

Who owns the robots ?

US inequality in multiple dimensions-- income, consumption and wealth

For-- “The Great Polarization
Economics, Institutions and Policies in the Age of Inequality “
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Hold onto your hat—15 minutes

- **Three main topics:**

1. **“Capital” , wealth and capital income, is the most important source of inequality --the owners of the robots are winning; labor is losing**
2. **Inequalities in Y, C and W are rising in tandem and are corrosive, especially wealth inequality
the effects of inter-vivos transfers on mobility**
3. **Then, what can we do about it?**

- **Done**

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1. Income from capital : from surveys, to tax data, to the real story--

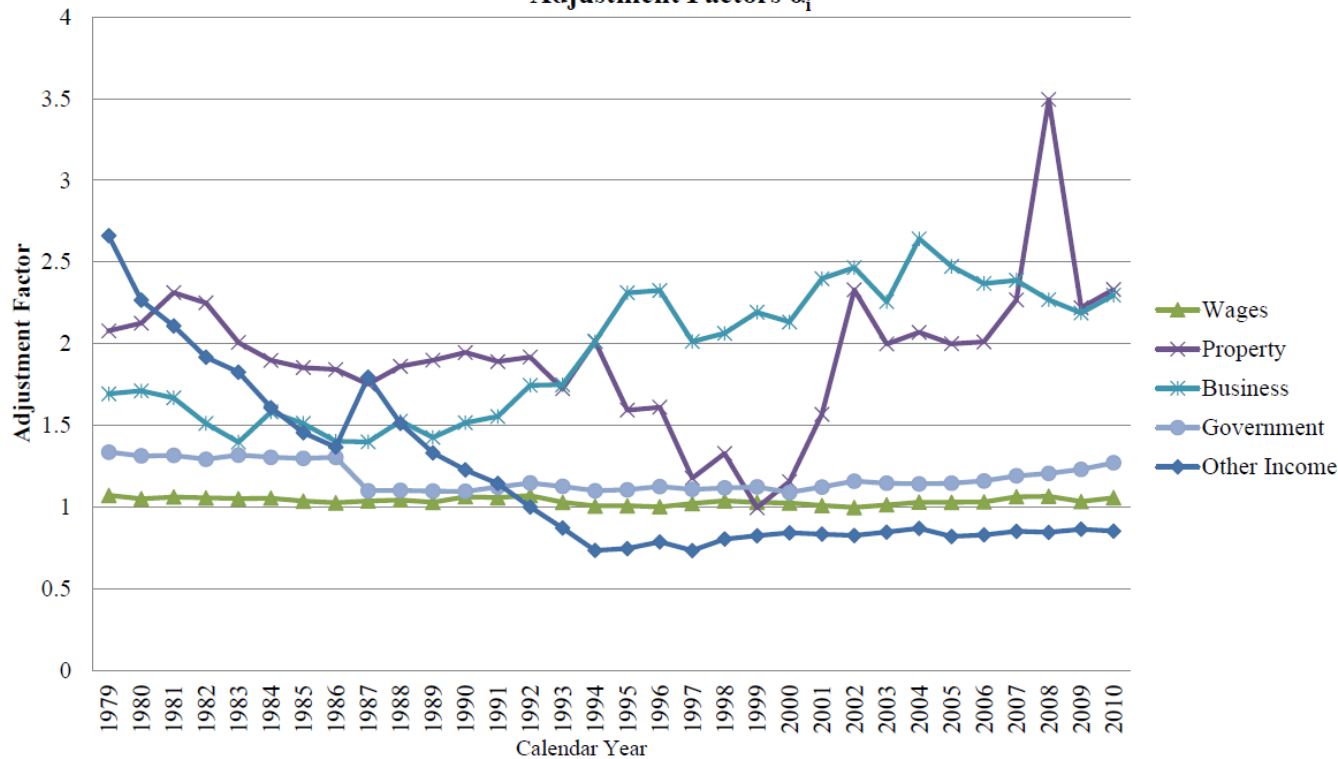
- **Surveys report “i,r,d” and only the part that is realized annually**
- **Tax returns do better , but not enough as only a tiny part of realized capital income is taxed**
- **Neither get more than a third of total income from capital**
- **SNA adjustments show the true level of inequality by distributing the rest**
- **And then compare L to K in the SNA to see how capital is winning**



USA SNA/NIPA Adjustments for Poverty (missing government transfers) vs. Inequality (missing property income, business income)

Figure 7

Ratio of NIPA Income to CPS Aggregate Income
Adjustment Factors α_i



Notes: See text for description of NIPA adjustment.
Source: Own calculations from BEA and public use CPS.



Start with sources of income

- Functional “sources” side of income (Y) , adding together income from labor, earnings (E), & income from capital (KI, including capital gains plus other income from wealth), plus net transfers (NT, those received minus those paid out)

$$Y = E + KI + NT$$

- If we ignore NT, divide self-employment income into income from labor and capital, we are left with the macroeconomists’ functional distribution of income.
- **So what can we learn here for distributional analyses from the sources side ?**

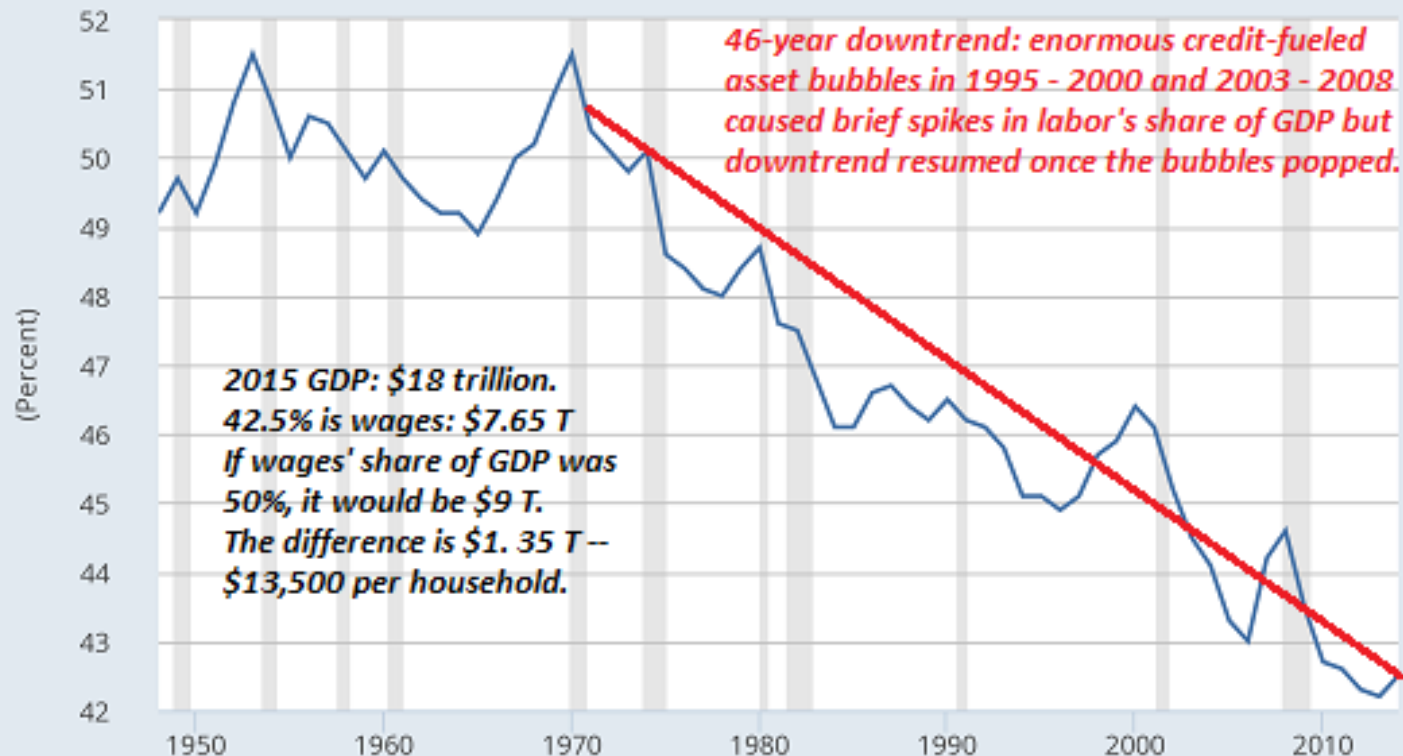


Sources side : $Y = E + KI$

- Factor Shares—E (labor share of national income) falling in USA : more than 50 % in 1970's, now 42%

FRED

— Shares of gross domestic income: Compensation of employees, paid: Wage and salary accruals: Disbursements: To persons



Source: US. Bureau of Economic Analysis
research.stlouisfed.org

myf.red/g/2KkM



Why is capital share up ?

- Technological change, global trade--- and policy --
 - 'Regulatory' policy : rising concentration of industry, less competition & more profit
 - Pro-capital tax policy, eg stock buy backs
 - 'Rent capture': sheltered markets, limited enforcement, protected market niches , and political power



Why is labor share down ?

- Rising monopsony power and policy, global competition from cheap labor, insecurity of work —*not* just decline of unions but broader malaise
 - “non-compete clauses”;
 - workplace inflexibility;
 - spatial immobility of workers;
 - rise of “gig” economy
 - declining real federal minimum wages



2. Measuring sources of income and effects of inequality: Y,C,W

- “the most pertinent measures of the distribution of material living standards are probably based on jointly considering the **income, consumption, and wealth** position of households or individuals.”

*Commission on the Measurement of Economic Performance and Social Progress
(Fitoussi, Stiglitz et al.,2009):*

- **Income(Y), consumption(C), and wealth (W,NW)**
- **all three together *for the same households***
- **Start with aggregate accounting again**



Flows and stocks: Income (Y); Consumption (C); Net Worth (NW)

- Haig and Simons definition, income (Y) is equal to consumption (C) plus the ***change in net worth*** (ΔNW) realized over an income accounting period.
- So defined, Y ,or H-S income, is a measure of potential consumption : amount one could consume or transfer without changing total net worth (one's stock of assets or debts)
- Thus according to a “uses “ of income definition:

$$Y = C + \Delta NW$$



On the uses of income side--

- The hardest thing to measure is the real change in net worth (ΔNW) as much of it is not realized or distributed and hence not captured in surveys or registers —but it is behaviorally VERY important
- It would also let us determine consumption in a much more accurate way $C = Y \pm \Delta NW$
- The thing we can measure much better is the stock – W (NW) alone using proper samples like the (SCF) which lines up well with SNA



Why care about ΔNW ?

- Changes in financial wealth have cyclical (GR) but stronger upward trends when smoothed
- Most stocks and financial wealth, including defined contribution pension plans, are owned by the top decile (about 75 % in USA)in a period when capital is winning on the sources side
- E.g, 2017, a “very good year” for top decile wealth and pension holders in USA (financial wealth with 25-30% return vs. your academic salary?)



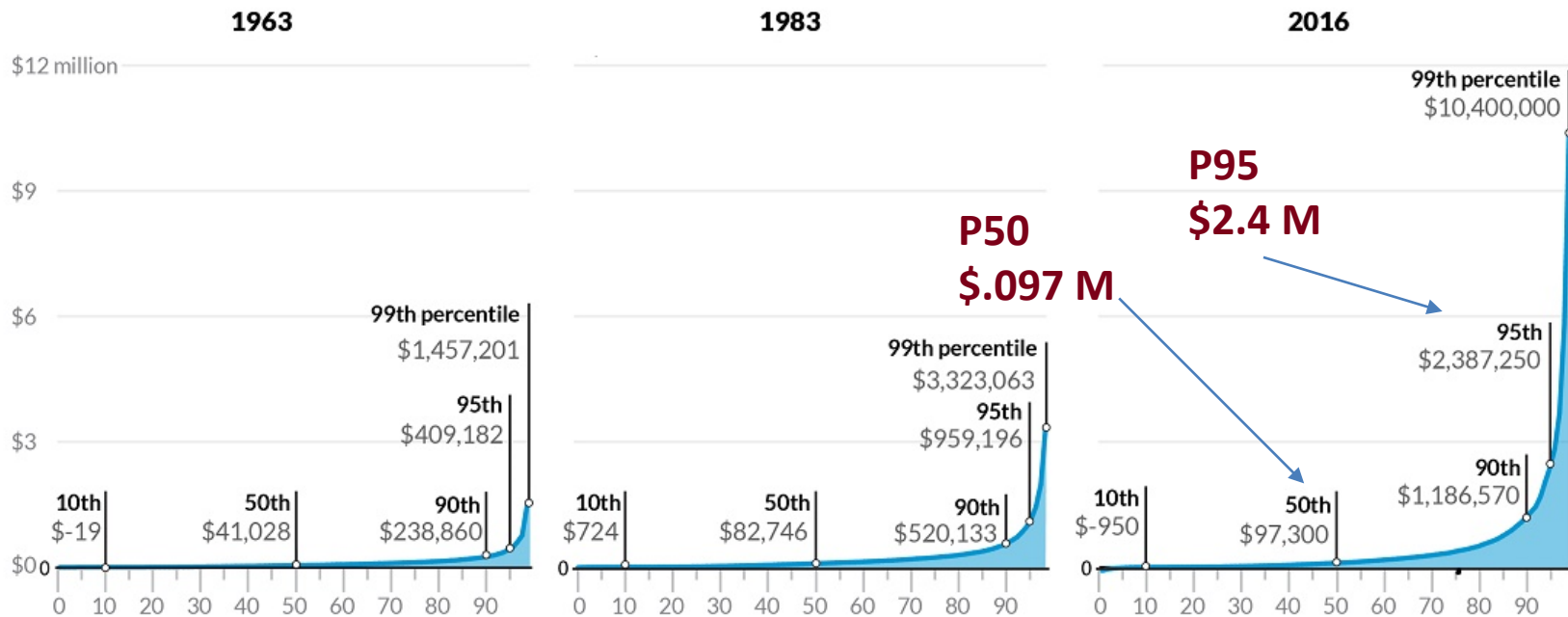
Turn to Wealth or Net Worth as key

- **The stock , NW can replace the flows, Y and C , multiple times over**
- **from WID-World DINA and from the SCF comes the distribution of wealth**
- **from panel data , we see dynastic mobility across three generations or more now in PSID**
- **Key: role of intergenerational transfers in improving off-spring economic position**



The distribution of family wealth: USA 1963-2016 (before 2017-18)

Distribution of Family Wealth, 1963-2016



Source: Urban Institute calculations from Survey of Financial Characteristics of Consumers 1962 (December 31), Survey of Changes in Family Finances 1963, and Survey of Consumer Finances 1983-2016.

Note: 2016 dollars.

URBAN INSTITUTE

Source : SCF at <http://apps.urban.org/features/wealth-inequality-charts/>

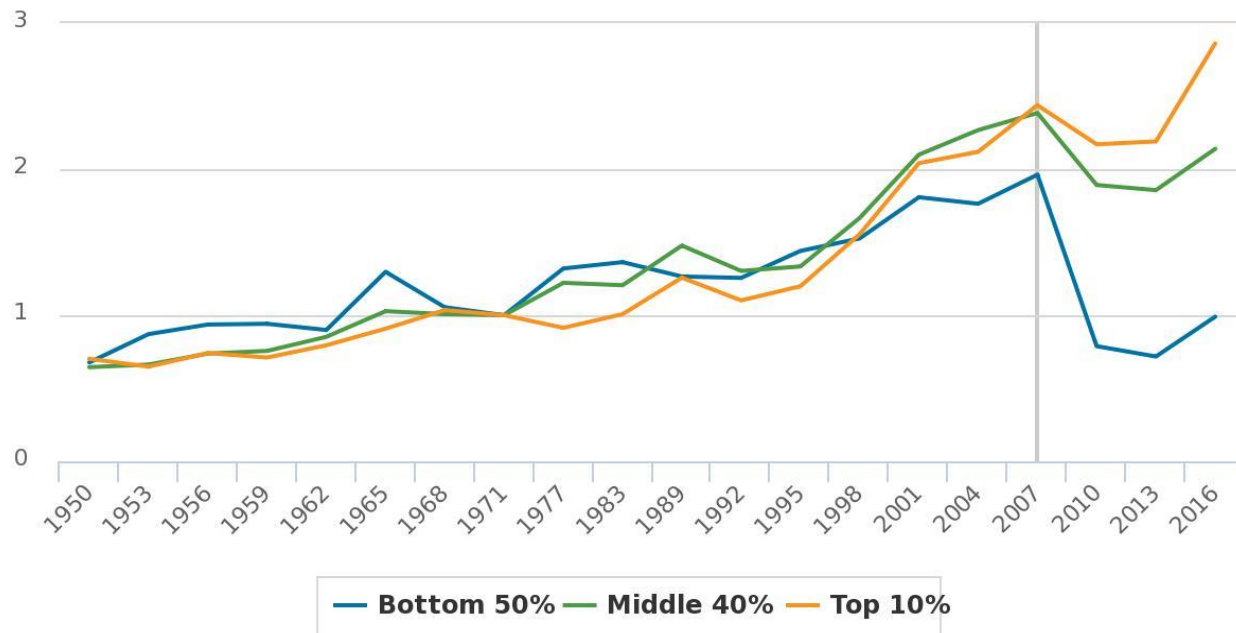


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After the Great Recession wealth inequality explodes

Growth in Household Wealth, 1950-2016



Notes: Lines show growth rates for different wealth groups, with blue for the bottom 50 percent, for the middle class (50th percentile to 90th percentile), and orange for the top 10 percent. All time series are indexed to 1 in 1971. Vertical line indicates financial crisis.

Source: Authors' calculations

<https://www.minneapolisfed.org/institute/working-papers-institute/iwp9.pdf>



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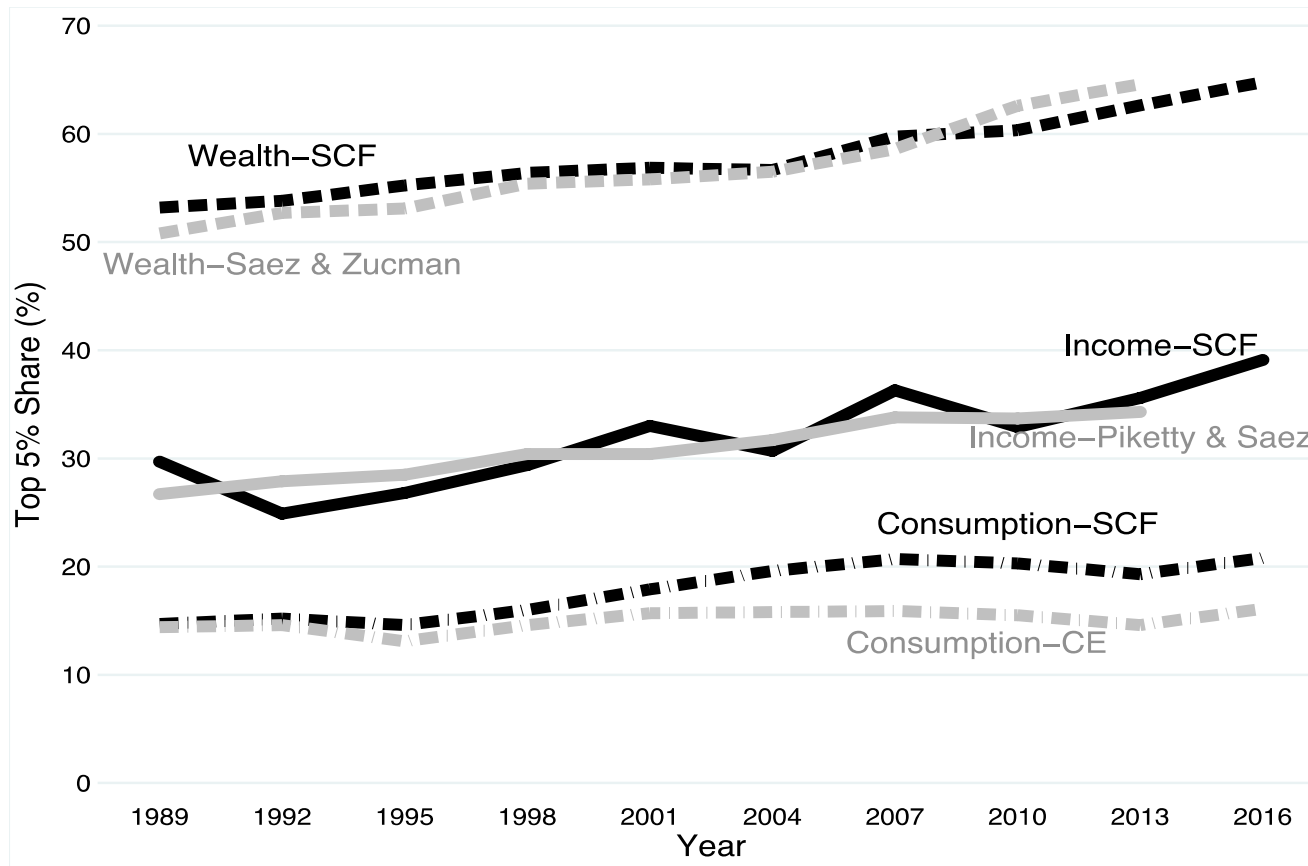
Y, C and W(NW)-- USA, 1989-2016

- Consider C, Y and NW , *all three for the same persons based SCF with some CEX imputes*
- Findings-----measures of one-dimensional inequality understate the level of inequality and the growth in inequality :
 - inequality in income (Y), consumption (C)and wealth (or net worth, NW) *all rising separately*
 - inequality in any two dimensions increased faster than in any one dimension over this period*
 - inequality in all three dimensions together rose by the most*

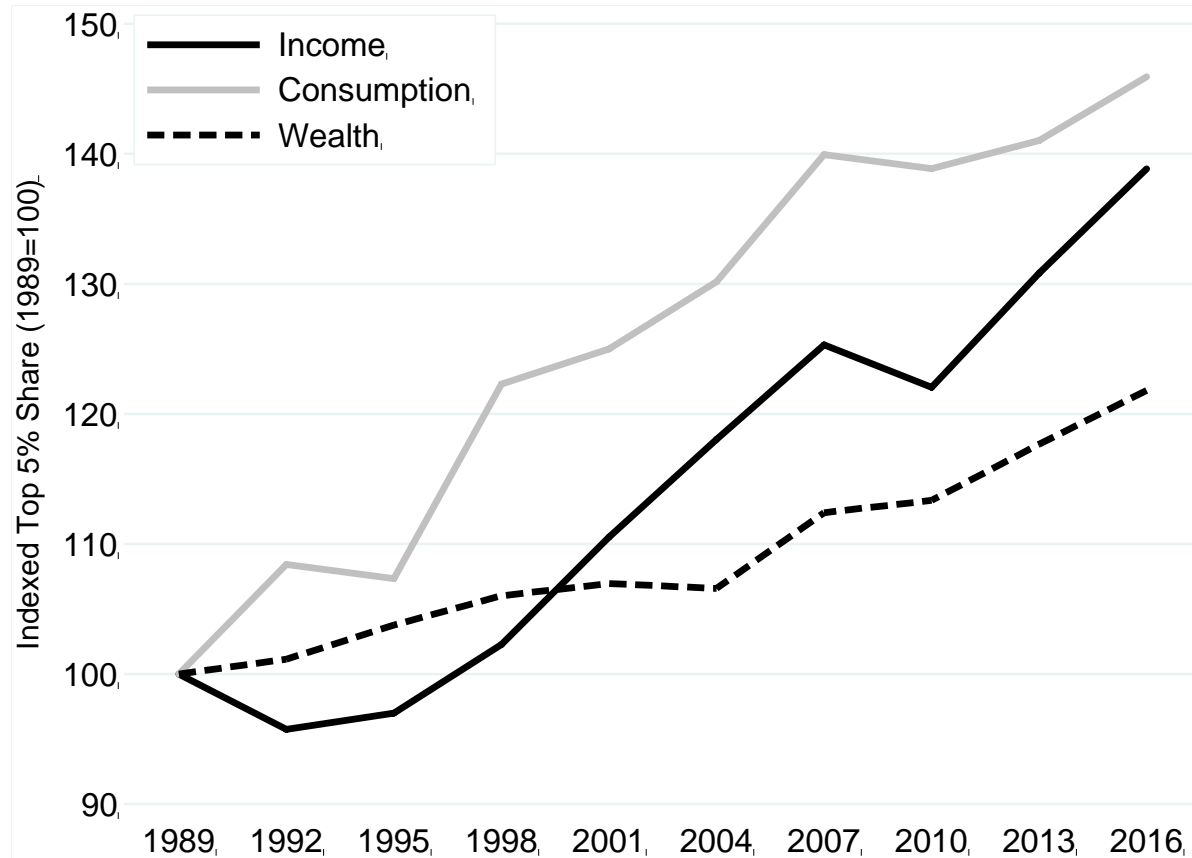


Comparison of share held by top 5%

C,Y,W -- one dimension



2-D inequality: Top 5% shares in **two dimensions** by wealth ranking (1989=100)

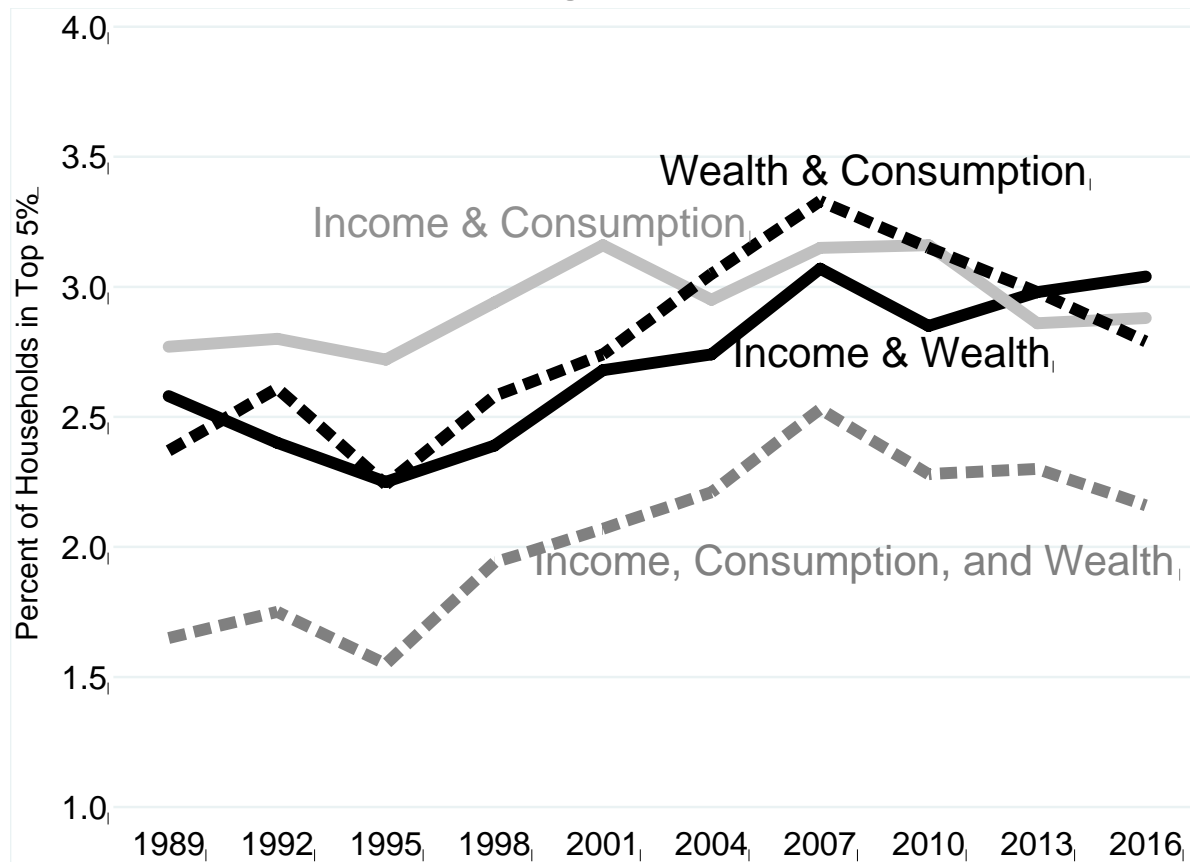


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3-D inequality: three dimensions

Percent of households in top 5% of income, consumption, and wealth



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C,Y & W together for same families-

Question:

What fraction of all households that were in the top 5% of the income (Y) distribution, were also in the top 5% of the consumption (C) distribution and the top 5% of the wealth (NW) distribution year by year ?



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C,Y & W together for same families

Answers :

1989-- 32 %

2007 -- 49 %

2016 -- 44% *

* March 2016 (SCF)- summer 2018, stock markets rose more than 30 % in USA, suggesting that the answer is now more than 50%



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Why should we care ? the corrosive effect of W on intergenerational mobility

- Wealth is passed generation to generation in two forms :
- **Inheritance** -- only at death of oldest parent, so late in life
- **In-vivos**-- at key stages in life course, earlier on through key periods of human and physical capital formation

(-note the “glass floor” at the top : child’s neighborhood; education; co-sign mortgage ; free rent; subsidized internships; and often lifetime job in family firm)



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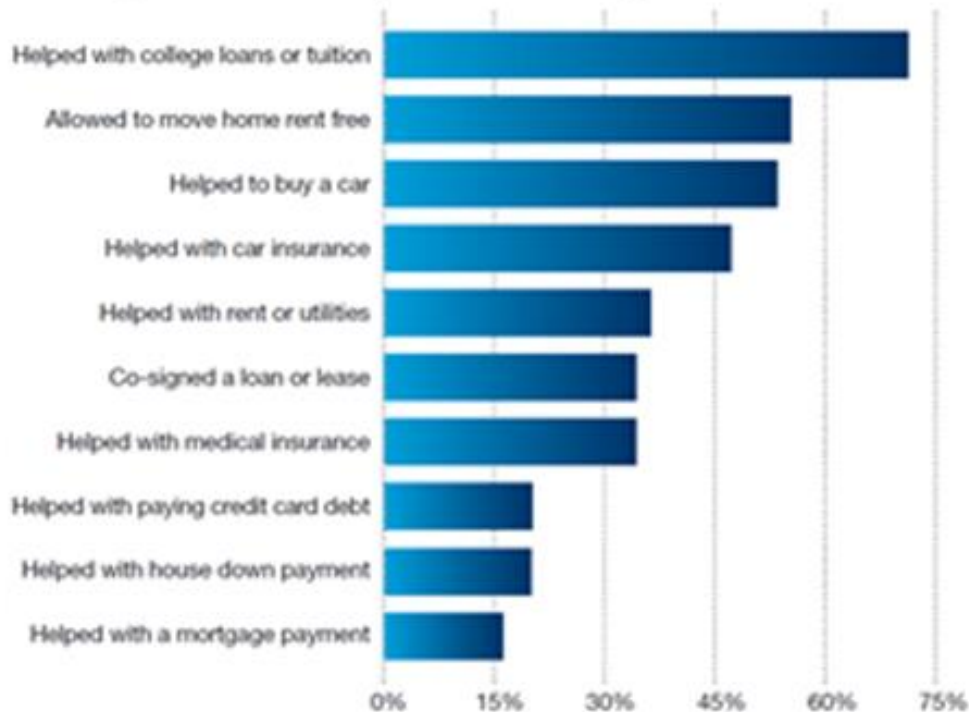
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Intergenerational transfers are frequent and large and make a difference

Consider the source— but- see the numbers too

Fig. 7: Financial assistance to adult children

Parents aged 47–65 who have provided financial support to adult children



Source: Ameriprise Financial



Increasing inequality and declining mobility via in-vivos transfers

- In the United States, in the aggregate, regular private cash transfers pale in comparison with these **large, irregular private inter-vivos “strategic transfers”**
- These **transfers are rarely recorded as consumption, or as income**, or even reported (except in some cases where ‘donors-only’ are queried in wealth surveys) and typically known only to the private money managers
- **Donor side: households in the top wealth quartile of persons 50 or over who made a transfer, averaged gifts of over \$40,000 in 2009-10 alone (Banerjee,2015).**
- ***But the survey offers no information on the economic status of recipient children or grandchildren***



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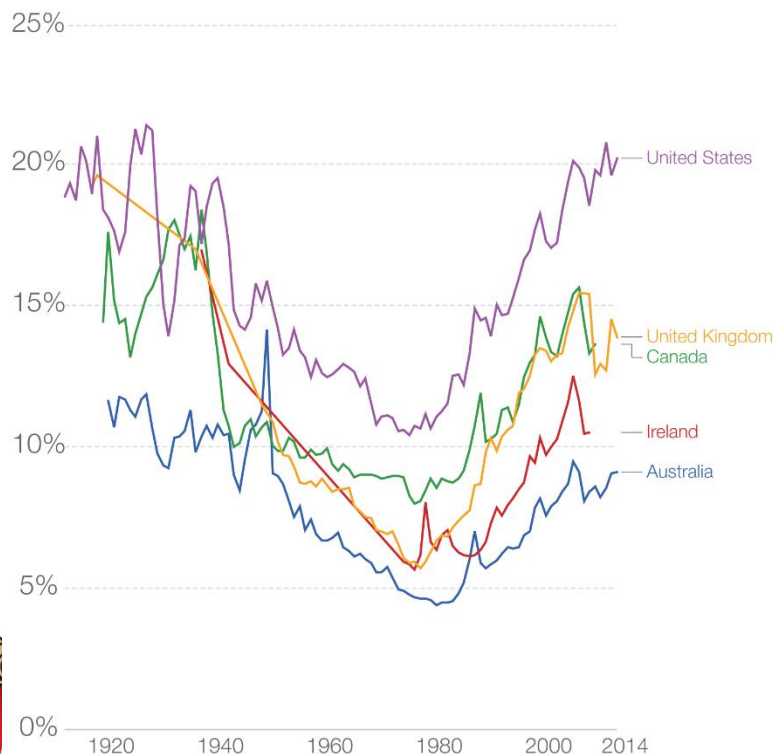
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Lessons from cross-country data -ever growing top 1% share is *not* inevitable

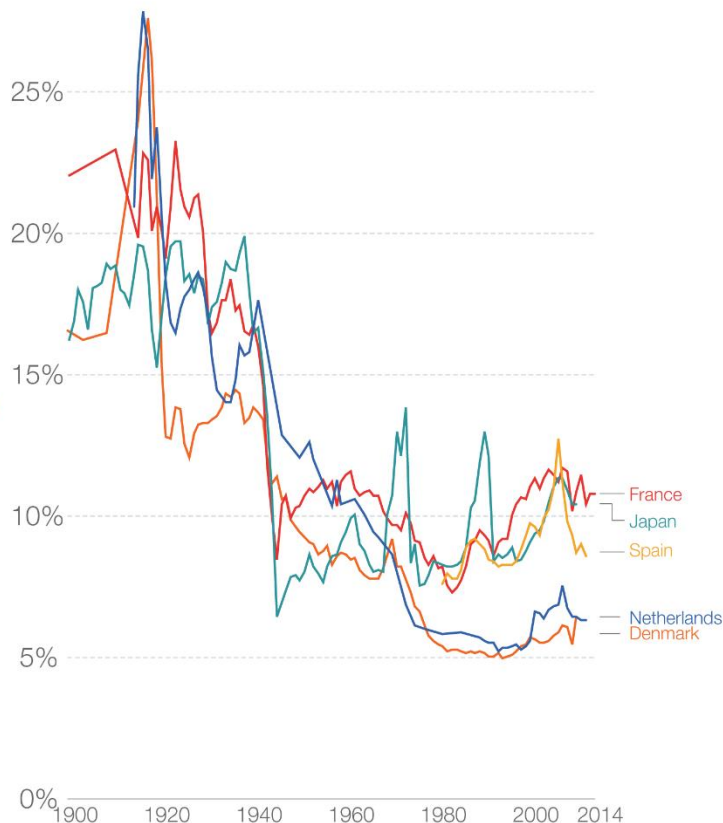
Our World
in Data

Share of Total Income going to the Top 1% since 1900

The evolution of inequality in English speaking countries followed a U-shape



The evolution of inequality in continental Europe and Japan followed an L-shape



Data source: World Wealth and Income Database (2018). This is income before taxes and transfers.

This data visualisation is available at [OurWorldinData.org](https://ourworldindata.org). There you find the raw data and more visualisations on inequality and how the world is changing. Licensed under CC-BY-SA by the author Max Roser.

3. The outcomes are not inevitable: we can do better

Institutions matter:

- **Public investment in human capital**, especially for kids (health, education, upward mobility) ,how countries treat children is key
- **Tax capital income** (no K gains roll-over) same as labor income
- **More widely shared profits** –how owners treat valued workers will be important , esp. if scarce and highly productive
- **Mandatory defined contribution pensions to all workers** managed by third party (Australia and Denmark)
- **Employer labor partnerships**, post secondary education & training (eg German work sharing; Danish and EU 'ALMPs')
- **Promote shared prosperity and inclusive growth**, value firms for more than the bottom line (dignity of work, environment)
- **Give labor a voice in political discourse**

That 's all folks

- Questions and comments welcome

Some Sources

- Fisher, Jonathan, David Johnson, Jonathan Latner, Timothy Smeeding and Jeffrey Thompson. 2016. "Inequality and Mobility using Income, Consumption, and Wealth for the Same Individuals", *Russell Sage Foundation, Journal of the Social Sciences*, 2(6), pp. 44–58
- Grusky, David, Michael Hout, Timothy Smeeding and Matt Snipp. 2018. "The American Opportunity Study: A New Infrastructure for Monitoring Outcomes, Evaluating Policy, and Advancing Basic Science", *Russell Sage Foundation, Journal of the Social Sciences*, in press
- Fisher, Jonathan, David Johnson, Timothy Smeeding and Jeffrey Thompson. 2018. "Inequality in 3-D: Income, Wealth and Consumption, 1989-2016", under review



Table 1: 2016 USA only-SCF NW/Y/C Combined File Descriptives

	(In millions of \$US)			Number of years funded by NW	
	NW (000)	Y (000)	C (000)	NW/Y	NW/C
P95	\$2.400	.197	.135	12.2	17.7
P50	\$.097	.047	.044	2.1	2.2

In fact in 2016 in USA --

P95 NW could finance 51 years of P50 (median) income ;

P50 NW could finance .5 years of income at P95

Note:

NW – From SCF for March 2016

Y – Disposable income from SCF for calendar year 2015

C – Total consumption from imputed/enhanced SCF totals for calendar year 2015

Source: Authors' calculations from 2016 SCF and related work (Fisher et al., 2018)



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Falling labor share around the world

source : IMF World Economic Outlook , 2017
<https://blogs.imf.org/2017/04/12/drivers-of-declining-labor-share-of-income/>

Labor is losing out

The share of national income paid to workers has been declining in many countries.

(evolution of the labor share of income, percent)



Source: IMF, *World Economic Outlook*, April 2017.



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