

# Understanding the New Normal: The Role of Demographics

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**Discussion by**

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## Key takeaway:

A rich general equilibrium model does not predict any reversal of recent trends, despite the importance of the transitory baby-boom.

This is a very important point!!

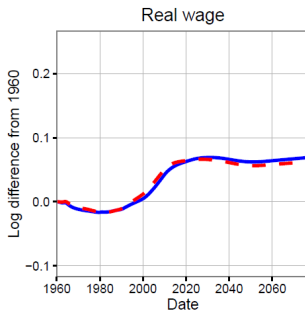
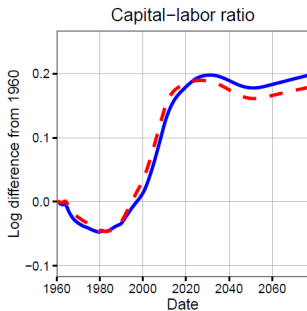
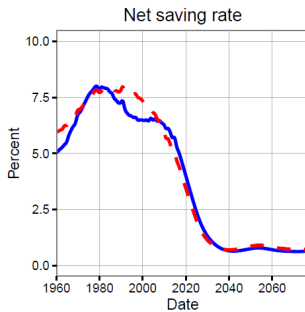
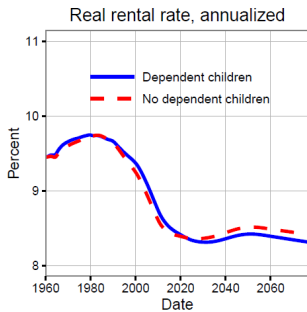
My comments:

- **Dependent children** overcomplicate the model
- Are you picking up the **permanent rise** in life expectancy?
- How well do you **calibrate life-cycle profiles**?

# Dependent Children

- Structure with dependent children makes the model overly complicated
- Enters the Euler equation and therefore doesn't feel innocuous
- Complicated calibration process using:
  - data on live births from three different sources
  - fertility tables to map to mother's age
  - age differences between married men and women to map to the age of the representative parent
- Also requires the calibration of two quite abstract utility parameters
- But ultimately doesn't buy you anything...

# Dependent Children



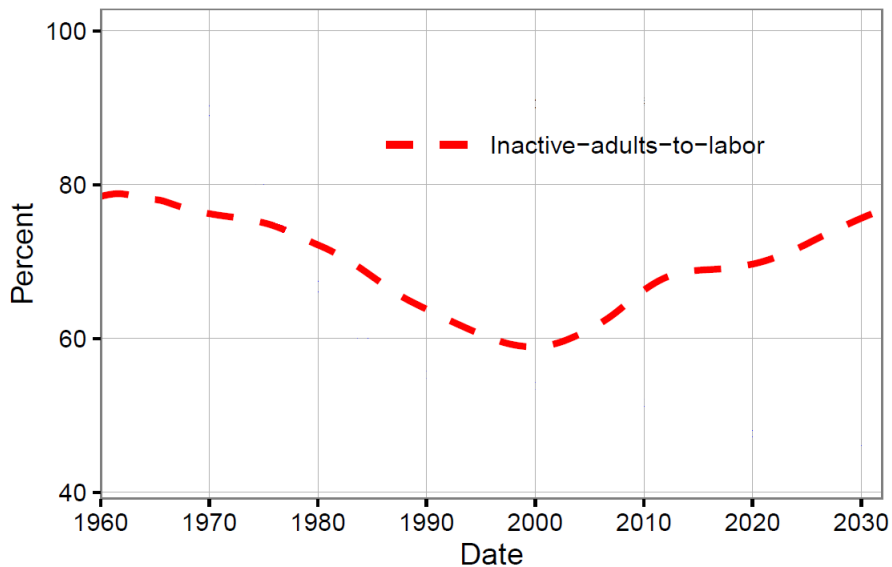
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- But ultimately doesn't buy you anything...
- So why not keep the baseline without dependent children?

# Life Expectancy

- By removing that complication, you will have space to be a lot clearer about the demographic trends in the model
- One thing that is unclear currently, what happens to life expectancy in your model?
- Rising life expectancy accounts for the rising share of older generations in the economy
- But this doesn't seem to be picked up in your model
- Closest thing you plot is the ratio of inactive adults to labor...

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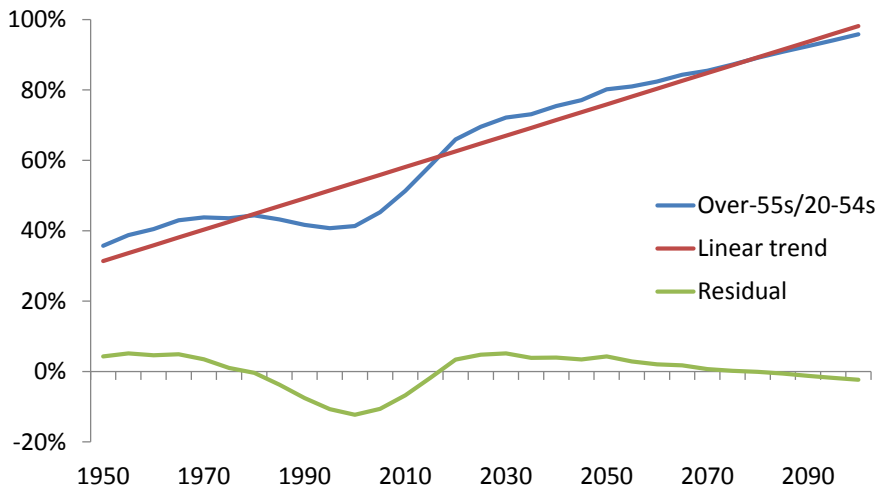


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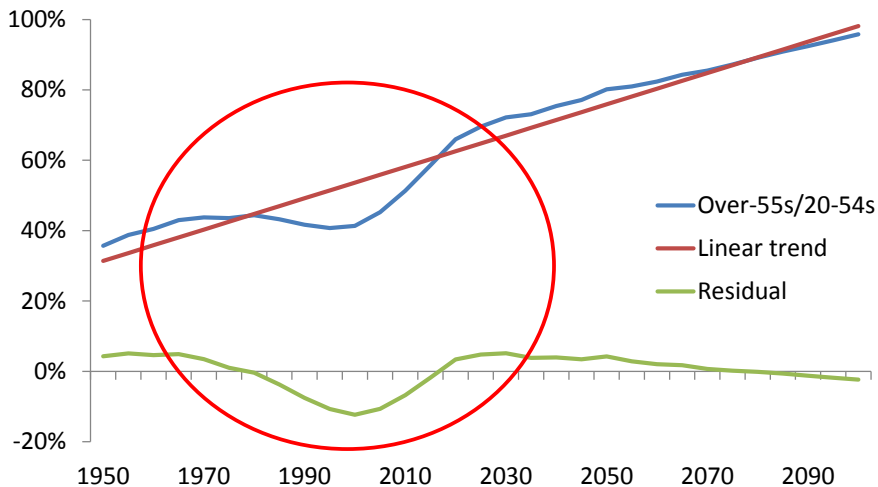
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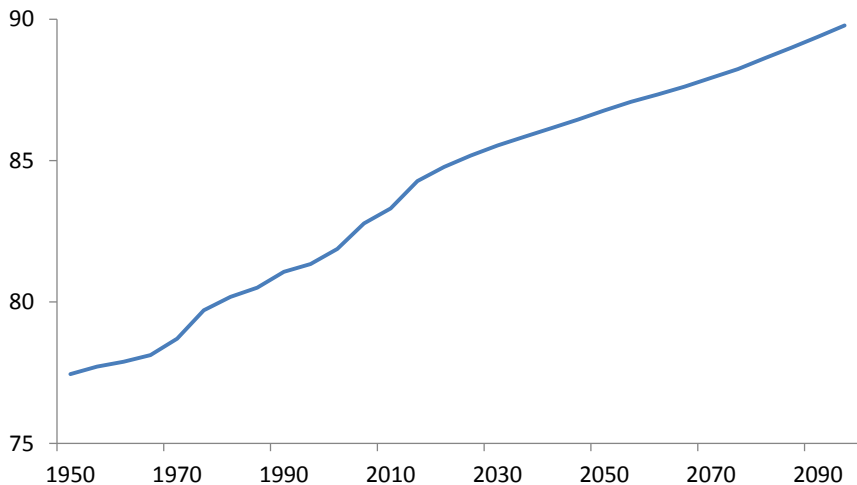


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- But this doesn't seem to be picked up in your model
- Closest thing you plot is the ratio of inactive adults to labor...
- ... but does this match the data?
- Makes me wonder if you are picking up rising life expectancy?

# Life Expectancy

Life expectancy at 60 (Both sexes)

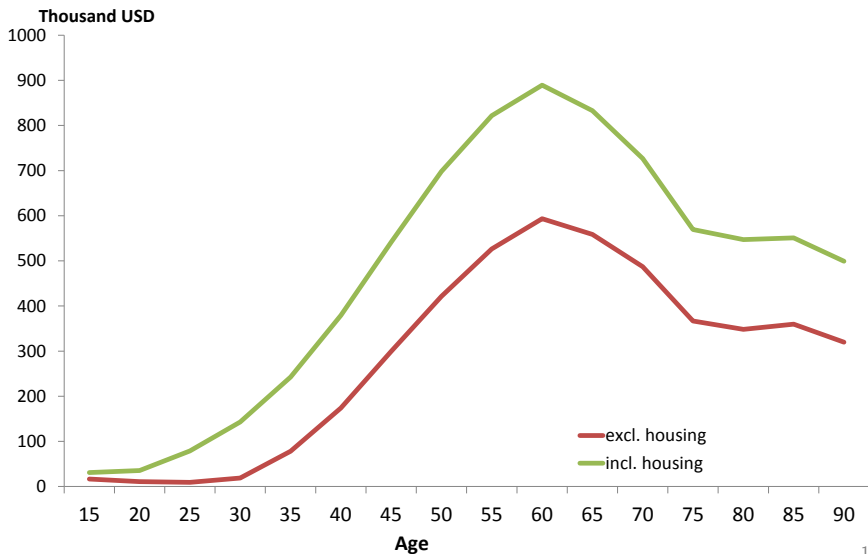


# Calibrating the Life-cycle

- Increased life expectancy at 60 is important for the effects of demographics on interest rates:
  - For each agent, more time spent in retirement means a need to save more while working
  - For the economy as a whole, weight of older generations increases
- The effect of the latter will depend on agent's asset holdings over the life-cycle
- I would like to see that plotted in the paper
- If you do not calibrate it (and have no bequest motive) do you match the observed high asset holdings during retirement?

# Calibrating the Life-cycle

Net Worth over the Life-cycle (1989-2013 Average)

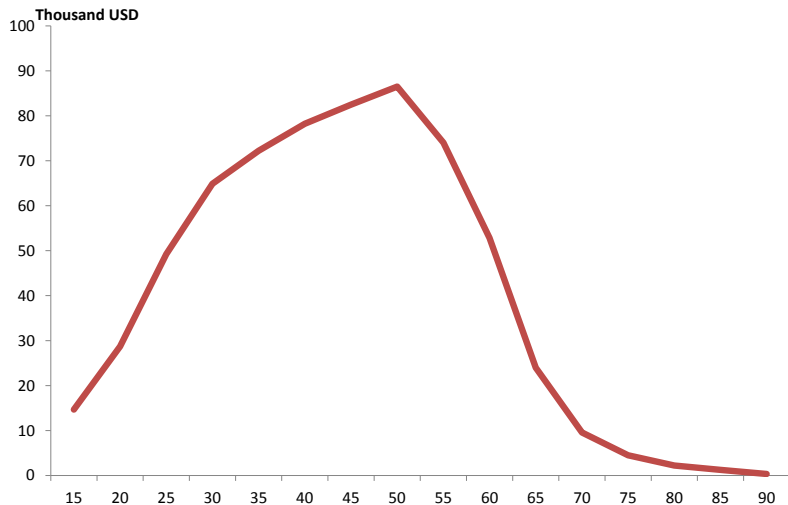


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Labour Income over the Life-cycle (1989-2013 Average)





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- Similarly, you take employment rates to match effective labour endowment, but what about productivity?
- You could be missing some important channels for both the interest rate and growth rates

**Thank you!**

## Employment by age

Figure 7: Employment rates by age and calendar year

