Monetary Policy I
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1 Why Money?

- Read, if interested, **Kiyotaki-Moore, Clarendon Lectures**
  http://econ.lse.ac.uk/staff/kiyotaki/Evilistherootofallmoney.pdf
  http://econ.lse.ac.uk/staff/kiyotaki/ClarendonLec2.pdf

- "Evil is the Root of all Money" (Lack of Trust)

- Kocherlakota, "Money is Memory"

  From the abstract: *Memory is defined as knowledge on the part of an agent of the full histories of all agents with whom he has had direct or indirect contact in the past. Money is defined as an object that does not enter utility or production functions, and is available in fixed supply. The main proposition is that any allocation that is feasible in an environment with money is also feasible in the same environment with memory. Depending on the environment, the converse may or may not be true. Hence, from a technological point of view,* ***money is equivalent to a primitive form of memory***.

2 How to Introduce Money?

Money has no value.

- **Money-in-the-Utility function (MIU)**

$$Max \sum_{i=0}^{\infty} u(c_{t+i}, \frac{M_{t+i}}{P_{t+i}})$$

$$s.t. \quad c_t = Y_t + TR_t + \frac{M_{t-1}}{P_t} - \frac{M_t}{P_t} + \frac{B_{t-1}}{P_t} - \frac{1}{1+i_t}\frac{B_t}{P_t}$$

- **Cash-in-Advance constraint (CIA)**

$$Max \sum_{i=0}^{\infty} u(c_{t+i})$$

$$s.t. \quad c_t = Y_t + TR_t + \frac{M_{t-1}}{P_t} - \frac{M_t}{P_t} + \frac{B_{t-1}}{P_t} - \frac{1}{1+i_t}\frac{B_t}{P_t}$$

$$c_t \leq \frac{M_{t-1}}{P_t} + TR_t$$

- **Search Models**

- Monetary models without money (**Cashless Economy**): there are no monetary frictions.

Wicksell (1898)'s "pure credit economy": *A state of affairs in which money does not actually circulate at all, neither in the form of coin (except perhaps as small change) nor in the form of notes, but where all domestic payments are effected by means of...bookkeeping transfers.*

3 The New-Keynesian Framework

- Macroeconomic model with microfoundations (important for policy analysis)

  Decisions

- Consumers $\Rightarrow$ Aggregate Demand

- Firms $\Rightarrow$ Aggregate Supply

- Monetary/Fiscal Authority