Introduction to Money

Monetary and Financial Macroeconomics

UC3M

Today

- In the theoretical class we introduced money in an individual choice model
- Today we are going to work with a few utility and shopping functions

A simple model

- 2 periods
- Born with (M_0) and (B_0)
- endowments: Y_1 y Y_2

$$P_1 Y_1 + M_0 + (1 + R_0) B_0 = P_1 C_1 + M_1 + B_1$$

$$P_2 Y_2 + M_1 + (1 + R_1) B_1 = P_2 C_2 + M_2 + B_2$$

A simple model

- Objective function

$$V = U(C_1) + \frac{1}{1+\rho} U(C_2)$$

A simple model

1. Write the intertemporal budget constraint in nominal terms
2. Write the intertemporal budget constraint in real terms
3. Apply the transversality condition, what are the consistent choice con money and bonds for period 2
4. Assume $U(C_t) = \ln(C_t)$, for $t = 1, 2$. Solve for optimal consumption levels, graphically and algebraically
5. Find the money demand