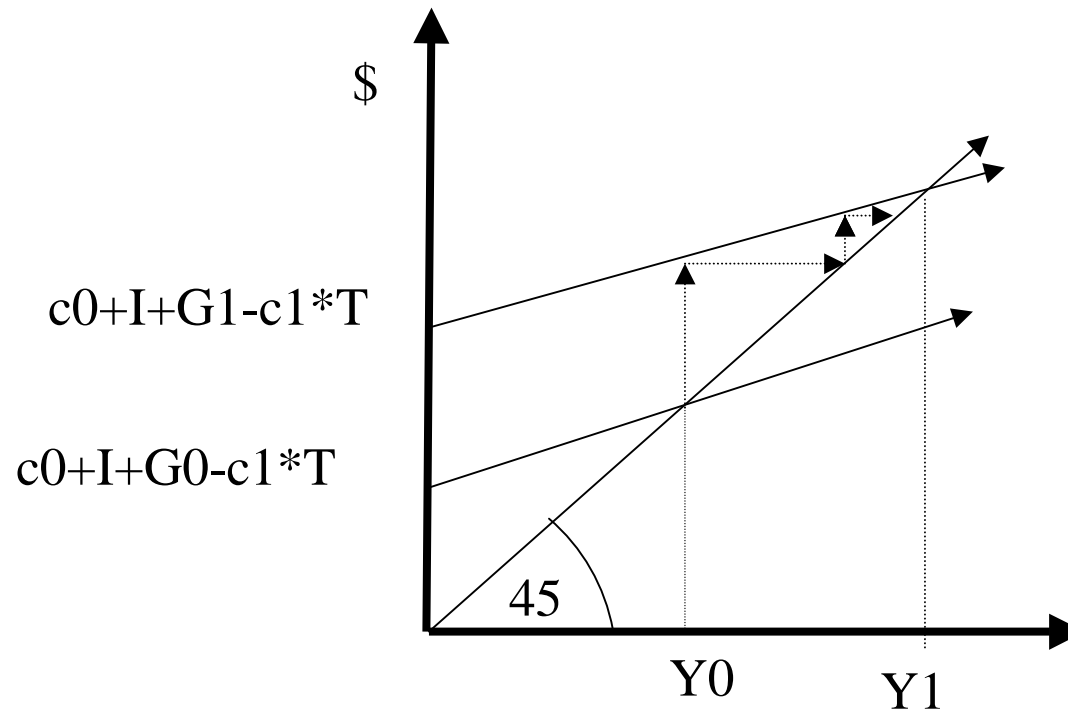


Lecture 5: Financial Markets

- Current events (FT 09/22/99)
- Review Lecture 4
 - Basic aggregate demand model
 - The goods market.
 - Dynamics

Dynamics



$$Y(t+1) = Z(t) \quad \Rightarrow \quad (\text{inventories})$$

$$\text{Other: } C(t) = c_0 + 0.5 * c_1 * (Y(t) + Y(t-1))$$

Macroeconomic policy is tricky... lags and leads

Second Ingredient: Financial Markets

- Goal: Determine equilibrium *interest rate*
- Short run
- Main cyclical instrument (Central Bank)
- Monetary policy (as opposed to fiscal policy) -- both are (primarily) aggregate demand policies

Financial Assets

- Money, bonds, stocks, mutual funds, derivatives...
- Reduce to two:
 - *Money*: transaction (liquidity) role.
 - *Bond*: investment -- pays an interest rate: i
- Key question: How much of each?
 - Tradeoff: transaction services vs return.

Money Demand

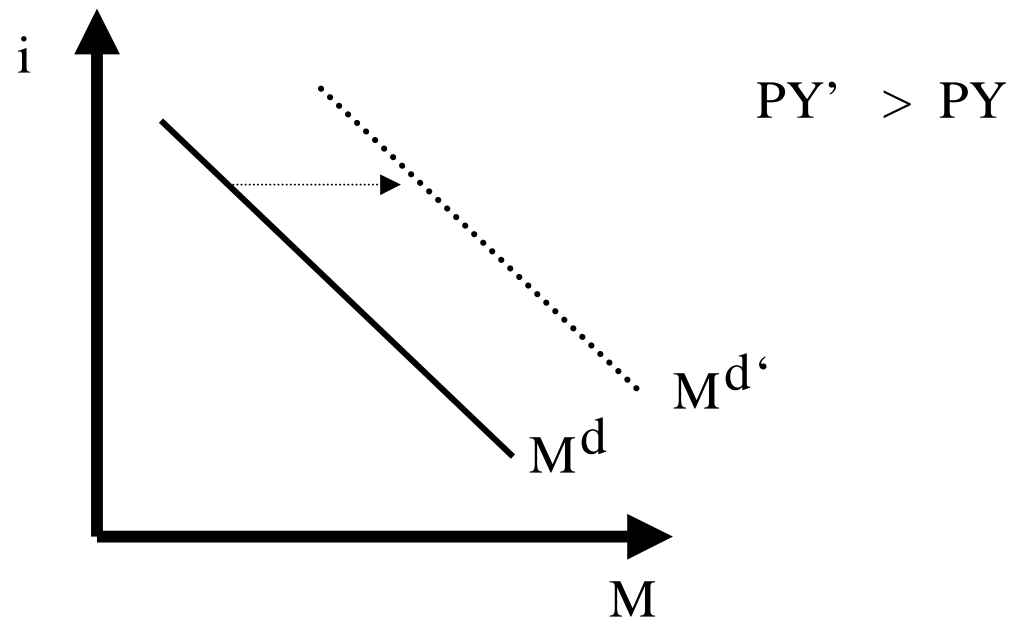
Fix (nominal) wealth at: $PWealth$

$$M^d + B^d = PWealth$$

\Rightarrow determine only one of them

$$M^d = P Y L(i)$$

Money Demand Diagram

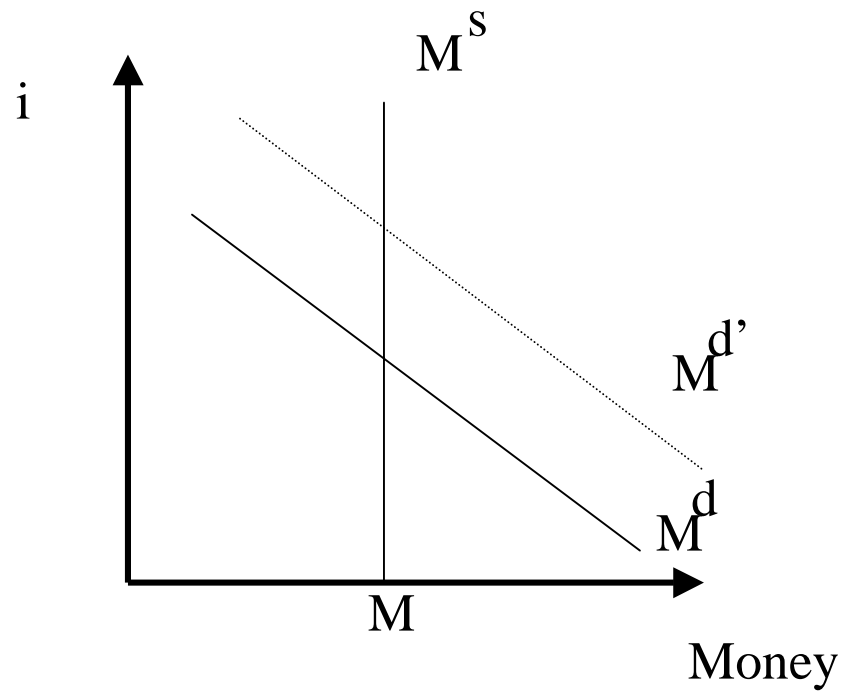


High U.S. nominal interest rates during late 70s - early 80s \Rightarrow sharp decline in M/PY

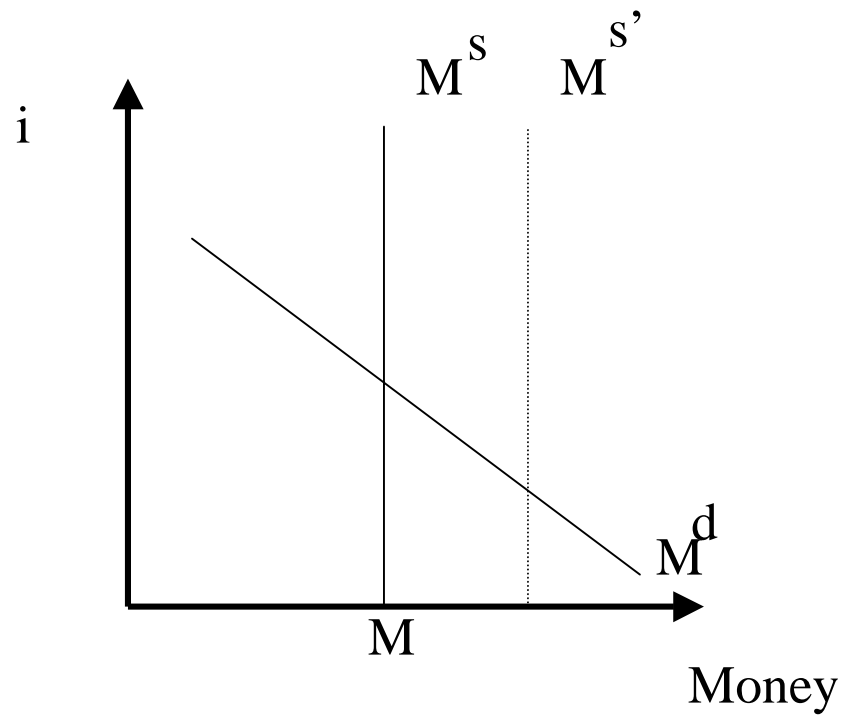
Equilibrium Interest rate

- Simple model:
 - Money supply is constant (i.e. it doesn't depend on interest rate or P or Y)
- Equilibrium:
 - $M = P Y L(i)$
- Our interest is to determine the interest rate, so we fix P and Y .

Equilibrium



Monetary Policy



Open Market Operation

- Central Bank buys bonds in the open market
- As a result, price of bonds rises

=> interest rate falls

$$i = \frac{\$100 - P_B}{P_B}$$