

Housing and the secular decline in real interest rates

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Abstract

In this paper I study the role of housing for the accumulation of wealth and the equilibrium real interest rate in a continuous-time OLG model with a realistic demographic structure. Households derive utility from renting housing services thereby giving rise to a positively valued housing stock which also constitutes a savings instrument. I discuss two alternative assumptions about savings behavior: fixed savings rates and a wealth-in-the-utility model. Under certain conditions the model can be solved in closed form while for the general case one must use numerical calibrations. Using plausible assumptions about the decrease in growth, the increase in life expectancy and the reduction in replacement rates the model implies a decrease in real interest rates of around 2.5% and an increase in the wealth-to-income ratio of around 150%. These results are in line with the related literature and close to the empirically observed data. The standard housing model is, however, less satisfactory in explaining the change in the housing share over time and in the divergent development of risky and safe interest rates. In an extension I show that these shortcomings can be mitigated by the introduction of heterogenous groups, in particular of owner-occupiers.

Keywords: Housing, Wealth, Interest Rate, Saving

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