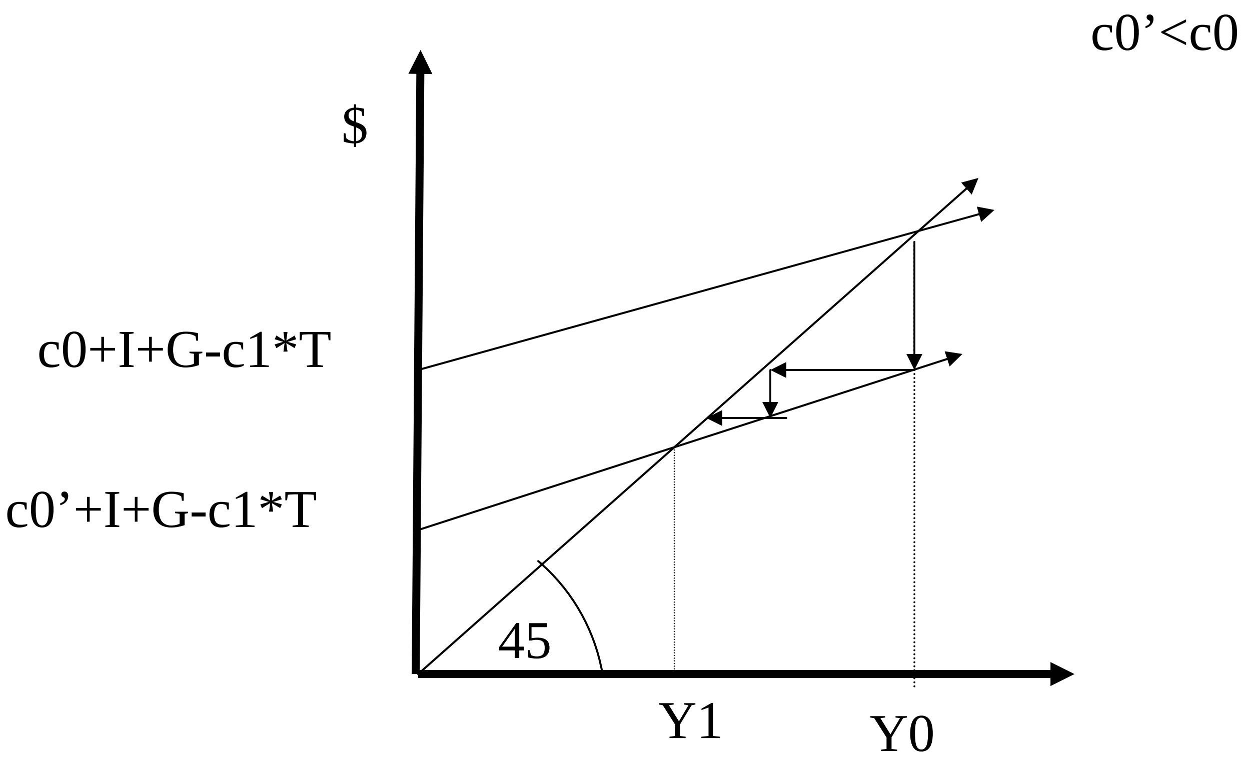
Lecture 4: Goods/Financial Markets

- Current events
- Review Lecture 4
  - Basic aggregate demand model
  - The goods market.
  - Decline in consumer confidence

Consumer Confidence



$Y(t+1) = Z(t)$ => (inventories)

Other: $C(t) = c0+0.5*c1*(Y(t)+Y(t-1))$

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: $\boldsymbol{i}$
- Key question: How much of each?
  - Tradeoff: transaction services vs return.

Money Demand

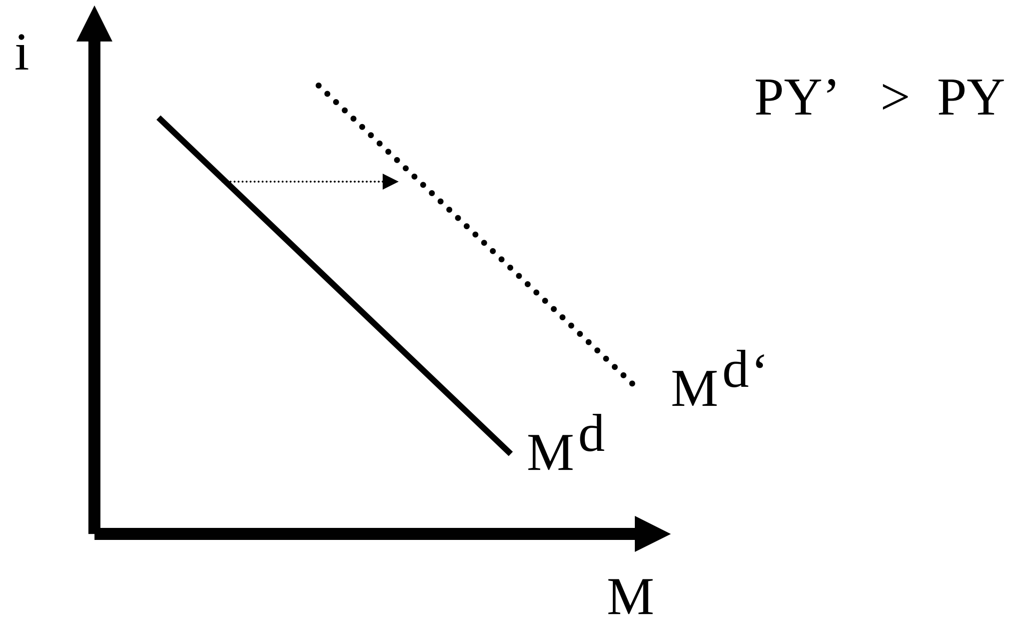
Fix (nominal) wealth at: PWealth

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

=> determine only one of them

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

Money Demand Diagram

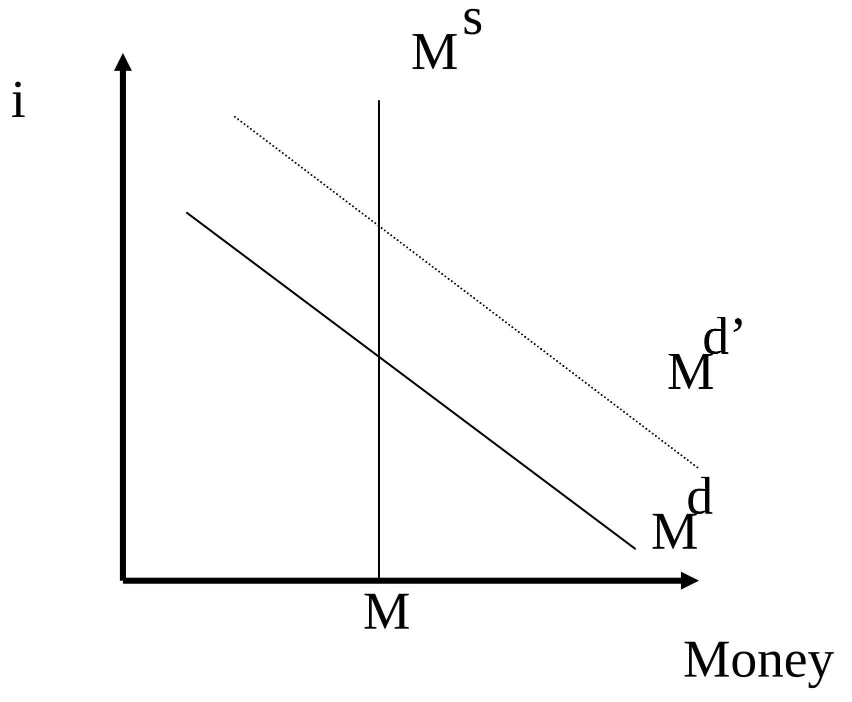


High U.S. nominal interest rates during late 70s - early 80s => sharp decline in M/PY

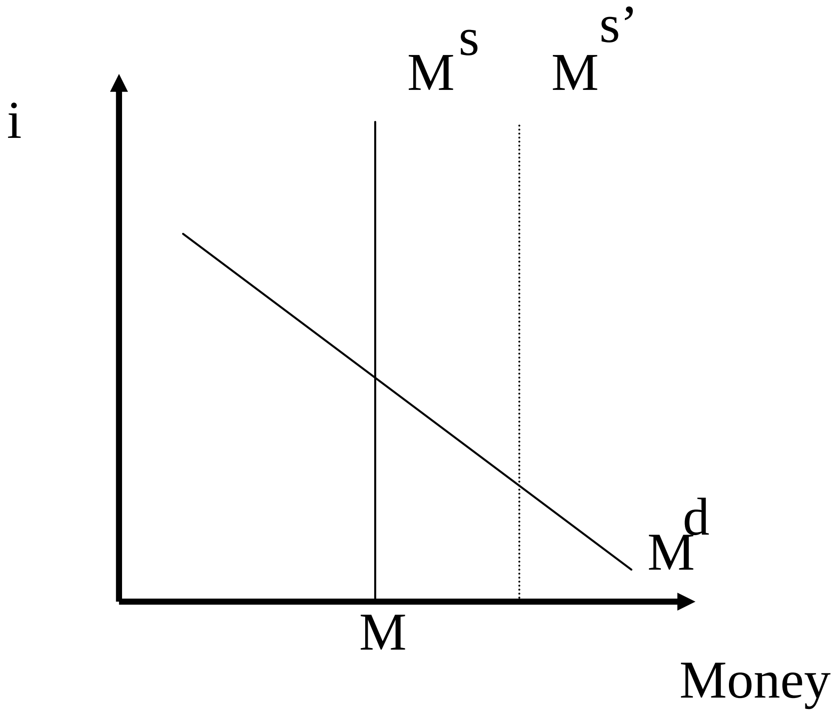
Equilibrium Interest rate

- 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

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