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Wealth Concentration in a Developing Economy : Paris and France, 1807-1994

Thomas Piketty, Gilles Postel-Vinay and Jean-Laurent Rosenthal *

Abstract : This paper uses large samples of estate tax returns to construct new series on wealth concentration in Paris and France covering the 1807-1994 period. We find that wealth concentration in Paris and in France kept increasing until World War I, with an acceleration of the trend (rather than a stabilisation) during the 1860-1913 period. This was largely driven by the growth of large industrial and financial estates and coincided with the decline of aristocratic fortunes (during the first half of the 19th century, the share of aristocrats and real estate in top estates was actually rising). The decline in wealth concentration that took place since World War I appears to have been prompted by the 1914-1945 shocks rather than by a two-sector, Kuznets-type process. Inequality declined both in Paris and in the rest of France, and this was not driven by the reduction of the Paris/Province gap. Finally, the very high levels of wealth concentration observed at the eve of World War I seem to be associated to retired rentiers rather than to active entrepreneurs. In particular, the age profile of wealth looks markedly different around 1900-1913 than in other periods. Top wealth holders are very old around 1900-1913 (they are in their 70s and 80s), whereas they are usually in their 50s in other periods, both at the beginning of the 19th century and at the end of the 20th century. This suggests that high wealth concentration contributed to economic sclerosis and had a negative growth impact.

* EHESS (Paris-Jourdan), EHESS (Paris-Jourdan) and UCLA. All comments are welcome (piketty@ehess.fr, gpv@ens.fr , rosenthal@econ.ucla.edu).

1. Introduction

This paper presents new series on wealth concentration in Paris and France covering the 1807-1994 period. These series were constructed using large samples of individual estate tax returns that we collected in the Paris archives for various years between 1807 and 1902, as well as tabulations by size of estate compiled by the French tax administration regularly since 1902.

Our general motivation for constructing such series is the study of the two-way interaction between development and distribution. More specifically, one of our primary goals is to better understand the decline in income and wealth inequality that occurred during the first half of the 20th century in today's developed countries. Recent research on France suggests that this decline was for the most part an accidental, capital income phenomenon,[1] as opposed to a spontaneous, two-sector, Kuznets-type process.[2] In particular, the only reason why top income shares dropped during the 1914-1945 period is the fall of top capital incomes, whereas top wage shares remained approximately constant (see Figure 1). Top wealth holders were severely hurt by major shocks during the 1914-1945 period (wars, inflation, depression), and they were never to fully recover from these shocks, probably because of the dynamic effects of progressive estate and income taxation on capital accumulation and pre-tax income inequality. However one central limitation of these top income and wage shares series is that they do not cover the 19th century and early 20th century (the modern progressive income tax was created around 1913-1914 in most countries, and there is no systematic data source on incomes prior to this date).[3] Although these series strongly suggest that the 1914-1945 shocks played the key role, one cannot fully exclude the possibly of a pre-existing, Kuznets-type downward trend in inequality prior to World War I. Our primary motivation for constructing wealth concentration series covering both the 19th and the 20th century is to be able put the 1914-1945 period into a broader historical perspective.

Insert Figure 1

[1] See Piketty (2001). For similar series covering the U.S., see Piketty and Saez (2001).

[2] According to Kuznets' influential hypothesis (Kuznets (1955)), one should expect income inequality to decline spontaneously in advanced capitalist countries, as more and more workers join the high-paying sectors of the economy.

[3] The modern income tax was introduced in 1913 in the U.S., 1914 in France, and 1909 in the U.K..

Our series can also be used to address the on-going debate about the impact of inequality on growth. Most economists have now realized that cross-country regressions of inequality on growth are unlikely to deliver robust conclusions, due to poor data quality and serious identification problems. Existing cross-country data sets on inequality suffer from serious limitations: they typically do not distinguish between income and wealth distribution, they are not homogenous across countries, and they are generally available for a small number of isolated years for each country. We believe that one first needs to construct homogenous, long run series for individual countries before the general issue can be re-addressed. In the meantime, careful case studies with good data are probably more informative than cross country regressions with bad data. Our micro samples of estate tax returns also allow us to test for the efficiency implications of wealth concentration in a different way, by looking at how the age and gender profile of wealth varies with the level of concentration (see below).

Finally, one supplemental motivation for looking at France is that French historical data sources on wealth distribution are richer than in other developed countries. The reason is that the French National Assembly introduced in 1791 a pretty universal estate tax, and that this tax (and the corresponding estate tax returns) has remained virtually unchanged since then. The estate tax introduced in 1791 was universal in the sense that all types of property (both real estate and personal estate) and all levels of wealth were covered. The successors of all decedents with positive wealth were required to file an estate tax return. The estate tax was made progressive in 1902 (it was strictly proportional from 1791 to 1902), which prompted the French tax administration to start compiling summary statistics based upon the tabulation by estate size of all individual estate tax returns. No such tabulation by estate size was compiled prior to 1902. However the tax registers with full information on individual returns have been kept in French local archives, which allowed us to collect large samples of individual returns over the 1807-1902 period and to construct homogenous estimates of wealth concentration in Paris and France over the 1807-1994 period (see below for more details on the data and methodology).

In contrast, one needs to wait until the end of the 19^{th} century and the beginning of the 20^{th} century for the introduction of a modern, universal estate tax in the U.K. and in the U.S. (1894 in the U.K., 1916 in the U.S.). This implies that homogenous wealth concentration series based upon estate tax returns can only cover the 20^{th} century in those two countries.[4] There did exist various forms of probate taxes prior to 1894/1916 in the U.K. and in the U.S., but the information provided by these probate records was not as rich and systematic as that contained in estate tax returns (in particular, probate records were purely voluntary, and all types of property were not covered).[5] Consequently, it is very difficult to compare in a precise manner the probate-based estimates of wealth concentration available for the 18th-19th centuries the modern estimates available for the 20th century. All available estimates confirm that wealth concentration rose during the 19th century and dropped during the first half of the 20th century, but there is a lot of uncertainty as to whether inequality stabilized (or even started declining) by the end of the 19th century or kept increasing until World War I.[6] Our French series are fully homogenous over the 1807-1994 period and allow us to cast new light on this central issue.

Our main conclusions are the following. First, wealth concentration in Paris and in France kept increasing until World War I, with an acceleration (rather than a stabilisation) of the trend at the end of the period. The bulk of the rise in inequality took place during the 1860-1913 period. This was largely driven by the growth of large industrial and financial estates and coincided with the decline of aristocratic fortunes (during the first half of the 19th century, the share of aristocrats and real estate in top estates was actually rising). Next, the decline in wealth concentration that took place since World War I appears to have been prompted by the 1914-1945 shocks rather than by a two-sector, Kuznets-type process. Inequality declined both in Paris and in the rest of France, and this was not driven by the reduction of the Paris/Province gap. Finally, and perhaps most importantly, the very high levels of wealth concentration observed at the eve of World War I seem to be associated to retired rentiers rather than to active entrepreneurs. In particular, the age profile of wealth looks markedly different around 1900-1913 than in other periods. Top wealth

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[4] The standard references are Atkinson and Harrison (1978) for the U.K. and Lampman (1962) for the U.S.. Atkinson and Harrison use estate tax returns tabulations covering the 1923-1972 period to compute top wealth share series (the tabulations compiled by the U.K. tax administration over the 1894-1914 period are less rich and do not allow for the same computations as the post-1923 tables). Lampman uses estate tax returns tabulations covering the 1922-1956 period to compute top wealth share series (these series have been updated by various authors). See Lindert (2000) for a recent survey.

[5] In particular, real estate was fully excluded from probate in the U.K. until 1898 (realty and personalty were also treated differently in U.S. probate records). For estimates of wealth concentration in the U.K. based upon 18th and 19th century probate records, see Lindert (1986). For corresponding estimates for Colonial America, see Jones (1977).

[6] See e.g. the survey by Lindert (2000).

holders are very old around 1900-1913 (they are in their 70s and 80s), whereas they are usually in their 50s in other periods, both at the beginning of the 19th century and at the end of the 20th century. This suggests that high wealth concentration was associated with economic sclerosis and lower growth.

The rest of this paper is organized as follows. Section 2 describes our data sources and outlines our methodology. Section 3 presents our 1807-1994 estimates of wealth concentration and composition in Paris. Section 4 discusses how the 19th century Paris estimates can be extended to the rest of France and presents preliminary results for wealth concentration in France over the 1807-1994 period. Section 5 presents decomposition by age group and gender and discusses the efficiency implications of high wealth concentration.

2. Data Sources

All of our estimates are based upon estate tax returns. As was already mentioned, the estate tax was created in 1791, and it became a progressive tax in 1902. Since 1902, the tax administration has been compiling more or less regularly tables indicating the number of decedents and amount of their estate for a large number of estate brackets. These are the same tables that were already used by Piketty (2001), and they are available over the 1902-1994 period.[7] They were compiled and published at the level of each "departement" (there are about 90 "departement" in France, including Paris), so they can be used to study the evolution of wealth concentration both in France and in Paris during the 20th century.[8]

Prior to 1902, the tax administration did not bother compiling tables by estate size, and all we know is the aggregate amount of wealth reported on estate tax returns, with a decomposition by real estate vs personal (non-real) estate (furniture, businesses, stock, bonds, etc.). Therefore we need to go back to the tax registers and collect samples of individual tax returns. Given that it was materially impossible to collect information on all individual returns from all "departement" (one needs to go to local archives in each "departement" to access these tax registers), we had the choice of several sampling strategies. One option was to randomly select (e.g. on the basis of birth dates or family names) a nationally representative sample of decedents

[7] 1902-1913, 1925-1960, 1962, 1964, 1984 and 1994
[8] departemental tables not published for all years

for various years during the 19th century. The problem is that the sample would need to be extremely large if it is to include sufficiently many top estates (given that wealth is extremely concentrated, it is critical to observe many top wealth holders).[9]

Therefore we decided to pursue a completely different strategy: we collected estate tax return information for all decedents in Paris for various years during the 19th century (1807, 1817, 1827, 1837, 1847, 1857, 1867, 1877, 1887, 1902).[10] The reason of choosing Paris is obviously that a disproportionate share of top wealth holders live there. As one can see from Table 1, the annual number of decedents (aged 20-year-old and over) in Paris was about 12,000 around 1800-1810 (2,5% of the French total) and nearly tripled during the 19th century, up to about 35,000 around 1900-1910 (6,5% of the French total). However the fraction of decedents with positive wealth was only 30% in Paris during the 19th century (about twice as small as for the rest of France),[11] so we only needed to collect detailed information on about 3,000-4,000 decedents per year at the beginning the 19th century and about 10,000 decedents per year in 1902. Although Paris had a larger fraction of decedents with zero wealth, the average estate was about 4-5 times larger in Paris than in the rest of France during the 19th century.[12] It is particularly striking to notice that this ratio actually increased over time, in spite of the large increase the size of Paris (which nearly tripled). At the eve of World War I, the total estates of Paris decedents made up over 26% of total French estates (see Table 1 and Figure 2).

Insert Table 1

Insert Figure 2

[9] This difficulty is illustrated by the so-called « TRA » survey, the objective of which was to follow over the 1800-1940 period the offspring of all couples marrying in France between 1800 and 1830 and whose family name started with the letters TRA. It turned out that this survey contains too few top observations and delivers unreliable estimates above the 90th percentile of the distribution (which is unfortunate, because this is where most of the wealth lies). The TRA survey can be used for other purposes, however. For instance, Bourdieu, Postel-Vinay and Suwa-Eisenmann (2003) use the TRA survey to measure the evolution of the fraction of poor decedents (i.e. decedents with zero or near-zero wealth), and they find that this fraction has been increasing in 19th century France (see below).

[10] We have not finished collecting the data for 1877 and 1887 yet, so the results presented in this paper do not include those two years.

[11] In 1902 (when the first administrative tabulations start), the fraction of decedents with positive wealth was about 30% in Paris and 60% for the all of France. Estimates from the TRA survey suggest that the fraction of decedents with positive wealth in France declined from about 70% at the beginning of the 19th century to about 60% at the beginning of the 20th cnetury (see Bourdieu et al (2003)).

[12] Average estates, as well as top estate fractiles, are always defined in this paper over the set of all decedents aged 20-year-old and over, including those with zero wealth.

Our 1902 Paris sample turned out to be fully consistent with the Paris table by estate size compiled for the tax administration for 1902. Therefore we can link up our 1807-1902 Paris files with the 190-1994 Paris tables to construct homogenous 1807-1994 series for wealth concentration in Paris. The more difficult part is the construction of estimates for wealth concentration for the all of France in 1807-1902 from the Paris estimates. For this we need to estimate the evolution of the share of Paris estates in top estates. To achieve this goal, we used other estate surveys,[13] as well as number of non-estate fiscal sources (see below).

3. Wealth Concentration in Paris, 1807-1994

The evolution of wealth concentration in Paris over the 1807-1994 period is depicted on Figure 3. Given that the top decile estate share is close to 100% during the 19th century (see Table 2), we choose to focus upon the top 1% estate share. The top 1% share in Paris appears to have been stable at a very high level (around 50-55%) during the first half of the 19th century. The 1817 spike was short-lived and was due not to a large increase in top estates, but rather to a large decline in modest estates (which apparently suffered the most from Napoleonic wars). Wealth concentration in Paris starts increasing substantially during the last third of the 19th century, with the top 1% share climbing from less than 52% in 1867 to over 72% in 1913. World War I and the ensuing shocks then prompted an abrupt decline. The top 1% share dropped by almost 40 percentage points between 1913 and 1947, and by nearly 10 percentage points between 1947 and 1994. On-going computations to convert these wealth-at-death concentration estimates into wealth-of-the-living concentration estimates (using the estate multiplier method) do not seem to entail any substantial change to this general picture.

Insert Table 2

Insert Figure 3

[13] In addition to the TRA survey (which gives a reliable picture of the national distribution up to the 90th centile), we should mention the study by Daumard (1973), which relied on samples of estate tax returns collected in five French cities (Paris, Lyon, Toulouse, Lille, Bordeaux) at the beginning and at the end of the 19th century. Daumard's findings (increased wealth concentration in all cities) is consistent and complementary with our findings. Unfortunately, Daumard's samples are not available in machine-readable format, she has only two or three years of data, and she did not try to compute homogenous inequality indicators (top fractiles shares, ec.) with her data.

Who are the top wealth holders who led to such a substantial increase in wealth concentration between 1867 and 1913? For the most part, their fortunes derive from large industrial and financial estates. As Figure 4 illustrates, the share of personal (non-real) estate has always been a U-shaped function of the estate level. This reflects the well-know fact that real estate is a middle class asset: the poor are too poor to own real estate and the little they own takes the form of furniture, cash, etc., while the rich have most of their fortunes in the form of stock and bonds. What is more interesting is that the overall share of personal estate has also been following a U-shaped curve along the 19th century in Paris, especially so for top estates (see Figures 4 and 5). That is, real estate became more and more important in top estates from 1807 to 1837, and then its role declined from 1837 to 1902, and particularly so between 1867 and 1902.

The share of aristocratic decedents in top estates has been following exactly the same inverted-U-shaped evolution as the share of real estate (see Figure 6). That is, aristocrats become more and more numerous in top estate fractiles from 1807 to 1837-1847, and then the trend reversed during the second half of the 19th century. Note that the number of aristocrats remains pretty high throughout the period, including in 1902 (about 13% of aristocrats in the top 1% estates, over 25% in the top 0,1%, vs. about 0,5-1% in the population as a whole). The obvious interpretation for the inverted-U pattern is that aristocrats were able to recover from the Revolutionary and Napoleonic period during the first half of the 19th century, but were finally overtaken by the new wave of capital accumulation in manufacturing and finance during the second half of the century. There is nothing surprising in the fact that aristocrats are at a nadir in 1807 (many are in exile in other European countries) and recover after 1815 and the “milliard des émigrés” (aristocrats returning from exile after the fall of Napoleon receive one billion francs to compensate for the losses they suffered from during the Revolution). What is more surprising is that the recovery lasted for several decades, leading to a pre-capitalist phase of capital accumulation in Paris based upon real estate. Presumably this did not contribute to accelerate industrial take-off in France.

Insert Figure 4

Insert Figure 5

Insert Figure 6

4. From Paris to France

In order to construct wealth concentration estimates for the all of France in 1807-1902 from the Paris estimates, we need to know the evolution of the share of Paris estates in top estates. During the 1902-1994 period, the evolution of top estate shares in France has been parallel to that of top estate shares in Paris: the levels of concentration have always been lower, but the trends are similar (see Figure 7). It is also striking to note that the fraction of Paris estates in the top 1% estates has remained virtually changed over the 20th century (around 25%), in spite of the fact that the aggregate fraction of Paris decedents in all decedents has dropped significantly, reflecting the population decline in Paris (see Table 3). In 1902, Paris decedents were 4 times more likely to belong to the national top 1% estates than average decedents (26,6/6,5=4,1); in 1994, Paris decedents were 7 times more likely to belong to the national top 1% estates than average decedents (25,2/3,6=7,0). If anything, the geographic concentration of fortunes is larger at the end of the 20th century than at the beginning of the 20th century. The decline of wealth concentration that took place during the 20th century is not due to Paris/Province redistribution.

How did the fraction of Paris estates in top estates evolve over the course of the 19th century? Our current benchmark estimates rely on a very conservative assumption: the fraction of Paris estates in top estates has increased during the 1807-1902 period in the same proportion as the fraction of Paris decedents in all decedents (see Table 3). The national top estate shares estimates reported on Table 4 were computed using this assumption, and they suggest that wealth concentration has been rising all along the 19th century in France, both during the 1807-1867 and 1867-1902 periods (see Figure 7). These estimates are conservative in the sense that it is almost certain that they underestimate the rise of wealth concentration that took place during the 19th century. First, we know that the bulk of the population growth of Paris during the 19th century was due to the addition of new territories at the outskirts of Paris into the city of Paris (most notably in 1860) and to population growth in these peripheral “arrondissement”. The latter being much poorer than central Paris, there is little doubt that the fraction of Paris estates in top estates increased less than total population. Next, and most importantly, this is confirmed by

19th century housing tax tabulations showing that the fraction of Paris taxpayers in national top 1% taxpayers was substantially larger than 10% at the beginning of the 19th century. (…)

Insert Table 3
Insert Table 4
Insert Figure 7

5. Testing for the Efficiency Costs of Wealth Concentration

What can our data tell us about the efficiency consequences of wealth concentration? With perfect credit markets, wealth concentration can be bad from a social justice viewpoint, but entails no efficiency cost: irrespective of who owns the wealth, the money will flow towards the most able entrepreneurs and the most profitable investment projects. In the presence of credit constraints, it all depends on who owns the wealth. If the people who own the wealth are those who know what to do with it (which projects to invest, etc.), then wealth concentration is fine. For instance, if wealth concentration is high because a small group of talented and active entrepreneurs has accumulated a lot of wealth and keeps re-investing it in profitable activities, then there is no efficiency problem. However if the people who own the wealth do not know what to do with it, then we have a problem. So the key question is: who owns the wealth when wealth concentration is high? Are these active entrepreneurs or retired rentiers?

One way to test for the efficiency implications of wealth concentration is look at growth rates. This is the approach taken in the cross-country regression literature. In the case of our French series (as well as with similar series for other developed countries), we get the long-run pattern depicted on Figure 8. That is, annual per capita growth rates were relatively low (1,1%) during the 1800-1914 period, when wealth concentration was enormous (around 50% of total wealth for the top 1%), and they have been much higher (3,1%) during the 1945-2000 period, when wealth concentration has been more moderate (around 25% of total wealth for the top 1%). Needless to say, this is not sufficient to prove that high wealth concentration is bad. After all, post-1945 growth might have been higher had wealth concentration remained the same as in 1914. At the very least, one can conclude from this simple comparison that the very high levels of wealth concentration that were in place until World War I were not a pre-condition for long-run growth and development.

Insert Figure 8

Another way to test for the efficiency implications of wealth concentration is to look directly at who owns the wealth when wealth concentration is high. Here the striking finding has to do with the changing age profile of wealth over the 1807-1994 period (see Table 5 and Figures 9 and 10). During the 19^{th} century, at a time of high and rising wealth concentration, wealth was getting older and older. At the beginning of the 19^{th} century, in the aftermath of the French Revolution, the richest individuals were those in their 50s: they were 100% richer on average than people in their 40s, 25% richer than those in their 60s, and 40% richer than those in their 70s and 80s. Little by little, this inverted-U shaped age-wealth pattern is going to become a strongly monotonic pattern over the course of the 19^{th} century. In the middle of the 19^{th} century, people in their 60s, 70s and 80s are as rich (or a bit richer) as those in their 50s. By the end of the 19^{th} century, the richest individuals are by far the oldest individuals. In 1902, people in their 60s own 70% more than those in their 50s, and those in their 70s and 80s own 140% more. At the eve of World War I, top wealth holders were retired rentiers, not active entrepreneurs. Unsurprisingly, the former were strongly hit by the shocks of the 1914-1945 period. In 1947 as well as in 1994, we are back to a pattern where the richest individuals are those in their 50s. These findings suggest that the very high levels of wealth concentration that were in place at the eve of World War I did probably contribute to economic sclerosis than to economic growth.

Insert Table 5

Insert Figure 9

Insert Figure 10

Another way to analyze the changing age-wealth relationship is to look at the profile of average age by top estate fractile (see Table 6 and Figure 11). In 1807 and 1817, average age was virtually the same within the top 10% and the top 1% estates (or even slightly declining). The average-age-per-fractile relationship turns upward sloping over the course of the 19^{th} century, and by 1902 average age within the top 1% is almost 6 years larger than with the top 10%. The relationship becomes flat again in 1947 and downward-sloping in 1994. Finally, we find that it is at the eve of World War I that the share of women in top estates takes its highest value, which also suggests that the share of wealth held by active agents (as opposed to rentiers and successors) was fairly low at that time (see Figure 12).[14] (…)

Insert Table 6
Insert Figure 11
Insert Figure 12

6. Concluding Comments

To be completed

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Table 1: Estate Tax Returns in Paris, 1807-1994 - Summary Statistics

	N. decedents 20-yr +	N. estate>0	N. estate>0 (% N.deced. 20+)	N.deced. 20-yr + (% Paris/France)	Total Estate (% Paris/France)	Average Estate (Ratio Paris/rest of France)
1807	11,622	3,691	31.8	2.5	8.3	3.60
1817	11,925	3,104	26.0	2.5	8.5	3.60
1827	14,151	3,817	27.0	2.8	9.5	3.60
1837	16,902	4,926	29.1	3.1	9.8	3.42
1847	18,169	4,814	26.5	3.3	11.5	3.86
1857	19,248	6,048	31.4	3.6	14.3	4.51
1867	26,844	7,971	29.7	4.6	17.5	4.37
1877						
1887						
1902	34,366	9,830	28.6	6.5	26.0	5.05
1913	35,677	11,927	33.4	6.5	26.6	5.23
1929	35,842	14,495	40.4	5.8	22.8	4.77
1938	30,274	16,013	52.9	5.3	17.3	3.76
1947	24,955	14,090	56.5	5.5	15.0	3.07
1956	27,940	16,053	57.5	5.5	14.9	3.14
1984						
1994	18,553	12,528	67.5	3.6	9.7	2.86

Source : Authors' computations using estate tax returns

Table 2: Wealth Concentration in Paris, 1807-1994

	Top 10% Estate Share	Top 1% Estate Share	Top 0,1% Estate Share
1807	**95.9**	**49.1**	**16.1**
1817	**97.9**	**56.7**	**18.3**
1827	**97.5**	**52.3**	**16.9**
1837	**97.7**	**50.0**	**14.8**
1847	**98.3**	**51.8**	**17.3**
1857	**96.9**	**51.0**	**15.4**
1867	**97.4**	**52.3**	**16.7**
1877			
1887			
1902	**99.1**	**64.8**	**26.1**
1913	**99.6**	**72.1**	**32.8**
1929	**94.9**	**63.1**	**26.4**
1938	**90.4**	**53.6**	**24.1**
1947	**73.7**	**33.1**	**12.8**
1956	**69.4**	**30.6**	**10.0**
1984			
1994	**66.9**	**23.7**	**4.9**

Source : Authors' computations using estate tax returns

Table 3: The Fraction of Paris Estates in Top Estates, 1807-1994

	Fraction of Paris decedents in all decedents 20-yr +	Fraction of Paris estates in top 10% estates	Fraction of Paris estates in top 1% estates	Fraction of Paris estates in top 0,1% estates
1807	**2.5**		***10.1***	***20.5***
1817	**2.5**		***10.3***	***21.0***
1827	**2.8**		***11.6***	***23.7***
1837	**3.1**		***12.6***	***25.6***
1847	**3.3**		***13.3***	***27.1***
1857	**3.6**		***14.6***	***29.7***
1867	**4.6**		***19.0***	***38.6***
1877				
1887				
1902	**6.5**	**7.5**	**26.6**	**54.1**
1913	**6.5**	**7.5**	**25.5**	**52.3**
1929	**5.8**	**8.3**	**23.9**	**53.0**
1938	**5.3**	**7.4**	**21.6**	**42.1**
1947	**5.5**	**11.0**	**19.8**	**35.2**
1956	**5.5**	**12.8**	**22.3**	**35.0**
1984				
1994	**3.6**	**8.9**	**25.2**	**35.2**

Source : Authors' computations using estate tax returns

Table 4: Wealth Concentration in France, 1807-1994

	Top 10% Estate Share	Top 1% Estate Share	Top 0,1% Estate Share
1807		**41.2**	**15.5**
1817		**44.5**	**17.1**
1827		**45.2**	**16.3**
1837		**43.8**	**16.7**
1847		**47.9**	**18.4**
1857		**48.6**	**18.0**
1867		**49.8**	**19.1**
1877			
1887			
1902	**86.1**	**54.4**	**24.4**
1913	**87.6**	**57.7**	**28.4**
1929	**82.0**	**50.2**	**24.7**
1938	**77.6**	**42.0**	**19.9**
1947	**69.9**	**29.9**	**11.0**
1956	**69.4**	**28.4**	**11.0**
1984	**64.8**	**21.6**	**6.6**
1994	**63.0**	**21.3**	**6.3**

Source : Authors' computations using estate tax returns

Table 5: The Age Profile of Wealth in Paris, 1817-1994
(average estate left by 50-59 yr-old = 100)

	20-29 yr-old	30-39 yr-old	40-49 yr-old	50-59 yr-old	60-69 yr-old	70-79 yr-old	80-89 yr-old	90-99 yr-old
1817	48	49	49	100	80	70	70	
1827	49	46	73	100	94	99	63	
1837	67	79	107	100	112	123	102	
1847	78	73	102	100	117	154	135	
1857	78	77	101	100	104	102	111	
1867	65	54	82	100	132	141	142	
1902	30	40	80	100	169	239	251	
1947	31	51	73	100	113	105	105	109
1994		11	45	100	87	93	95	68

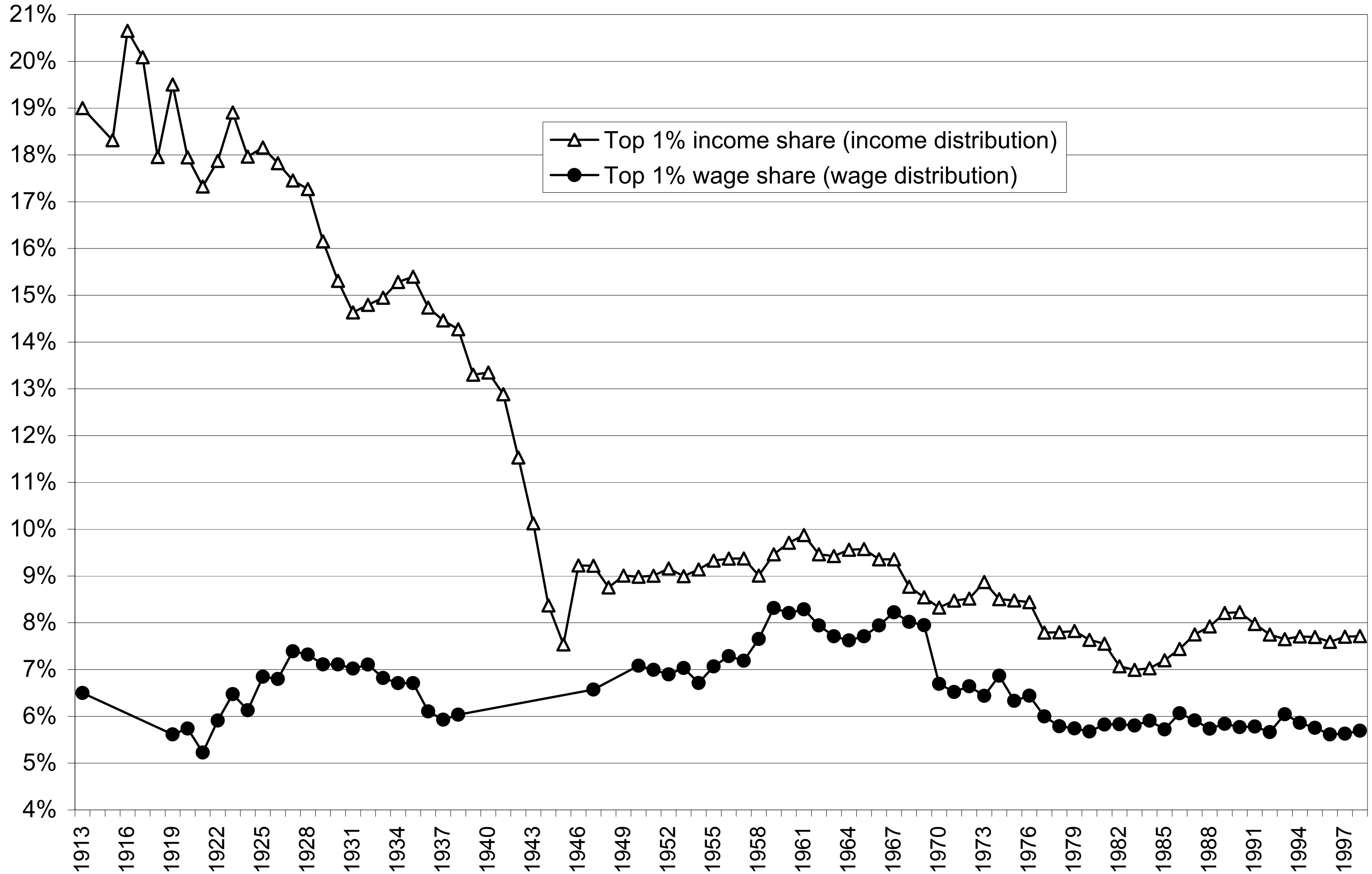
Source : Authors' computations using estate tax returns

Table 6: The Age Profile of Wealth in Paris, 1817-1994
(average age within top fractiles)

	Top 10% Estates	Top 5% Estates	Top 1% Estates
1817	57.5	57.6	57.6
1827	61.7	61.9	60.6
1837	60.2	60.6	62.3
1847	61.2	61.4	62.9
1857	62.4	63.6	66.4
1867	62.4	62.3	66.1
1902	61.8	63.9	67.6
1947	67.0	67.4	68.4
1994	81.7	81.3	80.3

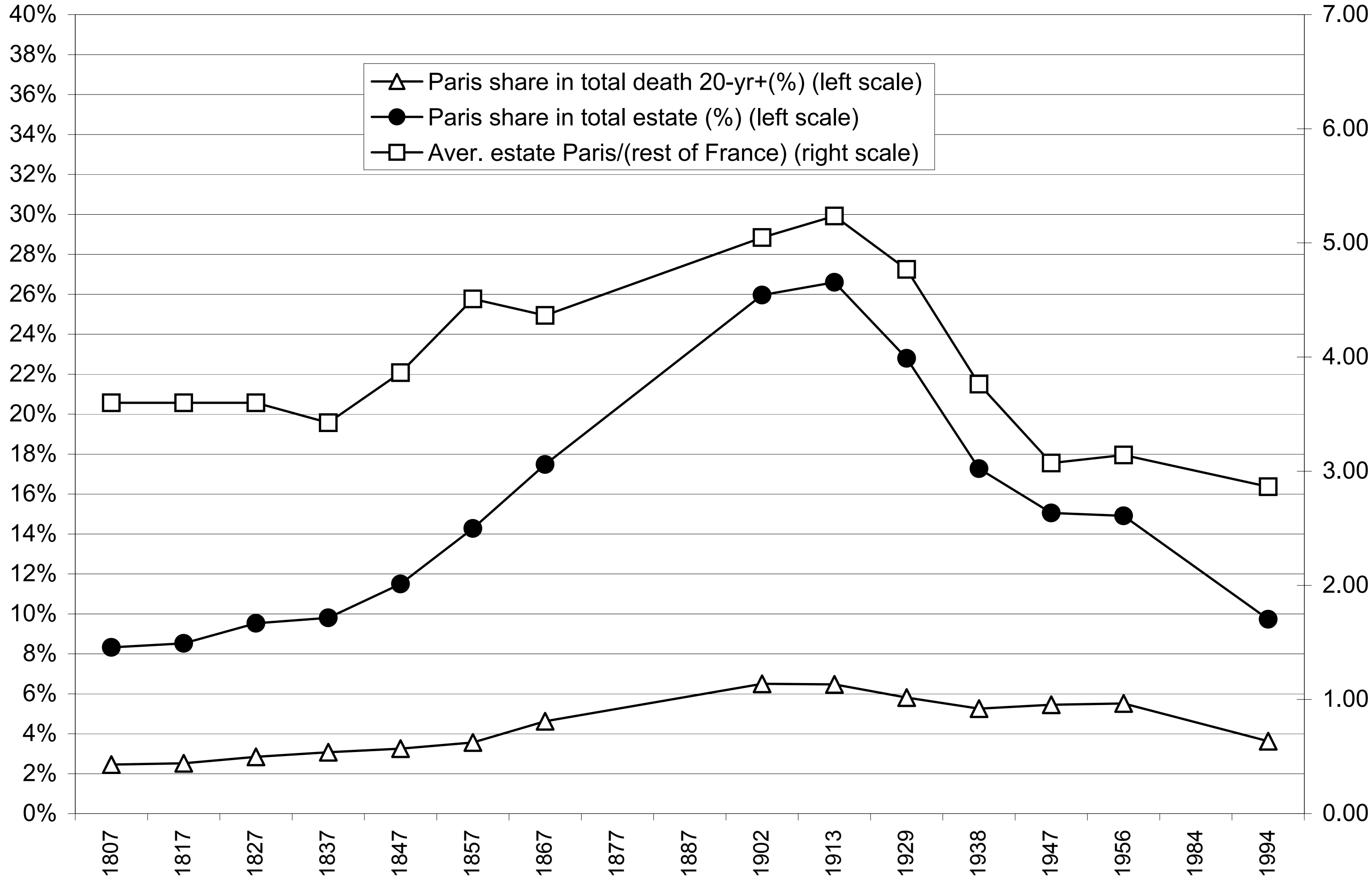
Source : Authors' computations using estate tax returns

Figure 1: The fall of top capital incomes in France, 1913-1998



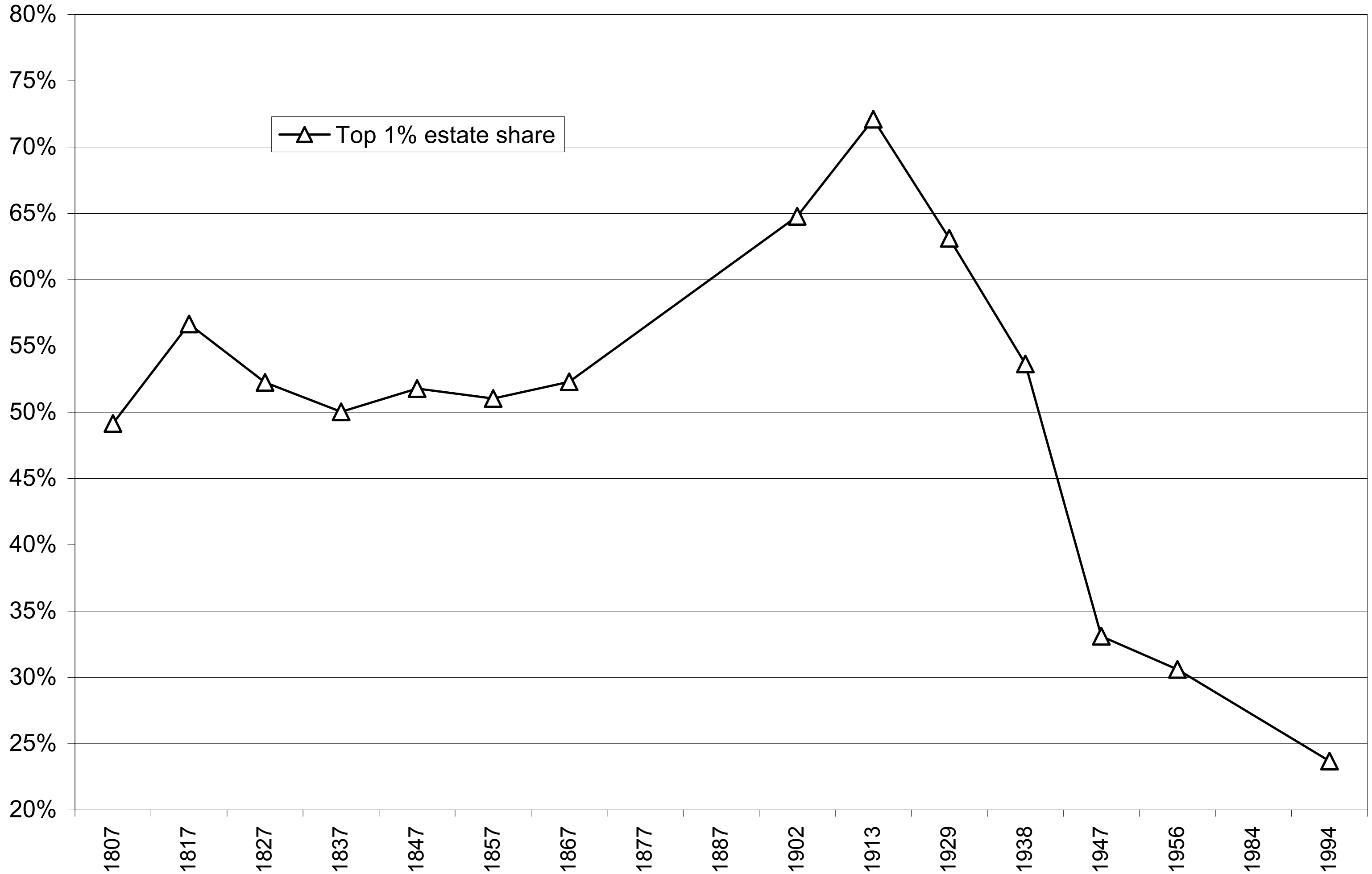
Source: Piketty (2001) (computations based on income tax returns)

Figure 2: The Paris share in French estates, 1807-1994



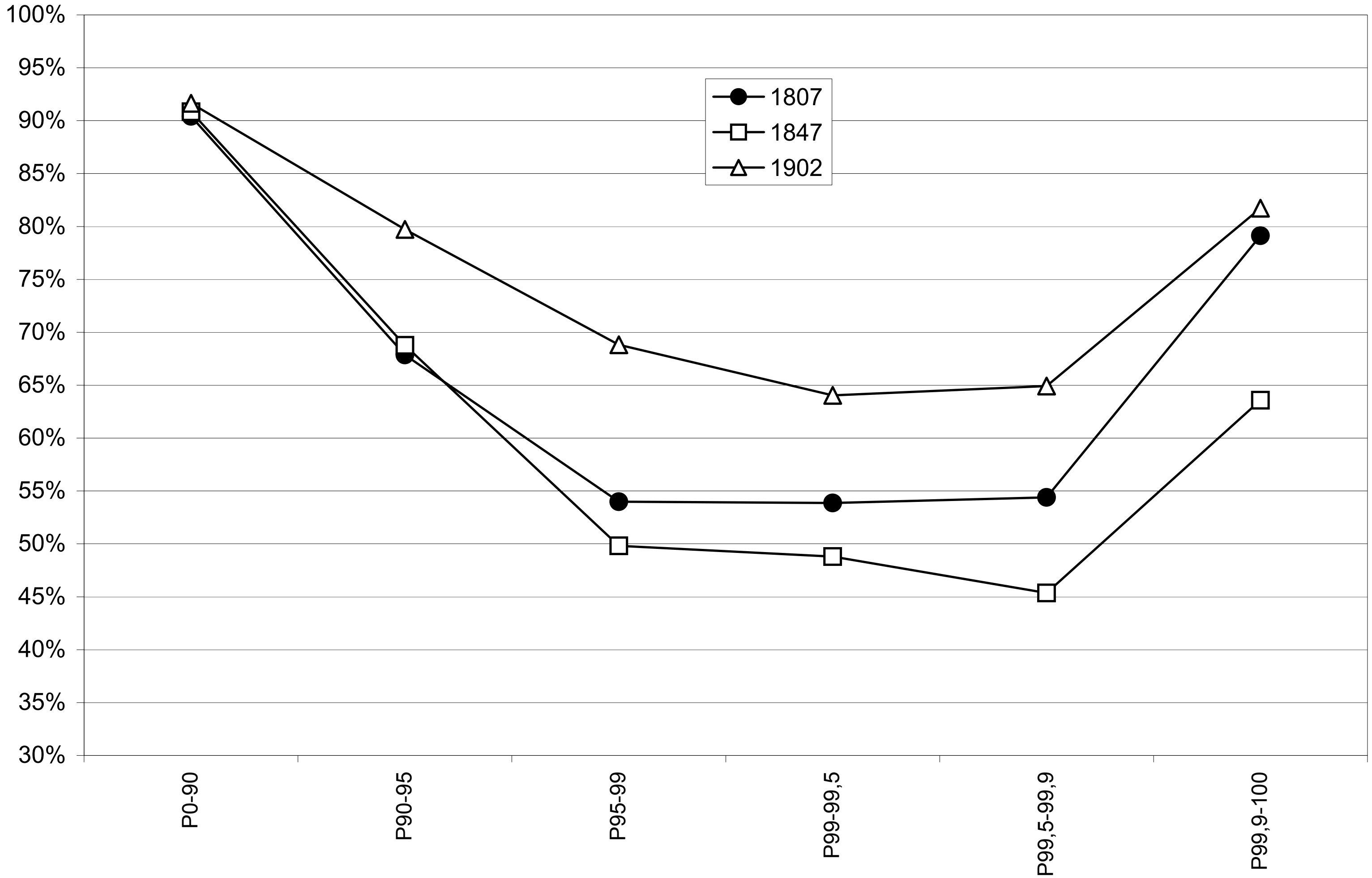
Source: Authors' computations based on estae tax returns

Figure 3: Wealth concentration in Paris, 1807-1994



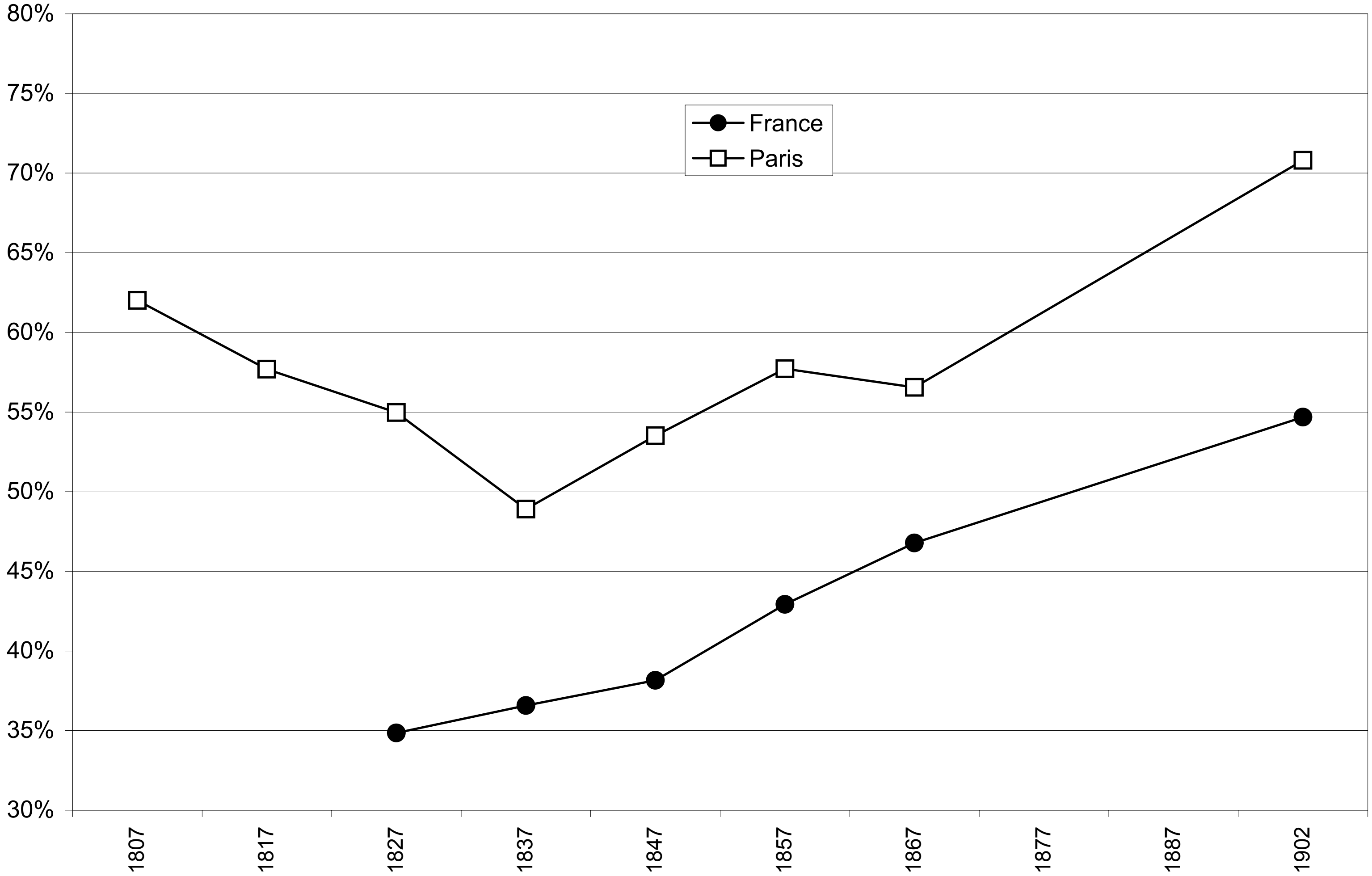
Source: Authors' computations based on estae tax returns

Figure 4: Wealth composition in Paris, 1807-1902
(share of personal (non-real) estate in total estate)



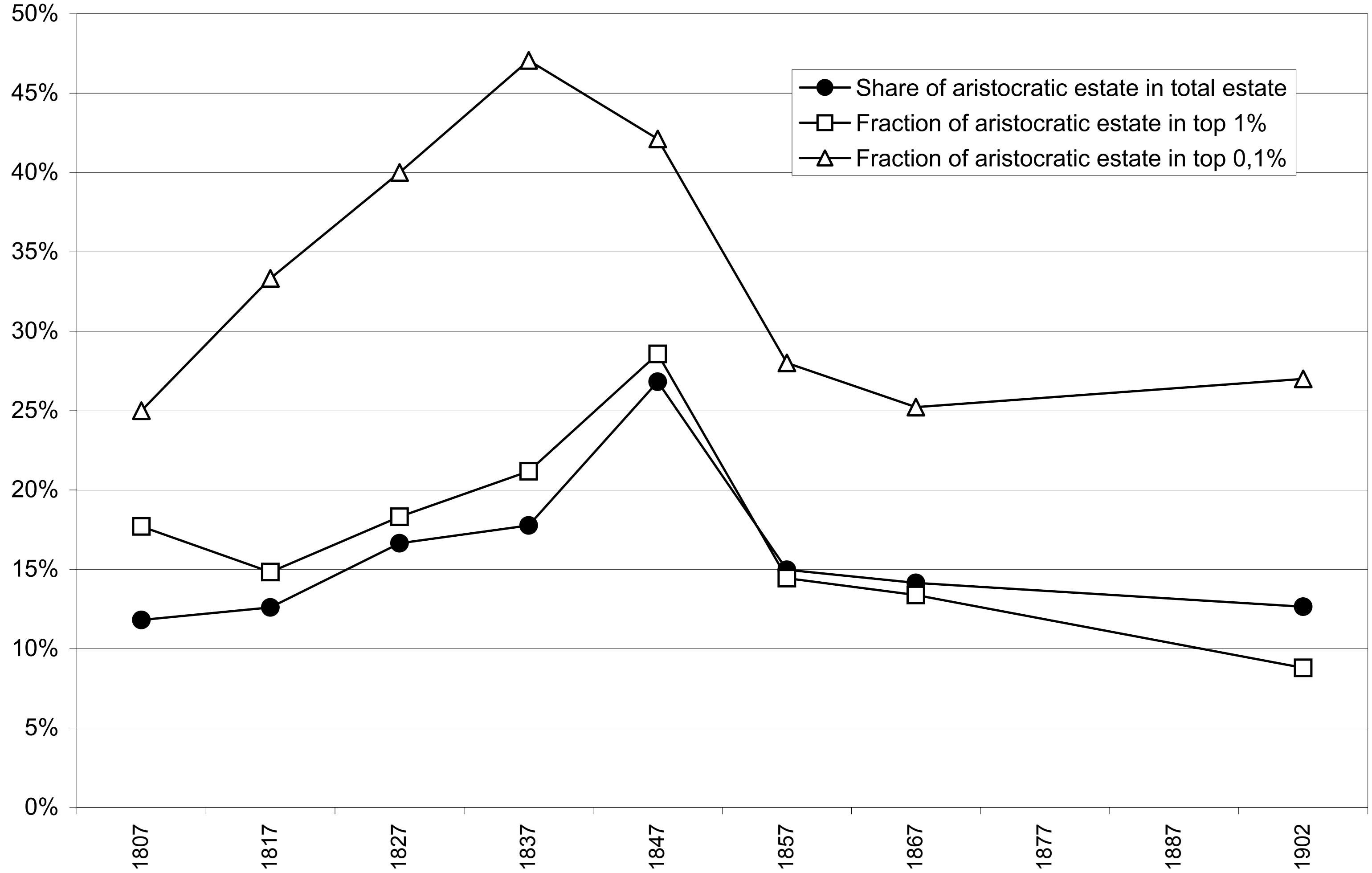
Source: Authors' computations based on estae tax returns

Figure 5: Wealth composition in Paris and France, 1807-1902
(share of personal (non-real) estate in total estate)



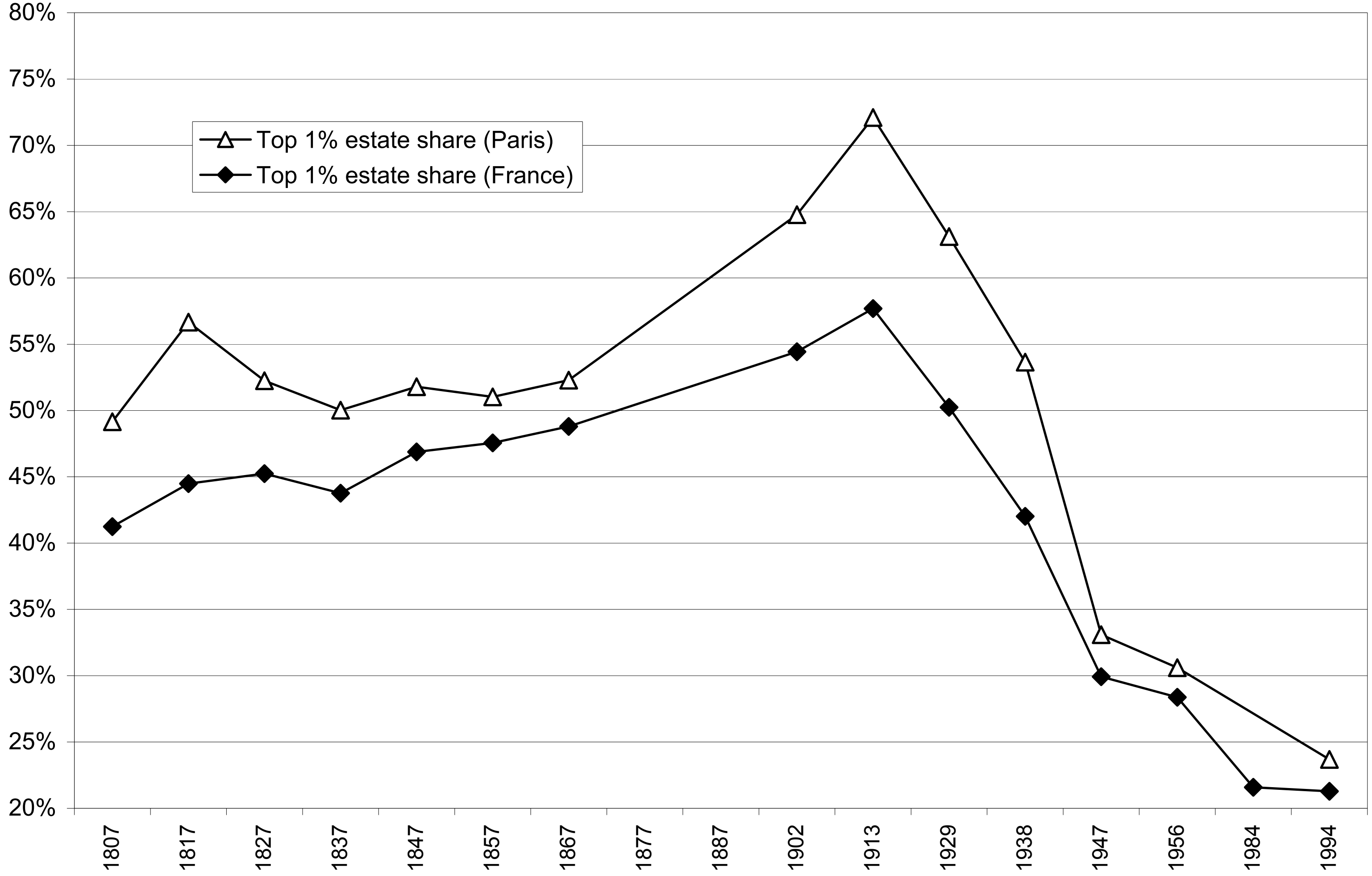
Source: Authors' computations based on estae tax returns

Figure 6: Aristocratic estates in Paris, 1807-1902



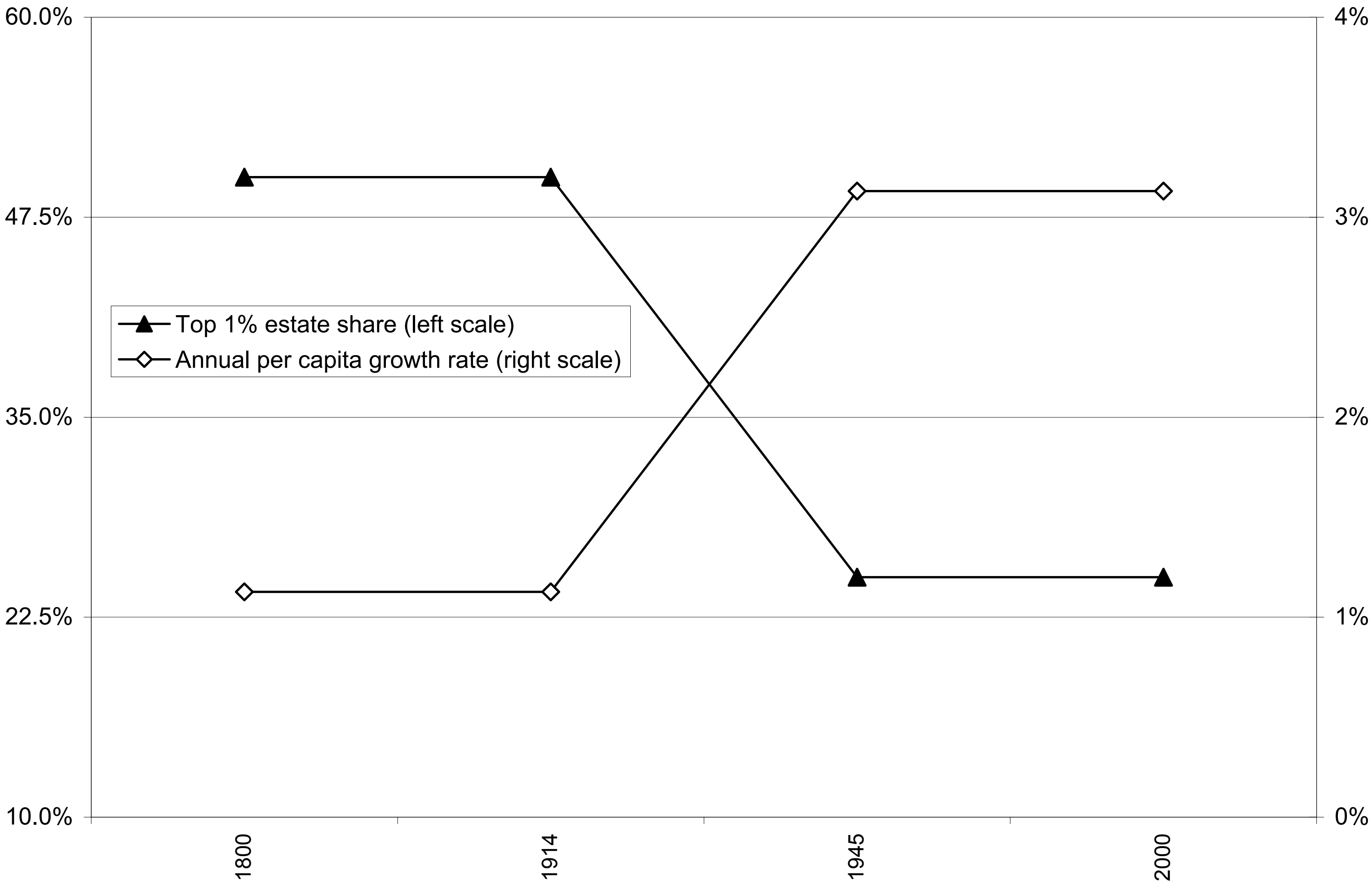
Source: Authors' computations based on estae tax returns

Figure 7: Wealth concentration in Paris and France, 1807-1994



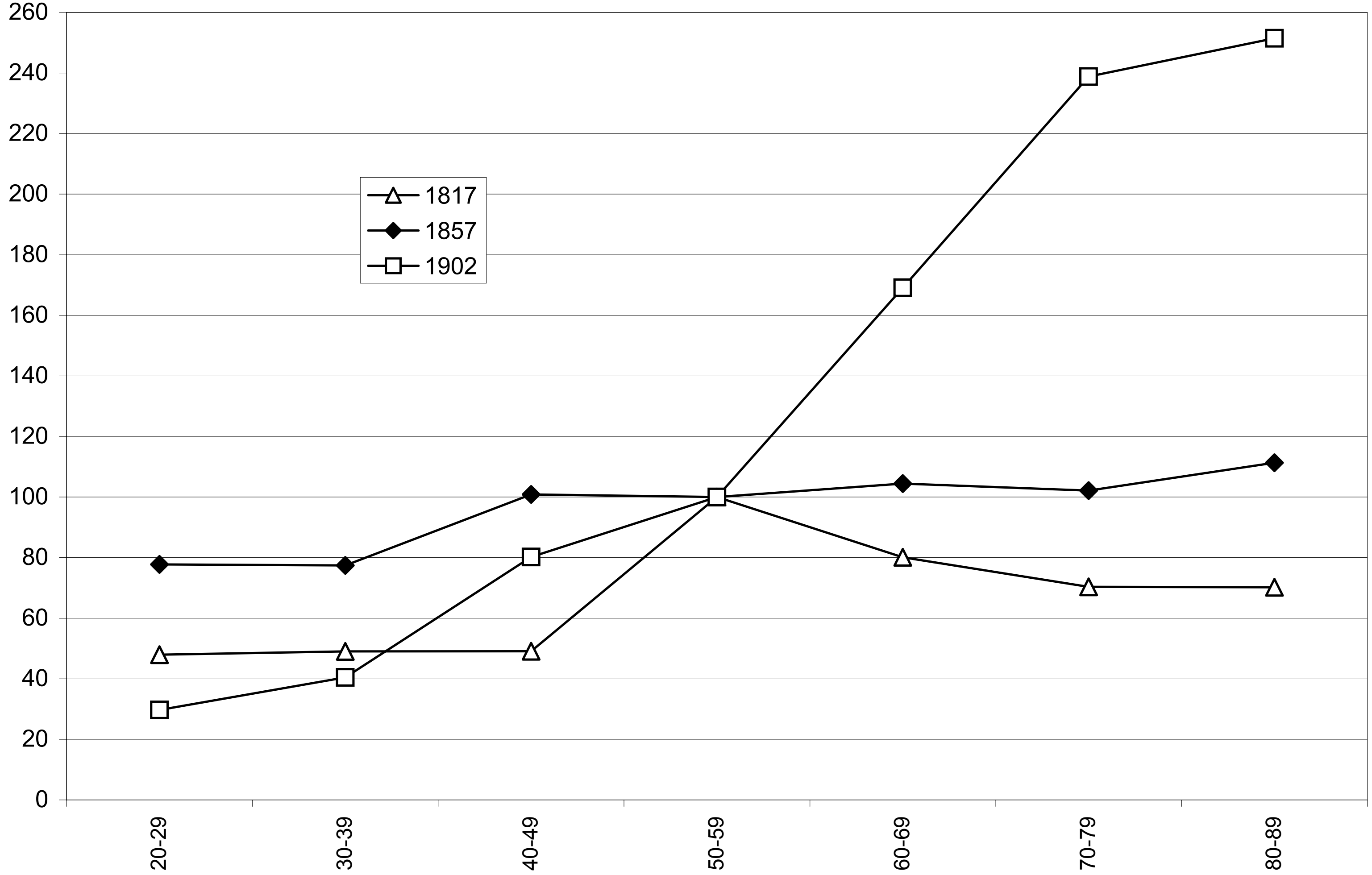
Source: Authors' computations based on estae tax returns

Figure 8: Wealth concentration and growth in France, 1800-2000



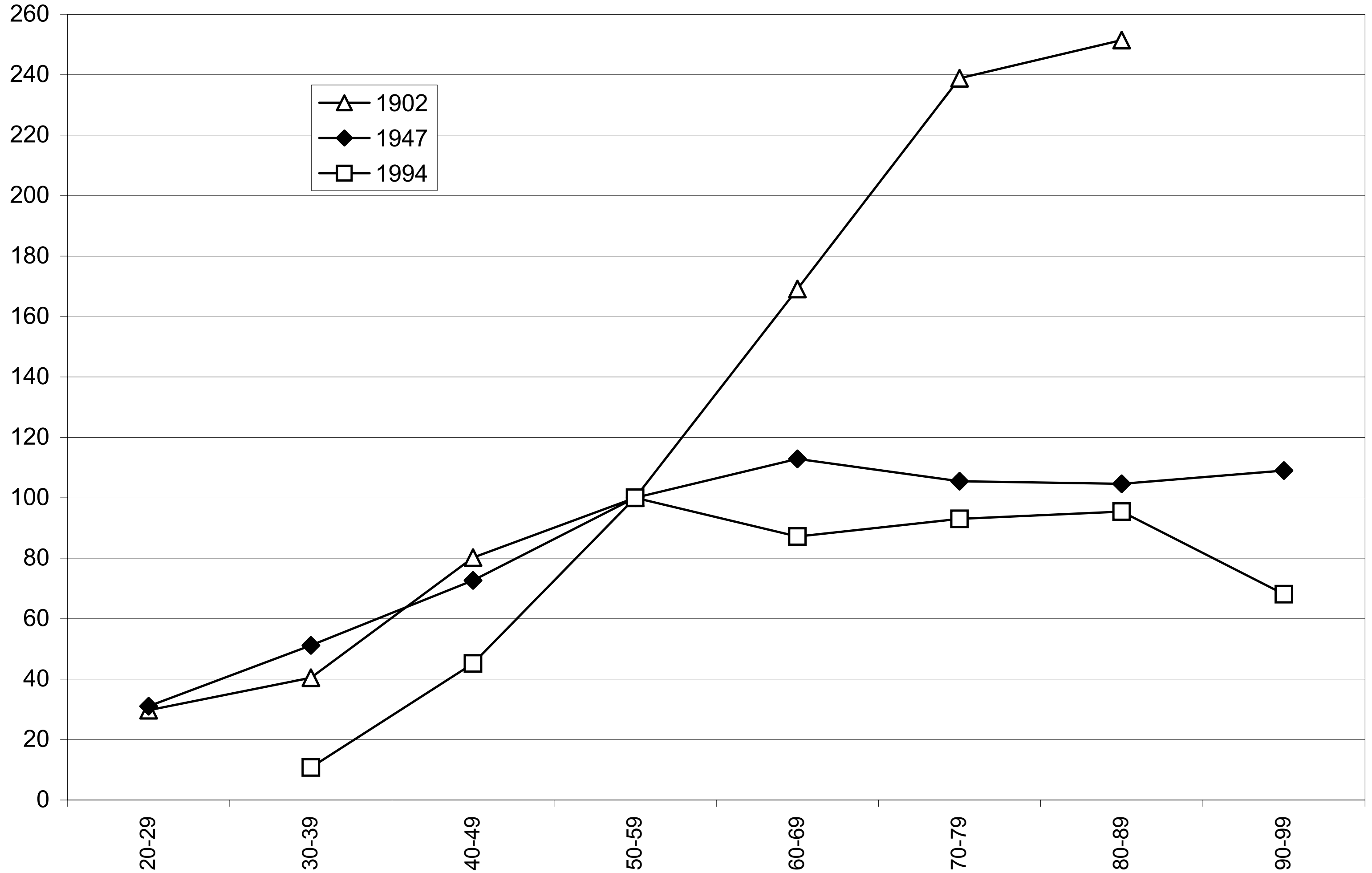
Source: Authors' computations based on estae tax returns

Figure 9: The Changing Age Profile of Wealth in Paris, 1817-1902
(average estate left by 50-59 year-old = 100)



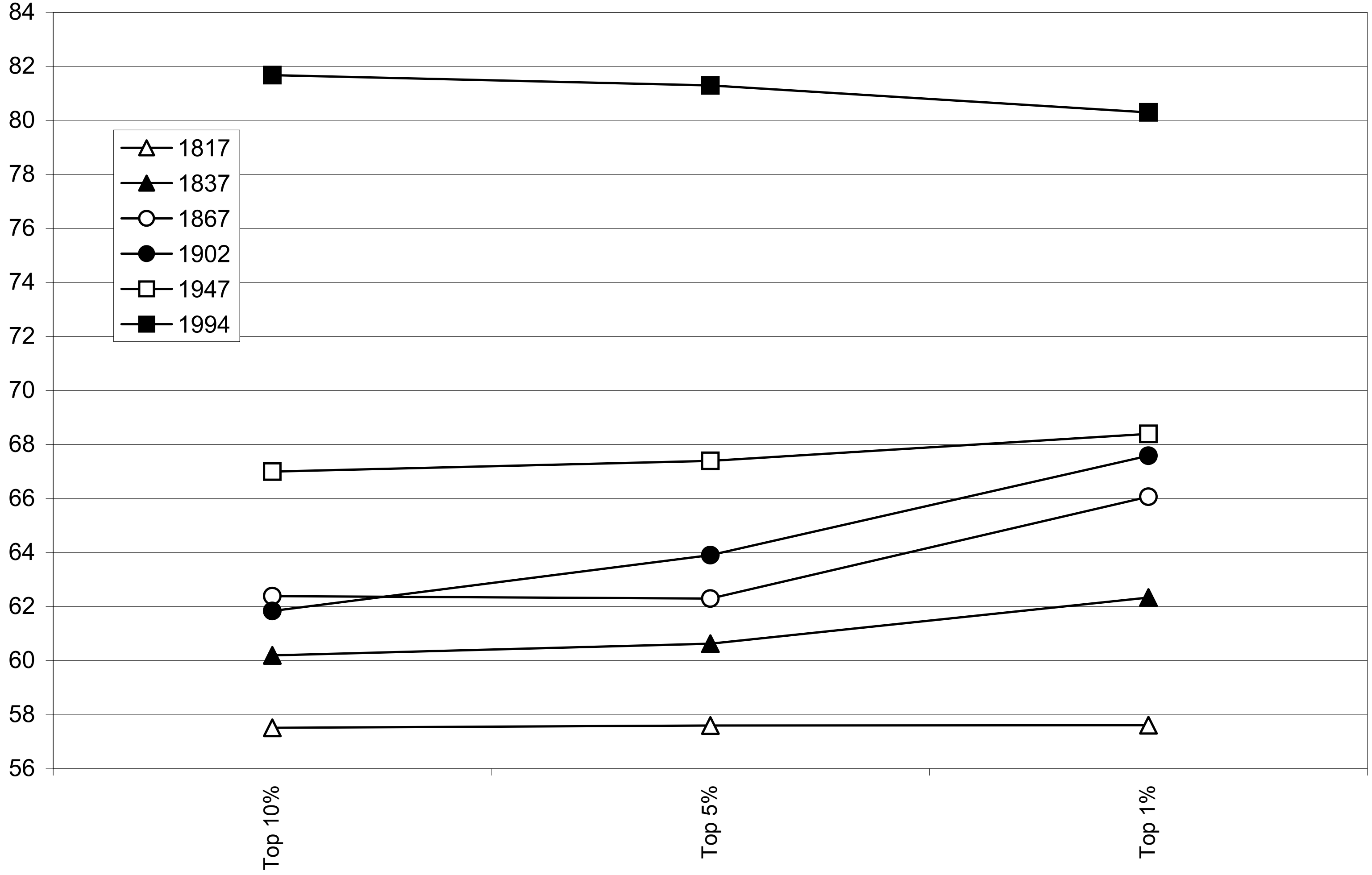
Source: Authors' computations based on estae tax returns

Figure 10: The Changing Age Profile of Wealth in Paris, 1902-1994
(average estate left by 50-59 year-old = 100)



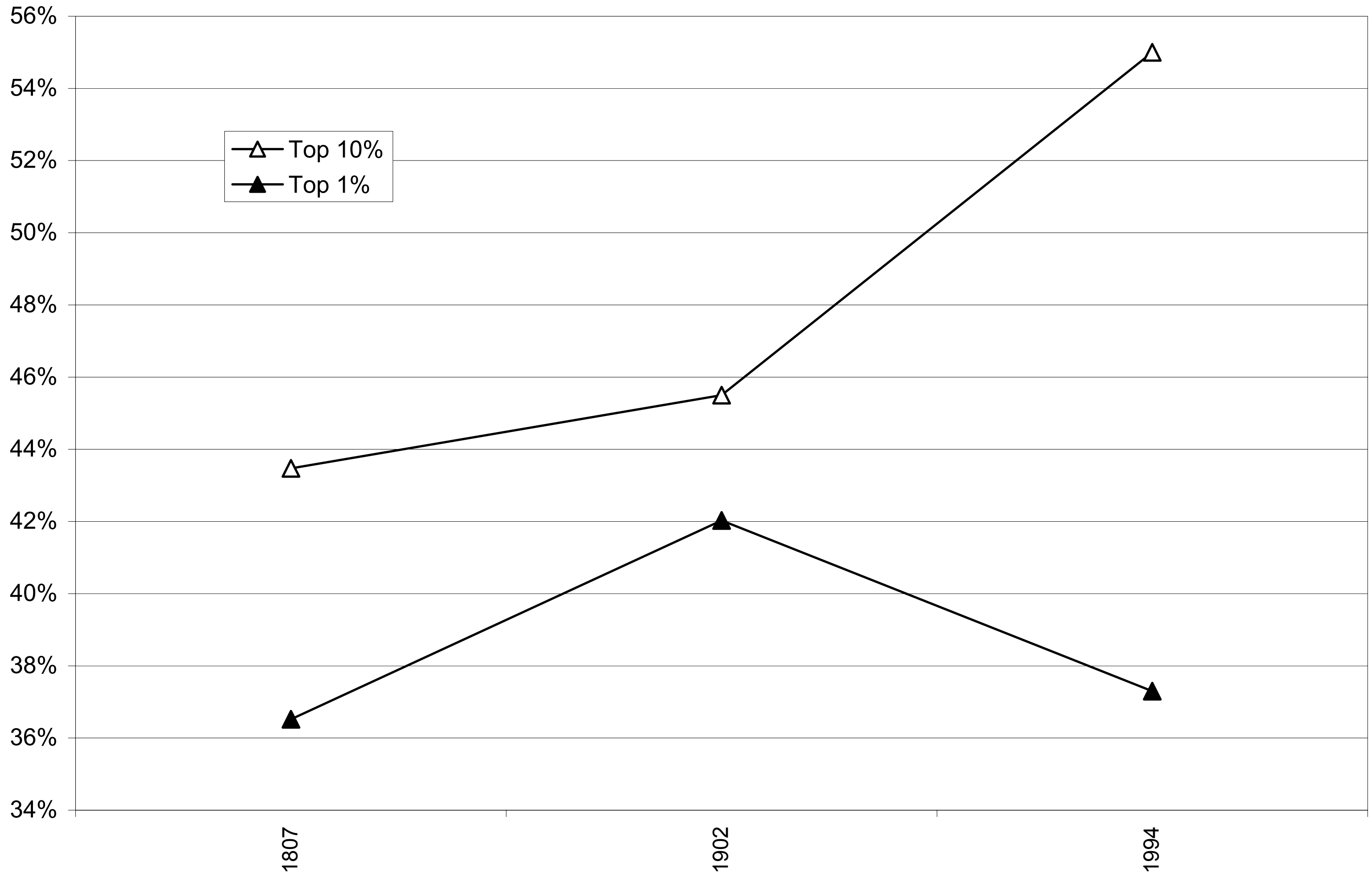
Source: Authors' computations based on estae tax returns

Figure 11: The Changing Age Profile of Wealth in Paris, 1817-1994
(average age within top estate fractiles)



Source: Authors' computations based on estae tax returns

Figure 12: Women and Wealth in Paris, 1807-1994
(share of women within top estate fractiles)



Source: Authors' computations based on estae tax returns