Rising Inequality and Globalization
New Issues and Evidence from WID.world

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• This lecture is based upon *Capital in the 21st century* (2013), *the World Inequality Report 2018* (released in december 2017) & more recent research

• In this work, I study the dynamics of income and wealth distribution since 19c. I use historical data collected over the past 20 years with F. Alvaredo, L. Chancel, T. Atkinson, E. Saez, G. Postel-Vinay, J.L. Rosenthal, G. Zucman, and 100+ others covering 70 countries. **Aim is to put distribution back at the center of political economy.**

• Today I will present a number of selected historical evolutions & attempt to draw lessons for the future

• More material available at [http://piketty.pse.ens.fr/capital21c](http://piketty.pse.ens.fr/capital21c) & the [World Wealth and Income Database](http://WID.world)
WORLD VIEW

Compare inequality between countries on an interactive world map

COUNTRY GRAPHS

Follow the evolution of inequality within countries with user-friendly graphs

DATA TABLES

Download our open-access datasets
• The WID.world project: more than 100 researchers over the five continents. All the data is entirely open source + transparent to feed public debates.

• This report: first systematic assessment of globalization in terms of inequality. Global top 1% captured twice as much growth as bottom 50% since 1980. Under Business as usual, even with optimistic growth assumptions in the emerging world, global inequality will continue to rise.

• Rising inequality is not inevitable: different types of policies can be implemented to promote equitable growth pathways in the coming decades.

This lecture: four points

1. The long-run dynamics of income inequality.
   In 20th century, it took major shocks (wars, depressions, revolutions) for elites to accept the social and fiscal reforms which finally led to the reduction of inequality.

2. Rising inequality in emerging countries & the post-colonial world.
   Not consistent with standard two-skill model of globalization.
   Extreme inequality regimes: Middle East, Brasil, South Africa.
   Need to go beyond the Western perspective on inequality.

3. The return of a patrimonial (or wealth-based) society, the fall of public wealth.
   With high r - g in 21st century, wealth inequality might rise again.

4. Rising inequality and the changing structure of political conflict.
   Why do we see more xenophobic populism and identity-based politics rather than more class-based politics and rising demand for redistribution?
1. The long-run dynamics of income inequality. The end of the Kuznets curve, the end of universal laws. Institutions and policies matter: education, labor, tax, etc.

During 20c, major shocks – wars, depressions, revolutions – played a central role in the reduction of inequality. It took these major shocks to force elites to accept new social and fiscal institutions which they refused until then.

Political determinants of inequality are more important than pure economic determinants, both to explain historical downturns and upturns.
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 and WID.world updates.
The rise in US inequality in recent decades is mostly due to rising inequality of top labor income, and a collapse of bottom 50% income share.

Rising inequality much larger in US than Europe/Japan: globalization cannot be the only explanation.

It is due to a mixture of reasons: changing supply and demand for skills; race between education and technology; very unequal to access to skills in the US (rising tuitions, insufficient public investment); unprecedented rise of top managerial compensation in the US (changing incentives, cuts in top income tax rates); falling minimum wage in the US.

→ institutions and policies matter.
USA: The collapse of the bottom 50% income share
1980: Top 1% average income = 27 x average bottom 50% income
2014: Top 1% average income = 81 x average bottom 50% income
(all amounts in 2014 $)

1980: Top 1% = $428,000
1980: Bottom 50% = $16,000
2014: Top 1% = $1,305,000
2014: Bottom 50% = $16,200
Modern inequality: the meritocratic fairy tale

College Attendance Rates vs. Parent Income Rank in the U.S.

Percent Attending College at Ages 18-21

Parent Income Rank

Slope = 0.675 (0.0005)
Gender inequality in the US: men still make 85% of top 1% earners

Share of women in the employed population, by fractile of labor income

- **Top 0.1%**
- **Top 1%**
- **Top 10%**
- **All**

Data from 1962 to 2014.
Gender inequality in France: equal pay in the 22c?

Share of women in fractiles of top labor incomes in France, 1970-2012

- Top 50%
- Top 10%
- Top 1%
- Top 0.1%

- Share of women in top 1%:
  - 10% in 1994
  - 16% in 2012
  - 50% by 2102?

- Top 0.1%:
  - 50% by 2144?
Inequality rose less in West. + East. Europe (pop: 510m) than in US (320m)
• 2. Inequality in developing countries & in the post-colonial world.
Need for more data access. Need to go beyond the Western-centered perspective on inequality.

• On-going work on inequality using newly accessible data in South Africa, Brasil, Middle East, India, China suggest that official measures vastly underestimate inequality.

• By combining household survey data with newly released fiscal data in emerging countries, the World Inequality Report 2018 provides a more plausible picture of global inequality (though probably still a lower bound) (more on wir2018.wid.world)
Income inequality varies widely across world regions

Top 10% national income share across the world, 2016

- Europe: 37%
- China: 41%
- Russia: 46%
- US-Canada: 47%
- Sub-Saharan Africa: 54%
- Brazil: 55%
- India: 55%
- Middle East: 61%
Income inequality rises almost everywhere, but at different speeds

Top 10% income shares across the world, 1980-2016

Source: World Inequality Report 2018, Figure 2.1.1. See wir2018.wid.world for data sources and notes.
• Rising inequality within emerging countries (China, India, etc., especially at the top): not consistent with standard model of globalization

• Standard model with two skill groups: inequality ↑ in North but ↓ in South

• One needs models with more than two skill groups (so that bottom skill groups in the South do not benefit from economic openness, & globalized very high-skill)

• Most importantly, one needs to introduce the fact that post-1980 globalization came with specific institutions and policies: financial deregulation, end of progressive taxation, etc.; unclear whether these policies were of any use for bottom 90% income growth
Is the world moving toward the high-inequality frontier?

Top 10% income shares across the world, 1980-2016

Source: World Inequality Report 2018, Figure 2.1.1. See wir2018.wid.world for data sources and notes.
Toward a global distribution of income and wealth

China + Europe + USA + India + Russia, Brazil, Middle East

Global inequality dynamics
The global elephant curve of inequality: scaled by population

Total income growth by percentile across all world regions, 1980–2016: Scaled by population

The global elephant curve of inequality: scaled by growth share

Total income growth by percentile across all world regions, 1980–2016: Scaled by share of growth captured

Top 1% captured twice as much global growth than bottom 50%
How much inequality is necessary?

China vs India: higher inequality rise in India, but larger growth in China

Top 1% vs. bottom 50% in China vs. India, 1980-2016

Source: World Inequality Report 2018, Appendix Figure A4. See wir2018.wid.world for data sources and notes.
US vs Europe: slightly higher growth in the US, but much bigger rise in inequality & complete stagnation of bottom 50% incomes

Top 1% vs. bottom 50% in the US and Western Europe, 1980-2016

Source: World Inequality Report 2018, Figure 2.1.3. See wir2018.wid.world for data sources and notes.
• 2. The return of a patrimonial (or wealth-based) society in 21c.
  Private wealth-income ratios seem to be returning to very high levels in rich countries. Intuition: in a slow-growth society, wealth accumulated in the past can naturally become very important. In the very long run, this can be relevant for the entire world. Not bad in itself, but new challenges.

• Net public wealth has become negative in most Western countries: this is too small.

• The metamorphosis of capital call for new regulations of property relations. The key role of the legal and political system. Democratizing capital: worker voting rights in boards, patent laws (intellectual property can be temporary, not permanent), progression wealth taxation (other way to make property rights temporary), etc.
Figure I.2. The capital/income ratio in Europe, 1870-2010

Aggregate private wealth was worth about 6-7 years of national income in Europe in 1910, between 2 and 3 years in 1950, and between 4 and 6 years in 2010. Sources and series: see piketty.pse.ens.fr/capital21c.
Countries have become richer, but governments have become poor. Source: World Inequality Report 2018, Figure E6. See wir2018.wid.world for data sources and notes.
The fall of the share of public capital in the West vs China

The decline of public capital, 1970–2016

Value of net public wealth (% of national wealth)

-10%  0%  10%  20%  30%  40%  50%  60%  70%


- - - - - - - -

China  France  Germany  Japan  UK  US
There are some exceptions to the decline of public capital: Norway (sovereign funds without Russian leaks...)

The share of public wealth in national wealth in rich countries, 1978–2015
• The future of wealth concentration.

With high $r - g$ during 21\textsuperscript{c} ($r =$ net-of-tax rate of return, $g =$ growth rate), then wealth inequality might reach or surpass 19\textsuperscript{c} oligarchic levels. Gap $r-g$ largely determined by legal system, institutions and policies. Need for more transparency about wealth. Need for progressive taxation of net wealth.
Table 12.1. The growth rate of top global wealth, 1987-2013

<table>
<thead>
<tr>
<th>Average real growth rate per year (after deduction of inflation)</th>
<th>1987-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>The top 1/(100 million) highest wealth holders (about 30 adults out of 3 billions in 1980s, and 46 adults out of 4.6 billions in 2010s)</td>
<td>6.8%</td>
</tr>
<tr>
<td>The top 1/(20 million) highest wealth holders (about 180 adults out of 3 billions in 1980s, and 226 adults out of 4.6 billions in 2010s)</td>
<td>6.4%</td>
</tr>
<tr>
<td>Average world wealth per adult</td>
<td>2.1%</td>
</tr>
<tr>
<td>Average world income per adult</td>
<td>1.4%</td>
</tr>
<tr>
<td>World adult population</td>
<td>1.9%</td>
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<tr>
<td>World GDP</td>
<td>3.3%</td>
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</tbody>
</table>

Between 1987 and 2013, the highest global wealth fractiles have grown at 6%-7% per year, vs. 2.1% for average world wealth and 1.4% for average world income. All growth rates are net of inflation (2.3% per year between 1987 and 2013). Sources: see piketty.pse.ens.fr/capital21c.
<table>
<thead>
<tr>
<th>Average real annual rate of return (after deduction of inflation and all administrative costs and financial fees)</th>
<th>Période 1980-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>All universities (850)</td>
<td>8.2%</td>
</tr>
<tr>
<td>incl.: Harvard-Yale-Princeton</td>
<td>10.2%</td>
</tr>
<tr>
<td>incl.: Endowments higher than 1 billion $ (60)</td>
<td>8.8%</td>
</tr>
<tr>
<td>incl. Endowments between 500 millions and 1 billion $ (66)</td>
<td>7.8%</td>
</tr>
<tr>
<td>incl. Endowments between 100 and 500 million $ (226)</td>
<td>7.1%</td>
</tr>
<tr>
<td>don't: Endowments less than 100 million $ (498)</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

Between 1980 and 2010, U.S. universities earned an average real return of 8.2% on their capital endowments, and all the more so for higher endowments. All returns reported here are net of inflation (2.4% per year between 1980 and 2010) and of all administrative costs and financial fees. Sources: see piketty.psc.ens.fr/capital21c.
Rise in wealth inequality since the 1980s in most countries after a historical decline

Source: World Inequality Report 2018, Figure 4.2.1. See wir2018.wid.world for data sources and notes.
4. Rising inequality and the changing structure of political conflict.

With rising inequality, one could have expected rising political demand for redistribution.

So why do we see more xenophobic populism and identity-based politics (Brexit, Trump, Le Pen, Modi, etc.), rather than more class-based (income-based and wealth-based) politics?

One possible explanation: globalisation & competition between countries make vertical redistribution very difficult to organize; end of class-based redistributive politics, rise of identity-based conflict.

Partly true, but not enough; not the end of the story.
• Nothing in globalization makes redistribution and egalitarianism technically impossible

• **Unequal globalization is a choice**: countries & governments choose to sign treaties with free trade/capital flows with no common redistributive taxation/regulation (though they might not always anticipate all consequences of what they sign)

• The history of inequality is political and ideological, not technical or deterministic

• E.g. the history of progressive taxation in 20c involves sharp reversals in beliefs systems, unexpected political bifurcations, and unstable institutional tinkering
Top income tax rates in rich countries, 1900-2017

Sources: Piketty (2014) and updates. See wr2018.wid.world for data series and notes.
Top inheritance tax rates in rich countries, 1900-2017

Source: Piketty (2014) and updates. See wir2018.wid.world for data series and notes.
• There are also powerful structural forces which led to the mid-20c (1930-1980) class-based redistributive politics and winning coalition
• Unique circumstances (wars, revolutions, depression) led to structural changes in political beliefs toward capitalism and markets
• Political organizations contributed to and mobilized these changing beliefs to turn them into action
• Europe: role of social-democratic parties in post-WW2 welfare state consensus (CNR 1945 etc.)
• US: Roosevelt coalition (poor whites and poor blacks vote for the same party) (≠ 19c, ≠ today...
• Was there something exceptional and inherently unstable in post-WW2 class-based politics and pro-redistribution winning coalition?
• Maybe not exceptional, but at least very specific
• There are deep changes in the structure of electoral conflict since 1980s-1990s which are not favourable to the development of pro-redistribution coalitions
• In Europe, left-wing parties used to attract predominantly low- and middle-wealth voters, and low- and middle-education voters
• Since the 1980s-1990s, they have gradually started more and more highly educated voters, while less educated voters gradually turn to the right: complete reversal of the education cleavage
Left-wing vote in France, 1956-2017: from the worker party to the high-education party

Difference between (% univ. graduates voting left) and (% non-univ. graduates voting left)

Source: author’s computations using French post-electoral surveys 1956-2017 (presidential and legislative elections)
Reading: in 1956, left-wing parties (SFIO-PS, PCF, Rad., various left, green, extreme-left) obtain a score that is 17 points lower among university graduates than among non-university graduates; in 2012, their score is 8 points higher among university graduates.
Voting for left-wing & democratic parties in France and the US, 1948-2017: from the worker party to the high-education party

- France: Difference between (% univ. graduates voting left) and (% non-univ. graduates voting left) (after controls)
- US: Same with democratic party vote (after controls)

Source: author's computations using French and US post-electoral surveys 1948-2017 (presidential and legislative elections)
Reading: In 1966, left-wing parties (SFIO-PS, PC, Rad., green, extr.-left) obtain a score that is 14 points lower among university graduates than among non-university graduates in France; in 2012, their score is 13 points higher among university graduates (after controls for age, sex, income, wealth, father's occupation). The evolution is similar for the democratic vote in the US.
Political conflict in France, 1956-2017: toward a multiple-elite party system, or a great reversal?

Source: author's computations using French post-electoral surveys 1956-2017 (presidential and legislative elections)

Reading: the left vote used to be associated with lower education and lower income voters, it has gradually become associated with higher education voters, giving rise to a "multiple-elite" party system (education vs wealth). It might also become associated with high-income voters in the future, giving rise to a great reversal or realignment of the party system.
• Why did the left vote become more & more the high-education vote?
• Left parties have always promoted emancipation through education; those who have succeeded and benefited from it identify and vote for the left
• High-education voters & left parties support universal values associated to globalization and post-colonial multi-ethnic societies; low-education voters feel abandoned & threatened by globalization/migration and gradually turn to xenophobic right; then left parties further shift their economic and policies to the right; and so on.

• Next step: will the left vote also become the high-wealth vote? Possible: see US election 2016 and French election 2017
• Does this mean that we are gradually shifting from a left-vs-right poor-vs-rich political conflict to a globalists-vs-nativists rich-vs-poor conflict?
• There are powerful forces pushing in this direction, and this is clearly not leading to more redistribution
• But there are also forces pushing in opposite direction: rising inequality also leads to rising demand for class-based politics. Identity-based conflict highly unstable.
• Not a deterministic process. Actors matter. Historical bifurcations will happen again. E.g. Sanders-Trump or Melenchon-Le Pen could have happened instead of Clinton-Trump or Macron-Le Pen and would have led to different electoral structures & political outcomes, for better or worst.
Conclusions

• The history of income and wealth inequality is deeply political. It involves beliefs systems, national identities, sharp reversals. Wars & revolutions played a key role in 20\textsuperscript{c} inequality dynamics. It will probably be chaotic as well in 21\textsuperscript{c}.

• In a way, both Marx and Kuznets were wrong: there are powerful forces pushing in the direction of rising or reducing inequality; which one dominates depends on the institutions and policies that different societies choose to adopt.

• The ideal solution involves a broad combination of inclusive institutions, including progressive tax on income & wealth; education & labor laws; economic democracy, new forms of property, power structure and participatory governance.

• Inequality regimes need to be put into a broad historical and comparative perspective, so as to invent new solutions and go beyond nationalism and perceived exceptionalism. Social sciences can help.