

Income Inequality in France, 1901–1998

Thomas Piketty

Ecole des Hautes Etudes en Sciences Sociales, Paris-Jourdan, and Centre for Economic Policy Research

This paper uses data from income tax returns (1915–98), wage tax returns (1919–98), and inheritance tax returns (1902–94) in order to compute homogeneous, yearly estimates of income, wage, and wealth inequality for twentieth-century France. The main conclusion is that the decline in income inequality that took place during the first half of the century was mostly accidental. In France, and possibly in a number of other countries as well, wage inequality has been extremely stable in the long run, and the secular decline in income inequality is for the most part a capital income phenomenon. Holders of large fortunes were badly hurt by major shocks during the 1914–45 period, and they were never able to fully recover from these shocks, probably because of the dynamic effects of progressive taxation on capital accumulation and pretax income inequality.

I. Introduction

The primary objective of this research is to document trends in income inequality in France during the twentieth century. Did income distribution become more unequal or more equal in France over the course of the 1901–98 period? What are the specific periods in which income inequality increased or declined, and what income deciles were most affected by these trends?

I am grateful to seminar participants at Columbia, Harvard, Massachusetts Institute of Technology, Chicago, London School of Economics, and Paris for lively discussions. I also thank an editor and two anonymous referees of this *Journal* for their helpful comments. I gratefully acknowledge financial support from the MacArthur Foundation. This paper presents some of the results that are exposed in a more detailed manner in a book in French (Piketty 2001*a*). All series used in this book and in this paper can be downloaded at <http://www.cepremap.ens.fr/piketty>.

[*Journal of Political Economy*, 2003, vol. 111, no. 5]
© 2003 by The University of Chicago. All rights reserved. 0022-3808/2003/11105-0006\$10.00

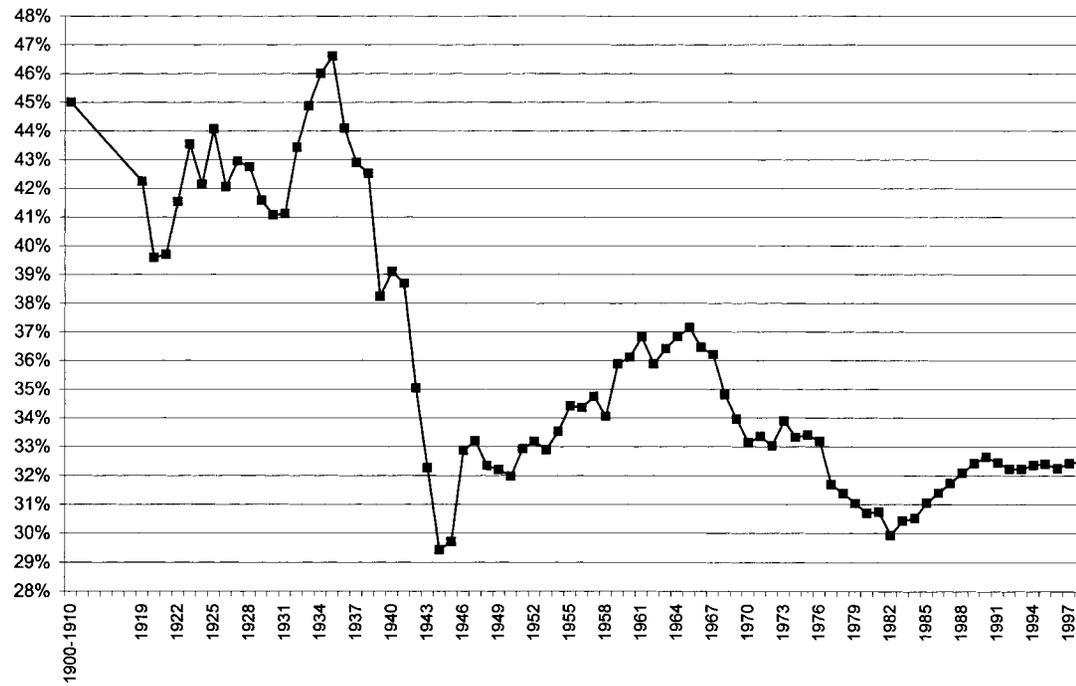


FIG. 1.—The top decile income share in France, 1900–1998. Source: Author’s computations based on income tax returns (see App. table A1, col. P90–100, and Piketty [2001*a*, app. B, table B14, pp. 620–21]).

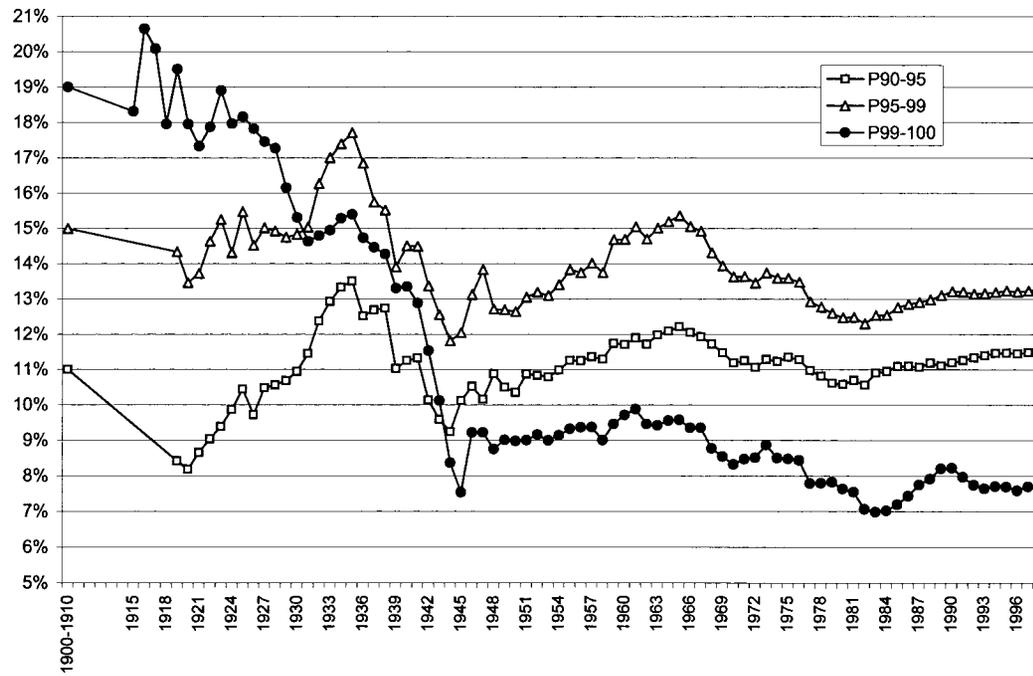


FIG. 2.—The income share of fractiles P90–95, P95–99, and P99–100 in France, 1900–1998. Source: Author’s computations based on income tax returns (see App. tables A1, A2; Piketty [2001*a*, app. B, tables B14, B15, pp. 620–22]).

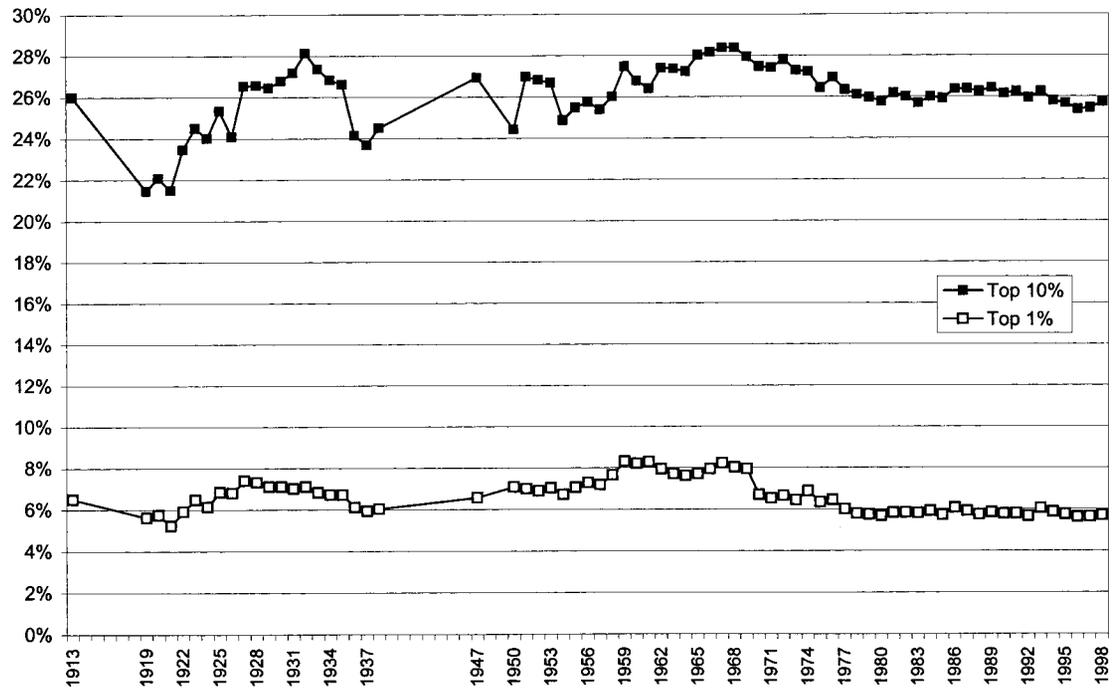


FIG. 3.—The top decile and top percentile wage shares in France, 1913–98. Source: Author's computations based on wage tax returns (see Piketty 2001*a*, app. D, tables D7, D16, cols. P90–100, P99–100, pp. 664, 675).

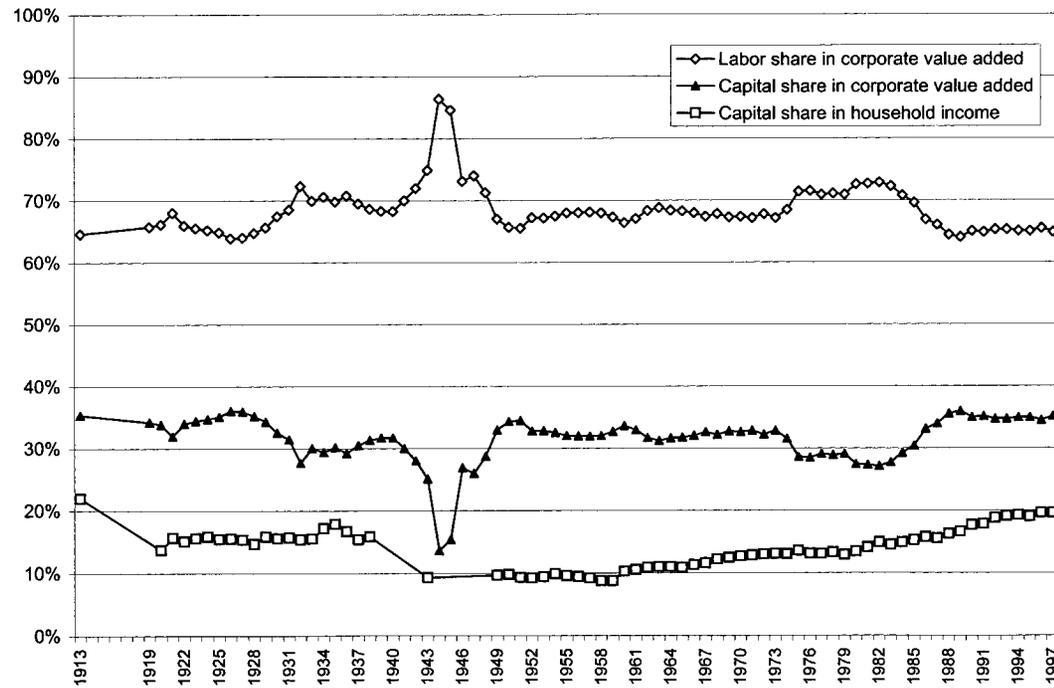


FIG. 4.—Factor shares in France, 1913–98. Source: Author’s computations based on national accounts (see Piketty 2001a, app. G, tables G3–G6, G9, pp. 703–5, 710–13).

TABLE 2
IMPACT OF PROGRESSIVE TAXATION ON CAPITAL ACCUMULATION

	$r=5\%$, $t=0\%$	$r=5\%$, $t=30\%$	$r=5\%$, $t=50\%$	$r=10\%$, $t=0\%$	$r=10\%$, $t=30\%$	$r=10\%$, $t=50\%$
$c=100\%$	1.0	.0	.0	1.0	.0	.0
$c=80\%$	3.1	.3	.0	24.3	.0	.0
$c=60\%$	5.2	1.7	.5	47.6	5.1	.0
$c=40\%$	7.3	3.0	1.5	70.8	13.2	3.1
$c=20\%$	9.4	4.3	2.5	94.1	21.3	7.3
$c=0\%$	11.5	5.6	3.4	117.4	29.5	11.5

NOTE.—This table reads as follows: Assume that a capitalist's consumption level is equal to a fixed fraction c (say, $c=20$ percent) of the full return r (say, $r=5$ percent) to his capital stock. In the absence of taxation ($t=0$ percent), his capital stock will be multiplied by 9.4 after 50 years; with an effective tax rate of $t=50$ percent, his capital stock will be multiplied by 2.5 after 50 years (I assume that the capitalist keeps the same absolute consumption level during 50 years). The corresponding formula is given by

$$x_n = \frac{c}{1-t} + [1 + (1-t)r]^n \times \left(1 - \frac{c}{1-t}\right)$$

with a 5 percent before-tax return and a consumption level equal to 40 percent of the before-tax return to the initial capital stock, one can accumulate in 50 years a fortune that is about five times as large with a 0 percent tax rate as with a 50 percent tax rate. That is, the initial capital stock is multiplied by 7.3 after 50 years in the absence of taxation, and the initial capital stock is multiplied by only 1.5 with a tax rate of 50 percent. This tax rate of 50 percent corresponds approximately to the average effective tax rates faced by fractile P99.99–100 in France since World War II, and the factor of five corresponds approximately to the secular decline in the income share of fractile P99.99–100.

Note also that these simple simulations do not take into account the impact of the progressive inheritance tax. During the nineteenth century, the French inheritance tax was strictly proportional, with a fixed 1 percent tax rate. A progressive inheritance tax was introduced in 1901, but tax rates remained low until World War I: at the eve of the war, top tax rates did not exceed 5 percent. In the same way as with the progressive income tax, the top rates of the progressive inheritance tax suddenly reached nontrivial levels in the aftermath of World War I. One can compute that the effective tax rate faced by fractile P99.99–100 of the estate distribution was about 20–25 percent during the interwar period (or even 30–35 percent during the early 1920s), 30–35 percent during the 1950s, 15–20 percent during the 1960s–70s, and again 30–35 percent during the 1980s–90s (see Piketty 2001*a*, app. J, pp. 767–71). Note, however, that the long-run impact of the progressive inheritance tax on capital accumulation, though important, has probably been less drastic than the impact of the progressive income tax. Because the income tax applies every year and has cumulative effects, an effective income tax rate of 50 percent can reduce by a factor of five the size of