What shapes the U.S. wealth distribution?
Longevity vs income Inequality

Why? Demography matters!
Colossal rise in life expectancy (longevity)
- ↑ lifetime wealth [permanent]
- ↑ % of individuals at peak wealth [transitory]
Wealth inequality ought to rise.

This paper
Two objectives:
- Quantify the role of rise in LE for wealth inequality in an OLG model.
- Horse race between demography and policy.
+ Policy experiments.

Model with multiple mechanisms of redistribution
Government collects taxes and issues debt to finance government purchases, operates PAYG DB social security.
Redistribution via:
> progressive labor income tax (as in Benabou, 2002)
> progressive social security (AIME).
> taxes on consumption and capital income are flat
gov’t purchases do not enter utility

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Scenarios (calibrated to the US)
Variance of productivity shocks rises for subsequent birth cohorts.
Full model features changes in
- Longevity: historical mortality data + UN projection until 2100.
- Fertility: historical births data + US Census projection until 2060.
- Technology: TFP growth and labor share.
- Fiscal policy: tax rates, progressivity of labor income tax, govt. purchases, debt/GDP.

In the initial steady state
Wealth inequality driven by income risk and life-cycle savings.
Negligible role of discount factor shocks and return risk.

<table>
<thead>
<tr>
<th></th>
<th>Gini</th>
<th>Top 10% share</th>
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</thead>
<tbody>
<tr>
<td>Discount factor shocks</td>
<td>0.21%</td>
<td>0.82%</td>
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<tr>
<td>Income risk</td>
<td>28.05%</td>
<td>74.01%</td>
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<tr>
<td>Return risk</td>
<td>0.00%</td>
<td>0.01%</td>
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<tr>
<td>Life-cycle</td>
<td>28.63%</td>
<td>48.79%</td>
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</tbody>
</table>

Contribution of various channels for steady state wealth inequality

Longevity and wealth inequality
Wealth Gini (change in pp relative to 1960)

<table>
<thead>
<tr>
<th>Year</th>
<th>Data</th>
<th>no growth in life expectancy</th>
<th>Full model</th>
<th>not seeing growth in life expectancy</th>
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<tbody>
<tr>
<td>1960</td>
<td></td>
<td>0.00</td>
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<td>1980</td>
<td></td>
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<td>2000</td>
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<td>2020</td>
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<td>2040</td>
<td></td>
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<td>8.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

Conclusions: change needed?
Rise in longevity is a big part of the rise in wealth inequality.
Relatively minor role of changes in tax system (not shown here).
These forces will continue to operate.
Work in progress: what kinds of policy can affect wealth inequality?