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

Volume Title: The Share of Top Wealth-Holders in National Wealth, 1922-56

Volume Author/Editor: Robert J. Lampman

Volume Publisher: Princeton University Press

Volume ISBN: 0-87014-073-6

Volume URL: http://www.nber.org/books/lamp62-1

Publication Date: 1962

Chapter Title: The Share of Top Wealth-Holders in Personal Wealth, 1922-56

Chapter Author: Robert J. Lampman

Chapter URL: http://www.nber.org/chapters/c2170

Chapter pages in book: (p. 191 - 217)

### CHAPTER 6

# The Share of Top Wealth-Holders in Personal Wealth, 1922–56

IN THIS chapter we seek to discover the relative importance of top wealth-holders whom estate tax data enable us to identify for most years after 1922. What part of the total population and of the adult population are they? What share of the wealth of all persons do they hold? What types of property are most highly concentrated in their hands? Have the number and the wealth of this top group changed over the years to indicate increasing or decreasing concentration of wealth over time?

We shall first present the picture for 1953, then compare our findings with those of the Survey of Consumer Finances for that year, and then discuss historical changes. Finally, the observed changes in the concentration of wealth-holding are compared with changes over a similar period in England and Wales.

### The Share of Top Wealth-Holders in 1953

The 1,659,000 persons who are estimated to have had \$60,000 or more of gross estate in 1953 comprised 1.04 per cent of the total population, and 1.6 per cent of the adult population. This group of top wealth-holders held over a quarter of the total personal wealth, on the basis of either the prime wealth or the total wealth variant of personal wealth (see Chart 2 in Chapter 1 and Table 90).

Table 90 needs some explanation. The data in columns 1–7 are derived from national balance sheet accounts as developed by Raymond W. Goldsmith.<sup>1</sup> These accounts record estimates of aggregate assets, liabilities, and equities for sectors of the economy. Several of these sectors have been combined and adjusted to form a "personal sector" which is conceptually adapted for comparison with the holdings of individual wealth-holders. As shown in Table 90, the definition of the personal sector includes the following subsectors: "household,"

<sup>1</sup> Tables for certain benchmark years were published in his book, A Study of Saving in the United States, III, Princeton, 1956.

TABLE 90 Role of Top Wealth-Holders in National Balance Sheet Accounts, 1953

All Sectors           All Sectors           Total         Personal           Wealth         House-         Trust         Farm           Variant*         hold         Funds         Business           Variant         224.9         270.6         \$78.8           Structures, non-         260.3         49.3         64.1           U.S. govt. bonds         209.9         49.3         7.3           State and local bonds         33.9         7.8         8.2           Corporate bonds         56.0         2.8         3.3           Stock <sup>d</sup> 306.5         138.8         2.6         6.6           Monctary metals         27.4         0.2         0.2         0.2	Personal F Trust F Funds Bu (3) \$ \$2.0 \$ 8.2 8.2	Rarm N N N N N N N N N N N N N N N N N N N	onfarm, foncor- porate usiness (5) 14.5 17.3	Total Wealth Variant (6) \$444.6	Prime - Wealth	W Top	ealth Held	by	Held by 7	ob Wealt	****
Total         Personal           Total         Wealth         House-           Wealth         Wealth         House-           Variant*         hold         Funds         Business           Variant*         hold         Funds         Business           Variant*         hold         Funds         Business           Variant*         hold         Funds         Business           Variant*         10         (2)         (3)         (4)           Real estate         \$765.1         \$317.9         \$2.0         \$78.8           Structures, residential         294.9         270.6         \$78.8         \$4.1           Structures, non-         260.3         49.3         64.1         \$4.1           U.S. govt. bonds         209.9         49.3         7.3         64.1           U.S. govt. bonds         260.6         47.3         7.3         54.1           U.S. govt. bonds         56.0         2.8         3.3         54.1           U.S. govt. bonds         56.0         2.8         3.3         53.3           Corporate bonds         56.0         2.8         3.3         50.5           Corporate bonds         245.5	Personal Trust F Funds Bu (3) \$2.0 \$ 8.2 8.2	N N N N N N N N N N N N N N N N N N N	onfarm, foncor- porate (5) (5) 14.5 14.5	Total Wealth Variant (6) \$444.6	Prime - Wealth	$T_{op}$	Wealth-Ha	,	`		h-Holders
TotalPersonalTotalWealthHouse-WealthHouse-TrustVariant*holdFundsVariant*(1)(2)(3)(4)Variant* $765.1$ $317.9$ Structures, residential $294.9$ $270.6$ Structures, non- $260.3$ $49.3$ Structures, non- $260.6$ $47.3$ Tand $209.9$ $49.3$ U.S. govt. bonds $33.9$ $7.3$ State and local bonds $33.9$ $7.8$ Stockd $56.0$ $2.8$ $3.3$ Stockd $306.5$ $138.8$ $2.6$ Monctary metals $27.4$ $0.2$	Personal Trust F Funds Bu (3) \$2.0 \$ 8.2 8.2	Rarm J Jasiness B (4) (78.8 14.7 64.1	foncor- porate (usiness (5) 14.5 17.3	Total Wealth Variant (6) \$444.6	Prime - Wealth			lders			
Wealth         House-         Trust         Farm           Variant*         hold         Funds         Business           (1)         (2)         (3)         (4)           Variant*         hold         Funds         Business           (1)         (2)         (3)         (4)           Real estate         \$765.1         \$317.9         \$2.0         \$78.8           Structures, residential         224.9         270.6         \$78.8           Structures, non-         260.3         \$270.6         \$7.3         64.1           U.S. govt. bonds         209.9         49.3         64.1         7.3           U.S. govt. bonds         260.6         47.3         7.3         64.1           U.S. govt. bonds         260.6         47.3         7.3         54.1           U.S. govt. bonds         260.6         47.3         7.3         54.1           U.S. govt. bonds         26.0         2.8         3.3         54.1           U.S. govt. bonds         56.0         2.8         3.3         50.5           Corporate bonds         56.0         2.8         3.3         50.6         6.6           Monctary metals         27.4         0.2	Trust F Funds Bu (3) \$2.0 8.2 8.2	Farm Jainess B (4) (4) (78.8 14.7 64.1	porate usiness (5) 14.5 17.3	Wealth Variant (6) \$444.6	Wealth				Col. 8	Col. 9	Col. 10
Real estate         \$765.1         \$317.9         \$2.0         \$78.8         \$755.1         \$317.9         \$2.0         \$78.8         \$755.1         \$317.9         \$2.0         \$78.8         \$755.1         \$317.9         \$2.0         \$78.8         \$755.1         \$317.9         \$2.0         \$78.8         \$755.1         \$517.9         \$2.0         \$78.8         \$78.8         \$78.8         \$78.8         \$78.8         \$78.8         \$78.8         \$78.2         \$78.1         \$14.7         \$14.7         \$14.7         \$14.7         \$14.7         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$64.1         \$78.2         \$60.5         \$78.2         \$78.3         \$73.3         \$64.1         \$78.2         \$60.5         \$78.2         \$60.5         \$78.2         \$60.5         \$78.2         \$20.5         \$60.5         \$245.5         \$2127.2         \$28.5         \$60.5         \$60.2         \$60.5         \$60.5 </th <th>\$2.0 8.2 8.2</th> <th>78.8 14.7 64.1</th> <th>\$45.9 14.5 17.3</th> <th>\$444.6</th> <th>Variant (7)</th> <th>Basic Variant (8)</th> <th>Prime Variant (9)</th> <th>Total Variant<sup>b</sup> (10)</th> <th>÷ Col. 7 (11)</th> <th>÷ Col. 7 (12)</th> <th>÷ Col. 6 (13)</th>	\$2.0 8.2 8.2	78.8 14.7 64.1	\$45.9 14.5 17.3	\$444.6	Variant (7)	Basic Variant (8)	Prime Variant (9)	Total Variant <sup>b</sup> (10)	÷ Col. 7 (11)	÷ Col. 7 (12)	÷ Col. 6 (13)
Real estate         \$765.1         \$317.9         \$2.0         \$78.8           Structures, residential         294.9         270.6         \$78.8           Structures, non-         Structures, non-         294.9         270.6         \$78.8           Structures, non-         Structures, non-         290.9         \$9.3         14.7           Land         209.9         49.3         64.1           U.S. govt. bonds         260.6         47.3         7.3           State and local bonds         33.9         7.8         8.2           Other bonds         56.0         2.8         3.3         56.0           State and local bonds         56.0         2.8         3.3         56.6           Orrporate bonds         56.0         2.8         3.3         56.6           Stock <sup>d</sup> 306.5         138.8         2.6         6.6           Monetary metals         27.4         0.2         0.2	\$2.0 8.2 8.2	78.8 14.7 64.1	\$45.9 14.5 17.3	\$444.6							
Structures, non- residential         260.3         14.7           I and         260.3         14.3           I and         209.9         49.3         64.1           U.S. govt. bonds         200.6         47.3         7.3         64.1           U.S. govt. bonds         23.9         7.8         8.2         64.1           Other bonds         33.9         7.8         8.2         54.1           State and local bonds         33.9         7.8         8.2         54.1           Corporate bonds         56.0         2.8         3.3         55.5         127.2         28.5           Cashe         306.5         138.8         2.6         6.6         6.6           Monctary metals         27.4         0.2         0.2         0.2	8 J 9 .7	14.7 64.1	17.3		\$442.6	\$70.1		\$71.7	15.8%		16.1%
residential         260.3         14.7           Land         209.9         49.3         64.1           U.S. govt. bonds         209.9         49.3         64.1           U.S. govt. bonds         260.6         47.3         7.3         64.1           State and local bonds         33.9         7.8         8.2         64.1           Other bonds         33.9         7.8         8.2         56.0         56.0         56.0         56.0         56.0         56.0         56.0         56.0         56.5	7.3 8.2	14.7 64.1	17.3								
	7.3 8.2	64.1									
U.S. govt. bonds $260.6$ $47.3$ $7.3$ State and local bonds $33.9$ $7.8$ $8.2$ Other bonds $56.0$ $2.8$ $3.3$ Corporate bonds $56.0$ $2.8$ $3.3$ Stock <sup>d</sup> $245.5$ $127.2$ $28.5$ Cash <sup>e</sup> $306.5$ $138.8$ $2.6$ $6.6$ Monetary metals $27.4$ $0.2$	7.3 8.2		14.1								
State and local bonds         33.9         7.8         8.2           Other bonds         56.0         2.8         3.3           Corporate bonds         56.0         2.8         3.3           Stock <sup>d</sup> 245.5         127.2         28.5           Cash <sup>e</sup> 306.5         138.8         2.6         6.6           Monetary metals         27.4         0.2	8.2		5.8	60.4	53.1	17.4		23.2	32.8		38.2
Other bonds         56.0         2.8         3.3           Corporate bonds         56.0         2.8         3.3           Stock <sup>d</sup> 245.5         127.2         28.5           Cash <sup>e</sup> 306.5         138.8         2.6         6.6           Monetary metals         27.4         0.2	•			16.0	7.8	10.8		17.3	IJ		v
Corporate bonds         56.0         2.8         3.3           Stock <sup>d</sup> 245.5         127.2         28.5           Cash <sup>e</sup> 306.5         138.8         2.6         6.6           Monetary metals         27.4         0.2	•					2.8		5.4	100.0		88.5
Stock <sup>d</sup> 245.5 127.2 28.5 Cash <sup>e</sup> 306.5 138.8 2.6 6.6 Monetary metals 27.4 0.2	3.3			6.1	2.8						
Cash <sup>e</sup> 306.5 138.8 2.6 6.6 Monetary metals 27.4 0.2	28.5			155.7	127.2	105.7		128.3	83.2		82.2
Monetary metals 27.4 0.2	2.6	6.6	13.0	160.0	158.4	. 44 . 6		46.7	28.2		29.1
		0.2	0.2								
Currency and deposits 258.1 6.4		6.4	12.8		•						
Deposits in other finan-											
cial institutions 20.9											
Mortgages and notes 234.0 19.5 1.2 Receivables from	1.2		10.5	31.2	30.0	10.5		11.3	35.0		36.2
business 106.7 0.6			6.3								
Receivables from											
households 31.1			4.2								
Loans on securities 4.9 1.1											
Mortgages, nonfarm 84.1 14.6											
Mortgages, farm 7.2 3.0											

.0% 13.3%	5.9	.0 18.2	10.9	.6 29.2% 30.8	.3 22.1		.5 30.2 32.0	
9.		18.		27	21.		- 28	
\$10.4	3.8	40.3		381.1	28.8		352.4	
				327.5	28.8		298.8	
\$7.1		39.6	20.0	309.2	27.7		281.5	
\$78.2		219.9		1,120.0	132.8		987.2	
\$78.2	63.5	220.8		1,237.6	132.8		1,104.8	n page 194
		\$35.6 19.5 16.1		110.8 81.7 29.1	34.1 6.9 9.1	15.1 3.0	76.6	(notes o
		\$39.2 17.2 18.9	3.1	124.6 115.1 9.5	13.8 2.8 2.7	7.8 0.4	110.8	
		\$0.9	0.9	54.1 2.0 52.1			54.1	
\$78.2	63.5 11.0 52.5	332.5 128.8	187.4 <sup>6</sup> 16.1 0.2	1,135.5 447.9 687.4	85.0 9.6 13.2	3.2 58.8	1,050.5	
\$69.8	56.7 8.8 47 9	611.0 134.7 122.7 106.8	187.4 16.1 43.3	2,639.3	299.8 44.9 79.9	3.2 91.2 80.6	2,339.3	
Life insurance reserves	funds Private Construction	Miscellaneous property Durables, producer Durables, consumer Inventories	Equitics, iarm and nonfarm Equitics, mutual finan- cial institutions Other intangibles	Gross estate Total tangible Total intangible	Debts and mortgages Payables to banks Other payables to business	rayables to nouscious Borrowing on securities Mortgages Other liabilities	Economic estate	

"farm business," "nonfarm, noncorporate business," and "personal trust funds." (We have excluded nonprofit organizations entirely.)

Since the household subsector consolidates balance sheets of all households, the debts owed by one household to another are canceled out. In other words, intrahousehold debt is excluded both as an asset and as a liability. Another difficulty arises in the treatment of households' equity in unincorporated business. Because the national balance sheets do not consolidate the household, farm business, and nonfarm business subsectors while the estate tax wealth data in effect do consolidate them,<sup>2</sup> the balance sheet totals for most types of property are relatively overstated. This means that we do not have strict comparability on a line-by-line basis, but this does not appear to be a serious difficulty for most types of property. Double-counting of the equity in unincorporated business is avoided by showing it in the household sector but not adding it into the personal sector totals. Hence, this does not lead to any errors in the total gross and economic estate figures. Following the concepts developed in Chapter 3, we refer to the prime

<sup>2</sup> That is, estate tax wealth is not uniformly classified to show all assets held by unincorporated enterprises as "equity in unincorporated business." In some cases they are separately listed as real estate, cash, etc. The equity item is listed under the heading of miscellaneous in Table 90.

#### Notes to Table 90

SOURCE: For cols. 2-7, preliminary national balance sheet estimates for 1953 by National Bureau of Economic Research.

<sup>a</sup> Preliminary estimates for 1952. All-sector totals are not yet prepared for 1953.

<sup>b</sup> 80 per cent of each type of asset in personal trust fund wealth is allocated to the top wealth-holder group because the tabulations of fiduciary income tax returns suggest that 80 per cent of fiduciary income distributable to beneficiaries went to persons with estates worth \$60,000 or more since it was from parcels of wealth of at least \$60,000 in value. Since available data do not enable us to identify the share of each type of property (e.g., real estate and stock) in the personal trust fund aggregate allocable to the top wealth-holders, we have applied the 80 per cent ratio to each type of property. For pensions and retirement funds, 10 per cent of private and 5 per cent of government funds are so allocated, and 20 per cent of annuities are estimated to belong to the top wealth-holders. This column does not add to gross estate as shown. The gross estate figure of \$381.1 billion is our best estimate.

° In excess of 100 per cent.

<sup>d</sup> The original estate tax data for stock include shares in savings and loan associations. However, we have adjusted the top wealth-holder account in cols. 8 and 10 to exclude those shares from "stock" and to include them in "cash." The assumption used for 1953 was that the top wealth-holders held 70 per cent of the \$22.5 billion worth of shares in savings and loan associations held by "individuals." This assumption is based on the belief that such shares are less concentrated than corporate stock and corporate bonds.

<sup>o</sup> Including shares in savings and loan associations. See footnote d.

<sup>4</sup> Excluded from cols. 6 and 7 but included in gross estate and economic estate in col. 2.

wealth and total wealth variants of personal wealth. Prime wealth differs from total wealth in excluding personal trust funds, annuities, and pension and retirement funds.

The top wealth-holders in 1953 held 30.2 per cent of the prime wealth in the personal sector, and 32.0 per cent of the total wealth (Table 90, cols. 12 and 13).<sup>3</sup> These columns also show estimates for the share of each of several types of property held by top wealth-holders. These range from over 100 per cent for state and local bonds down to 9 per cent for life insurance reserves. Particular interest attaches to the corporate stock figure. Our estimate for 1953 is that the top wealth group held 82 per cent of all the stock in the personal sector. This matter is discussed in more detail below in the section on type of property.

# Comparison with Survey of Consumer Finances Findings for 1953

The broadest view obtainable of wealth-holdings in 1953 is that furnished by the Survey of Consumer Finances for that year. According to the Survey, the median net worth of the nation's 54 million spending units was \$4,100; 4 per cent of the nation's spending units had a net worth of \$50,000 or more; 11 per cent had a net worth of \$25,000 or more. This upper 11 per cent held 56 per cent of the total assets and 60 per cent of the total net worth. While this group held only 30 per cent of consumer capital goods, they held 80 per cent of business and investment assets (Table 91).

Inspection of the 1950 and 1953 Surveys suggests that the spending units with \$60,000 or more of net worth were 3 per cent of all spending units in 1953. These spending units held 30 per cent of total assets and 32 per cent of total net worth.<sup>4</sup> These particular figures on the top 3 per cent are the ones we would like to compare with our estimates of the holdings of the top wealth group made by the estatemultiplier method.

First, however, it should be noted that there are some limitations to the 1953 Survey data as a representation of wealth-holdings. Not all types of property were included in the count. Insurance, consumer

<sup>&</sup>lt;sup>3</sup> Distributing the top wealth-holders' interest in personal trust funds by type of property (col. 10) is done largely in ignorance. We assumed that the top wealth-holders owned 80 per cent of the amount of each type of property in personal trust funds.

<sup>&</sup>lt;sup>4</sup> It is of interest that the Survey conclusions about this top group are based upon interviews with 124 spending units.

durables other than automobiles, currency, personal trust funds, annuities, pension reserves, bonds of corporations and of state, local and foreign governments were all omitted. Further, there appears to be some understatement of those assets which were included, with perhaps the largest understatement for liquid assets.<sup>5</sup> These exclusions

		NET W	ORTH G (per ce	ROUPS, 1 nt)	953			
Net Worth Group (dollars)	Spend- ing Units	1952 Money In- come Before Taxes	Con- sumer Capi- tal Goods <sup>a</sup>	Busi- ness and Invest- ment Assets <sup>b</sup>	Fixed Value Assets°	Total Assets	Debt <sup>d</sup>	Net Worth
Negative and 0 to			1	6	e	(1)	6	f
1,000	31	19	1	6	2	1	4	1
1,000 to 5,000	23	20	13	1	9	7	18	5
5,000 to 25,000	35	37	55	19	37	36	51	34
25,000 and over	11	24	30	80	52	56	21	60
All cases	100	100	100	100	100	100	100	100
Aggregation valu- ation (\$ bill.)		219	288	328	109	725	84	641

			TAI	BLE	91		
PROPORTION	OF	Net	Worth	AND	Components	Held	Within
		Net	WORTH	i Gr	OUPS, 1953		
			(200		+)		

SOURCE: 1953 Survey of Consumer Finances, reprinted from Federal Reserve Bulletin, 1953, Supplementary Table 5, p. 11.

<sup>a</sup> Includes automobiles and owner-occupied nonfarm houses.

<sup>b</sup> Includes owner-occupied farms, farm machinery, livestock, crops, interest in unincorporated business, and privately held corporations, real estate other than home or farm on which owner is living, and corporate stock.

<sup>o</sup> Includes liquid assets and loans made by spending units.

<sup>d</sup> Includes mortgages and other real estate debt, instalment and other short-term debt.

\* Less than 0.5 per cent.

f Negative or less than 0.5 per cent.

and the difficulty of getting full representation of top wealth-holders and complete reporting of their holdings would lead one to suspect that the Survey has probably understated the degree of inequality of wealth distribution on a prime wealth basis and more certainly on a total wealth basis.

Since all our estate tax data are for individuals, it is awkward to

<sup>5</sup> Approximately 80 to 85 per cent of the full value of the items included is accounted for by the Survey. Among the excluded items, personal trust funds, annuities, and pension reserves (which together totaled about \$100 billion) fall outside our definition of prime wealth. For a comparison of Survey and national balance sheet aggregates, see Goldsmith's *Saving in U.S.*, III, p. 107, Table W-44. Further difficulties with Survey data are discussed in the *Federal Reserve Bulletin*, September 1958, p. 1047.

check them against the spending unit estimates of the Survey. While the top wealth-holder group in 1953 made up 1.6 per cent of all adults, they represented a minimum of 2.3 per cent of the families (see Chapter 4). More precisely, in 2.3 per cent of the families there were one or more persons with \$60,000 or more of gross estate. In some unknown number of other families the combined holdings of two or more persons equaled \$60,000 or more. In the light of this, the Survey's estimate that 3 per cent of the spending units have \$60,000 or more of net worth seems altogether reasonable. Similarly, their estimate that this group had 30 per cent of the total assets and 32 per cent of the total net worth seems compatible with our findings that the top 1.6 per cent of adults held 30.2 per cent of total economic estate. To add another 0.7 per cent of all families would mean adding another 400,000 persons to the top wealth-holder group. If we impute \$60,000 to each one of them, this would add \$24 billion or an extra two percentage points to the top group's share of total economic estate: 30.2 plus 2 equals 32.2, which is close to the Survey's finding of 32 per cent of net worth. In spite of the fact that the Survey figures tend to minimize the degree of inequality by excluding certain kinds of property, we find only slightly more inequality than found by the Survey. However, the principal conclusion is that the Survey gives some confirmation of our estimates at one end of the historical series.

## Historical Changes in Inequality<sup>e</sup>

Table 90 and the companion Appendix Tables A-17 through A-21 enable us to compare top wealth-holders and the personal sector for 1953, 1949, 1945, 1939, 1929, and 1922. In looking for trends over the decades, the reader should remember that varying numbers of

<sup>6</sup>As far as is known, this is the first attempt to relate estate tax data to national balance sheet aggregates. Several other students of wealth distribution have examined changes in concentration within the group of decedent estate tax wealth-holders. W. L. Crum studied the returns for 1916-33 and concluded that "with respect to curvature, as with respect to the coefficients of average inequality, a rough lagging correlation with the economic cycle is evident. Prosperity is followed by a much greater stretching into high total valuations of the few largest estates than is depression" (*The Distribution of Wealth*, Boston, 1935, p. 10).

Working from a distribution of estate tax returns by net classes, Mendershausen was able to make some comparisons of inequality among living top wealthholders for the 1920's and the 1940's. He concludes that ". . . we find less inequality in the 1944 and 1946 distributions than in those for 1922 and 1924. This pertains of course to all returns for each of the several years, which, as has been noted before, extended over a changing range of wealth classes owing to changes in exemptions" (Goldsmith, *Saving in U.S.*, III, p. 344). These exemptions were \$50,000 in 1922 and 1924, and \$60,000 in the 1940's.

The introduction of the marital deduction in 1948 makes the net estate data



CHART 30 Top Wealth-Holders and Adult Population, Selected Years, 1922–56

Source: Table 92.

Note: As defined in the text, a "top wealth-holder" is a living person with more wealth than the estate tax exemption level. The sharp drop in the number of top wealth-holders in 1929 was due to the extraordinarily high estate tax exemption of \$100,000 effective in that year.

wealth-holders are involved in each year. These changes are due to changing exemption limits, changing prices and incomes, and changing population numbers. Chart 30 records the changing number of top wealth-holders and the changing population between 1922 and 1953.

after that year not comparable with those for earlier years. Hence, we cannot compare the inequality among top wealth-holders in the 1920's and 1940's with that in the 1950's. It is possible to compare the distribution of gross estate among the top wealth-holders in 1944 and 1953. We find virtually no difference in inequality in the two years. The great difficulty of presenting a meaningful comparison of the degree of inequality among estate tax wealth-holders over the years should be emphasized. Because of the dollar exemption (which itself changes), the changing level of asset prices, and the general growth in the economy, the top wealth-holders constitute a varying proportion of the total population. To compare the inequality within a group whose limits are so arbitrary and whose relative importance is so variable is apt to raise more questions than it answers.

-----

Comparison over the years, at least of aggregate economic estate, is facilitated by Table 92. Here we have shown as much information as could be assembled for 1922–56. In some cases the results are the product of interpolation. The estimates shown for 1929, 1933, 1939, 1954, and 1956 are particularly contrived, since the estate tax data for those years are not broken down by age and estate size and it has been necessary to use judgment in selecting devolution rates<sup>7</sup> for those years. The 1945 results are adjusted on the basis of 1944 findings, for which considerable basic data were available.

Columns 14 and 15 of Table 92 show the proportion that estate tax wealth-holders are of the total population and columns 16 through 18 show their share of total wealth. Thus, in 1922 0.47 per cent of the population held 29.2 per cent of the total equity of the personal sector. In 1949, 0.80 per cent of the population held 22.7 per cent of the total equity. In 1953, 1.04 per cent of the population held 28.5 per cent of the total equity. The whole set of figures suggests a downward drift in the degree of concentration of wealth, particularly from 1929 to 1945. The peak year for inequality in this series is 1929, with 0.27 per cent of the population holding 29.0 per cent of the wealth. There is considerable variability in these relationships over short periods. The variability may be due to sampling or other errors in the estate tax wealth estimates, to difficulties in the national balance sheet estimates, or to a combination of such errors. On the other hand, it is not altogether implausible that the degree of inequality should have increased during the 1920's, returned to below the pre-1929 level in the 1930's, fallen still more during the war, and then increased from 1949 to 1956.

Table 93 summarizes, perhaps in a clearer way, what changes in inequality are estimated.<sup>8</sup> It shows the shares of wealth for 1953 for the top percentiles of the population that estate tax wealth-holders were in some earlier years. This is shown graphically in Chart 31 which shows the upper right-hand section of a Lorenz curve.<sup>9</sup> The easiest

 $<sup>^{7}</sup>$  A devolution rate is an average estate-multiplier for numbers of persons or amount of estate.

<sup>&</sup>lt;sup>8</sup> This section has been much improved by the suggestions of Thor Hultgren.

<sup>&</sup>lt;sup>9</sup> This chart should be read downward from the upper right-hand corner to the bottom left-hand corner. The line of equality shows the relationship that would obtain if the top 1 per cent of the population held 1 per cent of the wealth. It will be noted that the farther a line is from the line of equality, the greater is the inequality represented. According to this chart, the share of wealth held by the top 0.5 per cent moved, from 1929 to 1953, about one-third of the distance toward absolute equality.

ET	Vealth- riant)	Adjusted Aortality l s ) (8)	517ª	330b	461b	758b	I	782ª	914ª.c	1,045ª	1,014 <sup>th</sup>	1.107	1.187	1.269		1.659	1.661		2,109
tonal Balance She	Number of Top N Holders (Basic Va	White K Mortality N (thousand (7)	454 <sup>8</sup>	495ª 200b	4026	641 <sup>b</sup>	529ª	660ª	759ª.º	859ª	967₽	938	1,003	1,079		1,417			
агтн то Nat	Domilation	Aged 20 and over ions) (6)	65.1	68.0 74.4	78.8	85.5	87.8	91.7	92.9	93.9	95.5	97.0	98.0	99.2	101.4	103.4	105.4	107.8	111.0
ите Тах W <sub>E</sub> / 1922-56		Total Population (milli (5)	110.1	114.1 121 8	125.7	131.0	133.4	138.4	139.9	141.4	144.1	146.6	149.2	151.7	157.0	159.6	161.2	164.3	167.2
ULATION AND ESTA SELECTED YEARS,	Personal Sector	Prime Wealth Variant (4)	278.3	400 8	300.7	326.5			598.4				760.6			987.2	1,060.2	1,142.4	1,230.0 <sup>d</sup>
i-Holders to Pop Aggregates, for	Total Equity, 1	Total Wealth Variant 1 o 11 a r s ) (3)	296.6	441 8	329.1	368.7			671.8				855.0			1,104.8	1,190.7	1,292.0	1,400.0 <sup>d</sup>
ATING TOP WEALTH	ets, Total Variant	Personal Sector (billion c (2)	347.8	521.5	387.9	426.6			722.5				942.7			1,237.6	1,340.9	1,465.4	
LECTED DATA REI	Total Ass Wealth	All Sectors (1)	653.0	981.7	733.1	877.4			1,626.2				2,063.5		2,639.3				
S		Year	1922	1924	01933	0 1939	1941	1944	1945	1946	1947	1948	1949	1950	1952	1953	1954	1955	1956

TABLE 92

TAV WP Ē ReT. 110 Ê SPLECTED DATA RELATING TOP WEALTH-HOLDERS THE SHARE OF TOP WEALTH-HOLDERS

						1 D	P			
						WEALTH-H	OLDERS AS			
	AGGREGATE E	CONOMIC ESTAT	TOP WEAL?	TH-HOLDERS		PERCEN'	IAGE OF	SHARE OF	PERSONAL V	VEALTH
					Aggregate Gross	Total	Adult	него ву т	OP WEALTH-	HOLDERS
				Total	Estate of Top	Popu-	Popu-	Basic	Prime	Total
	Basic	Variant	Prime Wealth	Wealth	Wealth-Holders,	lation	lation	Variant	Variant	Variant
			- Variant	Variant	Basic Variant	Col. 8	Col. 8	Col. 10	Col. 11	Col. 12
	White	Adjusted	Adjusted	Adjusted	Adjusted	·ŀ	÷	·ŀ	·ŀ	•j•
YEAR	Mortality	Mortality (bi)	Mortality <sup>®</sup> Ilion dollar	Mortality <sup>f</sup>	Mortality	Col. 5	Col. 6	Col. 4	Col. 4	Col. 3
	(6)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1922	70.0 <sup>a.g</sup>	81.3 <sup>a,g</sup>	86.2 <sup>h</sup>	98.1	92.28	0.47	0.79	29.2	30.7	32.7
1924	75.98.8	86.6 <sup>a,g</sup>								
ر 1929	$104.2^{b}$	119.1 <sup>b,g</sup>	126.1 <sup>h</sup>	146.2	138.4 <sup>b.g</sup>	0.27	0.44	29.0	30.7	33.2
2 1933	60.6 <sup>b</sup>	70.1 <sup>b</sup>	$72.1^{h}$	89.9		0.37	0.44	23.3	24.0	27.3
1939	81.0 <sup>b</sup>	95.1 <sup>b,g</sup>	100.8	126.3	109.3 <sup>b</sup> .€	0.58	0.89	29.1	30.6	34.1
1941	65.1ª,i									
1944	105.0ª	124.7ª				0.56	0.86			
1945	117.8ª.º	139.64,0	1,480.0 <sup>h</sup>	183.6	153.6	0.65	0.98	23.2	24.7	27.4
1946	130.5ª	152.2ª.s				0.74	1.11			
1947						0.70	1.06			
1948	133.98	159.4		223.9	177.0	0.75	1.14			
1949	144.0s	171.4s	$181.7^{h}$	215.9	190.28	0.80	1.26	22.7	24.6	26.0
1950	162.98	193.9 <sup>g</sup>			216.2%	0.81	1.23			
1952										
1953	235.2	281.5	298.8	352.4	309.2	1.04	1.60	28.5	30.2	32.0
1954 1055		297.0 <sup>b.g</sup>	314.8 <sup>b</sup>	375.8	315.0	1.04	1.57	28.0	29.7	31.5
CC41										
1956	·	406.6 <sup>b.g</sup>	431.0 <sup>h</sup>	510.0	432.6	1.26	1.90	33.0	35.0	36.3
				(note	s on page 202)					

IN PERSONAL WEALTH, 1922-56

201

			(p	er cent c	of wealth	)		•	
Per Cent of Population	1922	1929	1933	1939	1945	1949	1953	1954	1956
Top 0.27		29.0	-		16.9		18.0		
0.37			23.3		18.6		20.2		
0.47	29.2				20.4		22.0		
0.58				29.1	22.1		23.8		
0.65					23.2		24.8		
0.80						22.7	26.6		
1.04							28.5	28.0	
1.26									33.0
Top 0.50	29.8	32.4	25.2	28.0	20.9	19.3	22.7	22.5	25.0

TABLE 93 SHARE OF TOP GROUPS OF WEALTH-HOLDERS IN TOTAL POPULATION AND IN TOTAL EQUITY,<sup>a</sup> PERSONAL SECTOR, SELECTED YEARS, 1922-56 (Der cent of wealth)

SOURCE: Table 92, cols. 14 and 16. Percentages for top 0.5 per cent of population, shown in last row, are derived from Chart 31 by extension of lines from known points. The extensions were made by drawing lines parallel to that for 1953, except for 1945, for which detail is available for the top 0.65 per cent. The 1953 data are derived from adjusted data from Table 24.

\* Basic variant.

way to see what changes are involved is to hold the percentage of the population constant, which can be done with minimum guessing only for the top 0.5 per cent of the population for the series of years (bottom row in Table 93). This shows quite clearly that there were three periods when inequality declined in jumps from the 1920's to the 1930's and then to the war and postwar periods.

#### Notes to Table 92

<sup>a</sup> Multiplier process carried out for both sexes combined, hence these estimates are slightly high compared to those of 1948-53.

<sup>b</sup> Estimates of wealth-holders and aggregate economic estate made by multiplying number of returns and economic estate on returns by selected devolution rates. The rates were selected by inspection of devolution rates in surrounding years and with reference to changing exemption limits.

e Estimated from 1944 and 1946 findings.

<sup>d</sup> Estimated from 1953, 1954, and 1955 balance sheets.

• Relationship between basic variant and prime wealth variant estimated on basis of 1953 findings.

<sup>f</sup> Personal trust funds allocated to estate tax wealth-holders on the following basis: 1953, 85 per cent of the total; 1949, 80 per cent; 1939, 75 per cent; 1933, 1929, and 1922, 66 per cent.

<sup>e</sup> Includes a reduction of life insurance to equity value. For 1950 this correction was estimated to be \$20 billion; for 1949 and 1948, \$19 billion; for 1946, \$15 billion; for 1939 and 1929, \$7 billion; for 1922 and 1924, \$5 billion.

<sup>h</sup> Basic variant adjusted to prime wealth variant on basis of 1953 relationship of basic to prime wealth.

<sup>i</sup> Apparently there was an abnormally old group of decedent wealth-holders in 1941.

#### IN PERSONAL WEALTH, 1922-56

The change in inequality over time is modified somewhat by considering the percentage that estate tax wealth-holders are of adults rather than of the total population. In 1920, persons over 20 made up 57.9 per cent of the total population; in 1930, 61.1; in 1940, 65.9; in 1950, 65.7 per cent; and in 1955, 63.8. In view of this striking change, and also because adulthood is relevant to wealth-holding status, we have shown the percentage that estate tax wealth-holders





were of the adult population in column 15 of Table 92. While the share of wealth held by the top 0.5 per cent of all persons fell from 32.4 in 1929 to 22.7 per cent in 1953 (Table 93), the share held by the top 0.44 per cent of adults had a slightly larger percentage fall, from 29.0 to 18.3 per cent (Table 94). The fact that there were more children (most of whom held no wealth) per hundred of the population in the 1920's than in the 1950's means that the top 1 per cent of adults were a larger part of the total population in 1956 than in 1922.

Further, it means that to include the top 1 per cent of adults in 1956 one has to count down to smaller estate sizes than in 1922. Presumably it is because of this that we find a greater loss of share on an adult than on an all-person basis. The share of the top 1 per cent of adults shows a greater fall over the years than does the share of wealth of the top 0.5 per cent of all persons.<sup>10</sup> The top 1 per cent of adults held 31.6 per cent of wealth in 1922, 24.2 per cent in 1953, and 26 per cent in 1956 (Table 94, bottom row, and Chart 32).

TABLE 94

SHARE O AND I	n Tota	Groups l Equit	OF WEA Y, <sup>a</sup> Pers (per	CLTH-HO SONAL SI Cent of	LDERS IN ECTOR, S wealth)	N TOTAL Selectei	Adult Years	Popula , 1922–5	TION 6
Per Cent of Population Aged 20 and over	1922	1929	1933	1939	1945	1949	1953	1954	1956
Top 0.44	_	29.0	23.3				18.3		
0.79	29.2						22 3		
0.89				29.1			23.3		
0.98					23.2		24.1		
1.26						22.7	26.4		
1.57							28.4	28.0	
1.60							28.5		
1.90									33.0
Top 1.00	31.6	36.3	28.3	30.6	23.3	20.8	24.3	24.0	26.0

SOURCE: Table 92, cols. 15 and 16. Percentages for top 1 per cent of adults, shown in last row, are derived from Chart 32 by extension of lines from known points. The 1953 data are derived from adjusted data from Table 24.

<sup>a</sup> Basic variant.

Evaluation of the finding that inequality among all persons and among all adults has fallen over the period 1922–53 is aided by using the family as the wealth-holding unit. As was discussed in Chapter 4, the nearest that estate tax data enable us to come to a family wealth distribution is a rough count of the number of families having at least one member with at least \$60,000. This was established by subtracting the number of married women from the total of top wealth-holders. Thus, for 1953 the total of 1.6 million top wealth-holders less the 0.3

<sup>10</sup> A comment by P. F. Brundage to the author makes it clear that one may make a further step here to say that a statistical determinant of the degree of inequality of wealth-holding is the age composition of the population. Increasing the percentage that adults are of the total population tends to decrease the degree of inequality, or to offset a rise in inequality. However, increasing the percentage that older-aged adults are of the total adult population tends to increase inequality (Chapter 7). million married women yields the minimum estimate of 1.3 million families. The identical calculation for 1922 is 517,000 top wealth-holders less 45,000 married women, which yields the minimum estimate of 472,000 families.<sup>11</sup>





Setting these numbers of families among top wealth-holders against the numbers of total adults less married women in the total population, we find that families among the top wealth-holder group were

<sup>11</sup> Married women were 9.7 per cent of decedent estate tax wealth-holders in 1953, but only 5.5 per cent in 1922. (They were 5.3 and 6.0 per cent in 1923 and 1924 and 8.1 per cent in 1948.) In the estimate of living top wealth-holders, married women were 18 per cent in 1953 and 8.5 per cent in 1922. Unfortunately, estate tax data do not make possible a continuous series on this relationship.

1.4 per cent of all families in 1922<sup>12</sup> and 2.0 per cent in 1953. Since the top wealth-holder groups in the two years held almost the same share of total equity (29.2 and 28.5 per cent, respectively), it follows that the reduction in inequality is shown by the increase in the percentage of families.<sup>13</sup> By plotting these points on a Lorenz curve and

	Top Wealth	e-Holders	
Share of Total	Per Cent of	Per Cent of	Per Cent of
Personal Equity	All Persons	All Adults	All Families
29.2	0.47	0.79	1.4
28.5	1.04	1.60	2.0
	Share of Total Personal Equity 29.2 28.5	Top WealthShare of Total Personal EquityPer Cent of All Persons29.20.47 1.04	Top Wealth-Holders       Top Wealth-Holders       Share of Total Personal Equity     Per Cent of All Persons     Per Cent of All Adults       29.2     0.47     0.79       28.5     1.04     1.60

 TABLE 95

 Selected Data on Top Wealth-Holders, 1922 and 1953

projecting the lines a short distance, we estimate that the top 2 per cent of families in the two years had 33 per cent of all wealth in 1922. It is apparent that there was considerably more splitting of estates between spouses in 1953 than in 1922 since the percentage of adults who were top wealth-holders doubled while the percentage of families with a top wealth-holder increased only 40 per cent (Table 95).

It is concluded then that the decline in inequality shown on the

<sup>13</sup> W. I. King estimated that in 1921 the top 2 per cent of property owners held 40.19 per cent of all wealth. The top 1.54 per cent held 37.25 per cent of wealth; the top 0.63 per cent held 28.14 per cent of wealth. This may be compared with our finding that in 1922 roughly the top 1.4 per cent of families held 29.2 per cent of wealth. Since some families include two or more property owners, it is probable that there would be a greater concentration among families than among property owners. Hence, it appears that King, by his entirely different methods, found a higher degree of inequality in wealth-holding than we do for the same period. ("Wealth Distribution in the Continental United States," *Journal* of the American Statistical Association, January 1927, p. 152.)

It is also of interest that both G. K. Holmes and C. B. Spahr concluded that the top 1 per cent of families in 1890 owned 51 per cent of wealth. (For Holmes' work, see "The Concentration of Wealth," *Political Science Quarterly*, December 1893, pp. 589-600. Spahr's estimates are reported in his book, *The Present Distribution of Wealth in the United States*, New York, 1896.) It is difficult to believe that wealth was actually that highly concentrated in 1890 in view of the 1921 and 1922 measures.

<sup>13</sup> Using the Census definition of "households" yields the even smaller change of from 1.9 per cent in 1922 to 2.3 per cent in 1953. However, this overlooks an important change in household size over the years. In the 1920's households included many more subfamilies than was the case in any period since. (In 1910, 23 per cent of persons were heads of households; in 1950, 29 per cent were heads of households. Paul Glick, *American Families*, New York, 1957, p. 11.) To get around this difficulty it seemed best to adopt the "adults less married females" concept referred to above as the family measure. basis of individuals tends to overstate the decline which would be found on a family basis (see Chart 3 in Chapter 1).

Another way to test whether we have really found a decline in inequality is to find out how much error there would have to be in the balance sheet estimates upon which all the percentage estimates of wealthholdings are based in order to invalidate our finding of a decline. Suppose the balance sheet estimates of total personal equity are 10 per cent too high in 1953 and 10 per cent too low in 1922. This error (assumed in the direction unfavorable to a decline in inequality) would mean that instead of having 29.2 per cent of total equity in 1922 and 29.5 per cent in 1953, the top wealth-holders would have 26 per cent in 1922 and 32 per cent in 1953. Plotting these points on Chart 32 would indicate that both points could very well lie on the same Lorenz curve and hence that no decline in inequality actually

		TABLE 96	
Share	OF TOTAL	EQUITY, PERSONAL	SECTOR, HELD BY TOP
	0.47 Per	CENT OF PERSONS,	1922 AND 1953
		(per cent)	

Year	Adjusted Mortality Rates	White Mortality Rates	
1922	29.2		
1953	22.0	19.0	

took place. In this writer's judgment, however, there is little likelihood of an error of this size.

Interestingly, the conclusions about changes over the years are not affected by the selection of the wealth variant. The gap between prime wealth and total wealth as here defined changed very little in the thirty-year period (Table 92, cols. 16, 17, and 18). A more significant difference may be involved in the choice of mortality rates. The findings shown in Table 95 are based on our adjusted mortality rates, calculated as constant percentages of white rates for the respective years. However, it is generally believed that social and economic differentials in mortality have narrowed over time and, to the extent that such narrowing has taken place, we have understated the decline in inequality between 1922 and 1953. This means the multipliers used for 1922 are too low because the mortality rates are too high. The maximum possible error here is suggested by a comparison of the results for 1922 using the adjusted mortality rates with those for 1953 using white mortality rates. Estimates of numbers of top wealthholders using white mortality rates are shown in Table 92, column 7. The 1922 result of the top 0.47 per cent of the population holding 29.2 per cent of the wealth then compares with the top 0.88 per cent of the population in 1953 (1.4 million top wealth-holders) holding 24.6 per cent of the wealth. This means that the top 0.47 per cent in 1953 held 19.0 per cent of the wealth, according to white mortality rate estimates. It is possible then that the fall in the share of the top 0.47 per cent in 1953<sup>14</sup> (Table 96). It is difficult to imagine any combination of errors that would yield a result of increasing concentration over time.

# Changes in Share of Wealth Held by Top One Per Cent of Adults, by Type of Property

Between 1922 and 1953 the top 1 per cent of the adult population experienced a decline in the share of total equity in the personal sector and a decline in the share of most types of property (Table 97). Notable exceptions are "stock" and "other bonds," which appear to have changed little in degree of concentration. All studies of stock ownership indicate that this asset is highly concentrated.<sup>15</sup>

However, the unreasonable variation of some of these series plus the greater than 100 per cent figures for state and local bonds yield a less than convincing picture. It would seem appropriate to review the possible sources of error in the whole process of estimating wealth distribution. The irregularities referred to above could have arisen out of

<sup>&</sup>lt;sup>14</sup> The relative fall of 10 percentage points is meant to be indicated here. The percentage for 1953 is believed to be substantially too low.

<sup>&</sup>lt;sup>15</sup> Butters, Thompson, and Bollinger give the following as their best estimate for 1949 (based on SRC data, tax return data, and their own field surveys): The upper 3 per cent of spending units as ranked by income owned 75 per cent of marketable stock; the top 1 per cent, 65 per cent; the top 0.5 per cent, slightly over one-half; and the top 0.1 per cent, about 35 per cent of all the marketable stock owned by private investors. They indicate that these percentages would be higher if the stock held by personal trust funds were allocated to individuals. (*Effects of Taxation: Investments by Individuals*, Boston, 1953, p. 25, and also Chapters XVI and XVII.) As to a ranking by size of stock holdings, the 1 per cent of all spending units that owned \$10,000 or more of stock accounted for at least two-thirds of the total value of stock reported to the 1952 Survey of Consumer Finances (*Federal Reserve Bulletin*, September 1952, p. 985). For one measure of concentration of stock ownership by use of a total wealth ranking, see Goldsmith, *Saving in U.S.*, III, Table W-53. He estimated that in 1950 those spending units with \$60,000 or more of net worth held 76 per cent of corporate stock. The reader is cautioned that rankings by income and wealth are not interchangeable.

### IN PERSONAL WEALTH, 1922-56

random errors in the sampling process.<sup>16</sup> For example, the stock figure in one year could be too high because of an unrepresentative age distribution of decedents with large stock holdings. Another possible cause is the selection of mortality rates; we could have the wrong measure of the differential mortality enjoyed by the rich, or there could be errors in the way property is valued or classified on the estate

	.,, (p	er cent)	, ,	,		
Type of Property	1922	1929	1939	1945	1949	1953
Real estate	18.0	17.3	13.7	<b>1</b> 1.1	10.5	12.5
U.S. govt. bonds	45.0	100.0	91.0	32.5	35.8	31.8
State and local bonds	88.0	Ъ	b	b	77.0	b
Other bonds	69.2	82.0	75.5	78.5	78.0	77.5
Corporate stock	61.5	65.6	69.0	61.7	64.9	76.0
Cash				17.0	18.9	24.5
Mortgages and notes	—			34.7	32.0	30.5
Cash, mortgages, and notes	31.0	34.0	31.5	19.3	20.5	25.8
Pension and retirement funds	8.0	8.0	6.0	5.9	5.5	5.5
Insurance	35.3	27.0	17.4	17.3	15.0	11.5
Miscellaneous property	23.2	29.0	19.0	21.4	15.0	15.5
Gross estate	32.3	37.7	32.7	25.8	22.4	25.3
Liabilities	23.8	29.0	26.5	27.0	19.0	20.0
Economic estate	33.9	38.8	33.8	25.7	22.8	27.4

TABLE 97

SHARE OF PERSONAL SECTOR ASSETS AND LIABILITIES<sup>8</sup> Held by TOP ONE PER CENT OF ADULTS 1922, 1929, 1939, 1945, 1949. AND 1953.

SOURCE: Table 90 and Appendix Tables A-17 through A-21, col. 13. National balance sheet data used for 1922, 1929, and 1939 are from Goldsmith, Saving in U.S., III; for 1945, 1949, and 1953, from preliminary unpublished tables prepared by the National Bureau of Economic Research.

<sup>a</sup> Total wealth variant.

<sup>b</sup> In excess of 100 per cent. See text.

tax returns. On the other hand, we could be confronted with difficulties in the national balance sheet aggregates for the several types of property.<sup>17</sup> It also is possible that we have double-counted some of the assets in personal trust funds in making adjustments to move from the basic to the prime to the total wealth variant for top wealth-holders.

All of these considerations urge that the whole of Table 97 be used

<sup>16</sup> The top wealth-holder group held substantially more market value in stocks in 1953 than 1949. The aggregate gross estate of decedent top weath-holders was 36.5 per cent in stock in 1949, but 40.5 per cent in stock in 1953. <sup>17</sup> It seems probable, for example, that balance sheet difficulties are responsible

for the high percentages for state and local bonds in 1929 and 1939.

in evaluating any single figure in it, and that each individual item be treated with caution.

## Comparison with Wealth Distribution in England and Wales

In appraising a given degree of inequality in wealth distribution, it is useful to have not only a historical perspective, but also a comparison with other national economies. The only other nation for which similar studies have been made is Great Britain. British study of wealth distribution by the estate-multiplier method goes back to the work of





Bernard Mallet in 1908 and includes the later work of G. H. Daniels, H. Campion, and T. Barna. More recently Allan M. Cartter, an American, and Kathleen M. Langley have used this method with British tax data. The British estate tax has had a low filing requirement of £100 and hence the estate-multiplier method can give a much more nearly complete picture of wealth distribution for Britain than for this country.

Comparison of inequality in the United States and in England and Wales is made possible by our findings set forth above and those

TABLE 98

Number	r of Pe	rsons Aged an	25 AND O ID WALES,	ver in Ea 1946 and	сн Сарітаї 1947	GROUP, E	NGLAND
Capital	Group	All Pe	rsons	М	ales	Fema	ales
(poun	ds)	Thousands	Per Cent	Thousand	s Per Cent	Thousands	Per Cent
100 or less	3	16,856	60.62	7,027	53.72	9,829	66.76
100 to	1,000	7,727	27.79	4,272	32.66	3,455	23.47
1,000 to	5,000	2,465	8.87	1,352	10.33	1,113	7.56
5,000 to	10,000	383	1.38	221	1.69	162	1.10
10,000 to	25,000	251	0.90	139	1.06	112	0.76
25,000 to	100,000	106	0.38	60	0.46	46	0.31
Over 100,	000	15.5	0.06	11	0.08	4.5	0.03
Total		27,804	100.00	13,082	100.00	14,722	100.00

SOURCE: Kathleen M. Langley, "The Distribution of Capital in Private Hands in 1936-38 and 1946-47 (Part I)," Bulletin of the Oxford University Institute of Statistics,

December 1950, Table XIII, p. 353.

of Langley,<sup>18</sup> who related her own study of postwar wealth distribution to studies by others of earlier periods. Except for the exclusion of life insurance, the British data seem to be quite comparable to our own. Property in trust is treated in the same way in the two countries. This comparison shows a much greater inequality in England and Wales than in the United States.

In 1946-47 the top 1.5 per cent of adults owned 53 per cent of the total wealth in England and Wales, while in 1953 the top 1.5 per cent of adults in the United States owned only 27 per cent of the wealth.<sup>19</sup> Chart 33 shows, by use of a Pareto curve, how the upper tails in the two countries compare.

<sup>18</sup>Kathleen M. Langley, "The Distribution of Capital in Private Hands in 1936-38 and in 1946-47," Bulletin of the Oxford University Institute of Statistics, December 1950, pp. 339-359, and February 1951, pp. 34-54.

<sup>19</sup> The findings for the two countries are not strictly comparable for several reasons. First, the percentage of population column refers to persons over 25 in England and Wales and persons over 20 in the United States. Since the wealth-



CHART 34 Lorenz Curves of Gross Estates Among Adults, England and Wales, 1946–47, and United States, 1953

Source: Table 100 for England and Wales; Table 99 for the United States.

A rough estimate of the way the two distributions compare through the whole range of wealth-holders is offered in Tables 98 and 99 and Chart 34. The comparison is particularly rough because the estimated American distribution is built up from very few clues, as can be seen from the following description of our procedure. Our primary finding that 1.7 million individuals have "estate tax wealth" of over \$60,000

holders would be a larger part of the population over 25 than of the population over 20, this means we have overstated inequality in the United States compared to that in England and Wales. Secondly, the British data are estimated using general mortality rates while we have used adjusted mortality rates, which again tends to overstate the inequality in the United States. Finally, the British data exclude Scotland, which understates the inequality in Britain. To some extent these differences offset each other, but we have undoubtedly understated the difference between the two countries in Chart 34.

### IN PERSONAL WEALTH, 1922-56

and that they hold an aggregate of 309.2 billion of basic variant gross estate is complemented by the deduction that there were another 101.7 million individuals over age 20 who held the remaining part of the aggregate gross estate in the hands of all individuals. These 101.7 million persons are undoubtedly spread over the estate sizes below 60,000 in a very skewed distribution, with more than half of them under 4,000. The median net worth of a spending unit in 1953 was 4,100, so the individual median may be presumed to lie below that

			Average	Total Gro (Basic	oss Estate Variant)
Gross Estate Size (dollars)	Number of Persons Aged 20 and over (millions)	Per Cent	Estate Size (dollars)	Billion Dollars	Per Cent
0 to 3,500	51.70	50.0	1,800	93.1	8.3
3,500 to 10,000	19.00	18.4	6,000	114.0	10.2
10,000 to 20,000	21.89	21.2	15,000	328.4	29.3
20,000 to 30,000	6.00	5.8	25,000	150.0	13.4
30,000 to 40,000	2.00	1.9	35,000	70.0	6.3
40,000 to 50,000	0.80	0.8	45,000	36.0	3.2
50,000 to 60,000	0.35	0.3	55,000	19.3	1.7
Total under 60,000 <sup>a</sup>	101.74	98.4	7,900	810.8	72.4
60,000 to 70,000b	0.18	0.1	61,000	10.5	0.9
60,000 and over <sup>a</sup>	1.66	1.6	186,265	309.2	27.6
All estate sizes	103.40	100.0	10,800	1,120.0	100.0
Median estate size <sup>o</sup>			3,500		

			TA	BL	E 99			
Estimated	Dıs	TRIBUTIC	N	OF	TOTAL	Adult	POPULAT	ION
by Gi	ROSS	Estate	Sı	ίΖE,	Unitei	d State	s, 1953	

<sup>a</sup> Derived from Table 92.

<sup>b</sup> Table 24.

• Estimated from fact that median net worth of a spending unit in 1953 was \$4,000.

at, say, \$3,500. The rate of increase in the number of wealth-holders in the \$10,000 estate classes above \$60,000 is variable, but is generally smaller at the lower end of the range (Table 24). There is a flattening of the frequency curve between \$90,000 and \$60,000, with almost the same numbers in each bracket in that range. However, ignoring this peculiarity and extending the long swing of the line back to the \$0 to \$10,000 class, we come up with the distribution shown in Table 99.

A similar finding of greater inequality in England appears when the distribution of net worth among English income units in 1953 is compared (with certain cautions noted below) with the American

### CHART 35

### Upper Section of Lorenz Curves of Gross Estate Held by Top Percentiles of Adults, England and Wales and United States, Selected Years, 1911–53



Source: For England and Wales, Kathleen M. Langley, "The Distribution of Capital in Private Hands in 1936-38 and 1946-47 (Part II)," Bulletin of the Oxford University Institute of Statistics, February 1951, Table XVB, p. 46. For the United States, the 1953 point for the top 1.6 per cent of adults and the 1922 point for the top 0.79 per cent of adults were estimated from Table 92. The slope of the two lines was estimated from Table 94.

214

Survey of Consumer Finances finding in Table 91. In Britain the top 2.9 per cent of income units held 48.9 per cent of the total net worth; the top 9.9 per cent held 75.7 per cent of the total net worth. In the United States, on the other hand, the top 3 per cent of spending units held about 33 per cent of net worth; the top 10 per cent about 56 per cent of net worth. Apparently the leading difference in the two surveys was the use of the income unit in Britain as opposed to the spending units in the United States. Since there are more income than spending units (particularly single-person units) as the two are defined, it is probable that inequality is relatively overstated for Britain in a straight comparison.<sup>20</sup>

It would appear that the historical picture of decline in the degree of inequality of wealth distribution is similar in the two countries, at least for the period 1922–46 (Chart 35). However, throughout the whole period the inequality has been considerably greater in England and Wales than in the United States (Table 100). Langley explains this table as follows: "The distribution of capital had gradually become more equal during these years. One per cent of the persons aged 25 and over in England and Wales owned 50 per cent of the total capital in 1946–47; in 1936–38 the percentage was 55; in 1924–30 one per cent of the persons owned 60 per cent of the total capital; while in 1911–13, one per cent of the persons owned 70 per cent of the total capital."<sup>21</sup>

## Comparison with Changes in Income Inequality

It helps to place the findings on changes in wealth inequality in perspective to compare them with Simon Kuznets' findings on income in-

<sup>20</sup> In discussing the two surveys, K. H. Straw ("Consumers' Net Worth, the 1953 Savings Survey," Bulletin of the Oxford University Institute of Statistics, February 1956, Table II, p. 4) supplies us with some clues to the reasons for the difference in inequality. In Great Britain 16 per cent of the population is over 60 years of age, while the comparable figure for the United States is 12 per cent. In the United States 9 per cent of the spending units are headed by farm operators, while only 1 per cent of the British income units are so headed. In the United States half the spending units own their own homes, while in Britain only 27 per cent of the primary income units own their homes.

Straw declares that "probably the most interesting feature of the comparison is the generally higher ratio of net worth to income found in the United States. Over all the spending units in America net worth amounted to almost three years' gross income, compared with a little less than two years' in Great Britain" (*ibid.*, p. 55). Also see Harold Lydall and J. B. Lansing, "A Comparison of Distribution of Personal Income and Wealth in the United States and Great Britain," *American Economic Review*, March 1959, pp. 43-67.

<sup>21</sup> Bulletin of the Oxford University Institute of Statistics, February 1951, p. 47.

	DISTRIBUTION	OF CAPITAL IN	TAE ENGLAND AND V (cumulativ	3LE 100 WALES, 1911- re percentages)	13, 1924–30, 15	<b>36-38, and 1</b> 5	)4647	
	194	6-47	1936-	-38	192	4-30	161	-13
Capital Group (pounds)	Persons	Capital	Persons	Capital	Persons	Capital	Persons	Capital
Total	27,804,000	£24.3 bill.	25,502,000	£17.2 bill.	22,336,000	£13.7 bill.	18,745,000	£6.0 bill.
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
More than 100	39.38	95.85	24.75	94.71	21.4	96.4	11.7	93.3
More than 1,000	11.58	84.26	6.92	82.84	5.8	85.6	3.0	83.0
More than 5,000	2.72	63.27	1.84	65.45	1.6	68.1	0.9	66.9
More than 10,000	1.34	51.92	0.94	55.26	0.8	57.9	0.4	57.0
More than 25,000	0.44	35.49	0.33	40.46	0.3	43.1	0.2	42.4
More than 100,000	0.06	16.31	0.05	21.07	0.04	23.9	0.03	22.9
Source: Kathl Private Hands in	een M. Langley 1936–38 and 15	, "The Distribut 346-47 (Part II	tion of Capital in )," Bulletin of the	Note:	Figures are for	persons aged 2	25 and over.	

216

Oxford University Institute of Statistics, February 1951, Table XVB, p. 46. Based on general mortality rates.

### IN PERSONAL WEALTH, 1922-56

equality presented in Shares of Upper Income Groups in Income and Savings.<sup>22</sup> He traced changes in the shares of the upper 1 and 5 per cent of persons in a per capita distribution from 1913 to 1948 and found that the top 5 per cent's share of basic variant income had a rather narrow range of movement during the period 1919–38, with no perceptible and sustained change. However, he found that "from 1939 to 1944 it dropped from 23.7 to 16.8 per cent—almost 7 percentage points in five years; and in 1947 and 1948 its level was only slightly higher—17.6 and 17.8 per cent respectively. During the last decade, then, the share of the top 5 per cent declined about a quarter."<sup>23</sup> The fall for the top 1 per cent was from 12 per cent in 1939 and 1940 to about 8.5 per cent's share fell by well over three-tenths, from 27.1 to 17.9 per cent.

Our finding that the share of wealth held by the top 2 per cent of families fell from about 33 to 29 per cent from 1922 to 1953, or about one-eighth, would seem compatible with Kuznets' findings<sup>24</sup> and with the general belief that there has been some lessening of economic inequality in the United States in recent decades. Wealth distribution appears to have changed less than income distribution during this period.

<sup>22</sup> New York, National Bureau of Economic Research, 1953.

<sup>23</sup> Ibid., p. xxxvii.

<sup>24</sup> Kuznets' per capita distribution of income should not be confused with a per earner distribution. In the former, family income is divided by number of family members to obtain an array of families (or individuals) by per capita income. Since our wealth-holder data are not calculated on a per capita basis, we cannot make a direct comparison with Kuznets' findings on income. Our estimates of the distribution of wealth by families seem to be conceptually closest to Kuznets' per capita procedure. It is worth mentioning here that our method of ranking cannot reach all the change in economic inequality which occurred. Kuznets ranked persons by income but ignored changes on capital account. We have ranked persons by wealth and ignore changes in their income account. The ideal study would catch both kinds of change for both rankings.