



Battle of the Ages: Distributional and Aggregate Effects of Monetary Policy in a Model with Age Demographics

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We develop a model in which agents face unemployment risk, but also age and eventually retire. We study the impact of different retirement schemes on life-cycle consumption and the monetary transmission mechanism. Agents save because of a fall in income upon retirement, changes along the life-cycle wage profile, and unemployment risk. Changes in retirement policies affect the distribution of available assets (bonds) among the middle aged and the young, which in turn can have a strong impact on the ability of the young to insure themselves against unemployment risk. Interestingly, it is possible that an increase in retirement benefits leads to higher consumption levels during sustained unemployment spells even though the associated increase in taxes reduces unemployment benefits. The reason is that this policy induces the middle aged to save less which leaves more of the available asset supply to the young. A reduction in the interest rate has a bigger impact on those for whom labor market conditions improve the most and – due to a larger negative income effect – has a smaller impact on those who save more. In terms of the aggregate impact of monetary-policy shocks, our paper confirms conventional wisdom that the expansion is magnified in the presence of incomplete markets, since it is then accompanied by a fall in precautionary savings. The novel aspect of our analysis is that the extent of the incompleteness, i.e., the ability of those subject to unemployment risk to insure themselves, is endogenous. Specifically, it is reduced as the young (middle-aged) hold a larger (smaller) fraction of the available asset supply and this distribution is not only affected by retirement policies, but also by government bond supply and the

life-cycle wage profile. Thus, understanding the distribution of assets across different age cohorts is not only important for understanding life-cycle consumption patterns, but also business cycles