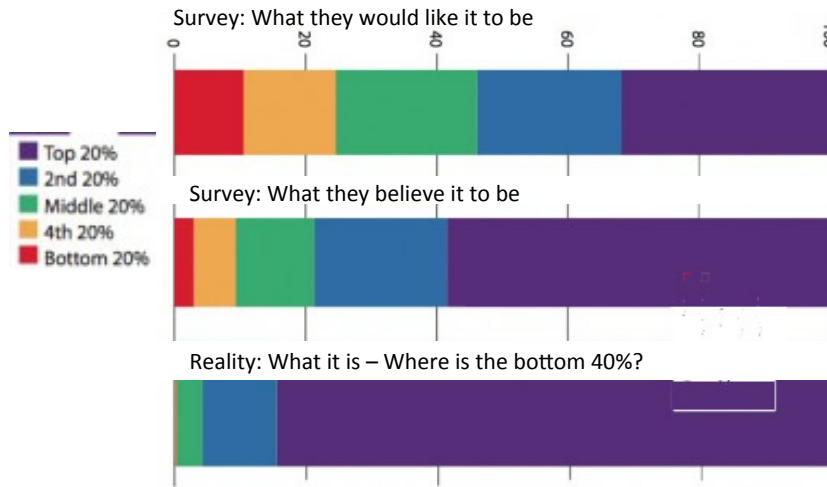


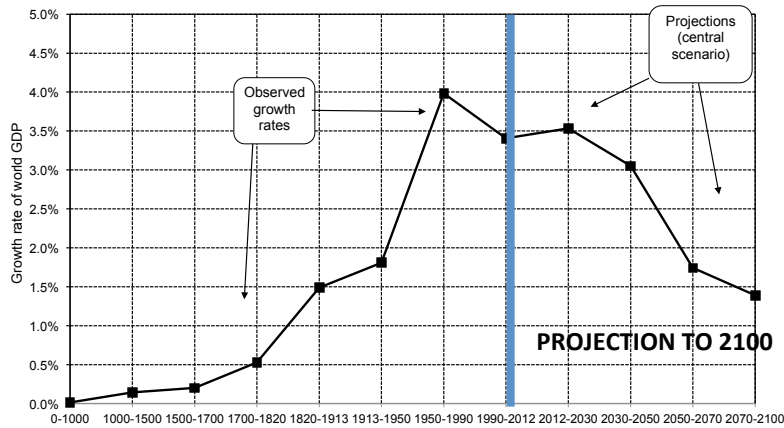
## Distribution of Wealth – U.S.



<http://harvardmagazine.com/2011/11/what-we-know-about-wealth>

## Projected Decline of Economic Growth in 21<sup>st</sup> Century

Figure 2.5. The growth rate of world output from Antiquity until 2100



The growth rate of world output surpassed 4% from 1950 to 1990. If the convergence process goes on it will drop below 2% by 2050. Sources and series: see [piketty.pse.ens.fr/capital21c](http://piketty.pse.ens.fr/capital21c).

# World Economic Growth

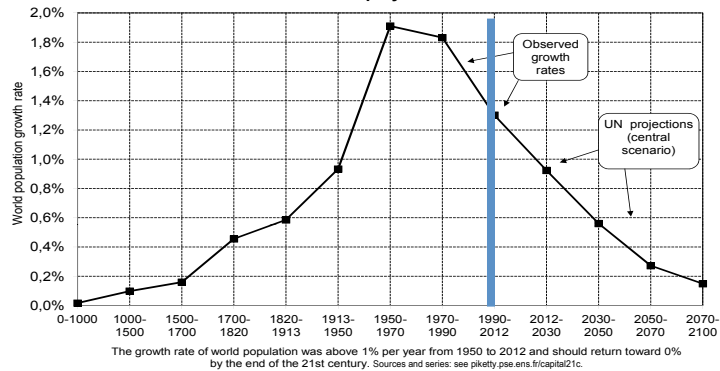
## Projected decline

	<u>Output</u>	<u>Population</u>	<u>Technological Productivity</u>
1700-1820	0.5%	0.4 (80%)	0.1 (20%)
1820-1913	1.5%	0.6 (40%)	0.9 (60%)
1913-2012	3.0%	1.4 (47%)	1.6 (53%)
2012-2100	2.0%	0.4 (21%)	1.6 (79%)
1950-2012	3.8%	1.9 (50%)	1.9 (50%)

# World Population Growth

## Projected decline

Figure 2.2. The growth rate of world population from Antiquity to 2100



The growth rate of world population was above 1% per year from 1950 to 2012 and should return toward 0% by the end of the 21st century. Sources and series: see piketty.pse.ens.fr/capital21c.

**PROJECTION TO 2100**

**Historically:**

- The slower the economic growth, the greater the capital/ income ratio (and therefore the greater the inequality of capital ownership.)

- The faster the economic growth, the smaller the capital/income ratio (and therefore the smaller the inequality of capital ownership.)

	<u><i>Slow growing economies</i></u>	<u><i>Fast growing economies</i></u>
Profit from capital reinvested in wage producing jobs	less	more
Profit from capital accumulated as savings	more	less
Capital/income ratio:	rises	declines

## Capital and Wealth:

*“Any asset that can be owned and exchanged in some market.”*

## National Income:

A year’s worth of GDP

Composed of:

Income from Labor (wage)

Income from Capital (rent)

Historically, the higher the capital / income ratio, the greater the inequality of wealth.

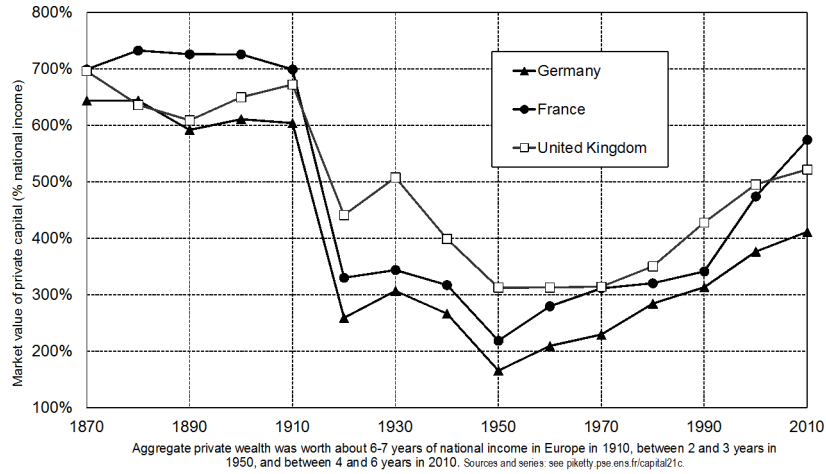
### Share of Private Capital Owned by Different Wealth Segments in:

	<u>(Europe)</u>	<u>(Scandinavia)</u>	<u>(USA)</u>
	1910:	1970:	2010:
<b>The ratio:</b>	<u>700%</u>	<u>250%</u>	<u>500%</u>

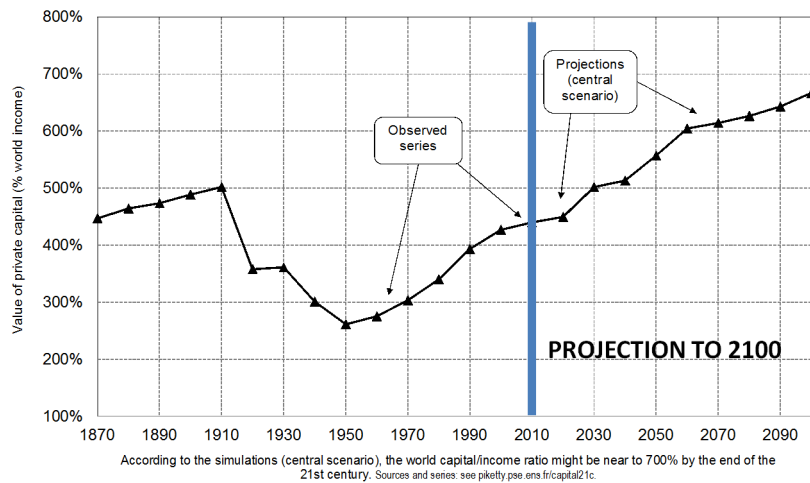
### **Wealth Distribution**

Top 10%	90%	50%	70%
Middle 40%	5%	40%	25%
Bottom 50%	5%	10%	5%

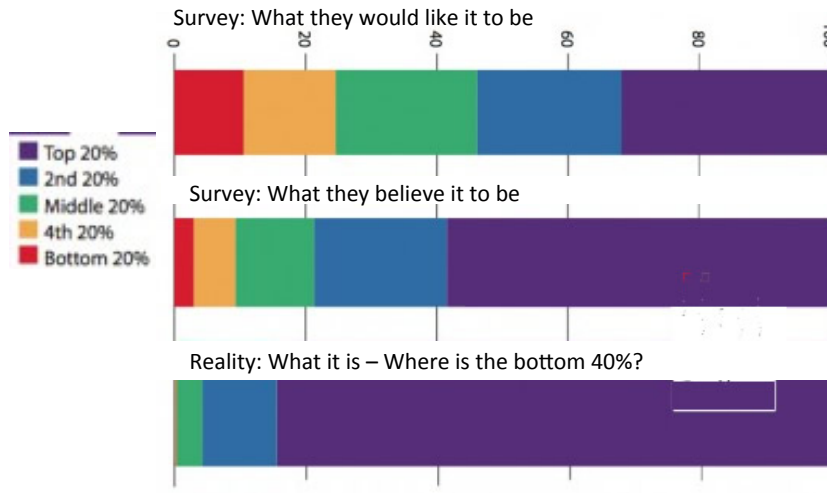
### CAPITAL/INCOME RATIO IN EUROPE, 1870-2010



### WORLD CAPITAL/INCOME RATIO, 1870-2100

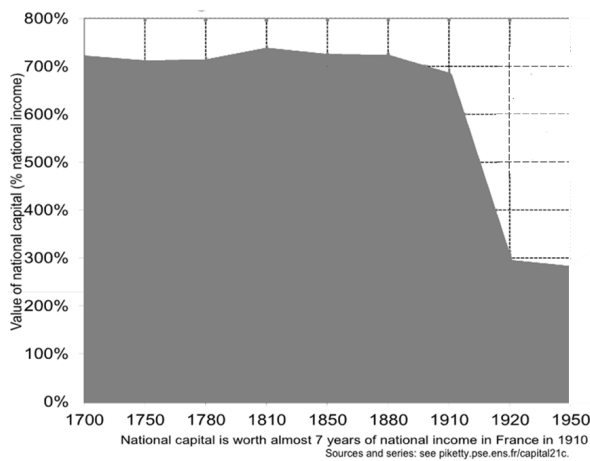


## Distribution of Wealth – U.S.

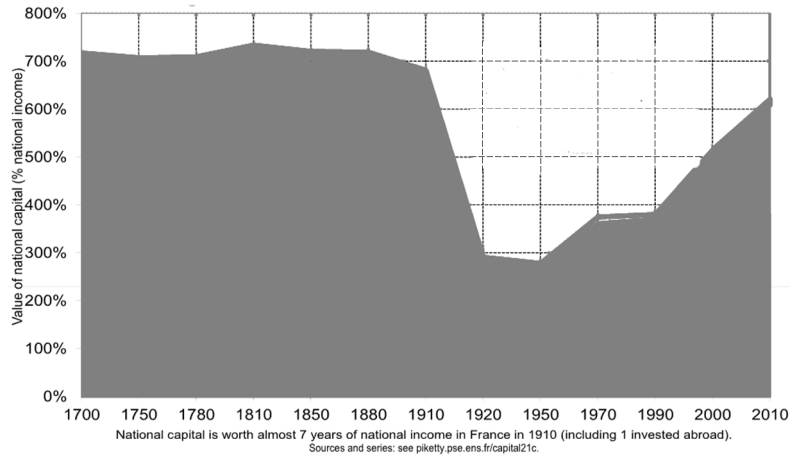


<http://harvardmagazine.com/2011/11/what-we-know-about-wealth>

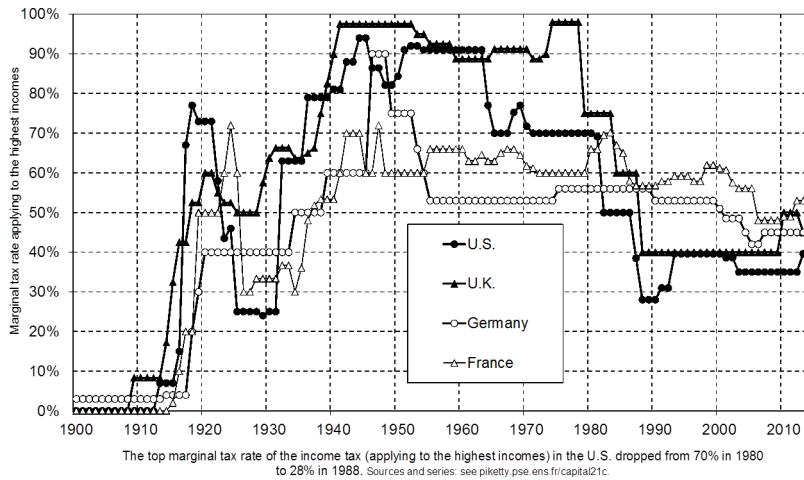
## CAPITAL/INCOME RATIO IN FRANCE, 1700 TO 1950



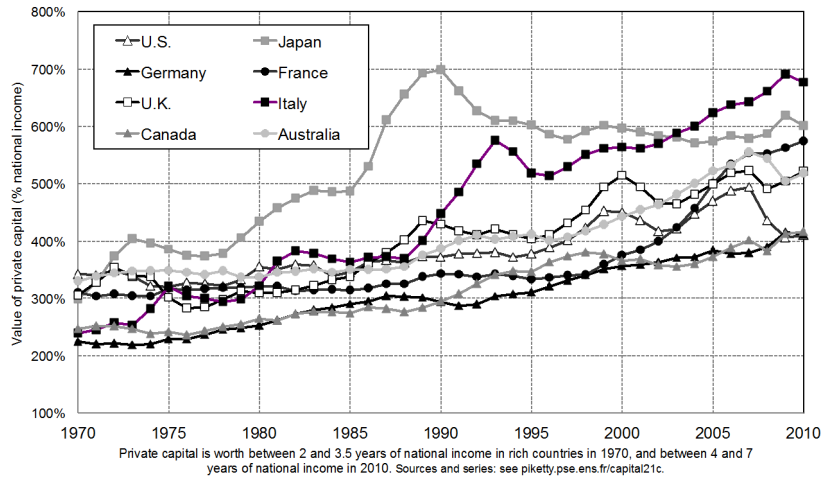
### CAPITAL/INCOME RATIO IN FRANCE, 1700 TO 2010



### TOP INCOME TAX RATES, 1900-2013

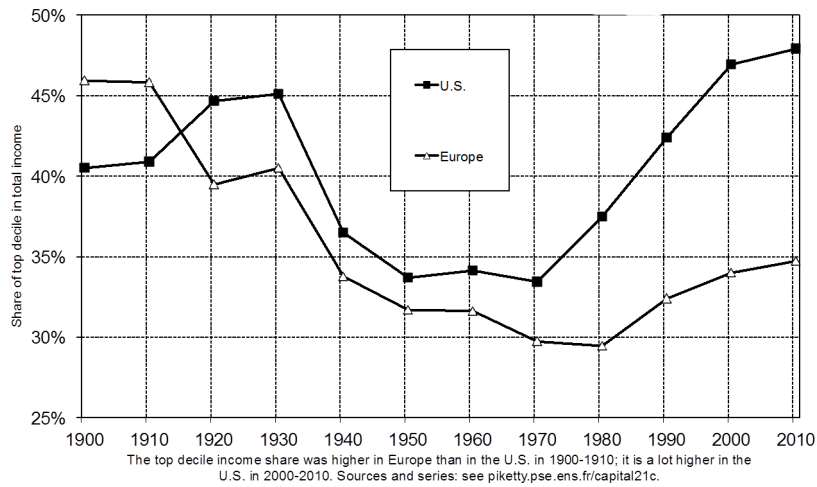


### PRIVATE CAPITAL IN RICH COUNTRIES 1970-2010



**Economic Growth slows; tax rates drop; privatization of public wealth**

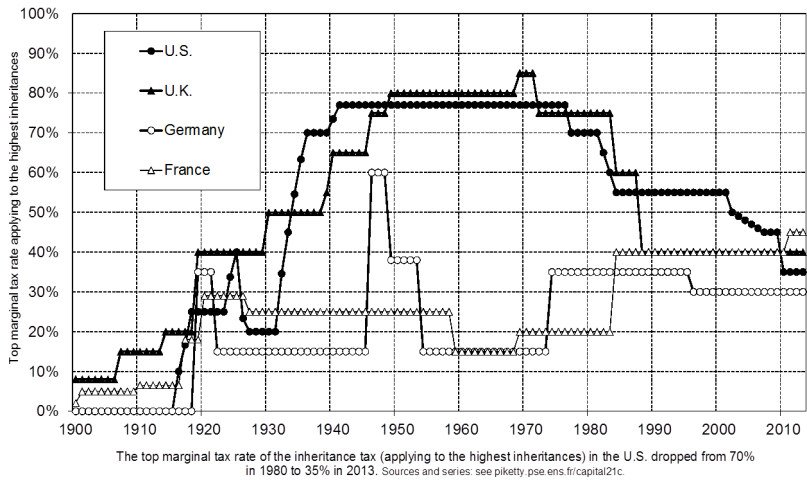
### Income Inequality: Europe and U.S. 1900-2010



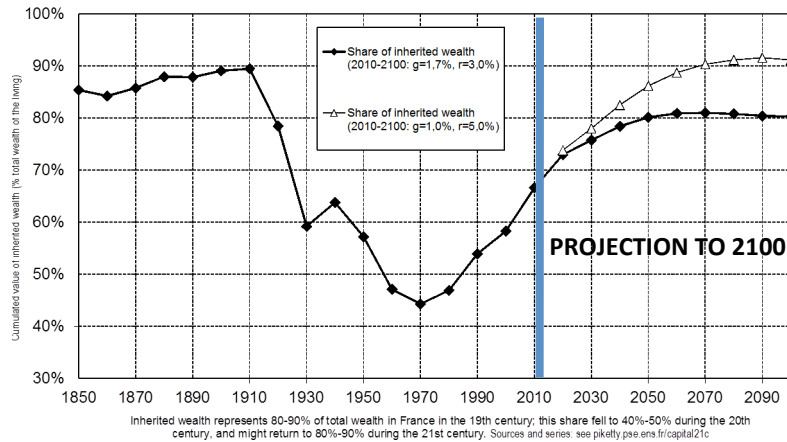
**Income share of top ten percent**



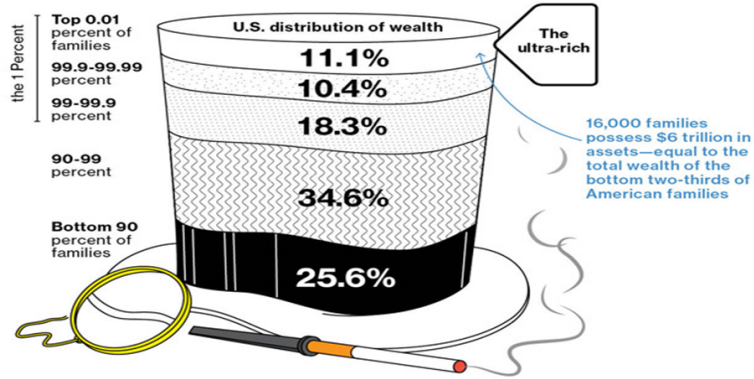
### TOP INHERITANCE TAX RATES, 1900-2013



### SHARE OF INHERITED WEALTH IN TOTAL WEALTH IN FRANCE PROJECTED TO 2100



## Top 1% own 39.8% of wealth in The New Gilded Age



## World Inequality

<u>Percentage of adults</u>	<u>adult population</u>	<u>percentage of world's wealth</u>
Top 0.1%	4.5 million	~ 20%
Top 1.0%	45 million	~ 50%
Top 10%	450 mil.	~ 85%
Middle 40%	1,800 mil.	~ 10 %
Bottom 50%	2,250 mil.	less than 5%

**r: return on capital**

Expected rate ~ 5%

Expected rate ~ 1.5%

**g: growth of economy**

**IMPACT OF  $r > g$**

