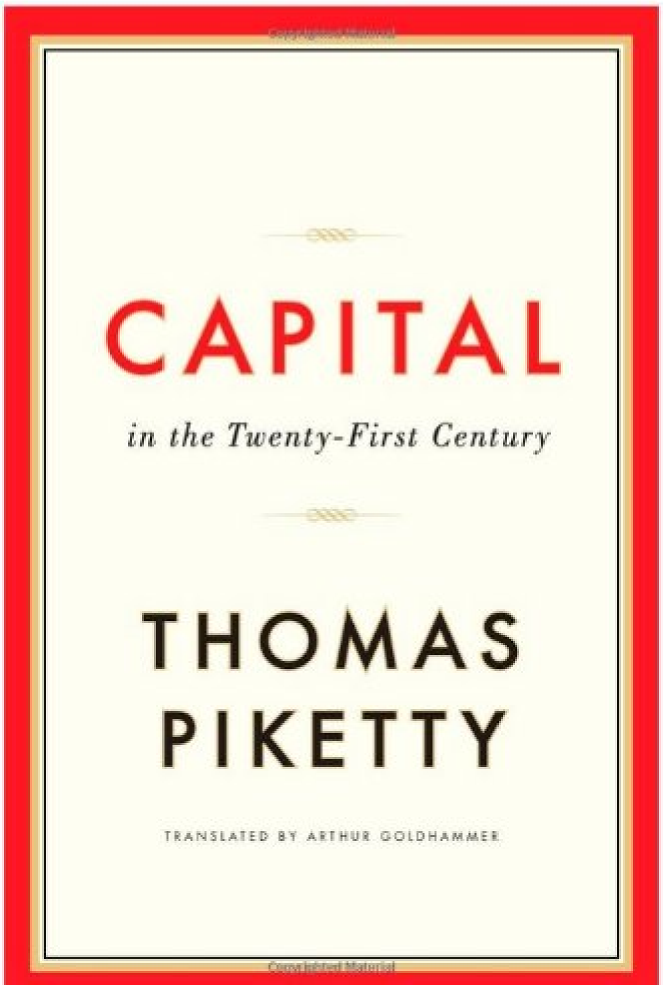
PURDUE UNIVERSITY

PURDUE AGRICULTURE

Thomas Piketty

Capital in the 21st Century



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November 11, 2014 10:00 pm

Thomas Piketty's 'Capital' wins Business Book of the Year

Andrew Hill

'Capital in the 21st century' has provoked a fierce debate over inequality

French economist Thomas Piketty

http://www.ft.com/intl/cms/s/0/b9e03c5c-6996-11e4-9f65-00144feabdc0.html#axzz3Kfj3MzPS

Capital in the Twenty-First Century, an epic analysis of the roots and consequences of inequality, has been named the 2014 Financial Times and McKinsey Business Book of the Year.

Comments on the Book

- “Best economics book of the decade”
- Praised by Nobel prize winning economists Robert Solow, Joseph Stiglitz, and Paul Krugman
- Robert Schiller
  - Piketty’s book makes an invaluable contribution to our understanding of the dynamics of contemporary inequality. He has identified a serious risk to our society. Policymakers have a responsibility to implement a workable way to insure against it.
- Criticized as distorting income equality by Phil Gramm and Michael Solon and others

Why I liked the book

- History of economic thought
- Economic history
- References to English and French literature
- Data driven – amassed huge amounts of data that was quite difficult to assemble
- Combined economic theory with data to tell a holistic story
- Well written – even the English translation

Book Objectives

- One of the main goals of this book is to understand the conditions under which such concentrated wealth can emerge, persist, vanish, and perhaps reappear.
- The novelty of this study is that it is the first attempt to place the question of the capital-labor split and the recent increase of capital's share of national income in a broader historical context by focusing on the evolution of the capital/income ratio from the eighteenth century until now.
- I will show that this spectacular increase in inequality largely reflects an unprecedented explosion of very elevated incomes from labor, a veritable separation of the top managers of large firms from the rest of the population.

Important Piketty Definitions and Relationships

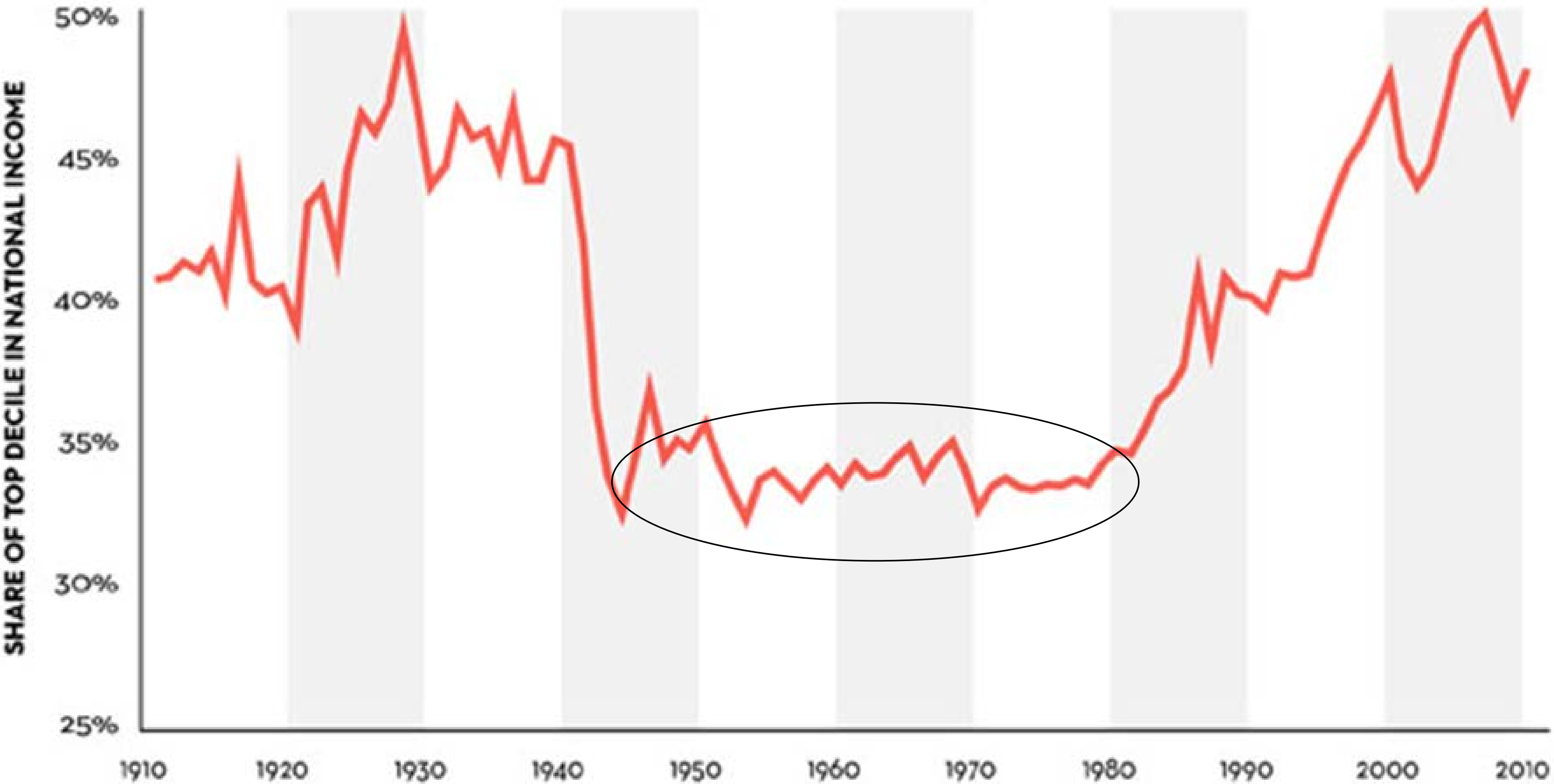
- r = real annual rate of return on capital
- g = real annual growth rate of the economy
- K_t = capital stock in period t
- Y_t = national income in period t
- $\beta_t = K_t/Y_t$ = capital to income ratio in period t, or wealth to income ratio
- s = long run annual saving rate
- $\alpha = rK/Y = r\beta$ = share of capital income in national income
- In the long run, $\beta = K/Y$ converges towards $\beta = s/g$
- g is the sum of the population growth rate and the rate of growth of productivity
- the key to rising inequality is $r > g$

Major Concepts

This fundamental inequality, which I will write as r > g (where r stands for the average annual rate of return on capital, including profits, dividends, interest, rents, and other income from capital, expressed as a percentage of its total value, and g stands for the rate of growth of the economy, that is, the annual increase in income or output), will play a crucial role in this book. In a sense, it sums up the overall logic of my conclusions.

- The inequality r > g, combined with the inequality of returns on capital as a function of initial wealth, can lead to excessive and lasting concentration of capital: no matter how justified inequalities of wealth may be initially, fortunes can grow and perpetuate themselves beyond all reasonable limits and beyond any possible rational justification in terms of social utility.

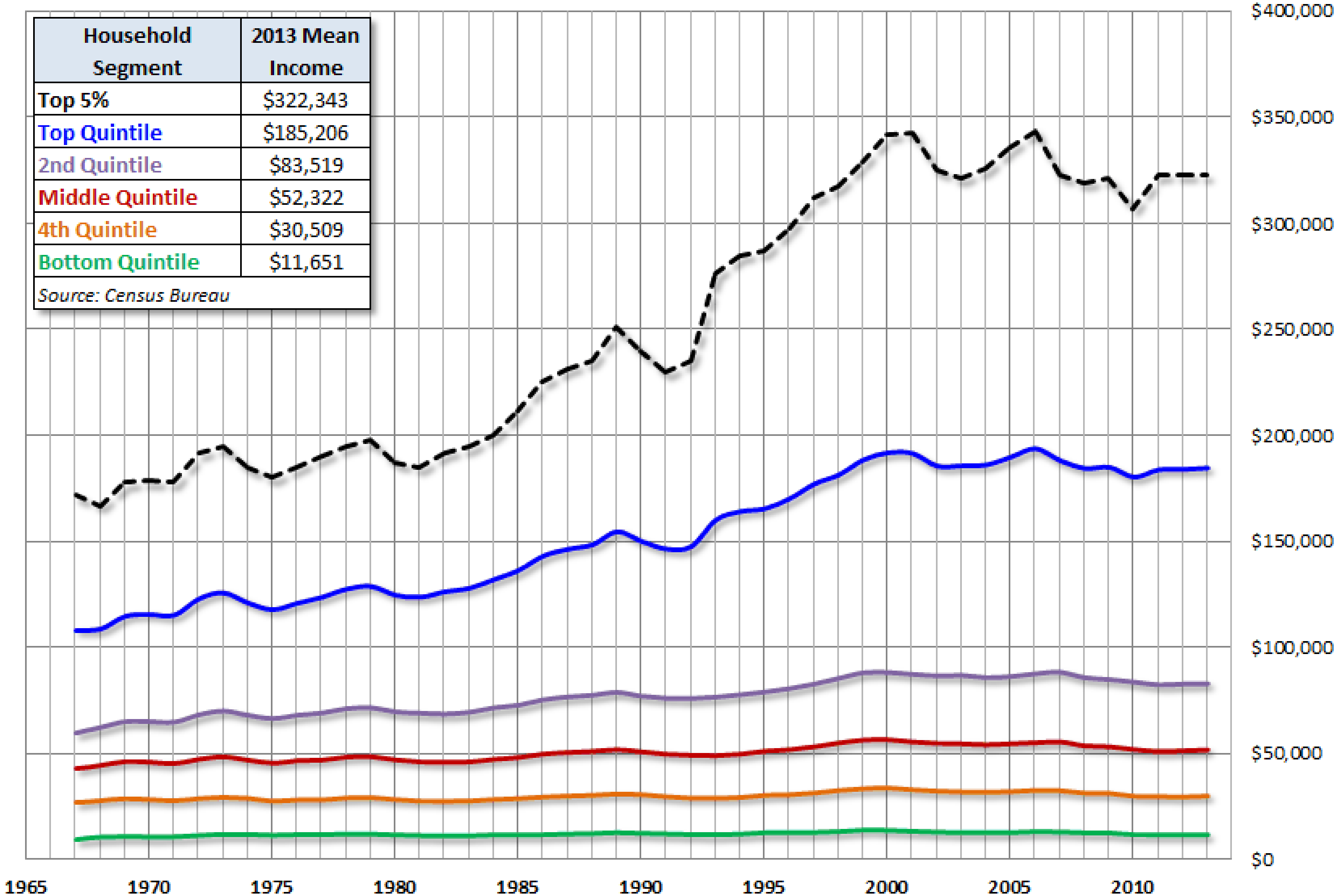
INCOME INEQUALITY IN THE UNITED STATES, 1910-2010



Source: Census Bureau
Data from 1967-2013

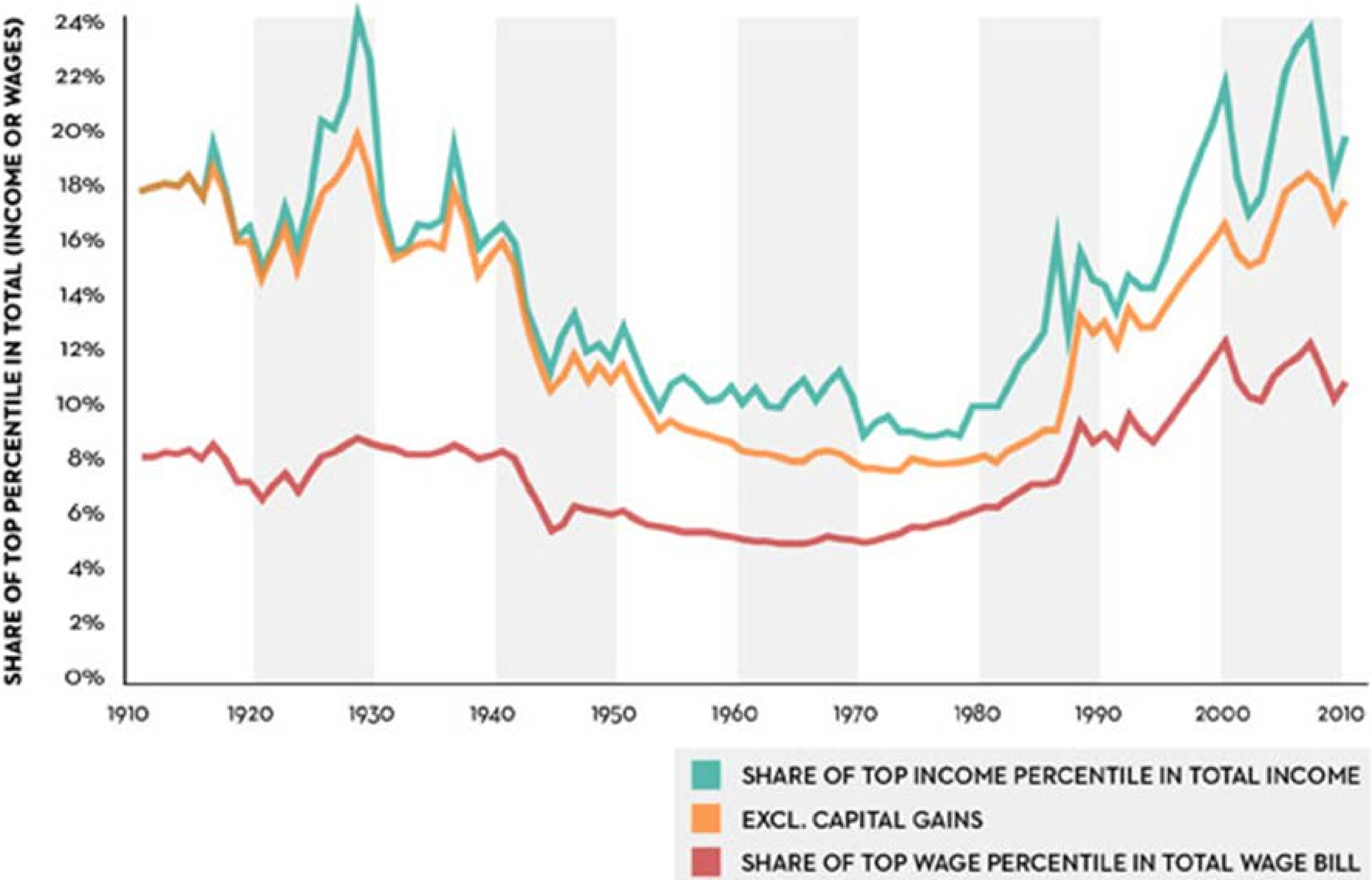
Real (Inflation-Adjusted) Mean Household Income
By Quintile and Top 5%

dshort.com



Household Segment	2013 Mean Income
Top 5%	$322,343
Top Quintile	$185,206
2nd Quintile	$83,519
Middle Quintile	$52,322
4th Quintile	$30,509
Bottom Quintile	$11,651
Source: Census Bureau	

THE TRANSFORMATION OF THE TOP 1% IN THE UNITED STATES



WEALTH INEQUALITY: EUROPE AND THE U.S., 1810-2010

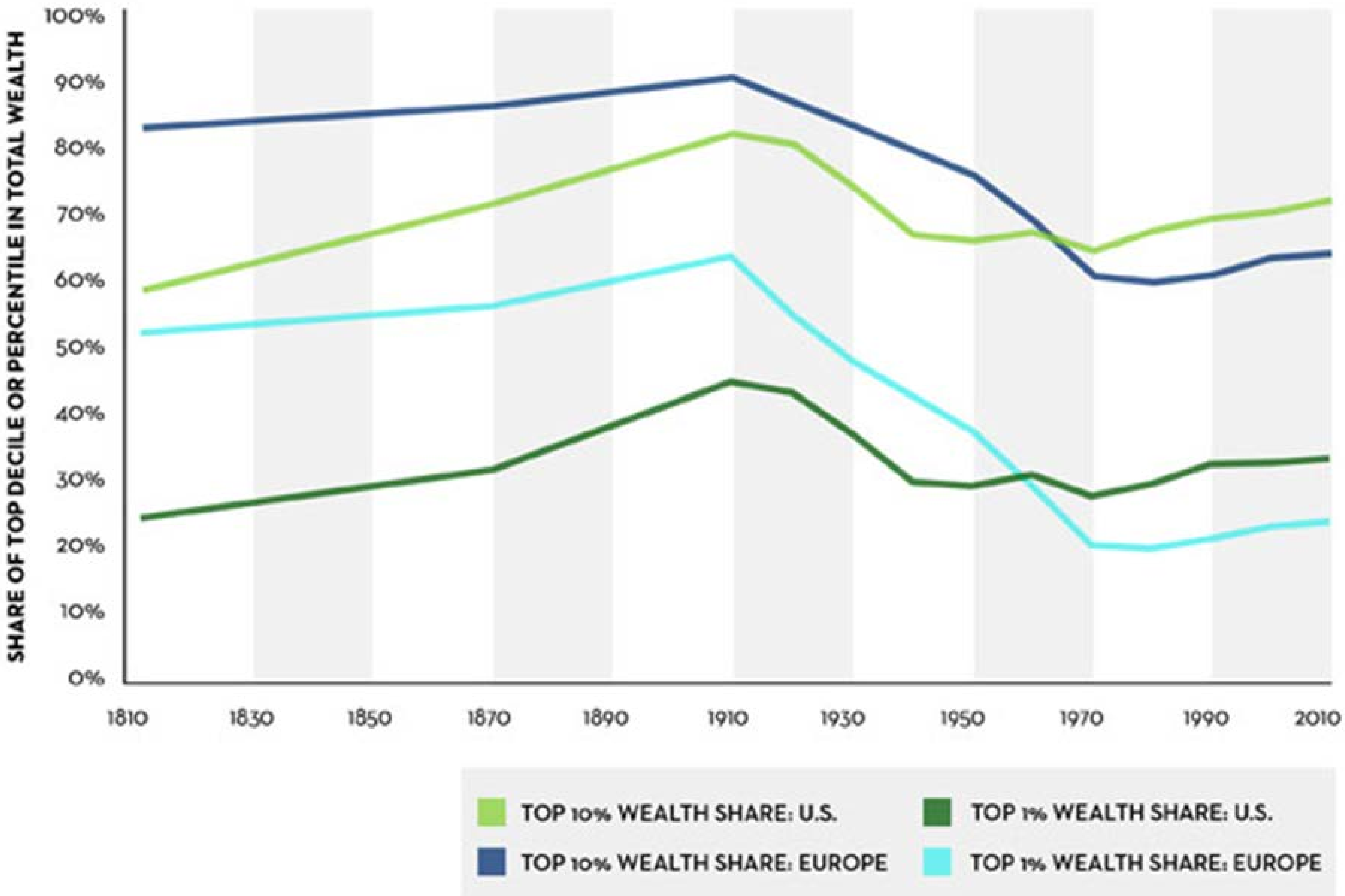
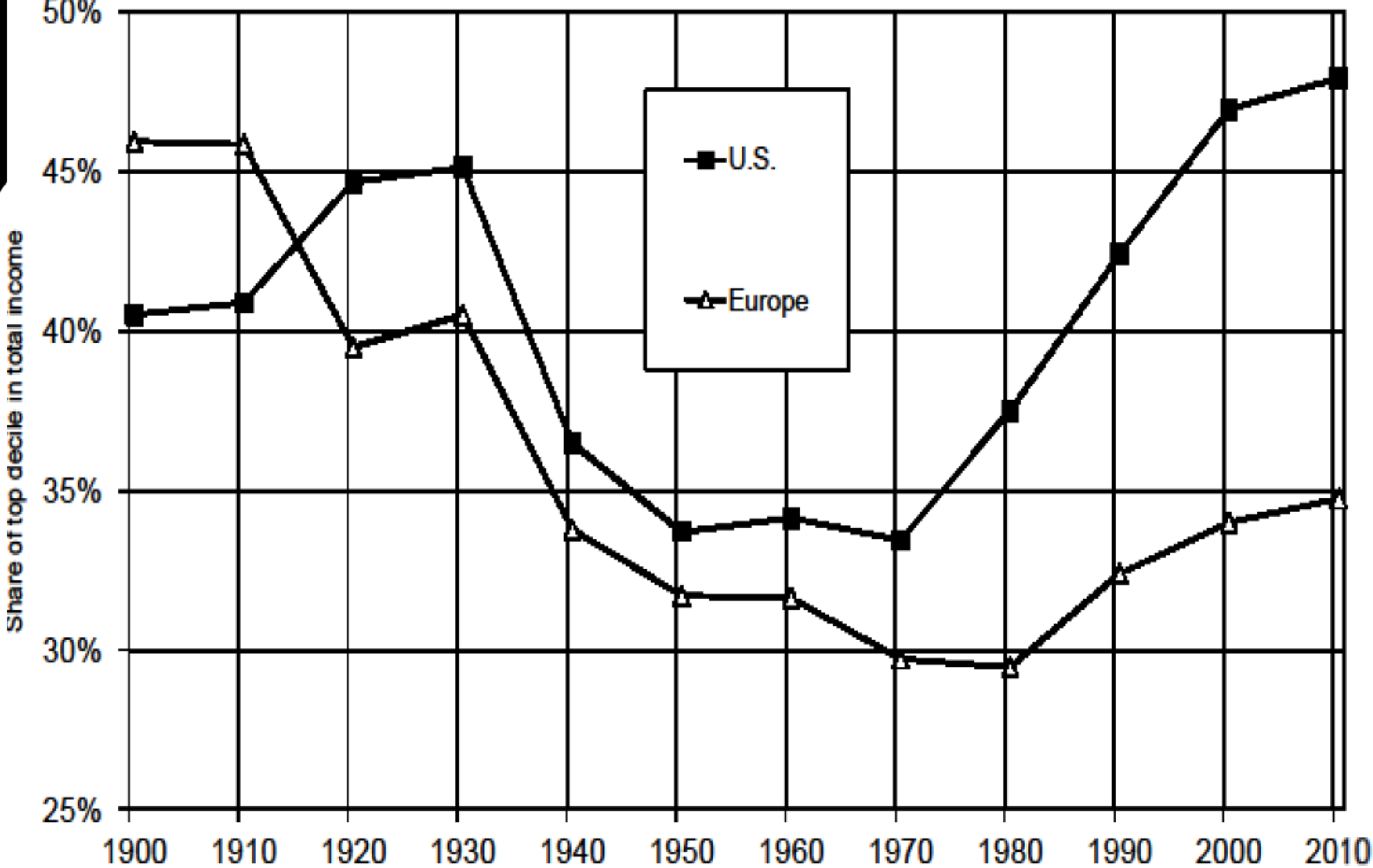


Figure 9.8. Income inequality: Europe vs. the United States, 1900-2010



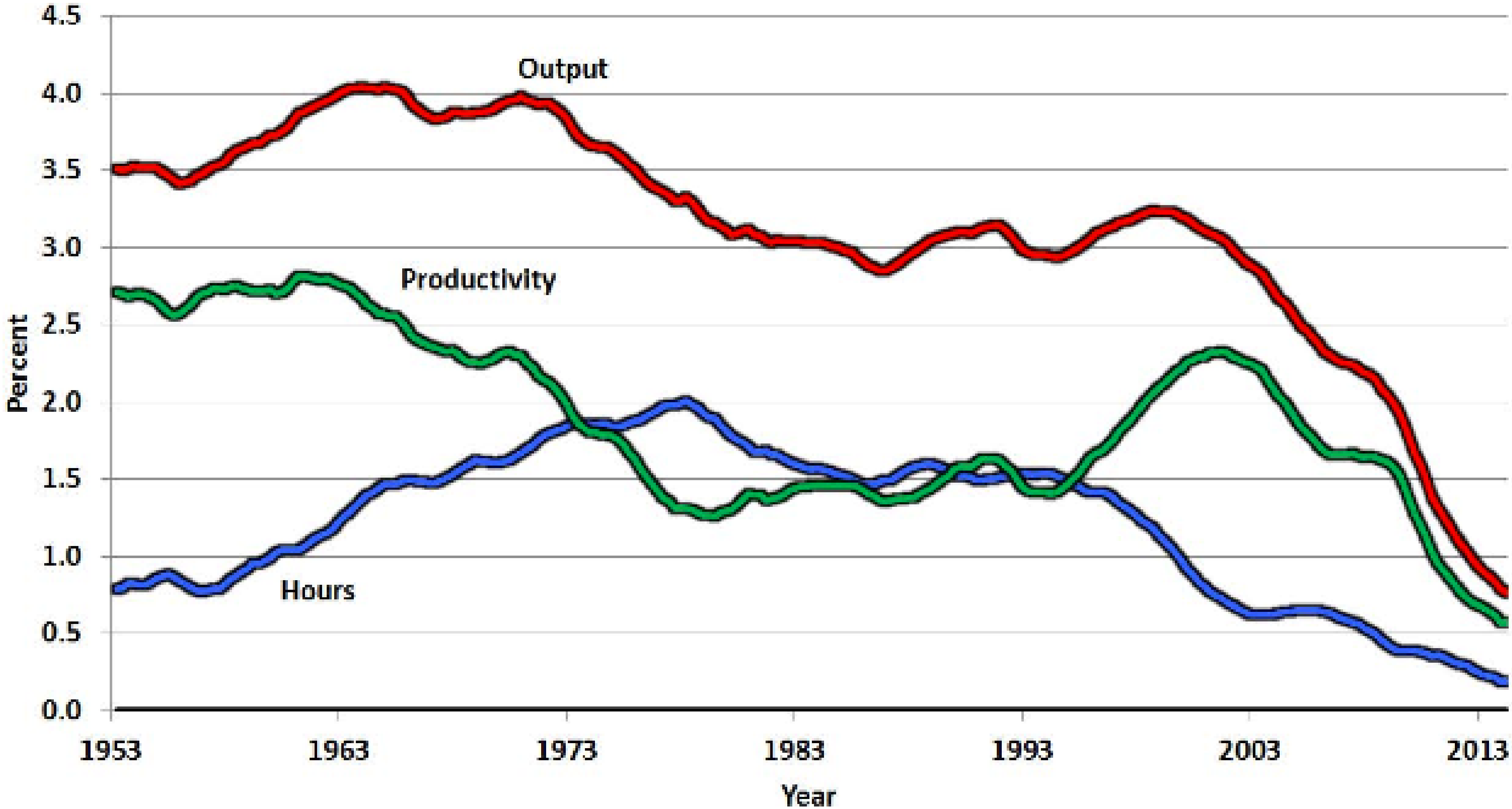
The top decile income share was higher in Europe than in the U.S. in 1900-1910; it is a lot higher in the U.S. in 2000-2010. Sources and series: see piketty.pse.ens.fr/capital21c.

AFTER TAX RATE OF RETURN VS. GROWTH RATE AT THE WORLD LEVEL, FROM ANTIQUITY UNTIL 2100

R. Gordon on Declining Productivity

- “The American economy has evolved from a fast-moving rabbit to a slow-moving turtle, and the community of academic economists, business economic forecasters, and policymakers inside the government have been slow to recognize this profound transformation.”

Figure 3. Kalman Growth Trends of Output, Hours, and Productivity, 1953:Q1 to 2014:Q2



r > g is the norm

- The important point to note is this: setting aside the period from the late nineteenth century to the early twenty-first century, which is roughly what we would call modernity, the growth rate has been below the rate of return, implying steadily rising inequality.
- The twentieth century, far from representing normality, was a historic exception that is unlikely to be repeated, Piketty argues. In the coming decades, he says, the growth rate will most likely fall back below the rate of return, and the “consequences for the long-term dynamics of the wealth distribution are potentially terrifying.”

Major Conclusions

- What are the major conclusions to which these novel historical sources have led me?
  - The first is that one should be wary of any economic determinism in regard to inequalities of wealth and income. The history of the distribution of wealth has always been deeply political, and it cannot be reduced to purely economic mechanisms.
  - In particular, the reduction of inequality that took place in most developed countries between 1910 and 1950 was above all a consequence of war and of policies adopted to cope with the shocks of war.
  - Similarly, the resurgence of inequality after 1980 is due largely to the political shifts of the past several decades, especially in regard to taxation and finance.
  - The history of inequality is shaped by the way economic, social, and political actors view what is just and what is not, as well as by the relative power of those actors and the collective choices that result. It is the joint product of all relevant actors combined.

Major Conclusions

- When the rate of return on capital significantly exceeds the growth rate of the economy (as it did through much of history until the nineteenth century and as is likely to be the case again in the twenty-first century), then it logically follows that inherited wealth grows faster than output and income.

- The most important lesson of this study thus far: modern technology still uses a great deal of capital, and even more important, because capital has many uses, one can accumulate enormous amounts of it without reducing its return to zero. Under these conditions, there is no reason why capital's share must decrease over the very long run, even if technology changes in a way that is relatively favorable to labor.

Major Conclusions and Recommendations

- The inequality r > g implies that wealth accumulated in the past grows more rapidly than output and wages. This inequality expresses a fundamental logical contradiction. The entrepreneur inevitably tends to become a rentier, more and more dominant over those who own nothing but their labor. Once constituted, capital reproduces itself faster than output increases. The past devours the future.
- But if democracy is to regain control over the globalized financial capitalism of this century, it must also invent new tools, adapted to today's challenges. The ideal tool would be a progressive global tax on capital, coupled with a very high level of international financial transparency.
- The goal is first to stop the indefinite increase of inequality of wealth, and second to impose effective regulation on the financial and banking system in order to avoid crises. To achieve these two ends, the capital tax must first promote democratic and financial transparency: there should be clarity about who owns what assets around the world.

Conclusions

The history of income and wealth inequality is always political, chaotic and unpredictable; it involves national identities and sharp reversals; nobody can predict the reversals of the future

- Marx: with $g=0$, $\beta\uparrow\infty$, $r\to 0$: revolution, war
- My conclusions are less apocalyptic: with $g>0$, at least we have a steady-state $\beta=s/g$
- But with $g>0$ & small, this steady-state can be rather gloomy: it can involve a very large capital-income ratio β and capital share α, as well as extreme wealth concentration due to high $r-g$
- This has nothing to do with a market imperfection: the more perfect the capital market, the higher $r-g$
- The ideal solution: progressive wealth tax at the global scale, based upon automatic exchange of bank information
- Other solutions involve authoritarian political & capital controls (China, Russia..), or perpetual population growth (US), or inflation, or some mixture of all

Economics Discipline

- I did not find the work of US economists entirely convincing.
  - To be sure, they were all very intelligent, and I still have many friends from that period of my life.
  - But something strange happened: I was only too aware of the fact that I knew nothing at all about the world's economic problems. My thesis consisted of several relatively abstract mathematical theorems. Yet the profession liked my work.
  - I quickly realized that there had been no significant effort to collect historical data on the dynamics of inequality since Kuznets, yet the profession continued to churn out purely theoretical results without even knowing what facts needed to be explained. And it expected me to do the same.

Economics Discipline

- To put it bluntly, the discipline of economics has yet to get over its childish passion for mathematics and for purely theoretical and often highly ideological speculation, at the expense of historical research and collaboration with the other social sciences.
  - Economists are all too often preoccupied with petty mathematical problems of interest only to themselves.
  - This obsession with mathematics is an easy way of acquiring the appearance of scientificity without having to answer the far more complex questions posed by the world we live in.

Economics Discipline

- Too much energy has been and still is being wasted on pure theoretical speculation without a clear specification of the economic facts one is trying to explain or the social and political problems one is trying to resolve.

- It is possible, for instance, to spend a great deal of time proving the existence of a pure and true causal relation while forgetting that the question itself is of limited interest. The new methods often lead to a neglect of history and of the fact that historical experience remains our principal source of knowledge.

- To be useful, economists must above all learn to be more pragmatic in their methodological choices, to make use of whatever tools are available, and thus to work more closely with other social science disciplines.

Thanks!