Optimal Money Supply in Models with Endogenous Discount Factor

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Abstract

This paper studies the Friedman rule for the optimal quantity of money in two MIU models with endogenous discount factor. In one model, the discount factor depends on the utility level of the previous period. In the other model, the discount factor is a function of the real balance holdings of the previous period. We show that in the former model the Friedman rule is the optimal policy. However, in the latter model, the Friedman rule is not always the optimal policy. If the discount factor is an increasing function of real balance holdings, the Friedman rule is optimal. On the other hand, if the discount factor is a decreasing function, the Friedman rule is not optimal.

Keywords: Friedman's Rule; Endogenous discount factor; Optimal quantity of money rule

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