

AS-AD model: short-run output response (prices fixed), long-run price response

Money has large effects on output

Assume no money growth, or long run output growth

Stabilization policy

Examples: Great Depression/Reducing Inflation

“Good” and “bad” deflation

Deflation and vicious circle

Upward sloping curve

Stagflation

Short-run Phillips Curve

Trade-off between inflation and output/u.e

Money Supply: broadly, what can be used for exchange (what can cause demand and hence inflation?)

What matters for inflation is demand, and this can be caused via cheques or currency

Monetary Base: currency and reserves

Banks must hold reserves

Money Supply: currency plus checking deposits (used and accepted widely)

Banks “create” money. Example:

Suppose I have 100. Put 100 in bank. Bank lends out 90, and then that 90 is deposited in another bank. *That* bank lends out 81 etc.

Money supply is $100 + 90 + 81 \dots$

Key idea: money supply is $100 + 90 + 81 \dots > 100$

Need banks lending and people placing currency in banks

Money supply = money multiplier *times* monetary base

Great Depression

Helicopter drop

Some Theory: How does central bank affect short-run interest rates?

Two markets: loanable funds market and money market

People save OR hold cash (i.e., have “money demand”)

Recall loanable funds model, which models sav-
ings

Increases in money supply, initially leads to more savings, and so reduces interest rates

But rise in money supply leads eventually to increases in money demand, as prices rise. So savings fall again.

Real rate reverts to normal

Money can affect real rates *in the short run*

In practice, central bank (in U.S.) interferes in federal funds market and affects federal funds rate

The federal funds market is where banks trade reserves; e.g., if a bank has excess reserves, it can lend them to another bank in this market.

Central bank “creates” excess/shortage reserves via open market operations

People do not pay this rate, but it affects the rate the bank charges to customers, so affects interest rates *indirectly*

Therefore, this rate affects economic activity

Often assume FED controls “interest rate”

Monetary policy: aim is to maintain price and output stability

How do banks decide which rate to set in FF market?

Taylor Rule of Monetary policy

Basic Idea: lower interest rates in a recession if inflation is below target

Pretty good performance;

FED/ECB

Liquidity Trap: Japan, US

IS-LM Analysis: standard way to examine monetary policy

IS: inverse relationship between interest rate and output

Anything except monetary policy that causes demand to change shifts IS curve; e.g., fiscal policy

Why?: consumption, investment, net exports

LM Curve: controlled by central bank

Position of LM determined largely by Taylor Rule