

Top Incomes during Wars, Communism and Capitalism: Poland 1892-2015

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23.10.2017, IBS

This Paper

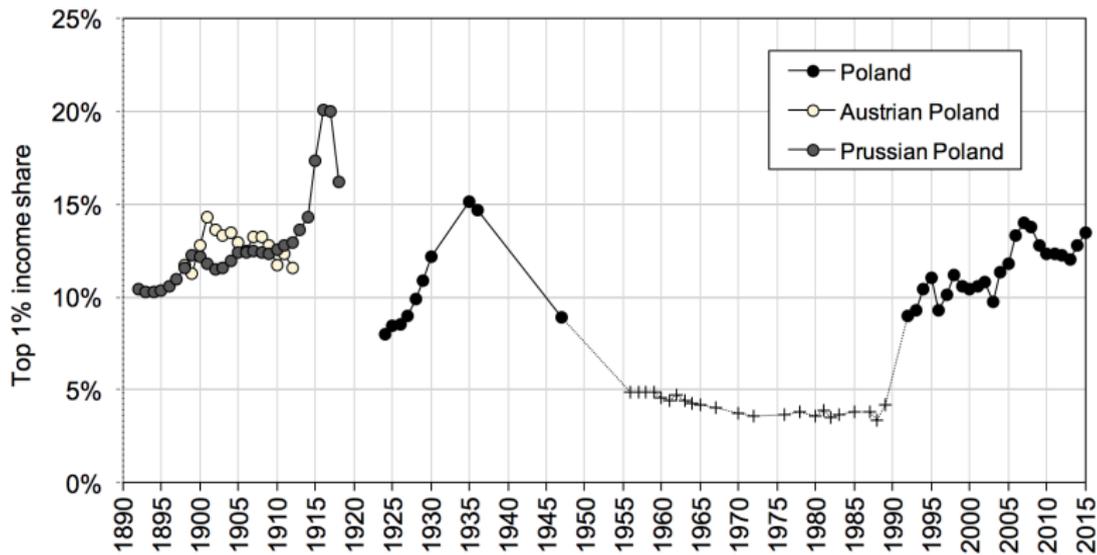
- ▶ Charting inequality using the tax data.
 - ▶ Homogeneous series spanning over the century.
 - ▶ Comparable across countries.
- ▶ A long-run perspective critical for understanding the dynamics of the income distribution.
- ▶ This influences the choice of policies, institutions, etc.

This Paper

- ▶ Top income shares for Poland.
- ▶ Chronology
 - ▶ The Partitions of Poland, 1892-1914 (Prussia and Austria)
 - ▶ World War I, 1914-1918 (Prussia)
 - ▶ Inter-war Poland, 1924-1936
 - ▶ World War II and Early Communism, 1947-49
 - ▶ Communism, 1956-1989
 - ▶ The Third Republic, 1992-2015

Main Conclusions

- ▶ U-shaped evolution of the top income shares.
- ▶ Steady rise after 1989 (especially post 2004)
 - ▶ Poland at the level of Germany or UK.
 - ▶ Synchronization with the German series
- ▶ The prominent role of capital (especially before 1939 and after 2000)
 - ▶ Globalization and technological progress.
 - ▶ Shocks to capital (wars, communism).



Top 1 per cent Income Shares in Poland

What We Know - Development and Inequalities

- ▶ **Optimistic** : the Kuznets' curve (1953, 1955): inequality rises in early phases of economic development but falls as the growth advances.
- ▶ 'Explained' using the demand and supply framework ; the "race between technology and education" (Tinbergen 1974, Goldin and Katz 2008)
- ▶ **Pessimistic** : Piketty (2001, 2014) no spontaneous fall in inequality - "the Great Leveling" of the 20th century was a unique episode

What We Know - Poland

- ▶ Derengowski (1930); Landau (1933); **Wisniewski (1934)**; Kalecki (1964); Kordos (1968); Brus (1974); Landau and Tomaszewski (1985); Flakierski (1986); Atkinson and Micklewright (1992); Milanovic (1999); Rutkowski (2001); Keane and Prasad (2002; 2006); Grosfeld and Senik (2008); Leszczynska and Lisiecka (2008); Kosny (2012); Brzezinski, Jancewicz, Letki (2014); Jedrzejczak and Kubacki (2017); Malinowski and van Zanden (2017); Brzezinski...

INSTYTUT
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J A N W I Ś N I E W S K I

ROZKŁAD DOCHODÓW
WEDŁUG WYSOKOŚCI

W R. 1929



Biblioteka Uniwersytecka
w Warszawie



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Introduction

Methodology

Results

Recent Rise

Conclusions

Top Shares

- ▶ Connecting tax data with external controls of income total and population total (Kuznets 1953; Piketty 2001).
 - ▶ "Top-bottom" - take aggregate total and exclude non-taxable income.
 - ▶ We interpolate by assuming the Pareto distribution for top incomes.
- ▶ 'Income' = gross income, before all personal deductions and taxes.
- ▶ 'Individuals' = tax units, psychical persons.
- ▶ Merging income taxed using the progressive and flat schedule.

Data

- ▶ 1892-1919 : yearbooks and tax tabulations from the Austrian and Prussian sources.
- ▶ 1924-1936 : tax tabulations from *Ministerstwo Skarbu*; censuses; yearbooks; *Statystyka Pracy*; *Statystyka Cen*, surveys.
- ▶ 1947-49 : unearned income tax data from yearbooks; enterprise wage surveys.
- ▶ 1956-1990 : enterprise wage surveys; yearbooks; HBS.
- ▶ 1992-2015 : annual income tax reported from *Ministerstwo Finansów*; NA; EU-SILC; LIS.

Łódźka (t. d.)		Łódź 14-pom.		Pakosice (zajpł. pom. kaskingo)		Pierzków 1		Pierzków 2 -pom.		Radomsko		Sieradz (zajpł. pom. sieradz.)		Słupca (zajpł. pom. kaniwick.)		Tomaszów Maz. (zajpł. pom. bartaniszkiog.)		Naj- wyż- szy
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Przedziały dochodów w zł		Liczba podatników	Struktura %
1		2	3
do	85 528	23 879 889	97,11
powyżej	85 528	710 471	2,89
Ogółem		24 590 360	100,00

Informacja dotycząca rozliczenia... 2015

Introduction

Methodology

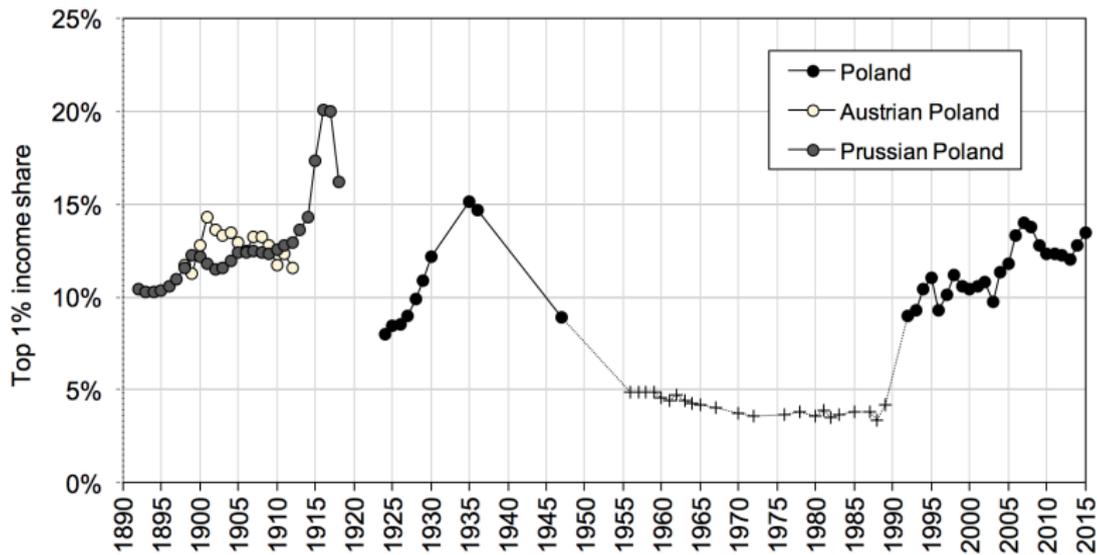
Results

Recent Rise

Conclusions

The Evolution of Top Income Shares in Poland

- ▶ U-shaped evolution of top income shares throughout the 20th century:

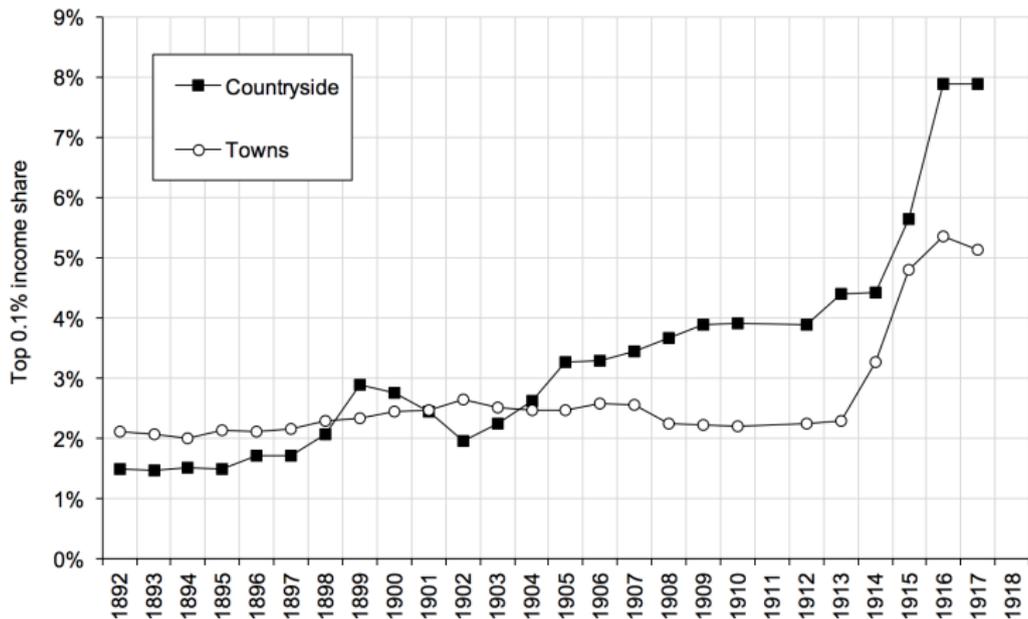


Top 1 per cent Income Shares in Poland

The Evolution of Top Income Shares in Poland

- ▶ **The Partition of Poland** and Kuznets' story
 - ▶ Prussia - growing; rural; agrarian capitalism.
 - ▶ Austria - stagnating; urban; malaise industrialization.

Province of Posen



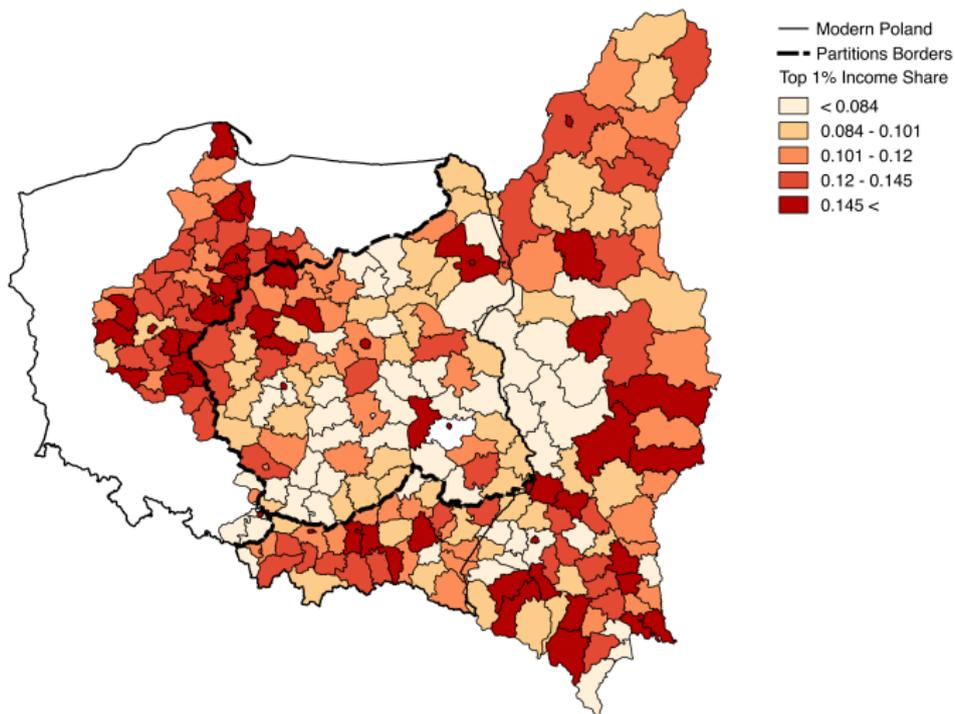
The Province of Posen – decomposition of the top 0.1 percentile

The Evolution of Top Income Shares in Poland

- ▶ **The Partition of Poland** and Kuznets' story
 - ▶ Prussia - growing; rural; agrarian capitalism.
 - ▶ Austria - stagnating; urban; malaise industrialization.
- ▶ **The Interwar Poland**
 - ▶ Large shocks to capital income concentration. Yet, capital income still dominant at the top.
 - ▶ The Great Depression saw proportionally greater shock to the bottom
 - ▶ Interesting regional differences.



Evolution of average income of groups within the top percentile

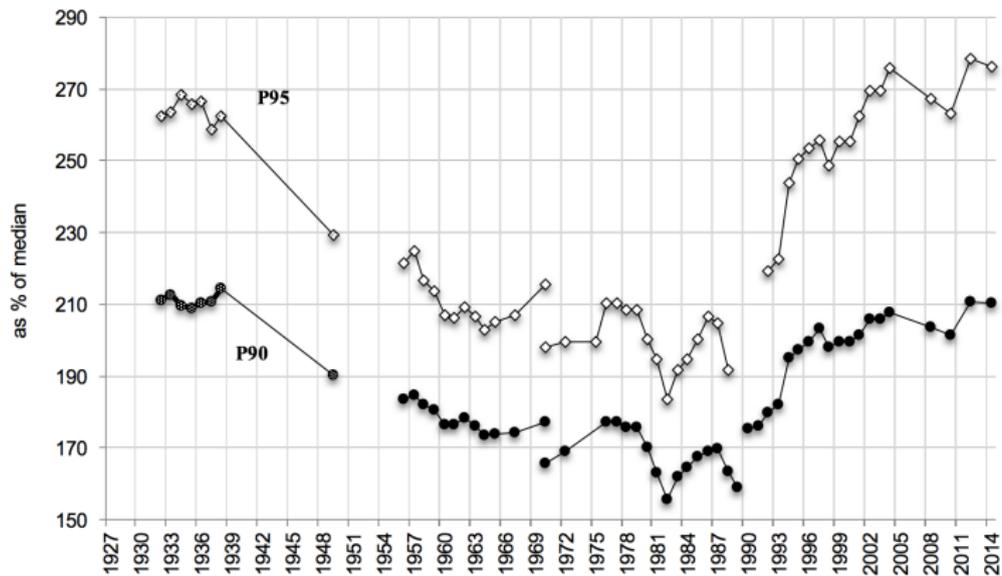


Top 1% Income Shares in 1927

The Evolution of Top Income Shares in Poland

▶ **Communism**

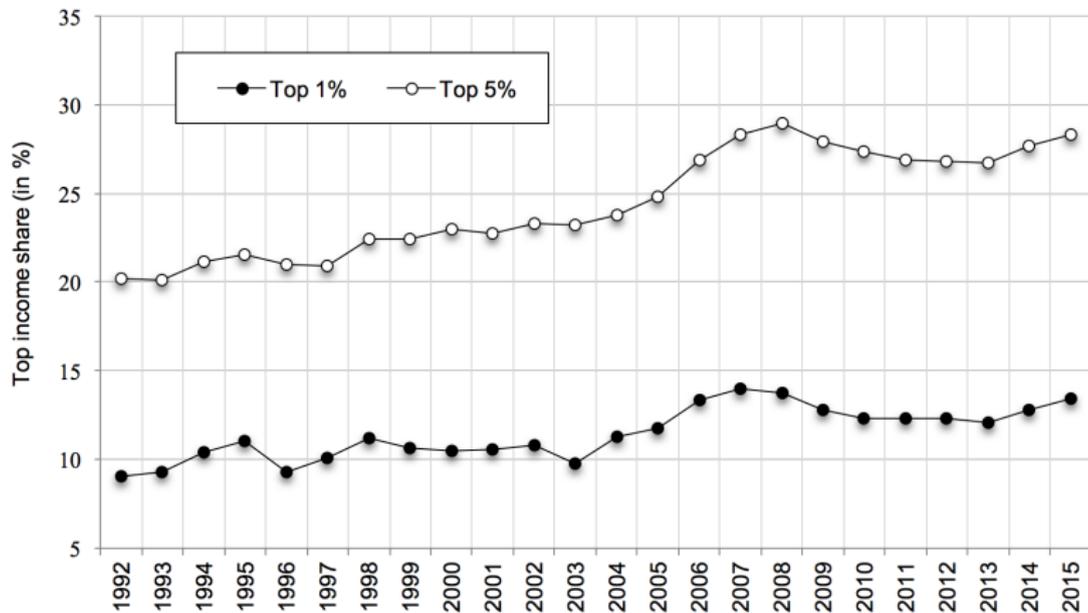
- ▶ Shock to capital - WWII (but less than WWI).
- ▶ Shock to capital - nationalization, land reforms.
- ▶ Wage compression.
- ▶ Wage inequality as a political tool.



The upper part of earnings distribution in Poland

Top shares from 1989 until today

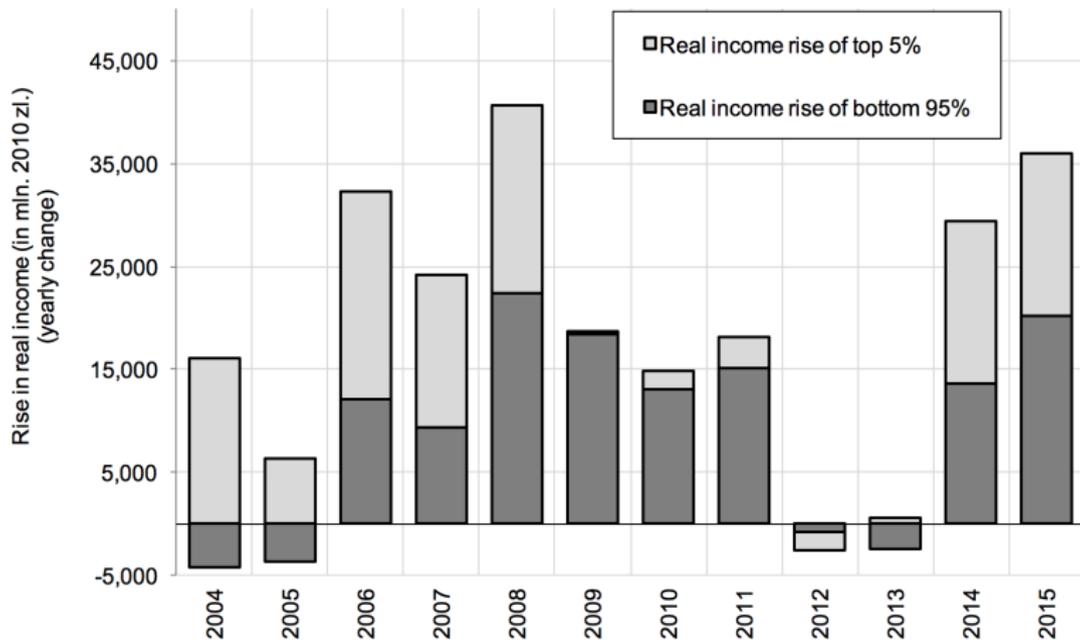
- ▶ An immediate upward adjustment and a steady rise after the fall of socialism.
- ▶ A strong increase after Poland joined the EU



Top 1 and 5 per cent Income Shares in Poland

Top shares from 1989 until today

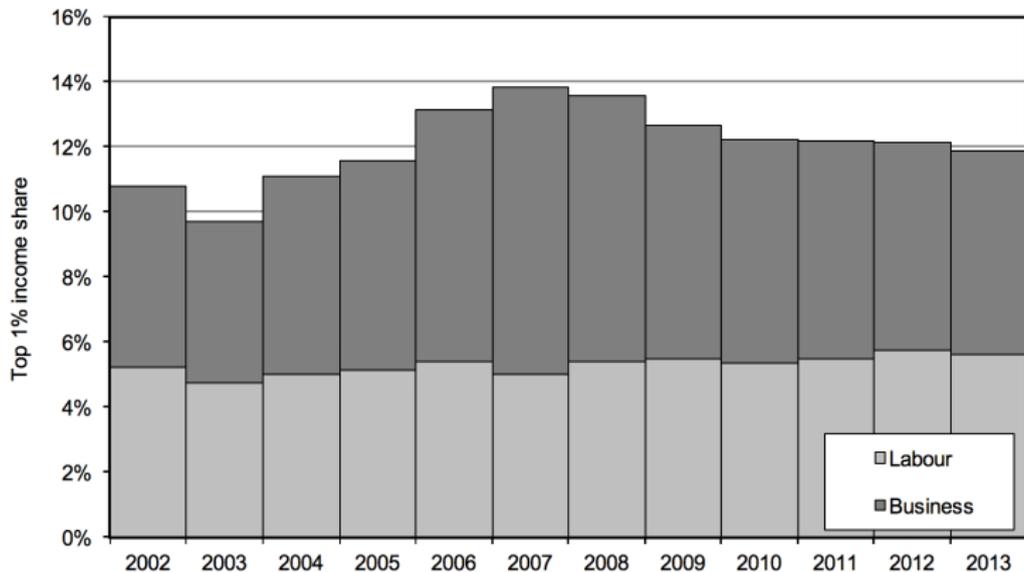
- ▶ An immediate upward adjustment and a steady rise after the fall of socialism.
- ▶ A strong increase after Poland joined the EU
- ▶ Top income groups have been main beneficiaries of the strong Polish growth in the 2000



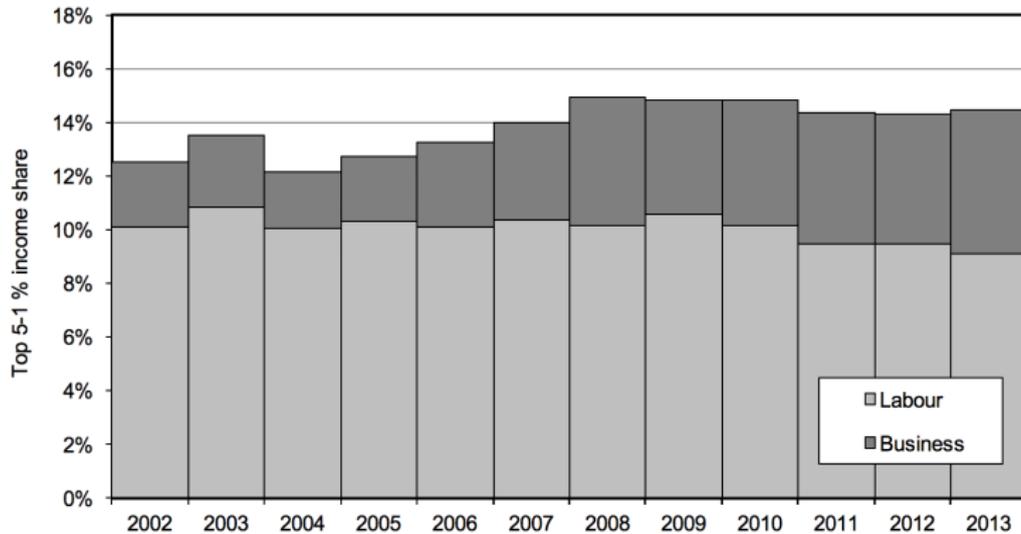
Rise in real income by income groups

Top shares from 1989 until today

- ▶ An immediate upward adjustment and a steady rise after the fall of socialism.
- ▶ A strong increase after Poland joined the EU
- ▶ Top income groups have been main beneficiaries of the strong Polish growth in the 2000
- ▶ Composition
 - ▶ Capital dominates at the top 1%.
 - ▶ Labour dominates at the top 5-1%.



Decomposition of the top 1% income share.

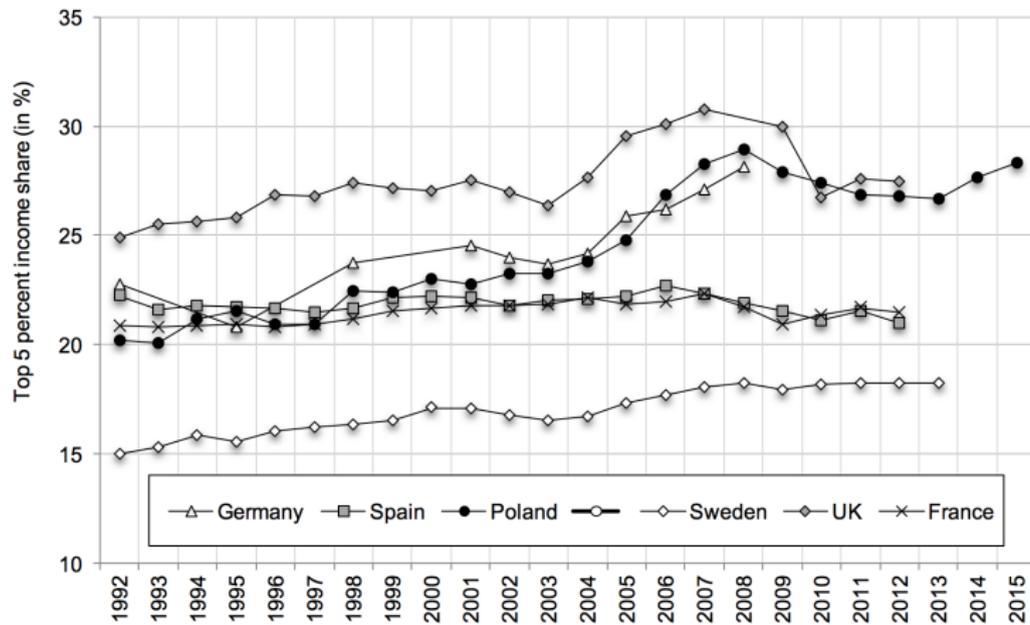


Decomposition of the top 5-1% income share.

International Comparison

- ▶ The Polish inequalities at the level of Germany or UK.
- ▶ Synchronization of the Polish and German series.

International Comparison

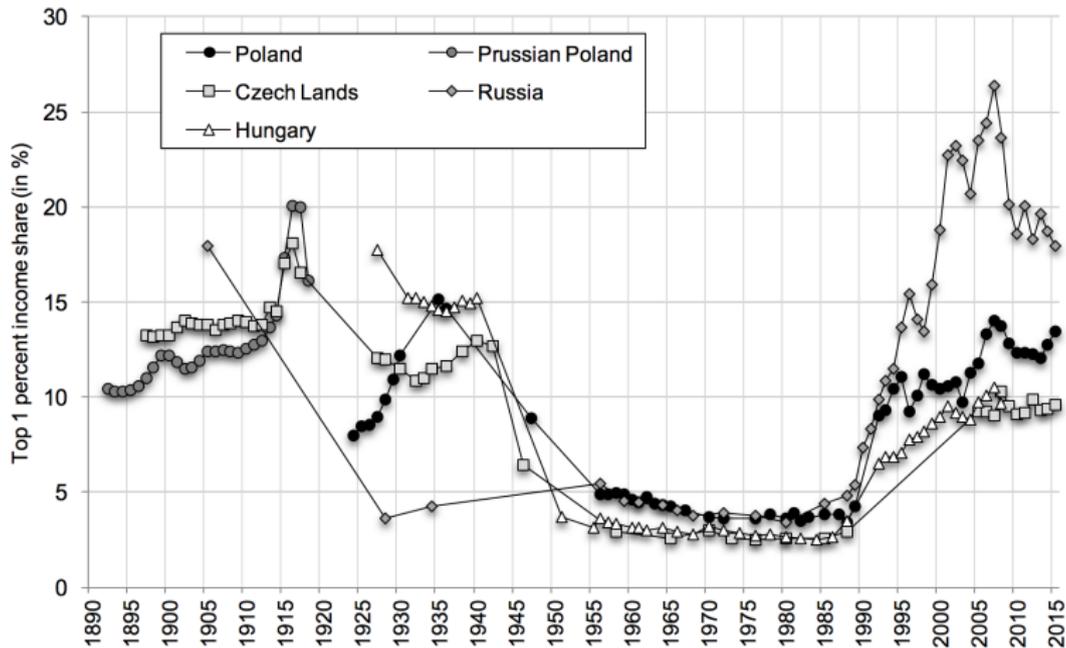


Top 1 per cent in Poland, France, Germany, Spain and Sweden

International Comparison

- ▶ The Polish inequalities at the level of Germany or UK.
- ▶ Synchronization of the Polish and German series.
- ▶ More unequal than most of the CEE countries, but way below Russia.

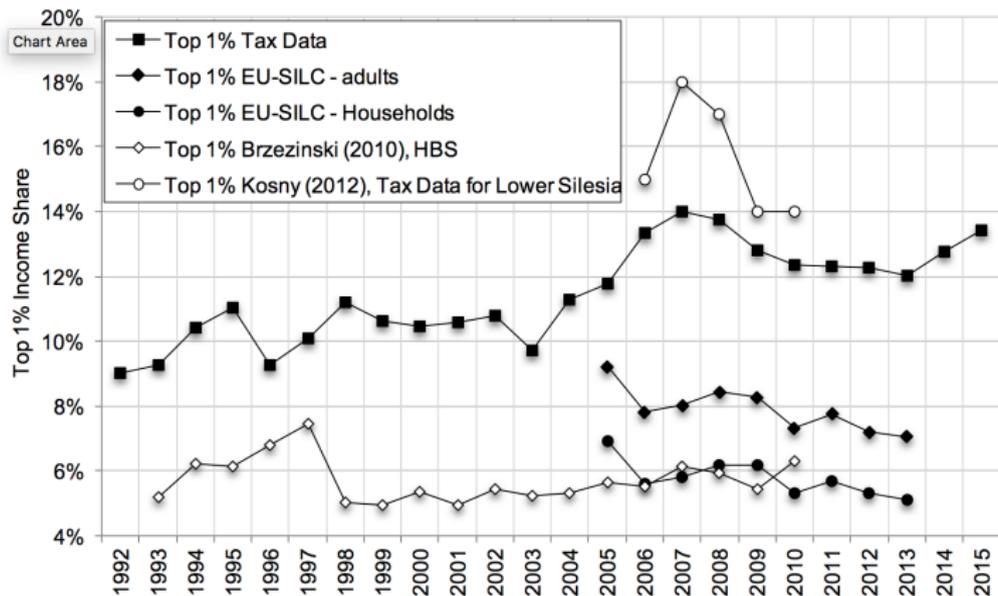
International Comparison



Top 1 per cent in Poland, Czech Rep., Hungary and Russia

Comparison across Studies and Data

- ▶ Quite consistent for the period before 2000.
- ▶ Differences for the post-2000 due to the under-coverage of wealthy?



Top 1 per cent in Poland across different studies and data

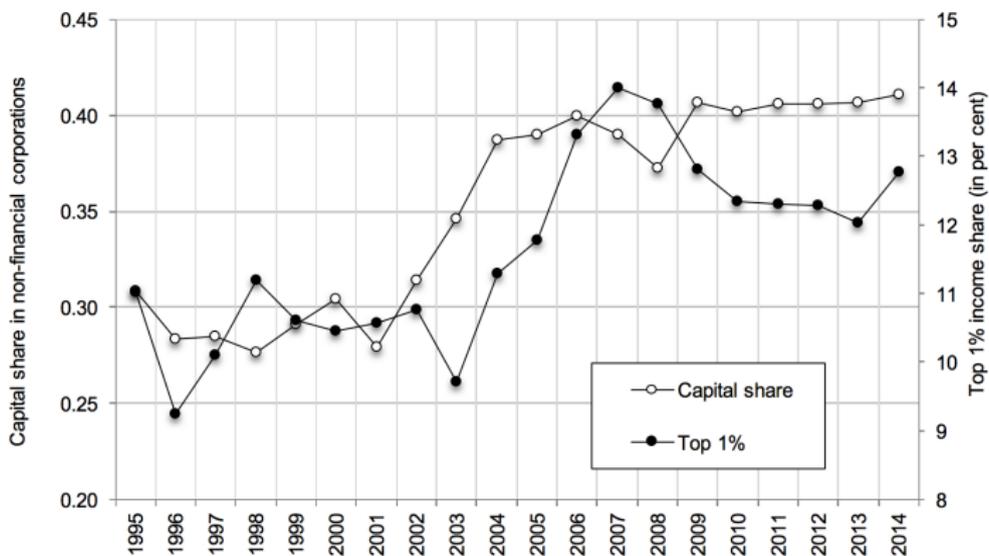
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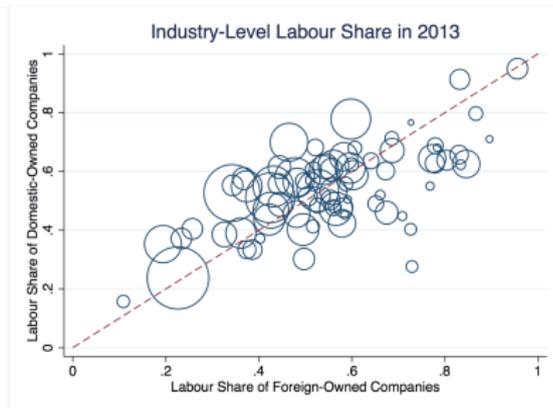
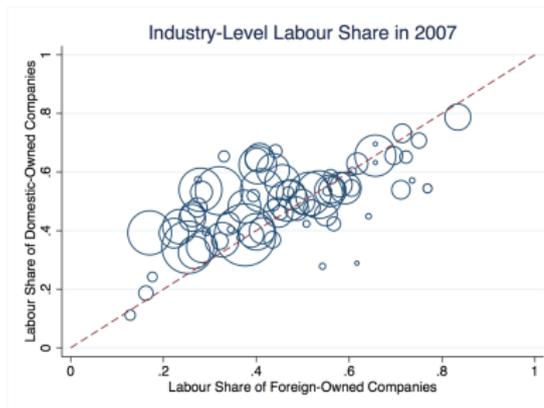
Conclusions



Capital share and the top 1% income share

Hypotheses

- ▶ Globalisation and Technological Progress
 - ▶ EU → FDI → K-biased Tech. → Spillovers → K income



The Industry-level labour share

Hypotheses

- ▶ Globalisation and Technological Progress
 - ▶ EU → FDI → K-biased Tech. → Spillovers → K income
 - ▶ ... → Skill-Biased Tech → Increasing returns to skills
- ▶ Globalisation and Trade
 - ▶ WTO China → Off-shoring L-intensive activities / Shift towards K-intensive sectors
- ▶ Migration
 - ▶ Higher wages of low-skill workers → K-biased Tech.
 - ▶ if $\sigma > 1$ → Higher Wages → Lower L-share
 - ▶ but no evidence on the wage rise for low-skill (Dustmann et al. 2009)
- ▶ Institutions?
- ▶ Tax reforms?

Introduction

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Conclusions

- ▶ U-shaped evolution of inequality over the 20th century in Poland
- ▶ The importance of capital income
- ▶ Complexities in the dynamics of inequalities