EC9AA Term 3: Lectures on Economic Inequality

Debraj Ray, University of Warwick, Summer 2024

- **Supplement 2 to Slides 1**: Differential Savings Rates

Supplement 2: Differential Savings Rates

- Do the rich save more than the poor? (lifetime vs current income)
  - Estimates from Survey of Consumer Finances (SCF):

	6-Yr Income Average	Instrumented By Vehicle Consumption
Quintile 1	1.4	2.8
Quintile 2	9.0	14.0
Quintile 3	11.1	13.4
Quintile 4	17.3	17.3
Quintile 5	23.6	28.6
Top 5%	37.2	50.5
Top 1%	51.2	35.6

Source: Dynan-Skinner-Zeldes (2004), they provide other estimates

$$r = \frac{[x(t)/x(0)]^{1/t}(1+g) - 1}{s}$$

- Some quick calculations for top 10% in the US:

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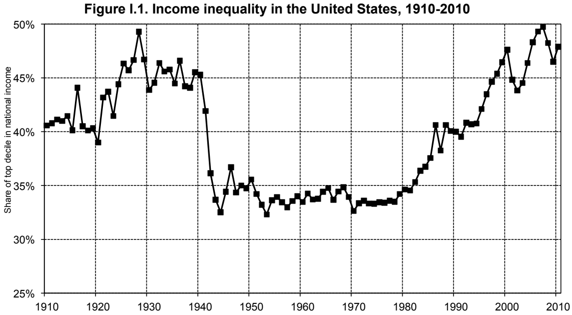

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- Some quick calculations for top 10% in the US:
- $x_0 = 1/3$ in 1970, rises to $x_t = 47/100$ in 2000.
- Estimate for g: 2% per year.
- Estimate from Dynan et al for s: 35% (optimistic).
- Can back out for r: $r = 9.7\%$.

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- Inflation-adjusted rate of return on US stocks over 20th century: 6.5%
  - Much lower in the 1970s and 2000s, higher in the 1980s and 1990s.

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- Similar calculations for top 1% in the US:
  - $x_0 = 8/100$ in 1980, rises to $x_t = 18/100$ in 2005.
  - Estimate for g: 2% per year.
  - Estimate from Dynan et al for s: 51%.
  - Can back out for r: $r = 10.5\%$.

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- Try the top 0.1% for the United States:
  - $x_0 = 2.2/100$ in 1980, rises to $x_t = 8/100$ in 2007.
  - Estimate for g: 2% per year.
  - If these guys also save at 0.5, then $r = 14.4\%$!
  - If they save $3/4$ of their income, then $r = 9.6\%$.

$$r = \frac{[x(t)/x(0)]^{1/t}(1+g) - 1}{s}$$

- Slightly better job for Europe, but not much. Top 10%:
  - $x_0 = 29/100$ in 1980, rises to $x_t = 35/100$ in 2010.
  - Estimate for g: 2% per year.
  - Estimate from Dynan et al for s: 35%.
  - Can back out for r: $r = 7.5\%$.

$$r = \frac{[x(t)/x(0)]^{1/t}(1+g)-1}{s}$$

- Slightly better job for Europe, but not much. Top 10%:
  - $x_0 = 29/100$ in 1980, rises to $x_t = 35/100$ in 2010.
  - Estimate for g: 2% per year.
  - Estimate from Dynan et al for s: 35%.
  - Can back out for r: $r = 7.5\%$.
- High relative to r in Europe.
  - UK the highest at 5.3% over 20th century, others appreciably lower.

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- Finally, top 1% for the UK:
  - $x_0 = 6/100$ in 1980, rises to $x_t = 15/100$ in 2005.
  - Estimate for g: 2% per year.
  - Estimate from Dynan et al for s: 51%.
  - Can back out for r: $r = 11.4\%$.

- Summary
  - Differential savings rates explain some of the inequality, but far from all of it.