

Econ 133 – Global Inequality and Growth

The interplay between inequality and growth

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Roadmap

1. Is there an association between inequality and growth in the data?
2. Is there a causal relationship between inequality and growth?
 - Growth \rightarrow inequality?
 - Inequality \rightarrow growth?

1 Correlation between inequality and growth in the data

- Time series evidence: looking at growth and inequality within a country over time
- \neq cross-country evidence: looking at growth and inequality in a sample of countries at a given period of time (e.g., today)
- In both cases, no simple, unidirectional relationship: complex theoretical interplay + diversity of national histories

1.1 Time series evidence

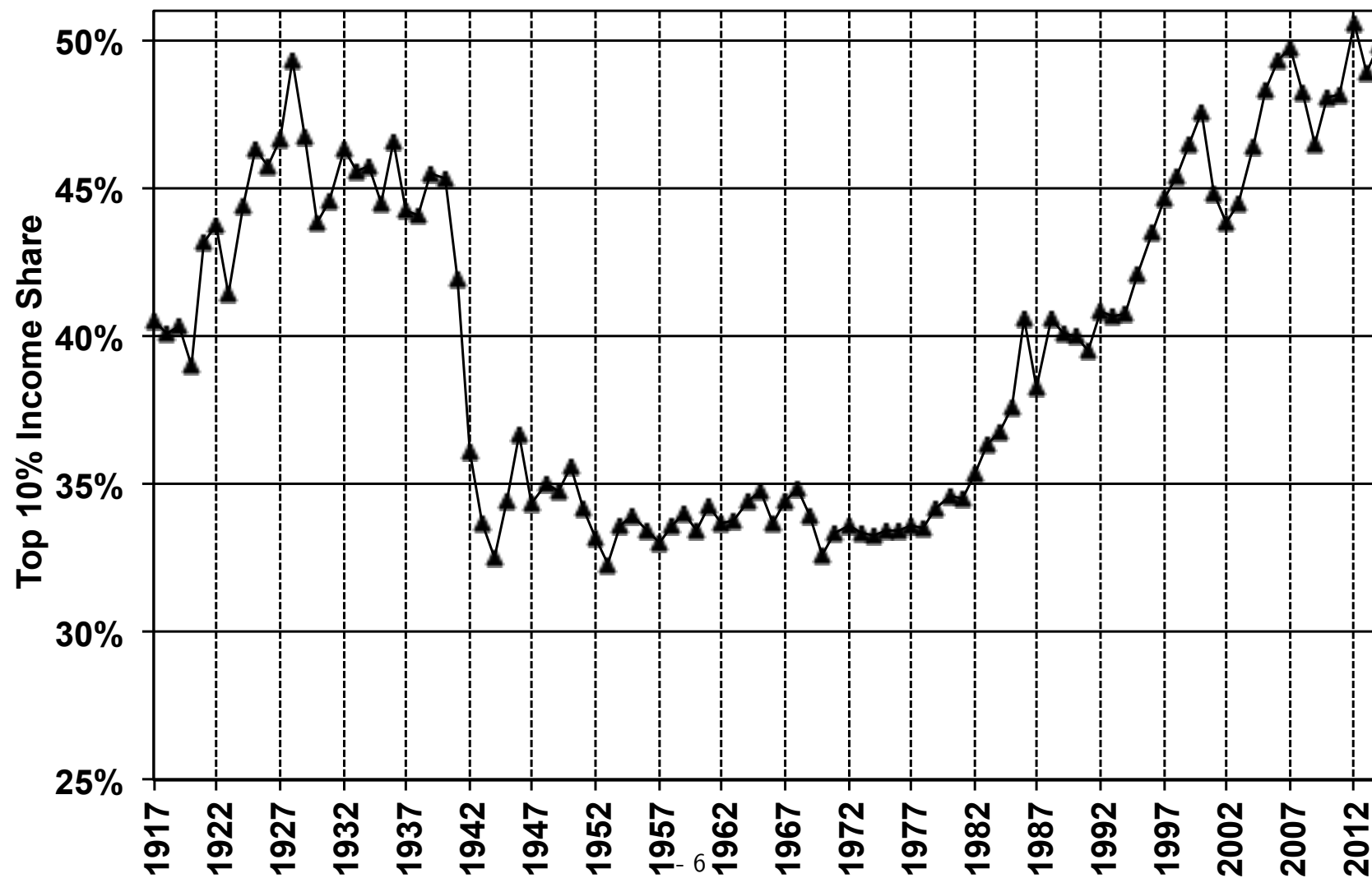
In the very long-run: negative relationship between inequality and growth from 1700 to today in Old World

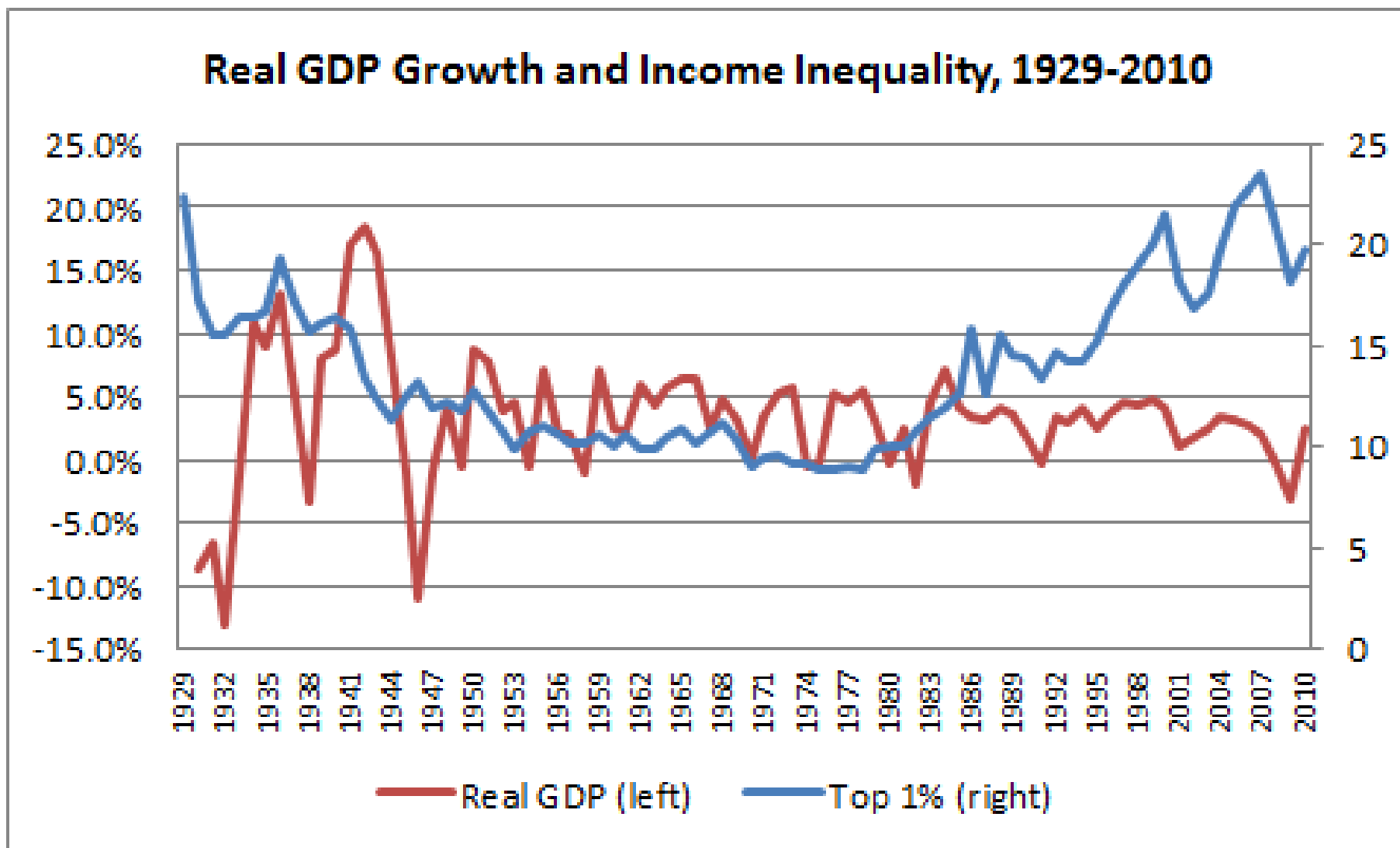
- Aristocratic, pre-industrial societies of 18th century = high inequality, very low growth
- Democratic, industrial and post-industrial societies of second half of 20th century = relatively low inequality, high growth

In the short / medium-run: no systematic relationship between inequality and growth

- 19th century UK: rise of productivity growth initially accompanied by an *increase* in inequality: “Engels’ pause”. See Allen (2009)
- 20th century US: dramatic changes in inequality of pre-tax income, but relatively little changes in macro growth rates

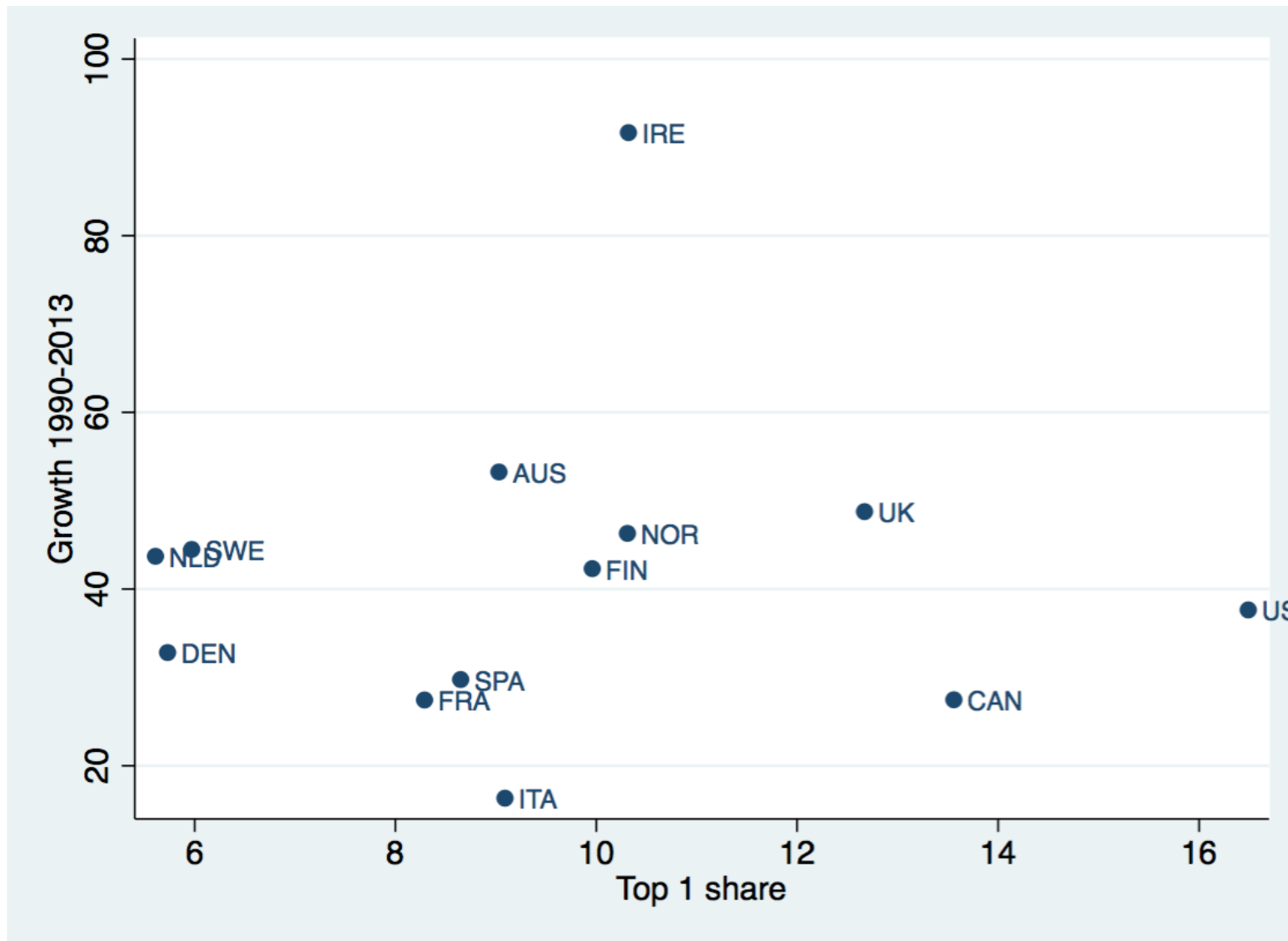
Share of income earned by the top 10% income earners in the United States





1.2 Cross-country evidence

- In the cross-section of developing countries today, more equal countries tend to grow more: Berg and Ostry (2011)
- However two limits: (i) no such correlation for rich countries
- (ii) say nothing about direction of causality (if any)



Source: World Wealth and Income Database, and national accounts.

Note: growth is real GDP growth per worker.

2 Theories of the interplay between inequality and growth

2.1 Growth → inequality: the Kuznets curve

A bell-shaped relationship btw inequality and growth: Kuznets (1955)

- Start from economy with 2 sectors: agriculture (low productivity, low inequality) & nonagric. (high productivity, high inequality)
- Phase 1: Shift from agriculture to nonagricultural sectors increases both inequality & growth

- Phase 2: further growth within nonagricultural sector generates mobility → less wealth and permanent income inequality
 - Population growth → old families have a smaller and smaller share of income
 - Productivity growth → new industries displace old wealth

Limit of Kuznets' theory: not consistent with the data since 1980s

2.2 Inequality → growth

A bell-shaped relationship between growth and inequality

- A moderate level of inequality is good for growth: incentive effect
- But excessive inequality is bad for growth:
 - Political economy reasons: inequality → political instability
 - Resource constraints: inequality makes it hard for poor people to stay healthy, acquire skills, look after or educate their children

- Credit constraints: inequality makes it harder for poor people to innovate
 - Keeping up with the Joneses': over-borrowing, financial distress
 - Effect on institutions: political capture by the wealthy
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- There is some suggestive evidence for these various channels (see following graphs)
 - Limit: hard to establish rigorous causal link empirically (lack of natural experiment)

Figure 1

The Great Gatsby Curve: More Inequality is Associated with Less Mobility across the Generations

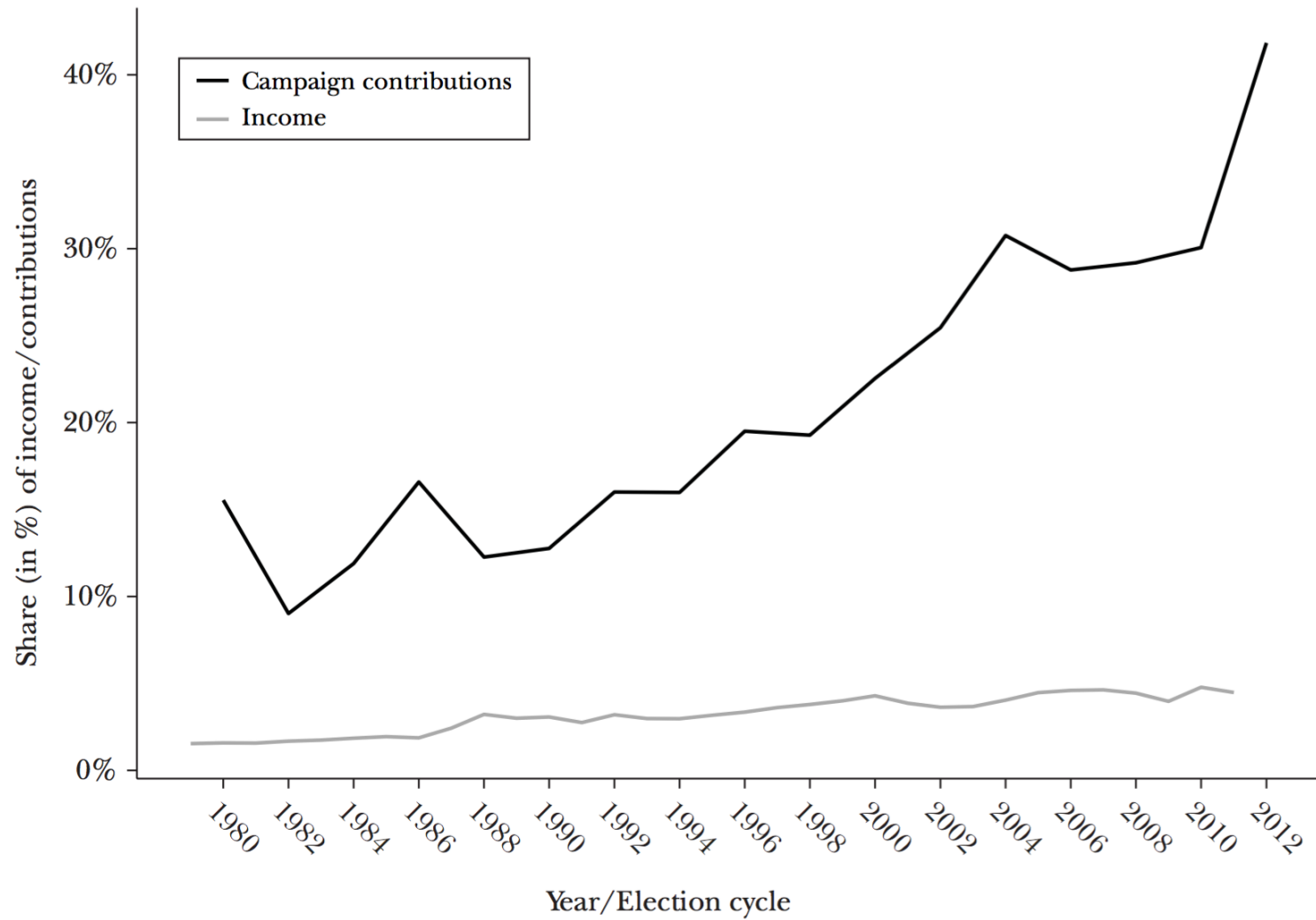


Source: Corak (2013). Note: inequality measured as the Gini coefficient for disposable income in 1985.

Intergenerational economic mobility is measured as the elasticity btw paternal earnings and son's adult earnings.

Figure 5

Concentration of Income and Campaign Contributions in the Top 0.01 Percent of Households and Voting Age Population



Source: Bonica et al. (2013)

References

Allen, Robert C., “Engels’ pause: Technical change, capital accumulation, and inequality in the British industrial revolution”, *Explorations in Economic History*, 2009 (web)

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Kuznets, Simon *Economic Growth and Income Inequality*, *American Economic Review* 1955 (web)