



### The evolution of wealth inequality in France from 1800 to 2014

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This Rue de la Banque analyses the long-run evolution of wealth in France from 1800 to 2014, using estimates from Garbinti, Goupille-Lebret and Piketty (2017). Following a period of prolonged stability during the 19th century, inequality declined significantly from the beginning of the 20th century before increasing, moderately but constantly, since the mid-1980s. Financial assets have accounted for an ever-increasing proportion of the wealth of the richest individuals since the 1970s. In the long run, highly contrasting scenarios for the evolution of wealth inequality are possible, depending on differences in labour incomes, saving rates and asset portfolio rates of return.

easuring the distribution of national wealth necessitates a large array of data sources and methodologies that are imperfect and often contradictory. We exploit several information sources to carry out a project to document the long-run evolution of wealth inequality in France. For the earlier period, from 1800 to the 1970s, we use inheritance tax data, which allow us to calculate the wealth of the people alive at the time via a simple method of reweighting death estates using a standard correction for differential mortality. For the recent period, from 1970 to 2014, we use both income tax returns data and Insee housing and wealth surveys.<sup>2</sup>

This methodology not only allows us to trace the evolution of wealth in France from 1800 to 2014, but also to present the changes in portfolio composition of the different wealth groups since 1970. Lastly, we propose a simple model to illustrate the effect on inequality of the key determinants of wealth accumulation (unequal labour income, saving rates and portfolio rates of return).

Inequality from 1800 to 2014: stability during the 19th century and a significant decline at the beginning of the 20th century, followed by a moderate but constant rise

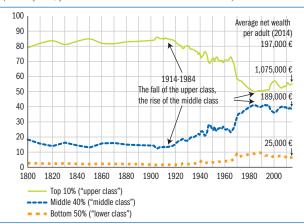
Throughout the 19th century, the "Top 10%" – the richest 10% of individuals in France – owned almost all the wealth (see Chart 1) and there was no real middle class.

The beginning of the 20th century marked the end of this stable period of severe inequality, and with the First World War, inequality began to decline sharply and a middle class started to emerge.

- 1 See Piketty, Postel-Vinay and Rosenthal (2006) for further information on these data.
- 2 For periods where overlaps are available, we demonstrate that using data from death estates on the one hand and tax returns and Insee surveys on the other are perfectly comparable in terms of levels and trends. We also demonstrate that our findings are consistent with the trends observed via wealth tax tabulations and the rankings of French fortunes published in the magazine Challenges.

#### C1 Wealth concentration in France, 1800-2014

(x-axis: years; y-axis: wealth share as % of total net wealth)



Source: Authors' calculations.

While the Top 10% total wealth share declined from 85% to 50% from 1910 to 1985, the wealth share of the middle class rose from 14% to 41% (the middle class is referred to in this paper as "M40%", representing the 40% of individuals "in the middle" of the wealth distribution, between the Top 10% and the poorest 50% at the "bottom" – "B50%").

This evolution corresponds to two distinct periods. First, the period from the beginning of the First World War to the end of the Second World War saw a drop in the wealth of the Top 10%, which was particularly hit by capital destruction during the conflicts, inflation, the Great Depression of the 1930s, and even nationalisations. The wealth of the middle class also declined but to a lesser extent, leading to a relative increase in their share of national wealth. The post-1945 period then followed a very different dynamic. Both categories saw their wealth increase, but middle class wealth grew more substantially than that of the Top 10%. The growth in wages (particularly after 1968) and the flattening of the compensation hierarchy boosted the wealth accumulation capacity of the middle class. At the same time, the implementation of an income tax in 1915 restricted the saving capacity, and therefore the accumulation capacity, of the richest members of society. The bequests of the rich were also constrained by the progressive inheritance tax introduced in 1901. Since the middle of the 1980s, we have started to see an increase in inequality with the Top 10% wealth share rising from 50% in 1985 to 55% in 2014. Although the scale of the increase may appear moderate, it is nevertheless constant.

### A breakdown of recent evolutions (1970-2014)

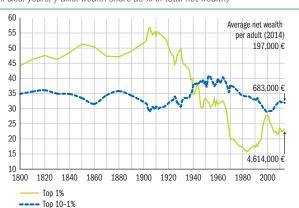
The evolutions of the Top 10% wealth share mainly reflect those of the Top  $1\%^3$  (a substantial drop between 1910 and 1984 followed by an upturn, see Chart 2) while the wealth evolution of the "moderately rich" (those who belong to the Top 10% but not the Top 1%) follows a trend that does not always conform to that of the Top 10% as a whole.

In order to understand recent evolutions in inequality, it is therefore important to analyse the composition of the wealth of the Top 1%, which our data allow us to do for the 1970-2014 period. As we can see in Chart 3, the proportion of business assets (commercial enterprises, etc.) has become less and less significant while the proportion of financial assets has increased since the development of the financial markets in the mid-1980s, becoming extremely predominant today.

The evolution of these assets mirrored that of stock market prices, which explains the sharp increase observed in the mid-1990s at the time of the stock market boom and which continued until 2000 when the CAC 40 hit its all-time high.

#### C2 Top wealth shares in France, 1800-2014

(x-axis: years; y-axis: wealth share as % of total net wealth)



Source: Authors' calculations.

<sup>3</sup> The richest 1%.

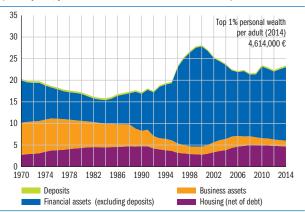
<sup>4</sup> Tax incentives to encourage the ownership of financial products supported this development. This was the case for Assurance-vie assets, for example (see Goupille-Lebret and Infante, 2017).

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#### C3 Breakdown of Top 1% wealth share, 1970-2014

(x-axis: years; y-axis: wealth share as % of total net wealth)



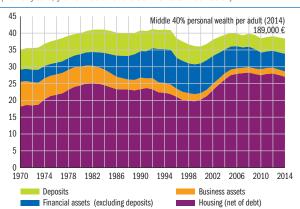
Source: Authors' calculations.

The influence of the principal wealth component on the evolution of wealth as a whole can also be observed with regard to the middle class, whose main asset is their home (see Chart 4). The surge in housing prices in the 1970s, and particularly at the end of the 1990s, explains the corresponding increases in middle class wealth share.

However, the effect of this increase in housing prices is contradictory. While it may appear to be a factor in the reduction of inequality, through an increase in middle class property wealth, it is also partly responsible for limiting opportunities for young households to get on the property ladder (see for example Bonnet et al., 2018). Furthermore, during periods of house price bubbles, their mechanical effect on middle class wealth probably leads to inequality being underestimated (see Carbonnier, 2015).

## C4 Breakdown of middle class (M40%) wealth share, 1970-2014

(x-axis: years; y-axis: wealth share as % of total net wealth)



Source: Authors' calculations

# Illustrative model of the long-run effects of unequal saving rates, portfolio rates of return and labour incomes

When accounting for the evolution of inequality, it is important to distinguish short-run evolutions, which are driven, for example, by the relative price movements of different assets (financial assets or houses, for instance), from long-run, structural, trends.

In order to better understand the level of inequality observed in the data as well as their variations throughout the 20th century, we devised a formula that allows us to calculate the degree of inequality that would prevail in a steady-state economy. Based on a simple accounting equivalence linking the wealth of a group (for example, the Top 10% or Top 1%) for a given year to that same group's wealth in the previous year, we highlight the effect of the three key factors of capital accumulation: differences in saving rates, asset portfolio rates of return and labour incomes. In the long run, small variations in these factors can have large multiplicative effects. This point is even more crucial given that differences in the saving rates between the richest and poorest appear to have diverged considerably since the mid-1980s.

This relationship also allows us to highlight the role that economic growth plays in moderating the reproduction of wealth inequality: in a world of explosive growth, the importance of previously accumulated capital would be very limited and only the differences in labour incomes and saving rates between the different groups would carry weight in explaining the evolution of wealth inequality. Equally, in a world where the entire population had the same saving rates and asset returns, wealth inequality would only reflect unequal labour incomes.

- 5 The steady state corresponds to a long-run situation in which economic variables such as growth, the saving rate, rates of return, the wealth-income ratio, etc., evolve at a constant rhythm; in which the wealth shares of the different groups are stable; and in which, more generally, inequalities in income and wealth remain unchanged.
- 6 Strictly speaking, this is not the saving rate of individuals but a synthetic saving rate calculated by wealth group that allows us to make the evolution of wealth observed for a group in a given year compatible with the wealth observed the following year (taking into consideration the rate of return, labour incomes and the economic growth rate) for the same group (although not necessarily the same individuals).
- 7 For a more detailed historical perspective on income inequality in France, see Piketty (2003), and for a recent perspective, see Garbinti, Goupille-Lebret and Piketty (2017).

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In order to measure the significance of cumulative effects, we run two simple simulations.

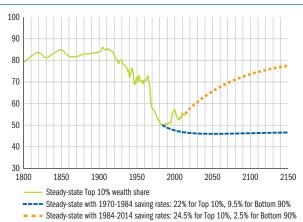
First, we use the average values observed during the 1970-84 period for the saving rates, rates of return, economic growth and unequal labour incomes (see Chart 5). If these values had continued to be observed after this period, inequality would have continued to decline and would have reached a relatively low level, with the Top 10% owning a little less than 50% of total wealth.

Second, we perform the same exercise but this time using the average values observed for the 1984-2014 period. The results are striking as we find that the moderate but constant rise in inequality observed since the mid-1980s persists until reaching a particularly high level of inequality that is similar to that observed at the beginning of the last century, with Top 10% wealth share at almost 80%.

Obviously, the objective here is not to claim to be able to predict the evolution of wealth inequality but to stress

### C5 Steady-state Top 10% wealth share, 1800-2150

(x-axis: years; y-axis: wealth share as % of total net wealth)



Source: Authors' calculations.

the significant, long-run, cumulative effect of the various factors underlying this inequality.

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### References

### Bonnet (C.), Garbinti (B.) and Grobon (S.) (2018)

"Inégalités d'accès à la propriété et de richesse immobilière parmi les jeunes en France, 1973-2013", Économie et Statistique, forthcoming.

### **Carbonnier (C.) (2015)**

"L'impact des prix de l'immobilier sur les inégalités et leur mesure", Revue économique, Vol. 66, No. 6, pp. 1029-1044

### Garbinti (B.), Goupille-Lebret (J.) and Piketty (T.) (2017)

"Accounting for wealth inequality dynamics: methods, estimates and simulations for France (1800-2014)", Working Papers, No. 633, Banque de France. Download the document

### Garbinti (B.), Goupille-Lebret (J.) and Piketty (T.) (2018)

"Income inequality in France, 1900-2014: evidence from distributional national accounts (DINA)", Journal of Public Economics.

### Goupille-Lebret (J.) and Infante (J.) (2017)

"Behavioral responses to inheritance tax: evidence from notches in France", INSEAD Working Paper, No. 2017/76/EPS.

### Piketty (T.) (2003)

"Income inequality in France, 1901-1998", Journal of Political Economy, Vol. 111, No. 5, pp. 1004-1042.

### Piketty (T.), Postel-Vinay (G.) and Rosenthal (J.-L.) (2006)

"Wealth concentration in a developing economy: Paris and France, 1807-1994", American Economic Review, Vol. 96, No. 1, pp. 236-256.

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