	-0.160	0.103	0.160	0.248	0.248
1922	0.751	7.267	0.070	0.026	-0.246	-0.333	0.087	0.473	0.473
1923	0.799	9.600	0.268	0.028	-0.264	-0.268	0.004	0.475	0.475
1924	0.737	8.036	0.135	0.259				0.706	0.706
1925	0.816	1.136						0.267	0.267
1926	0.870	1.036						0.309	0.309
1927	0.883	0.614						0.103	0.103
1928	0.755	5.04						0.513	0.513
1929	0.851	0.606						0.497	0.497
1930	0.872							0.414	0.414
1931	0.833								
1932	0.920	0.091			-0.743	-0.620	-0.123	0.410	0.287
1933	0.765								
1934	0.755	0.248			-0.429	-0.506	0.078	0.488	0.488
1935	0.771	0.776			-0.134	-0.164	0.030	0.441	0.441
1936	0.635	1.930			0.425	0.377	0.049	0.459	0.459
1937	0.545	3.189			0.614	0.641	-0.027	0.383	0.383
1938	0.650	2.928			0.663	0.614	0.049	0.459	0.459
1939	0.759	4.729			0.498	0.504	-0.005	0.405	0.405
1940	0.680	0.274							
1941	0.852	0.542							
1942	0.858	0.383							
1943	0.775	0.467							
1944	0.829	0.469							

II ADJUSTMENT OF BASIC VARIANT FOR NONFARM POPULATION
a Modification for 4th and 5th Percentage Band

	Actual Adjustment for Family Status 2nd & 3rd Percentage Band (1)	4th & 5th Percentage Band (2)	Coverage of Tax Return Population in Excess of 5 Percent of Nonfarm Population (% of nonfarm population) 1930-35 (3)	Theoretical Value of Col. 2, Derived from 2 Point Regression Line of Col. 2 on Col. 3 1930-35 (4)	Col. 2 minus Col. 4 (5)	Av. Level of Adj. for Family Status for 4th & 5th Percentage Band 1930-35 Modified (6)	Col. 2 Modified 1930-35 (col. 5 + col. 6) (7)
1919	0.544	0.152	4.053	0.096	0.250		0.957
1920	0.749	0.635	2.898	-0.146	0.016		0.723
1921	1.056	0.927	4.436	0.177	-0.196	0.707	0.511
1922	0.711	0.546	4.207	0.129	-0.164		0.543
1923	0.716	0.466	4.699	0.232	0.008		0.715
1924	0.895	0.197	5.367	0.372	0.086		0.793
1925	0.831	0.482					
1926	0.719	0.708					
1927	0.736	0.569					
1928	0.799	0.484					
1929	0.750	0.617					
1930	0.647	0.346					
1931	0.975	-0.130					
1932	1.029	-0.019					
1933	0.989	-0.035					
1934	0.657	0.240					
1935	0.559	0.458					
1936	0.350	0.770					
1937	0.346	0.702					
1938	0.419	0.212					
1939	0.526	0.825					
1940	0.683	0.732					
1941	0.685	0.682					
1942	0.759	0.731					
1943	0.667	0.753					
1944	0.733	0.757					

For notes see page 421.

II ADJUSTMENT OF BASIC VARIANT FOR NONFARM POPULATION (concl.)

b Modification for 6th and 7th Percentage Band

	Actual Adjustment for Family Status 2nd & 3rd Percentage Band (1)	Actual Adjustment for Family Status 6th & 7th Percentage Band (2)	Coverage of Tax Return Population in Excess of 7 Percent of Nonfarm Population (% of nonfarm population) 1925-39 (3)	Deviation of Col. 2 from 1925-39 Av. (-0.208) (4)	Theoretical Deviation of Col. 2 Derived from 3 Point Regression Line of Col. 2 on Col. 3 1925-39 (5)	Col. 4 minus Col. 5 (6)	Av. Level of Adj. for Family Status for 6th & 7th Percentage Band 1925-39 Modified (col. 6 + col. 7) (7)	Col. 2 Modified 1925-39 (col. 8) (8)
1919	0.544	0.632	4.082	0.179	0.118	0.060		0.680
1920	0.749	0.658	3.868	-0.030	0.090	-0.120		0.499
1921	1.056	0.693	3.196	-0.249	-0.014	-0.236		0.384
1922	0.711	1.045	3.010	-0.163	-0.046	-0.117		0.502
1923	0.716	0.436	3.114	-0.111	-0.028	-0.084		0.536
1924	0.895	0.631	2.053	-0.294	-0.235	-0.060		0.560
1925	0.831	-0.029	0.898	-0.667	-0.516	-0.152		0.468
1926	0.719	-0.238	2.436	0.037	-0.154	0.191	0.619	0.810
1927	0.736	-0.457	2.207	0.039	-0.202	0.240		0.860
1928	0.799	-0.371	2.699	0.102	-0.103	0.205		0.824
1929	0.750	-0.319	3.367	0.143	0.014	0.128		0.748
1930	0.647	-0.502	4.828	0.041	0.203	-0.163		0.457
1931	0.975	-0.875	6.406	0.321	0.303	0.018		0.637
1932	1.029	-0.171	5.992	0.373	0.287	0.085		0.705
1933	0.989	-0.169	8.290	0.284	0.281	0.003		0.622
1934	0.657	-0.106						
1935	0.559	-0.065						
1936	0.350	-0.167						
1937	0.346	0.113						
1938	0.419	0.165						
1939	0.526	0.076						
1940	0.683	0.832						
1941	0.685	0.685						
1942	0.759	0.524						
1943	0.667	0.633						
1944	0.733	0.603						

For notes see page 421.

Notes to Section B

I Adjustment of Basic Variant for Total Population

Column

Part a

- 1, 2 Table 120: column 2 minus column 1. For 1919-38 the NBER series is used; for 1939-44, the Department of Commerce series.
- 3 Column 6 of Table 69 minus 5 percent.
- 5 Derived from the curve: $y = a + bx + cx^2$, where y is the deviation from the arithmetic mean of column 2 and x that of column 3 for 1925-39. The regression equation, fitted by least squares, is $y = 0.09430 + 0.24592x - 0.04422x^2$.
- 8 The arithmetic mean of column 1 for 1925-39 (0.779) multiplied by column 7.

Part b

- 1, 2 See notes to Part a, columns 1 and 2.
- 3 Column 6 of Table 69 minus 7 percent.
- 4 Derived from the straight line: $y = a + bx$ where y is the value in column 2 and x is the value in column 3 for 1919-24. The regression equation, fitted by least squares, is $y = -0.54558 + 0.08474x$.
- 7 Derived from the curve: $y = a + bx + cx^2$, where y is the deviation from the arithmetic mean of column 2 and x that of column 3 for 1925-39. The regression equation, fitted by least squares, is $y = 0.20069 + 0.44078x - 0.10703x^2$.
- 9 The arithmetic mean of column 1 for 1919-24 (0.837) and for 1925-39 (0.768) respectively, multiplied by the average ratio of column 2 to column 1 for 1940-44 (0.53455).

II Adjustment of Basic Variant for Nonfarm Population

Column

Part a

- 1, 2 Table 121: column 2 minus column 1. For 1919-38 the NBER series is used; for 1939-44, the Department of Commerce series.
- 3 The percentage that the tax return population (Table 69, col. 3) constitutes of the nonfarm population (Table 115, col. 1) minus 5 percent.
- 4 Derived from the straight line: $y = a + bx$ where y is the value in column 2 and x is the value in column 3 for 1930-35. The regression equation, fitted by least squares, is $y = -0.75336 + 0.20967x$.
- 6 The arithmetic mean of column 1 for 1930-35 (0.80933) multiplied by the average ratio of column 2 to column 1 for 1919-29 and 1936-44 (0.87370).

Part b

- 1, 2 See notes to Part a, columns 1 and 2.
- 3 The percentage that the tax return population (Table 69, col. 3) constitutes of the nonfarm population (Table 115, col. 1) minus 7 percent.
- 5 Derived from the curve: $y = a + bx + cx^2$ where y is the deviation from the arithmetic mean of column 2 and x that of column 3 for 1925-39. The regression equation, fitted by least squares, is $y = 0.07473 + 0.14383x - 0.02172x^2$.
- 7 The arithmetic mean of column 1 for 1925-39 (0.68880) multiplied by the average ratio of column 2 to column 1 for 1919-24 and 1940-44 (0.89924).

Section C: Adjustments for the Maximum Effect of Unwarranted Inclusions and Deductions

Statistics of Income classifies returns by net income, defined to include gains from sales of capital assets and of other property, which are excluded from economic income. It excludes contributions, interest and taxes paid, bad debts, and other items that are included in economic income. To determine what the distribution would be had the returns been classified by income excluding gains from sales and including unwarranted deductions, two estimates were prepared.

The first measures the maximum effect of the inclusion of gains from sales of assets. These gains are assumed to be concentrated in a limited number of returns in each net income class, are not offset, even partly, by unwarranted deductions, and are not combined with any economic income. To determine the maximum number of returns in each income class whose income could be assumed to consist of gains from sales *alone* and whose income could be assumed to account for *all* the gains reported, the gains for each class are divided by the lower income limit of the respective class. These returns are then dropped from the distribution. The remaining returns are converted to population and cumulated by the usual procedure. The estimate for 1929 is presented in detail in Part I, below.

The second estimate combines the results of the first with an estimate of the maximum effect of unwarranted deductions. The maximum number of persons on whose returns these deductions can reasonably be assumed to be concentrated is estimated arbitrarily as a tenth of the population remaining in each net income class after the exclusion of returns whose income represents gains from sales alone. These persons and their net income — the latter estimated to be the same per return as that for all returns reporting net income — are then removed from their respective net income classes. Their removal on top of the removal of those whose income represents gains from sales alone makes it possible to assume that the economic income of those remaining in the distribution is identical with net income, tax definition. The persons on whose returns unwarranted deductions are assumed to be concentrated are then shifted to the net income classes whose economic income per capita most closely approximates their own (the sum of net income and unwarranted deductions). Corresponding shifts are made in the income distribution. The estimate for 1929 is presented in detail in Part II, below.

I SAMPLE CALCULATION OF ADJUSTMENT FOR MAXIMUM EFFECT OF UNWARRANTED INCLUSIONS, 1929

a Adjustment of Returns to Exclude Those Assumed to Report Capital Gains Alone

NET INCOME CLASS, TAX DEFINITION (1)	NET GAINS FROM SALES OF CAPITAL ASSETS & OTHER PROPERTY (\$'000) (2)	NUMBER OF Assumed to Report Gains Alone (3)	NUMBER OF Total (4)	RETURNS Excl. Those Assumed to Report Gains Alone (5)
\$5,000,000 & over	291,430	38	38	0
4,000,000-5,000,000	56,478	14	19	5
3,000,000-4,000,000	73,472	24	32	8
2,000,000-3,000,000	107,885	53	67	14
1,500,000-2,000,000	132,317	88	123	35
1,000,000-1,500,000	197,803	197	234	37
750,000-1,000,000	161,211	214	289	75
500,000- 750,000	243,014	486	687	201
*				
14,000- 15,000	45,912	3,279	21,216	17,937
13,000- 14,000	49,542	3,810	26,114	22,304
12,000- 13,000	52,267	4,355	31,060	26,705
11,000- 12,000	55,157	5,014	38,114	33,100
10,000- 11,000	57,359	5,735	47,239	41,504
9,000- 10,000	65,272	7,252	64,393	57,141
8,000- 9,000	64,137	8,017	81,454	73,437
7,000- 8,000	66,293	9,470	112,812	103,342
6,000- 7,000	67,023	11,170	157,784	146,614
5,000- 6,000	63,107	12,621	241,596	228,975
4,000- 5,000	94,991	23,747	485,822	462,075
3,000- 4,000	79,865	26,621	686,833	660,212
2,000- 3,000	54,184	27,091	810,347	783,256
1,000- 2,000	35,658	35,658	903,082	867,424
Under 1,000	27,144	54,288	126,172	71,884

* Each net income class was covered but it would be too space consuming to show all here; hence the gap between the \$500,000-750,000 and the \$14,000-15,000 class.

For notes see pages 428-9.

I SAMPLE CALCULATION FOR ADJUSTMENT FOR MAXIMUM EFFECT OF UNWARRANTED INCLUSIONS, 1929 (concl.)
 b Adjustment of Tax Return Population and of Income Shares of Upper Groups

Net Income Class, Tax Definition	Returns Excl. Those Assumed to Report Gains Alone	Av. No. per Return, All Returns	Tax Return Population Excl. Persons Assumed to Report Gains Alone	Economic Income		Rank of Per Capitas in Col. 6 from Highest to Lowest	Tax Return Population in Col. 4 Cumulated in Col. 7	Economic Income in Col. 5 (\$'000)	Basic Variant, Adjusted			
				Total (\$'000)	Per capita \$				Total Population Selected Level in Col. 9 as % of Col. 8 individuals' total income pop. receipts	Nonfarm Pop. Selected Level in Col. 9 as % of income of nonfarm pop.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
\$10,000 & over	298,798	2,506	748,698	10,609,311	14,170	1	748,698	10,609,311				
9,000-10,000	57,141	2,745	156,846	660,749	4,213	2	905,544	11,270,060	0.910	14.986	0.988	15.803
8,000-9,000	73,437	2,762	202,870	753,377	3,714	3	1,108,414	12,023,437	1.145	16.140	1.210	16.860
7,000-8,000	103,342	2,774	286,681	925,896	3,230	4	1,395,095	12,949,333				
6,000-7,000	146,614	2,790	409,097	1,126,113	2,753	5	1,804,192	14,075,446				
5,000-6,000	228,975	2,881	659,585	1,473,718	2,234	6	2,463,777	15,549,164				
4,000-5,000	462,075	3,011	1,391,169	2,470,936	1,776	8	2,626,867	15,891,247	2.156	19.807	2.867	22.283
3,000-4,000	660,212	2,736	1,806,340	2,830,406	1,567	10	4,018,036	18,362,183	3.298	22.886	4.386	25.748
2,000-3,000	783,256	1,823	1,427,719	2,327,864	1,630	9	5,445,755	20,690,047	4.470	25.788	5.944	29.012
1,000-2,000	867,424	1,520	1,318,398	1,871,461	1,419	11	7,252,095	23,520,453	5.953	29.316	7.916	32.981
Under 1,000	71,884	2,269	163,090	342,083	2,098	7	8,570,493	25,391,914	7.035	31.648		

The adjusted income share of a given upper percentage band is calculated from the logarithms of columns 10 and 11 or 12 and 13 by the procedure indicated in Section A, Part 1b.

For notes see pages 428-9.

II SAMPLE CALCULATION OF ADJUSTMENT FOR MAXIMUM EFFECT OF UNWARRANTED INCLUSIONS AND DEDUCTIONS, 1929
a Number and Income of Persons Assumed to Report All Unwarranted Deductions

Net Income Class, Tax Definition (1)	Tax Return Pop. Excl. Persons Assumed to Report Gains Alone (2)	No. of Persons Assumed to Report All Unwarranted Deductions (3)	Unwarranted Deductions		Av. No. Per Return, All Returns (6)	Net Income of Persons in Col. 3		Economic Income of Persons in Col. 3	
			Total (\$000) (4)	Per Person in Col. 3 (\$) (5)		Per Capita (\$) (7)	Total (\$000) (8)	Total (\$000) (9)	Per Capita (\$) (10)
\$15,000 & over	394,015		2,074,285						
14,000-15,000	44,945	4,494	63,409	14,110		5,787	26,007	89,416	19,897
13,000-14,000	55,887	5,589	70,463	12,607		5,388	30,114	100,577	17,995
12,000-13,000	66,915	6,692	76,327	11,406	2,506	4,989	33,386	109,713	16,395
11,000-12,000	82,939	8,294	84,329	10,167		4,590	38,069	122,398	14,757
10,000-11,000	103,997	10,400	91,109	8,760		4,190	43,576	134,685	12,950
9,000-10,000	156,846	15,685	114,733	7,315		3,461	54,286	169,019	10,776
8,000- 9,000	202,870	20,287	127,344	6,277		3,077	62,423	189,767	9,354
7,000- 8,000	286,681	28,668	148,904	5,194		2,704	77,518	226,422	7,898
6,000- 7,000	409,097	40,910	174,895	4,275		2,329	95,279	270,174	6,604
5,000- 6,000	659,585	65,958	218,283	3,309	2,881	1,909	125,914	344,147	5,218
4,000- 5,000	1,391,169	139,117	408,714	2,938	3,011	1,495	207,980	616,694	4,433
3,000- 4,000	1,806,340	180,634	494,887	2,740	2,736	1,279	231,031	725,918	4,019
2,000- 3,000	1,427,719	142,772	423,453	2,966	1,823	1,372	195,883	619,336	4,338
1,000- 2,000	1,318,398	131,840	407,210	3,089	1,520	987	130,126	537,356	4,076
Under 1,000	163,090	16,309	295,485	18,118	2,269	220	3,588	299,073	18,338

For notes see pages 428-9.

426 II SAMPLE CALCULATION OF ADJUSTMENT FOR MAXIMUM EFFECT OF UNWARRANTED INCLUSIONS AND DEDUCTIONS, 1929 (cont.)

b Reclassification of Persons Assumed to Report All Unwarranted Deductions

Net Income Class, Tax Definition (1)	No. of Persons Assumed to Report All Unwarranted Deductions (2)	Tax Return Pop. Excl. Those Assumed to Report Tax Gains Alone and Those in Col. 2 (3)		Net Income, Tax Definition All returns; \$000 (4)	Net Gains from Sales of Capital Assets & Other Prop. Other Prop. \$000 (5)	Net Income of Persons in Col. 2 (\$000) (6)	Economic Income of Tax Return Population in Col. 3 Total (\$000) (7)	Shift of Persons in Col. 2 to Income Class Whose Economic Income Per Capita (col. 8) is Closest Theirs (col. 9) (10)			Tax Return Pop. in Col. 3 Adj. for Shift in Col. 11 (\$000) (12)	Economic Income in Col. 7 Adj. for Shift in Col. 11 (\$000) (13)
		Pop. Excl. Those Assumed to Report Tax Gains Alone and Those in Col. 2 (3)	Net Income, Tax Definition All returns; \$000 (4)					Net Gains from Sales of Capital Assets & Other Prop. Other Prop. \$000 (5)	Net Income of Persons in Col. 2 (\$000) (6)	Economic Income of Tax Return Population in Col. 3 Total (\$000) (7)		
\$15,000 & over		394,015	10,234,167	3,804,693		8,503,759	21,582	19,897	4,494	89,416		
14,000-15,000	4,494	40,451	307,441	45,912	26,007	235,522	5,822	17,995	5,589	100,577	40,451	235,522
13,000-14,000	5,589	50,298	352,135	49,542	30,114	272,479	5,417	16,395	6,692	109,713	116,256	616,626
12,000-13,000	6,692	60,223	387,588	52,267	33,386	301,935	5,014	14,757	8,294	122,398	60,223	301,935
11,000-12,000	8,294	74,645	437,892	55,157	38,069	344,666	4,617	12,950	10,400	134,685	213,762	961,360
10,000-11,000	10,400	93,597	495,096	57,359	43,576	394,161	4,211	10,776	15,685	169,019	548,843	2,276,751
9,000-10,000	15,685	141,161	611,288	65,272	54,286	491,730	3,483	9,354	20,287	189,767	141,161	491,730
8,000-9,000	20,287	182,583	690,171	66,137	62,423	563,611	3,087	7,898	28,668	226,422	182,583	563,611
7,000-8,000	28,668	258,013	843,285	66,293	77,518	699,474	2,711	6,604	16,309	270,174	258,013	699,474
6,000-7,000	40,910	368,187	1,018,240	67,023	95,279	855,938	2,325	5,218	65,958	344,147	368,187	855,938
5,000-6,000	65,958	593,627	1,318,592	63,107	125,914	1,129,571	1,903	4,433	139,117	616,694	593,627	1,129,571
4,000-5,000	139,117	1,252,052	2,157,212	94,991	207,980	1,854,242	1,481	4,019	180,634	725,918	1,252,052	1,854,242
3,000-4,000	180,634	1,625,706	2,415,384	79,865	231,031	2,104,488	1,295	3,338	142,772	619,336	1,625,706	2,104,488
2,000-3,000	142,772	1,284,947	1,958,595	54,184	191,883	1,708,528	1,130	2,476	101,866	336,336	1,284,947	1,708,528
1,000-2,000	131,840	1,186,558	1,499,908	35,658	130,126	1,334,125	1,124	1,833	16,309	299,073	1,186,558	1,334,125
Under 1,000	16,309	146,781	73,742	27,144	3,588	43,010	293	18,338	16,309	299,073	146,781	43,010

For notes see pages 428-9.

c Adjustment of Income Shares of Upper Groups

Net Income Class, Tax Definition (1)	Tax Return Pop.		Economic Income of Tax Return Pop. in Col. 2	Rank of Per Capitas from Highest to Lowest (5)	Tax Return Pop. in Col. 2 Cumulated by Rank in Col. 5 (6)	Economic Income in Col. 3 (\$'000) (7)	BASIC VARIANT, ADJUSTED	
	Excl. Those Assumed to Report Gains Alone & Assumed to Report All Unwarranted Deductions (2)	Assumed to Report All Unwarranted Deductions (2)					Total Population Selected Level in Col. 7 as % of total income receipts of individuals (9)	Nonfarm Population Selected Level in Col. 7 as % of income of nonfarm pop. (10)
\$15,000 & over	551,343	10,215,003	18,527	1	551,343	10,215,003		
14,000-15,000	40,451	235,522	5,822	2	591,794	10,450,525		
13,000-14,000	116,256	616,626	5,304	3	708,050	11,067,151		
12,000-13,000	60,223	301,935	5,014	4	768,273	11,369,086		
11,000-12,000	213,762	961,360	4,497	5	982,035	12,330,446		
10,000-11,000	548,843	2,276,751	4,148	6	1,530,878	14,607,197	0.806	15.369
9,000-10,000	141,161	491,730	3,483	7	1,672,039	15,098,977	1.257	18.206
8,000- 9,000	182,583	563,611	3,087	8	1,854,622	15,662,538		
7,000- 8,000	258,013	699,474	2,711	9	2,112,635	16,362,012		
6,000- 7,000	368,187	855,938	2,325	10	2,480,822	17,217,950		
5,000- 6,000	593,627	1,129,571	1,903	11	3,074,449	18,347,521	2.524	22.868
4,000- 5,000	1,252,052	1,854,242	1,481	12	4,326,501	20,201,763	3.551	25.179
3,000- 4,000	1,625,706	2,104,488	1,295	14	5,611,448	21,910,291	4.606	27.309
2,000- 3,000	1,284,947	1,708,528	1,330	13	7,237,154	24,014,779	5.940	29.932
1,000- 2,000	1,186,558	1,334,125	1,124	15	8,423,712	25,348,904	6.914	31.595
Under 1,000	146,781	43,010	293	16	8,570,493	25,391,914	7.035	31.648

The adjusted income share of a given upper percentage band is calculated from the logarithms of columns 8 and 9 or 10 and 11 by the procedure indicated in Section A, Part Ib.

For notes see pages 428-9.

*Notes to Section C***I Sample Calculation of Adjustment for Maximum Effect of Unwarranted Inclusions, 1929***Column***Part a**

- 1 Every net income class shown in *Statistics of Income*.
- 2 *Statistics of Income, 1929*, Basic Table 7, supplemented by data for net income classes under \$5,000 from the *Source Book*.
- 3 The lowest number of whole returns calculated by dividing column 2 by the lower limit of the income class. For the top income class, when this procedure yields an entry larger than that in column 4, the figure in column 4 is used. For the lowest income class, where the lower limit is zero, the computations were carried through assuming it to be \$500.
- 4 *Statistics of Income, 1929*, Basic Table 2.
- 5 Column 4 minus column 3.

Part b

- 1 \$1,000 intervals up to \$10,000, and all over \$10,000 treated as a unit. For 1939 and later years all the intervals under \$10,000 shown in *Statistics of Income* are used.
- 2 From Part a, column 5.
- 3 Table 111: ratio of column 8 to column 2.
- 4 Column 2 multiplied by column 3.
- 5 Table 112, last column.
- 6 Column 5 divided by column 4.
- 10 For total population see Table 69, column 5.
- 12 For total income receipts of individuals see Table 114, column 12.
- 14 For nonfarm population see Table 115, column 1.
- 16 For income of nonfarm population see Table 115, column 2.

II Sample Calculation of Adjustment for Maximum Effect of Unwarranted Inclusions and Deductions, 1929*Column***Part a**

- 1 \$1,000 intervals up to \$15,000, and all over \$15,000 treated as a unit. For 1939 and later years all the intervals under \$10,000 shown in *Statistics of Income* are used.
- 2 Part Ib, column 4, extended to show each net income class from \$10,000 to \$15,000.
- 3 10% of column 2.
- 4 Table 112, columns 5-8.
- 5 Column 4 divided by column 3.
- 6 Part Ib, column 3, the figure for \$10,000 and over being used for each income class over \$10,000.
- 7 The midpoint of the net income class, \$14,500, \$13,500, etc., divided by column 6.
- 8 Column 3 multiplied by column 7.
- 9 Column 4 plus column 8.
- 10 Column 5 plus column 7, or column 9 divided by column 3.

*Notes to Section C concluded:**Column***Part b**

- 1 Same as for Part a.
- 2 Part a, column 3.
- 3 Part a: column 2 minus column 3.
- 4 Table 112, column 2, extended to show each net income class from \$10,000 to \$15,000.
- 5 Part Ia, column 2.
- 6 Part a, column 8.
- 7 Column 4 minus columns 5 and 6. For \$15,000 and over, unwarranted deductions (Part a, col. 4) are added.
- 8 Column 7 divided by column 3.
- 9 Per capita in Part a, column 10, shifted to the net income class whose economic income per capita (col. 8) most closely approximates it, account being taken of the per capitas of the classes just above \$15,000, which, if shown class by class instead of in combination with all over \$15,000, would be close to that for the \$14,000-15,000 class.
- 10 Number of persons in column 2 having the per capita income in column 9 (see Part a, col. 3 and 10).
- 11 Column 10 multiplied by column 9.
- 12 Column 3 plus column 10.
- 13 Column 7 plus column 11.

Part c

- 1 Same as for Part b.
- 2 Part b, column 12.
- 3 Part b, column 13.
- 4 Column 3 divided by column 2.
- 8 For total population see Table 69, column 5.
- 9 For individuals' total income receipts see Table 114, column 12.
- 10 For nonfarm population see Table 115, column 1.
- 11 For income of nonfarm population see Table 115, column 2.

Section D: Modification of Adjustment for Unwarranted Deductions for Limited Size of Tax Return Population

I ADJUSTMENT OF BASIC VARIANT FOR TOTAL POPULATION

a Modification for 2nd and 3rd Percentage Band

	Actual Adj. for Max. Effect of Unwarranted Deductions 2nd & 3rd Percentage Band	Top 1 Percent	Coverage of Tax Return Population in Excess of 3 Percent of Total Population (% of total population)	Deviation of Col. 2 from 1925-38 Av. (0.470)	Theoretical Deviation of Col. 2 Derived from 3 Point Regression Line of Col. 2 on Col. 3 1925-38	Col. 4 minus Col. 5	Av. Level of Adj. for Unwarranted Deductions for 2nd & 3rd Band 1925-38 Modified	Col. 2 Modified 1925-38 (col. 6 + col. 7) (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1919	0.435	0.170	5.136	0.031	0.136	-0.105		0.648
1920	0.462	-0.050	5.036	0.042	0.115	-0.073		0.681
1921	1.884	0.476	4.614	0.142	0.013	0.129		0.882
1922	1.362	0.408	4.504	0.081	-0.017	0.097		0.851
1923	0.897	1.571	4.606	0.142	0.011	0.131		0.885
1924	0.738	0.969	3.834	-0.127	-0.226	0.099		0.852
1925	0.688	0.501	2.957	-0.541	-0.573	0.032		0.785
1926	0.728	0.512	4.091	-0.330	-0.140	-0.190	0.754	0.563
1927	0.879	0.612	3.859	-0.409	-0.217	-0.192		0.562
1928	0.685	0.551	4.248	-0.059	-0.091	0.032		0.785
1929	1.237	0.612	4.776	0.143	0.054	0.088		0.842
1930	0.998	0.343	5.930	0.168	0.267	-0.099		0.655
1931	1.611	-0.071	7.189	0.285	0.334	-0.049		0.704
1932	1.602	0.140	6.928	0.437	0.334	-0.102		0.856
1933	1.413	0.061						
1934	0.885	0.411						
1935	0.761	0.613						
1936	0.507	0.638						
1937	0.591	0.755						
1938	0.772	0.907						
1939	0.699	0.885						
1940	0.436	0.527						
1941	0.456	0.419						
1942	0.286	0.576						
1943	0.199	0.254						

For notes see page 434.

b Modification for 4th and 5th Percentage Band

	Actual Adj. for Unwarranted Deductions 2nd & 3rd 4th & 5th Percentage Band	Coverage of Tax Return Population in Excess of 5 Percent of Total Population (% of total population)	Theoretical Value of Col. 2 Derived from 2 Point Regression Line of Col. 2 on Col. 3 1919-24	Col. 2 minus Col. 4 (5)	Deviation of Col. 2 from 1925-38 Av. (-0.590) (6)	Theoretical Deviation of Col. 2 Derived from 3 Point Regression Line of Col. 2 on Col. 3 1925-38 (7)	Col. 6 minus Col. 7 (8)	Av. Level of Adj. for Unwarranted Deductions for 4th & 5th Percentage Band 1919-24 & 1925-38 Modified (9)	Col. 2 Modified 1919-39 (col. 5 & 8 + col. 9) (10)
1919	0.170	6.830	-0.080	0.075	0.054	0.069	-0.014	0.553	0.553
1920	-0.050	11.280	0.078	0.094	0.086	0.054	0.032	0.572	0.572
1921	0.476	8.591	-0.017	-0.268	-0.084	-0.011	-0.073	0.210	0.210
1922	0.408	9.267	0.007	0.127	-0.015	-0.029	0.014	0.605	0.605
1923	1.571	11.600	0.090	-0.106	-0.244	-0.012	-0.232	0.372	0.372
1924	0.969	10.036	0.034	0.078	-0.099	-0.149	0.050	0.556	0.556
1925	0.501	3.136			-0.384	-0.332	-0.052	0.596	0.596
1926	0.512	3.036			-0.126	-0.101	-0.025	0.642	0.642
1927	0.612	2.614			-0.034	-0.144	0.111	0.537	0.537
1928	0.551	2.504			0.032	-0.073	0.105	0.624	0.624
1929	0.612	2.606			0.046	0.015	0.031	0.379	0.379
1930	0.343	1.834			0.243	0.170	0.073	0.661	0.661
1931	-0.071	0.957			0.304	0.282	0.022	0.558	0.558
1932	0.140	2.091			0.219	0.263	-0.044	0.585	0.585
1933	0.061	1.859						0.721	0.721
1934	0.411	2.248						0.715	0.715
1935	0.613	2.776						0.641	0.641
1936	0.638	3.930						0.683	0.683
1937	0.755	5.189						0.633	0.633
1938	0.907	4.928						0.566	0.566
1939	0.885							0.557	0.557
1940	0.527								
1941	0.419								
1942	0.576								
1943	0.254								

For notes see page 434.

II ADJUSTMENT OF BASIC VARIANT FOR NONFARM POPULATION

a Modification for 4th and 5th Percentage Band

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Actual Adj. for Max. Effect of Unwarranted Deductions 2nd & 3rd Percentage Band	Deviation of Col. 2 from 1925-38 Av. (-0.356)	Coverage of Tax Return Population in Excess of 5 Percent of Nonfarm Population (% of nonfarm population) 1925-38	Deviation of Col. 2 from 1925-38 Av. (-0.356)	Theoretical Deviation of Col. 2 Derived from 3 Point Regression Line of Col. 2 on Col. 3 1925-38	Col. 4 minus Col. 5	Av. Level of Adj. for Unwarranted Deductions for 4th & 5th Percentage Band 1925-38 Modified	Col. 2, Modified 1925-38 (col. 6 + col. 7)
1919	-0.048	0.150		0.156	0.129	0.027		0.862
1920	-0.126	0.049	6.082	0.061	0.093	-0.032		0.803
1921	0.463	0.244	5.868	-0.034	-0.026	-0.009		0.827
1922	0.376	0.414	5.196	0.047	-0.060	0.107		0.942
1923	1.598	0.524	5.010	-0.173	-0.041	-0.133		0.703
1924	0.877	0.484	4.053	-0.074	-0.245	0.171		1.006
1925	0.733	-0.200	4.898	-0.494	-0.489	-0.006		0.830
1926	0.660	-0.295	2.898	-0.353	-0.169	-0.184	0.835	0.651
1927	0.840	-0.390	4.436	-0.271	-0.214	-0.057		0.778
1928	0.709	-0.309	4.207	-0.062	-0.118	0.056		0.891
1929	1.225	-0.529	4.699	0.014	0.005	0.009		0.844
1930	0.709	-0.430	5.367	0.412	0.249	0.163		0.998
1931	0.586	-0.850	8.406	0.624	0.471	0.153		0.988
1932	1.017	-0.709	7.992	0.153	0.417	-0.264		0.571
1933	0.828	-0.627						
1934	0.853	-0.418						
1935	0.845	-0.342						
1936	0.610	0.056						
1937	0.650	0.268						
1938	0.907	-0.203						
1939	0.519	0.456						
1940	0.316	0.688						
1941	0.352	0.546						
1942	0.326	0.718						
1943	0.110	0.712						

For notes see page 434.

	Actual Adj. for Max. Effect of Unwarranted Deductions 4th & 5th Percentage Band (1)	6th & 7th Percentage Band (2)	Coverage of Tax Return Population in Excess of 7 Percent of Nonfarm Population (% of nonfarm population) 1919-39 (3)	Deviation of Col. 2 from 1919-39 Av. (-0.340) (4)	Theoretical Deviation of Col. 2 Derived from 3 Point Regression Line of Col. 2 on Col. 3, 1919-39 (5)	Col. 4 minus Col. 5 (6)	Av. Level of Adj. for Unwarranted Deductions for 6th & 7th Band 1919-39 Modified (7)	Col. 2, Modified 1919-39 (col. 6 + col. 7) (8)
1919	0.150	0.020	9.760	0.360	0.174	0.186	0.820*	
1920	0.049	0.190	16.140	0.530	0.393	0.137	0.772*	
1921	0.244	-0.332	12.202	0.008	0.269	-0.261	0.373*	
1922	0.414	-0.062	13.038	0.278	0.298	-0.021	0.614*	
1923	0.524	-0.028	15.981	0.312	0.388	-0.077	0.558*	
1924	0.484	0.045	13.590	0.385	0.317	0.068	0.703*	
1925	-0.200	-0.455	4.082	-0.115	-0.101	-0.014	0.620	
1926	-0.295	-0.338	3.868	0.002	-0.113	0.114	0.749	
1927	-0.390	-0.498	3.196	-0.158	-0.151	-0.008	0.627	
1928	-0.309	-0.461	3.010	-0.121	-0.161	0.040	0.675	
1929	-0.529	-0.707	3.114	-0.367	-0.155	-0.212	0.423	
1930	-0.430	-0.610	2.053	-0.270	-0.218	-0.053	0.582	
1931	-0.850	-0.663	0.898	-0.323	-0.288	-0.035	0.600	
1932	-0.709	-0.626	2.436	-0.286	-0.195	-0.091	0.543	
1933	-0.627	-0.514	2.207	-0.174	-0.208	0.034	0.669	
1934	-0.418	-0.439	2.699	-0.099	-0.179	0.080	0.715	
1935	-0.342	-0.333	3.367	0.007	-0.141	0.148	0.782	
1936	0.056	-0.345	4.828	-0.005	-0.060	0.055	0.690	
1937	0.268	-0.412	6.406	-0.072	0.021	-0.093	0.542	
1938	-0.203	-0.252	5.992	0.088	0.000	0.088	0.722	
1939	0.456	-0.314	8.290	0.026	0.110	-0.084	0.550	
1940	0.688	0.487						
1941	0.546	0.629						
1942	0.718	0.813						
1943	0.712	0.605						

* Because it raises the income share of the 6th and 7th percentage band above that of the 4th and 5th percentage band, the modification was disregarded in this year.

For notes see page 434.

*Notes to Section D***I Adjustment of Basic Variant for Total Population****Column****Part a**

- 1, 2 Table 120: column 4 minus column 3. For 1919-38 the NBER series is used; for 1939-43, the Department of Commerce series.
- 3 Column 6 of Table 69 minus 3 percent.
- 5 Derived from the curve: $y = a + bx + cx^2$ where y is the deviation from the arithmetic mean of column 2 and x that of column 3 for 1925-38. The regression equation, fitted by least squares, is $y = 0.06892 + 0.23993x - 0.05407x^2$.
- 7 The arithmetic mean of column 1 for 1925-38 (0.954) multiplied by the average ratio of column 2 to column 1 for 1919-24 and 1939-43 (0.79004).

Part b

- 1 Part a, column 2.
- 2 Table 120: column 5 minus column 4. See notes to Part a, columns 1 and 2.
- 3 Column 6 of Table 69 minus 5 percent.
- 4 Derived from the straight line: $y = a + bx$ where y is the value in column 2 and x that in column 3 for 1919-24. The regression equation, fitted by least squares, is $y = -0.32283 + 0.03557x$.
- 7 Derived from the curve: $y = a + bx + cx^2$ where y is the deviation from the arithmetic mean for column 2 and x that for column 3 for 1925-38. The regression equation, fitted by least squares, is $y = 0.02413 + 0.15402x - 0.01893x^2$.
- 9 The arithmetic mean of column 1 for 1919-24 (0.591) and for 1925-38 (0.754) multiplied by the average ratio of column 2 to column 1 (0.80942) for 1920, 1923, 1924, and 1940-43, the years for which tax coverage is highest. 1939 is estimated by substituting the appropriate values of x in the equation in the notes to column 7.

II Adjustment of Basic Variant for Nonfarm Population**Column****Part a**

- 1 Table 121: column 4 minus column 3. For 1919-38 the NBER series is used; for 1939-43, the Department of Commerce series.
- 2 Table 121: column 5 minus column 4. See note to column 1.
- 3 The percentage that the tax return population (Table 69, col. 3) constitutes of the nonfarm population (Table 115, col. 1) minus 5 percent.
- 5 Derived from the curve: $y = a + bx + cx^2$ where y is the deviation from the arithmetic mean of column 2 and x that of column 3 for 1925-38. The regression equation, fitted by least squares, is $y = 0.01800 + 0.17784x - 0.00850x^2$.
- 7 The arithmetic mean of column 1 for 1925-38 (0.798) multiplied by the average ratio of column 2 to column 1 for 1919-24 and 1939-43 (1.04661).

Part b

- 1 Part a, column 2.
- 2 See note to Part a, column 2.
- 3 The percentage that the tax return population (Table 69, col. 3) constitutes of the nonfarm population (Table 115, col. 1) minus 7 percent.
- 5 Derived from the curve: $y = a + bx + cx^2$ where y is the deviation from the arithmetic mean of column 2 and x that of column 3 for 1919-39. The regression equation, fitted by least squares, is $y = 0.02702 + 0.049352x - 0.00475x^2$.
- 7 The average adjustment for the 4th and 5th percentage band for 1919-39 (0.667, calculated from Part a: col. 2 for 1919-24 and 1939; col. 8 for 1925-38) multiplied by the average ratio of column 2 to column 1 for 1940-43 (.95120).