

Lecture 22 Monetary policy

Moral consequences: you don't bear the risk, so you don't care

Keep bail them out (moral hazard), they are more dangerous

Like Mario, drive out the road.

Incentives matter

Money creation

$M = \text{Currency} + \text{Deposits}$

Banks create money by multiplying deposits

Example: New \$1000

$r = 10\%$

Assume:

1. No excess reserves
2. All currency deposited at banks

Loan out other people's deposit: bank create money

Bank multiply the deposits

Round Deposits

1	1000
2	900 1900
3	810 2710
4	729 3439
sum	\$10,000

$m^m = 1/r = 10$

Simple money multiplier

$m^m = 1/r$

Banks hold excess reserves?

Slows multiplier process

People keep funds outside the banking system?

This decreases the money supply

Federal Reserve System (Fed)

The Fed is the central bank of the US: the bank for other banks

Major duties:

1. Monetary policy

2. Regulate banks
3. A bank for commercial banks



Federal funds: privately owned, not related to gov

Federal funds rate: The interest rate on overnight loans between banks
 The Fed “targets” this rate, but does not set it directly

Monetary Policy Tools

1. Open Market Operations (OMO)
 Buying and selling in the open market

Buy—M up
 Sell—M down

They sell US Treasury Securities—short-term

Notes:

2. Required reserve ratio (rr)

low rr, high mm, more money

But Unpredictable tool—Banks might not change reserves

Quantitative easing
 A new type of OMO

QE: Buy other bonds
 What about moral hazard?

short run
 Y up
 U down
 P up

Long Run
 Y nc
 U nc
 Price up up

monetary policy no long run effect