

Econ 133 – Global Inequality and Growth

Inherited vs. self-made wealth (2)

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What we've learned so far:

- Wealth accumulation involves two types of agents: savers and inheritors
- The macro stock of inherited wealth = sum of inheritors' wealth + inherited fraction of savers' wealth

What we're going to learn in this lecture:

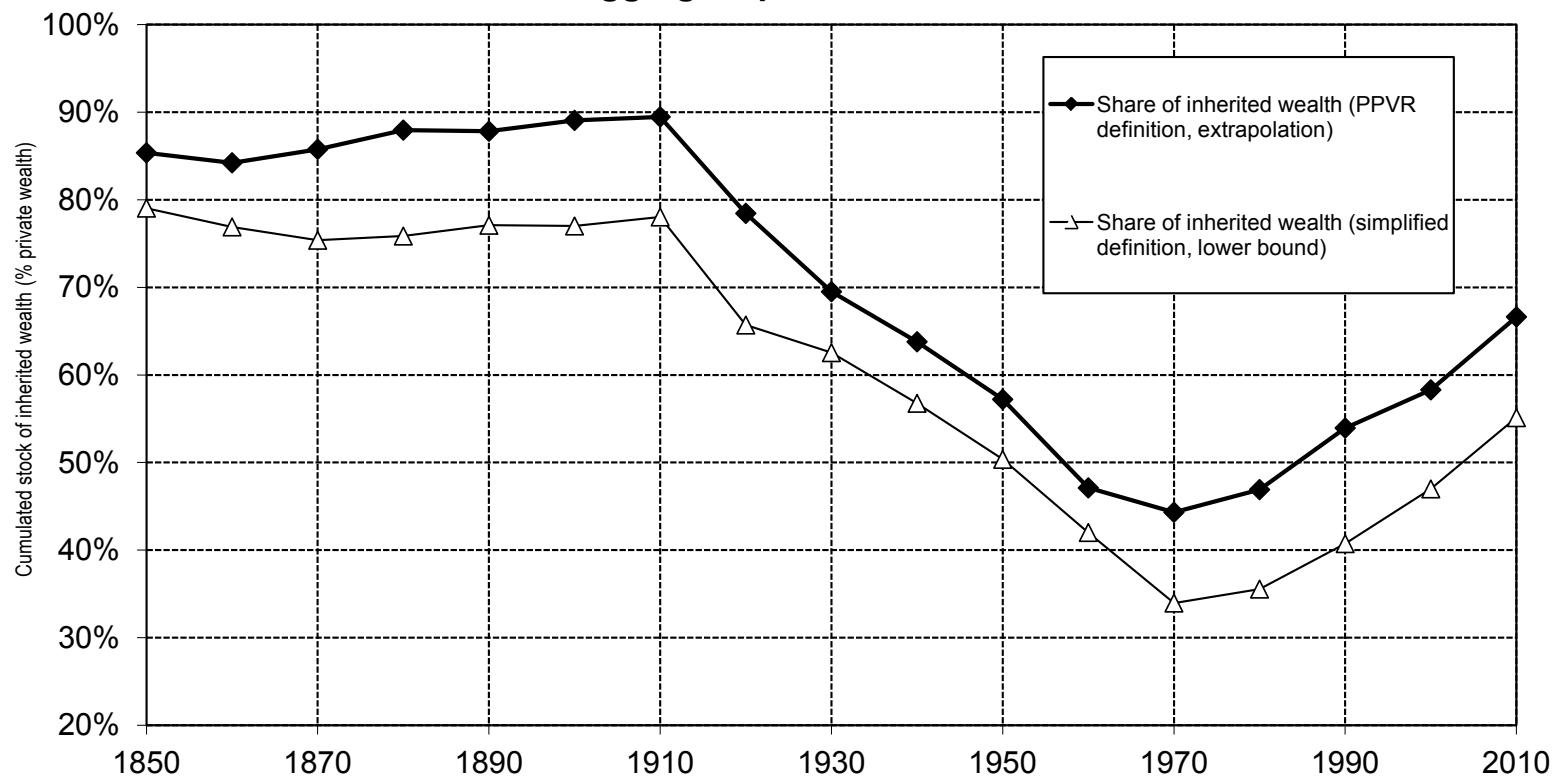
- How the importance of inherited wealth has changed over time
- What factors can account for these changes
- We will illustrate this with the case of France
- Reference for this lecture: Piketty (2014), chapter 11

1 Estimates of share φ of inherited wealth in total wealth

Lots of data issues involved:

- To identify rentiers vs. savers, one needs micro data on wealth and inheritance
- This is rare because few countries have universal estate or inheritance tax
- One exception: France = quasi-universal inheritance tax since 1790

Figure 4.4. The cumulated stock of inherited wealth as a fraction of aggregate private wealth, France 1850-2010

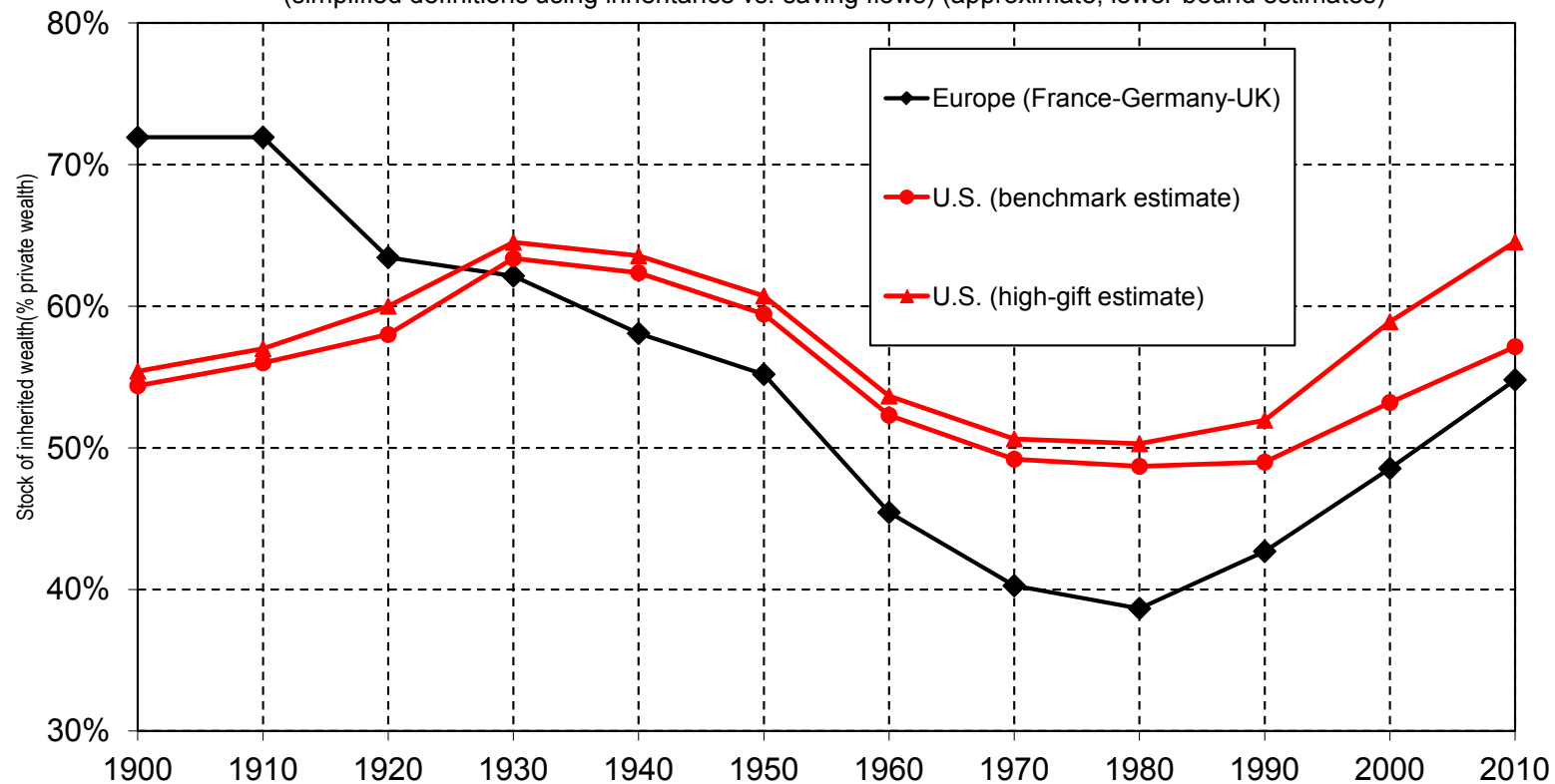


Inherited wealth represents 80-90% of total wealth in France in the 19th century; this share fell to 40%-50% during the 20th century, and is back to about 60-70% in the early 21st century.

Source: Piketty and Zucman (2015)

Figure 1. The share of inherited wealth. Europe and the U.S. 1900-2010

(simplified definitions using inheritance vs. saving flows) (approximate, lower-bound estimates)



The inheritance share in aggregate wealth accumulation was over 70% in Europe in 1900-1910. It fell abruptly following 1914-1945 shocks, down to 40% in 1970-1980 period. It is back to about 50-60% in 2000-2010 and rising. The U.S. pattern also appears to be U-shaped, but less marked, and with significant uncertainty regarding recent trends, due to data limitations.

Source: Alvaredo, Garbinti and Piketty (2015)

2 Explaining the changes in share of inherited wealth φ

- Key parameter: bequest-plus-gift flow B_t^*
- If the bequest flow is large, a lot of wealth is transmitted from the past to the present
- High bequest flows lead to high shares of inherited wealth φ in the following decades
- What determines the bequest-plus-gift flow?

Bequest flow B_t^* can always be computed as

$$B_t^* = (1 + v_t) \cdot \mu_t \cdot m_t \cdot W_t$$

- $m_t =$ mortality rate (adult decedents / total adult population)
- $\mu_t =$ ratio between average adult wealth at death and average adult wealth for the entire population
- $v_t = V_t/B_t =$ estimate of the gift/bequest flow ratio

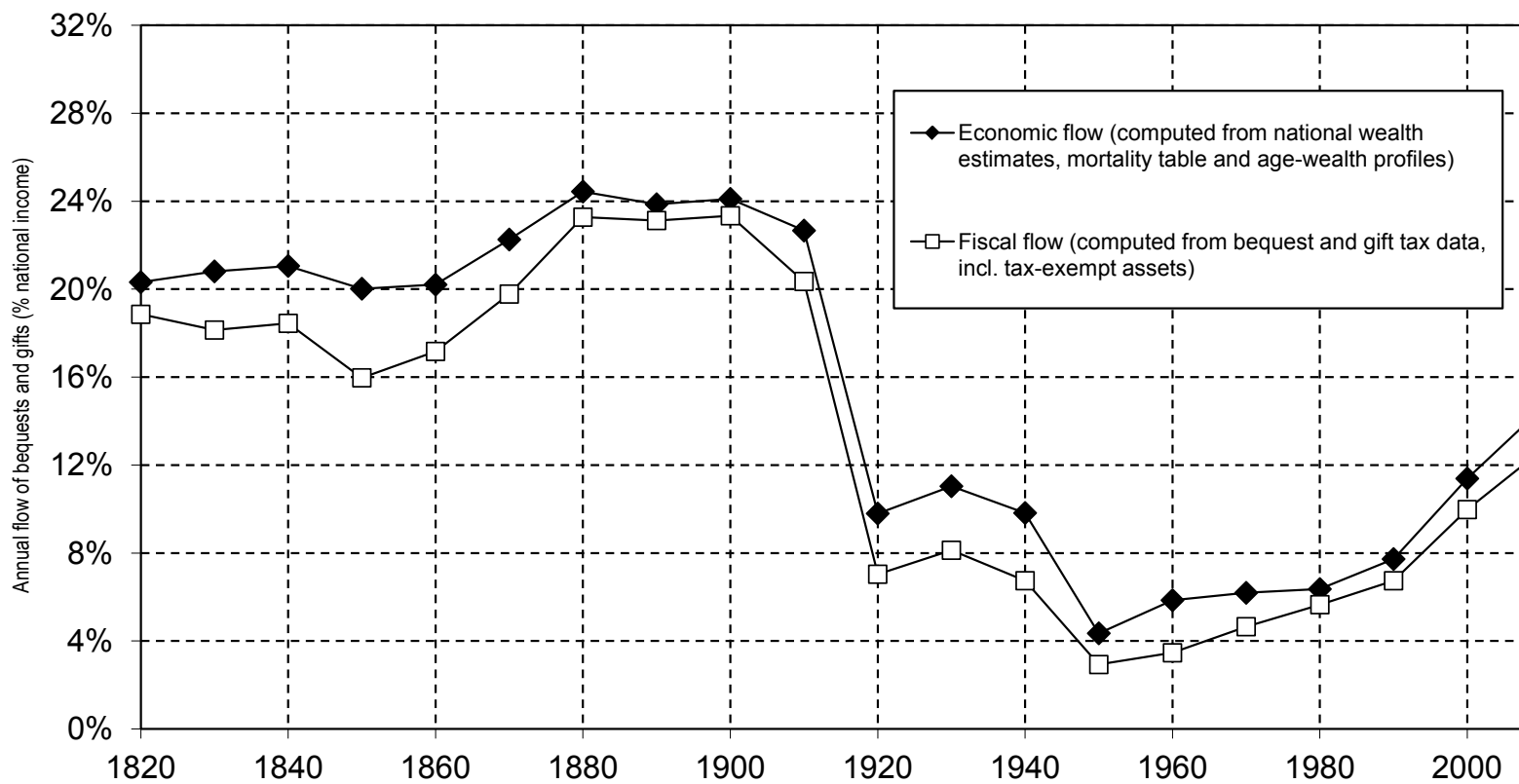
What does this formula mean?

- If $\mu_t = 1$ and $v_t = 0$ (no gift), then $B_t^* = m_t \cdot W_t$
- That is, if mortality rate is 1%, then 1% of total wealth is transmitted every year
- If $\mu_t = 0$ (pure life-cycle theory) and $v_t = 0$, then there is no inheritance at all

3 Example: the case of France

- Study by Piketty (2011) where inheritance tax data are exceptionally good
- Bequest flow has followed a spectacular U-shaped pattern over the 20th century

Figure 4.1. The annual inheritance flow as a fraction of national income, France 1820-2010



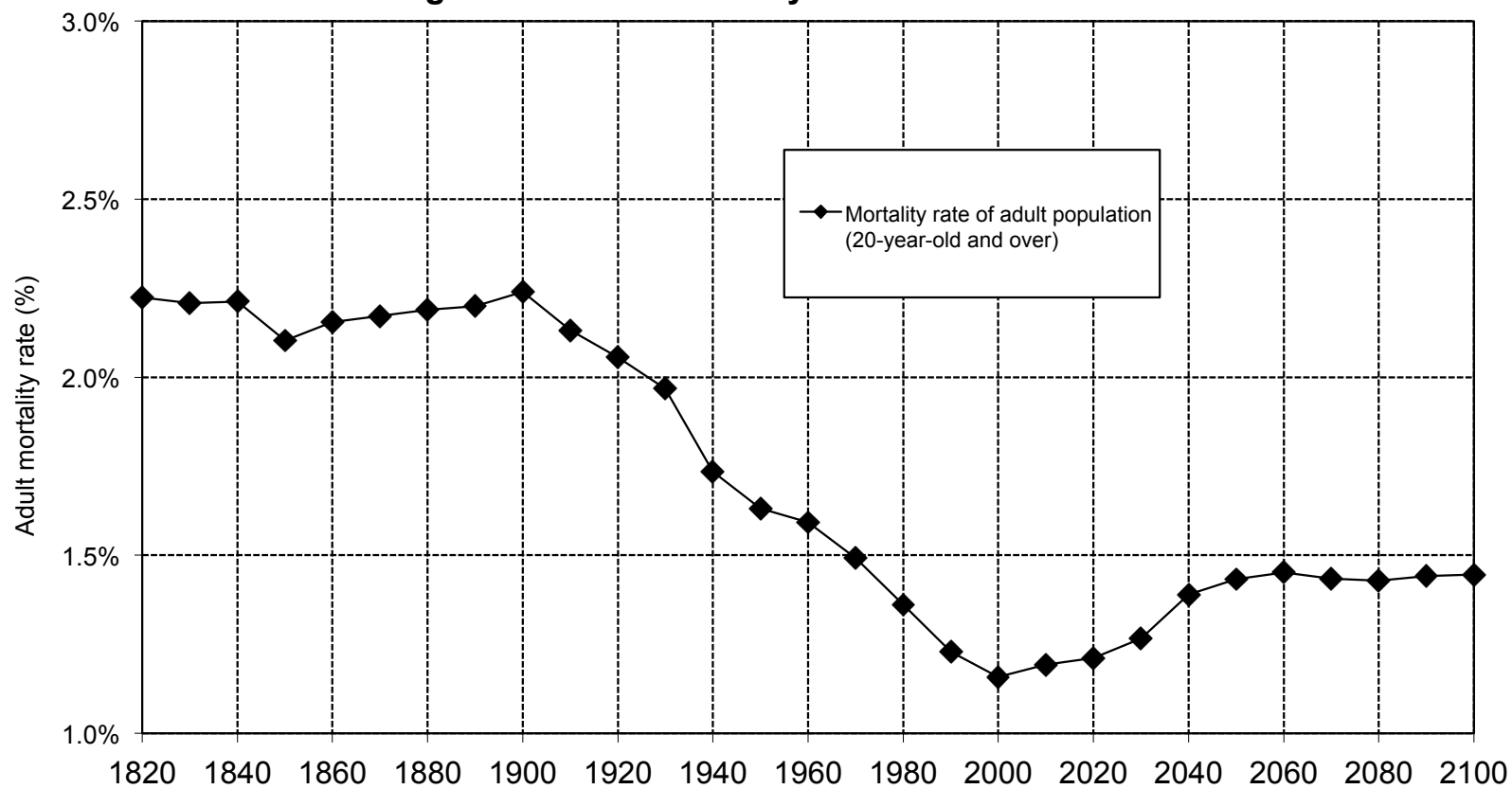
The annual inheritance flow was about 20-25% of national income during the 19th century and until 1914; it then fell to less than 5% in the 1950s, and returned to about 15% in 2010.

Source: Piketty (2011)

Key role of μ and gifts in explaining the evolution of the bequest flow:

- Relative wealth of decedents was at its lowest historical level in the aftermath of World War 2
- In recent years, μ_t has been rising, and v_t rising a lot
- μ tends to be high when $r > g$, because makes it easier for old people to accumulate a lot of wealth
- As old people grow richer, inheritance is making a comeback

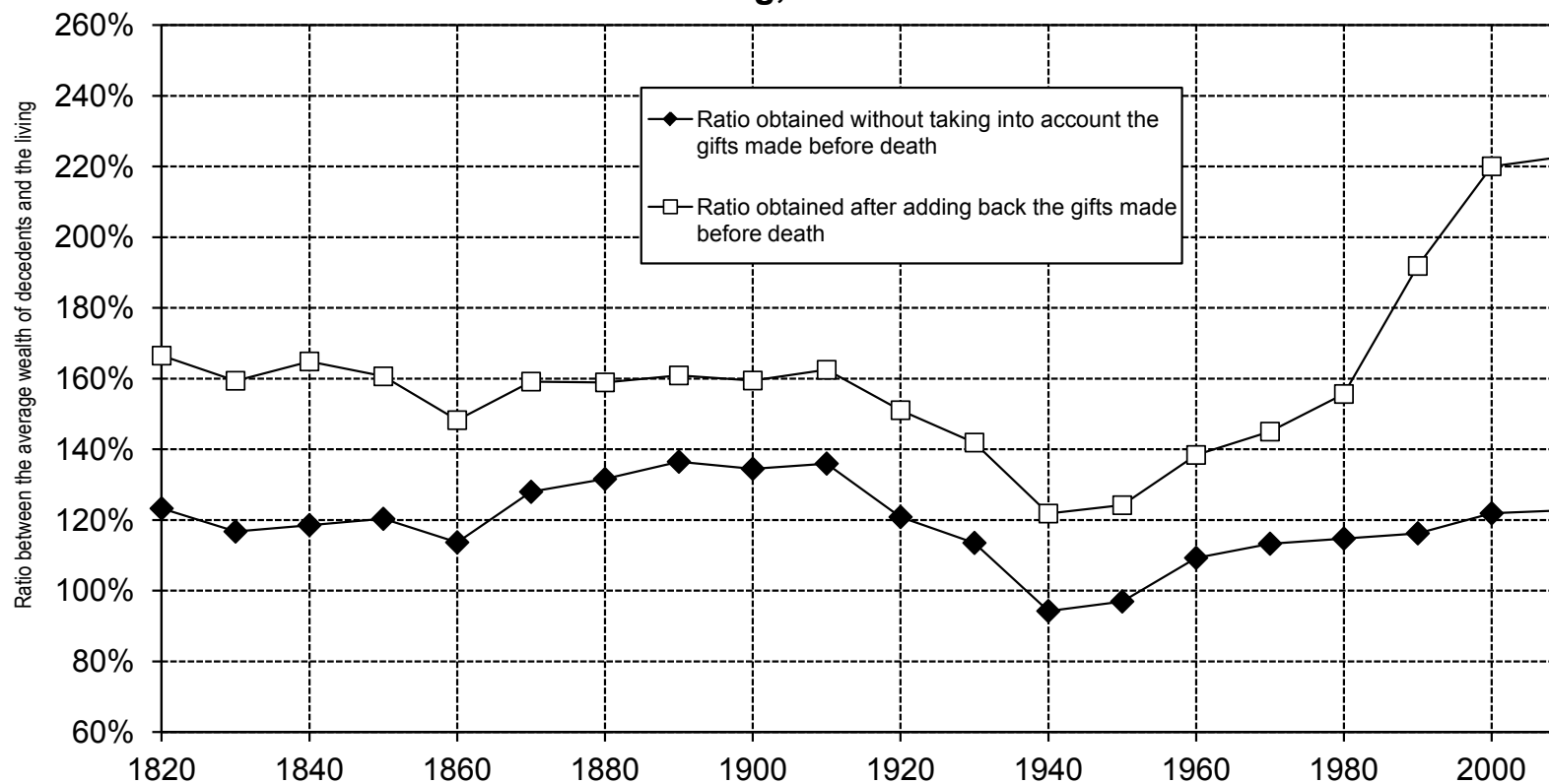
Figure 11.2. The mortality rate in France 1820-2100



The mortality rate fell in France during the 20th century (rise of life expectancy), and should increase somewhat during the 21st century (baby-boom effect). Sources and series: see piketty.pse.ens.fr/capital21c.

Source: Piketty (2014)

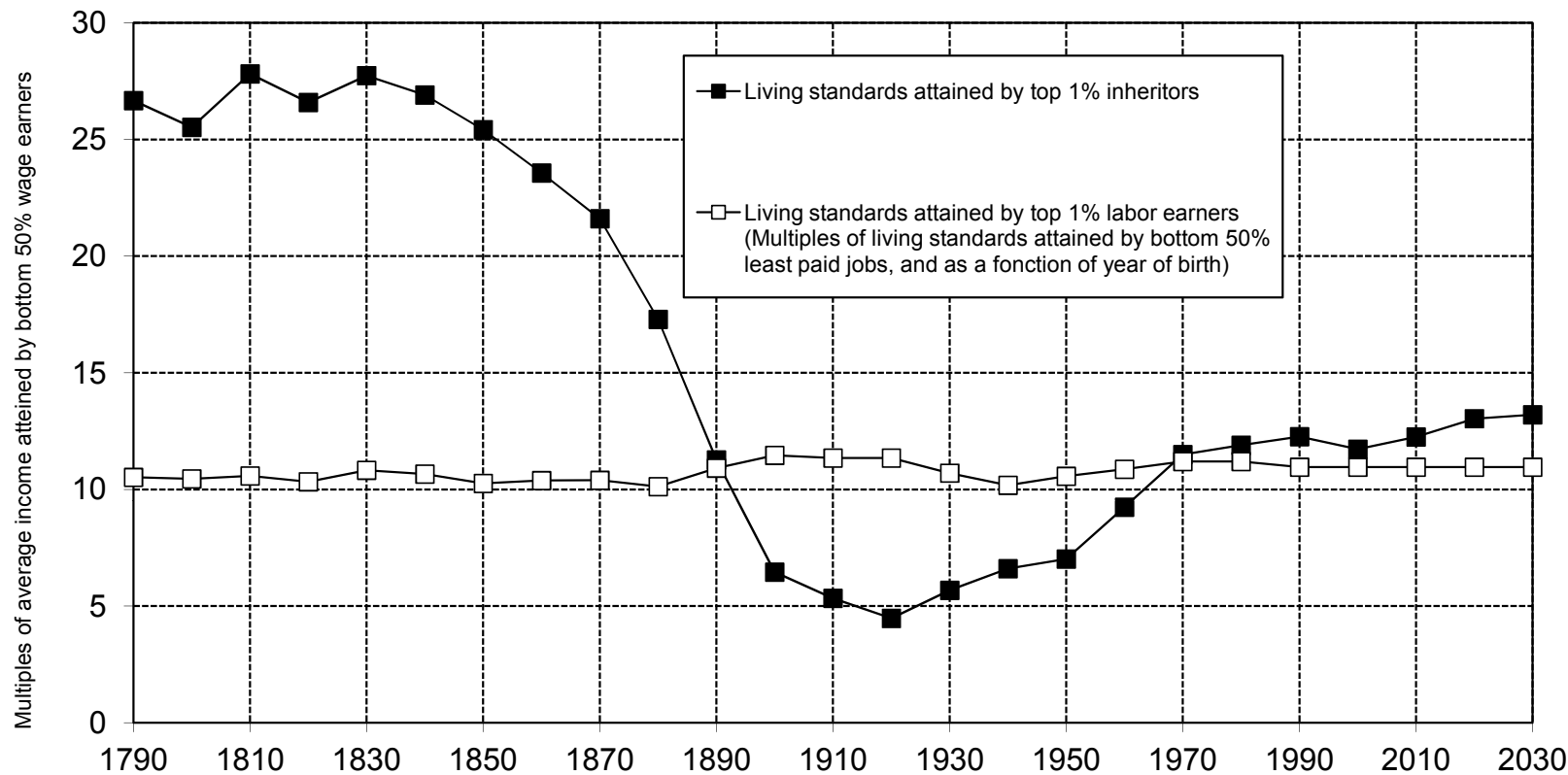
Figure 4.3. The ratio between average wealth at death and average wealth of the living, France 1820-2010



In 2000-2010, the average wealth at death is 20% higher than that of the living if one omits the gifts that were made before death, but more than twice as large if one re-integrates gifts.

Source: Piketty (2011)

Figure 11.10. The dilemma of Rastignac for cohorts born in years 1790-2030



In the 19th century, the living standards that could be attained by the top 1% inheritors were a lot higher than those that could be attained by the top 1% labor earners. Sources and series: see piketty.pse.ens.fr/capital21c.

Source: Piketty (2014)

4 Summary

- Today about 50%–60% of total wealth comes from inheritance
- The share of inherited wealth in total wealth has followed a U-shaped evolution over the 20th century
- Inherited wealth tends to be big when $r > g$

References

Alvaredo, Facundo, Bertrand Garbinti, and Thomas Piketty, “On the share of inheritance in aggregate wealth Europe and the United States, 1900-2010”, working paper, 2015, (web)

Piketty, Thomas, “On the Long-Run Evolution of Inheritance: France 1820-2050”, *Quarterly Journal of Economics*, 2011 (web)

Piketty, Thomas, *Capital in the 21st Century*, Cambridge: Harvard University Press, 2014, Chapter 11 (web)

Piketty, Thomas, and Gabriel Zucman “Wealth and Inheritance in the Long-Run”, *Handbook of Income Distribution*, 2015 (web)