

Economics 442  
Macroeconomic Policy  
10/21/2020

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Fall 2020

# Outline

- Fiscal Policy Considered Pre-Great Recession
- Fiscal Policy Recap
- Five Reasons for Fiscal Policy Ineffectiveness
- Fiscal Policy Reconsidered

# Fiscal Policy Pre-Great Recession

# Fiscal Policy Pre-Great Recession

- Not usually considered for countercyclical fiscal policy
- Thought that too cumbersome to implement given Executive Branch/Legislative Branch conflicts
- And difficulty implementing spending rapidly when recessions usually last less than a year

# Prologue: Automatic Stabilizers

- Tax system w/progressive marginal tax rate is an automatic stabilizer; so too transfers that depend on income like unemployment insurance, SNAP.
- Complicates figuring out stimulus; hence need to figure out budget balance stripping out cyclically-moving components

# Automatic Stabilizers

- Consider the multiplier for investment or consumption shocks (which is the same as that for government spending on goods and services)

$$\hat{Y} \equiv \frac{1}{1 - c_1(1 - t_1) - b_1 + \frac{b_2}{h}}$$

- A progressive tax system makes  $t_1$  increase when GDP is high, decrease when low
- Makes multiplier small when GDP is high

# Budget Balance: Actual vs. Cyclically Adjusted

Definition of Budget Surplus

$$BuS \equiv T - G - Tr$$

$$T = t_0 + t_1 Y$$

$$G = GO_0$$

$$Tr = TR_0 - \varphi Y$$

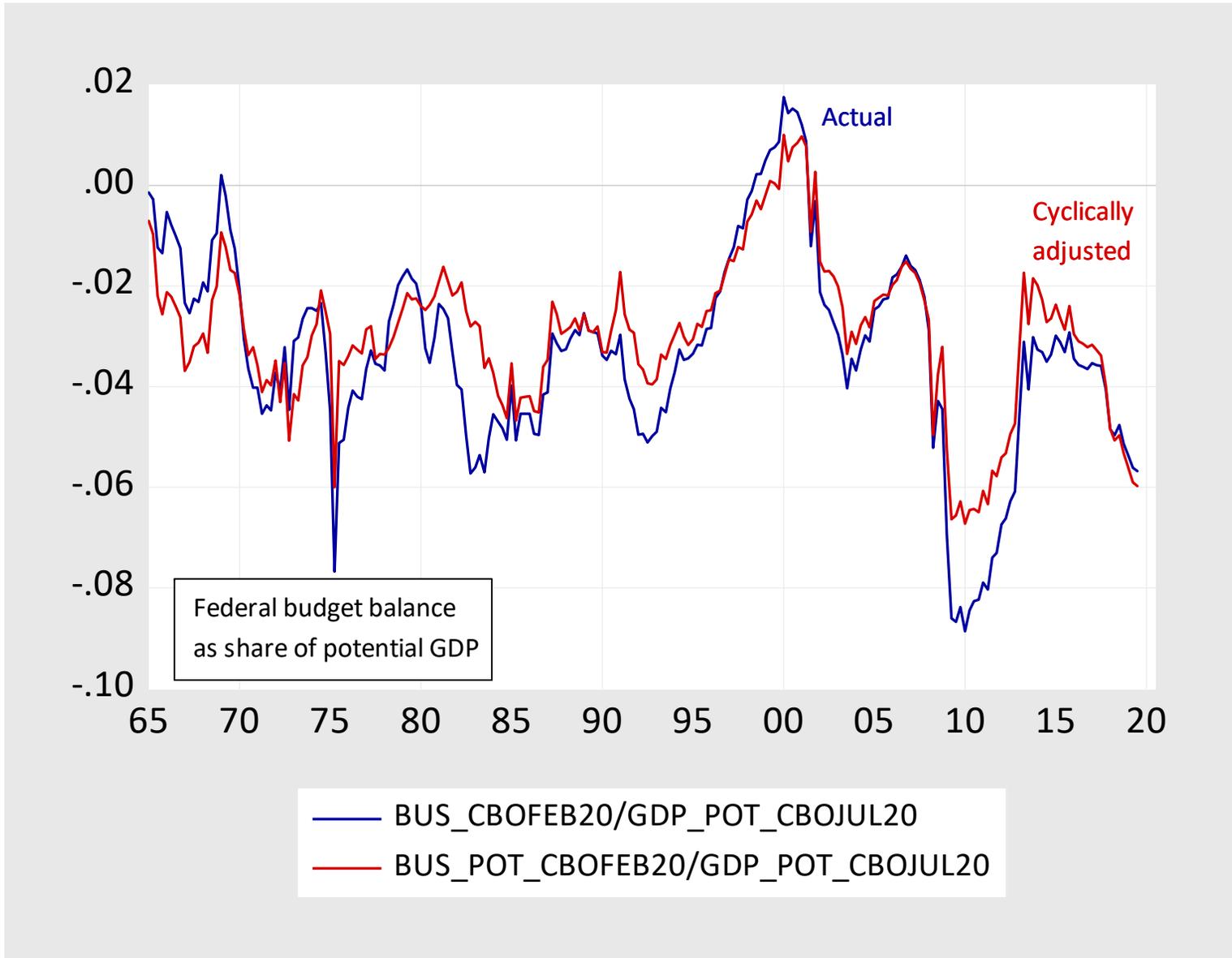
Actual budget balance

$$BuS = (t_0 + t_1 Y) - GO_0 - (TR_0 - \varphi Y)$$

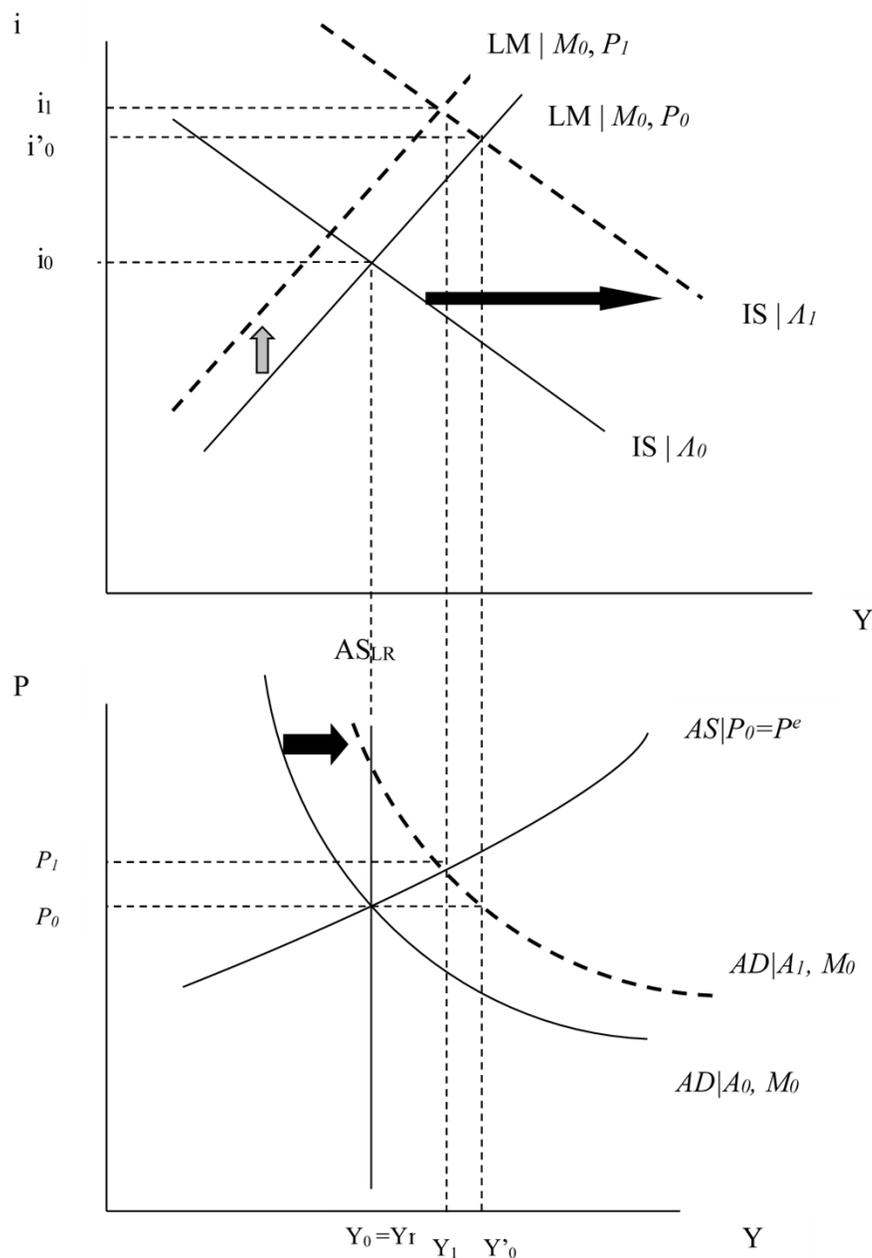
Full employment budget balance (aka “cyclically adjusted” or “structural”)

$$BuS_n = (t_0 + t_1 Y_n) - GO_0 - (TR_0 - \varphi Y_n)$$

# Actual vs. Cyclically Adjusted



# Fiscal Policy Recap



- Expansionary fiscal policy shifts to the right AD, IS curve.
- In short run, increase in income depends on slope AD (hence slopes IS, LM), and slope of AS
- In medium run, no impact on output level

# Fiscal Policy Effectiveness

- Depends on change in AD at constant price level

$$Y = \hat{y} \left[ A_0 + \frac{b_2}{h} \left( \frac{M_0}{P} \right) - \frac{b_2 \mu_0}{h} \right]$$

- And how much price level rises as output rises (unemployment falls)

$$P = P^e + \mu F \left( \left[ 1 - \frac{Y}{L} \right], z \right)$$

# The “Multiplier” (for fixed Money Supply, Fixed Price Level)

$$\hat{\gamma} \equiv \frac{1}{1 - c_1(1 - t_1) - b_1 + \frac{b_2}{h}}$$

Interest semi-elasticity, goes to infinity in liquidity trap;  
Also infinity if Fed accommodates

# Fiscal Policy Recap

## The Multiplier

- Depends on IS-LM parameters
- Central bank reaction function (how it adjusts money supply/interest rates as output changes)
- Sensitivity of price level to output (shape of the short run Aggregate Supply curve)
- Expectations of inflation
- Intertemporal considerations

# Five Reasons Why Fiscal Policy Might Be Ineffective

# Five Reasons

With prices predetermined...

1. the interest sensitivity of money ("h") demand is zero
2. the interest sensitivity of investment ( $b_2$ ) is infinite.
3. the sensitivity of bond demand to wealth ( $1-j$ ) is low.

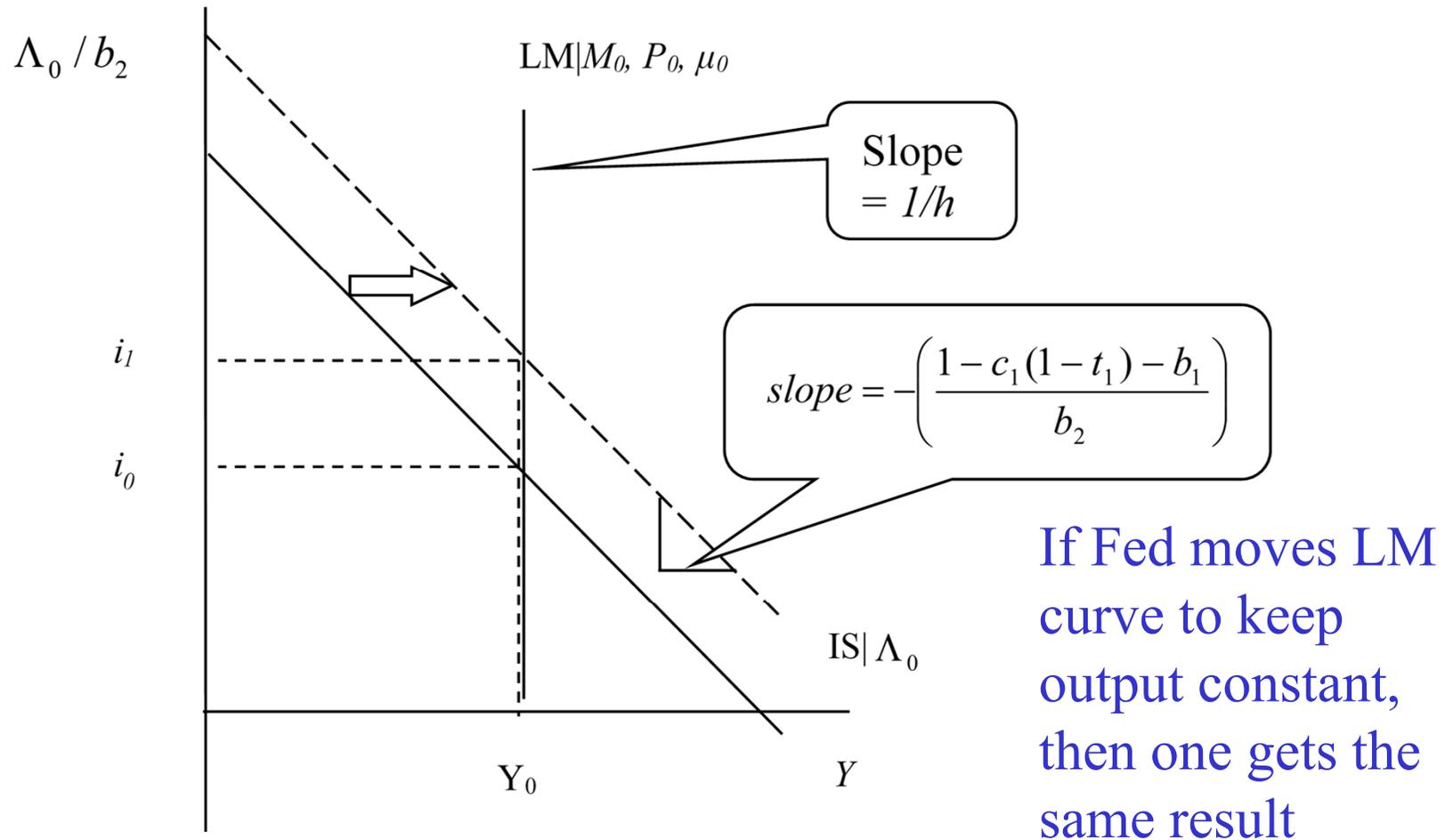
With prices flexible...

4. and output is at full employment levels.

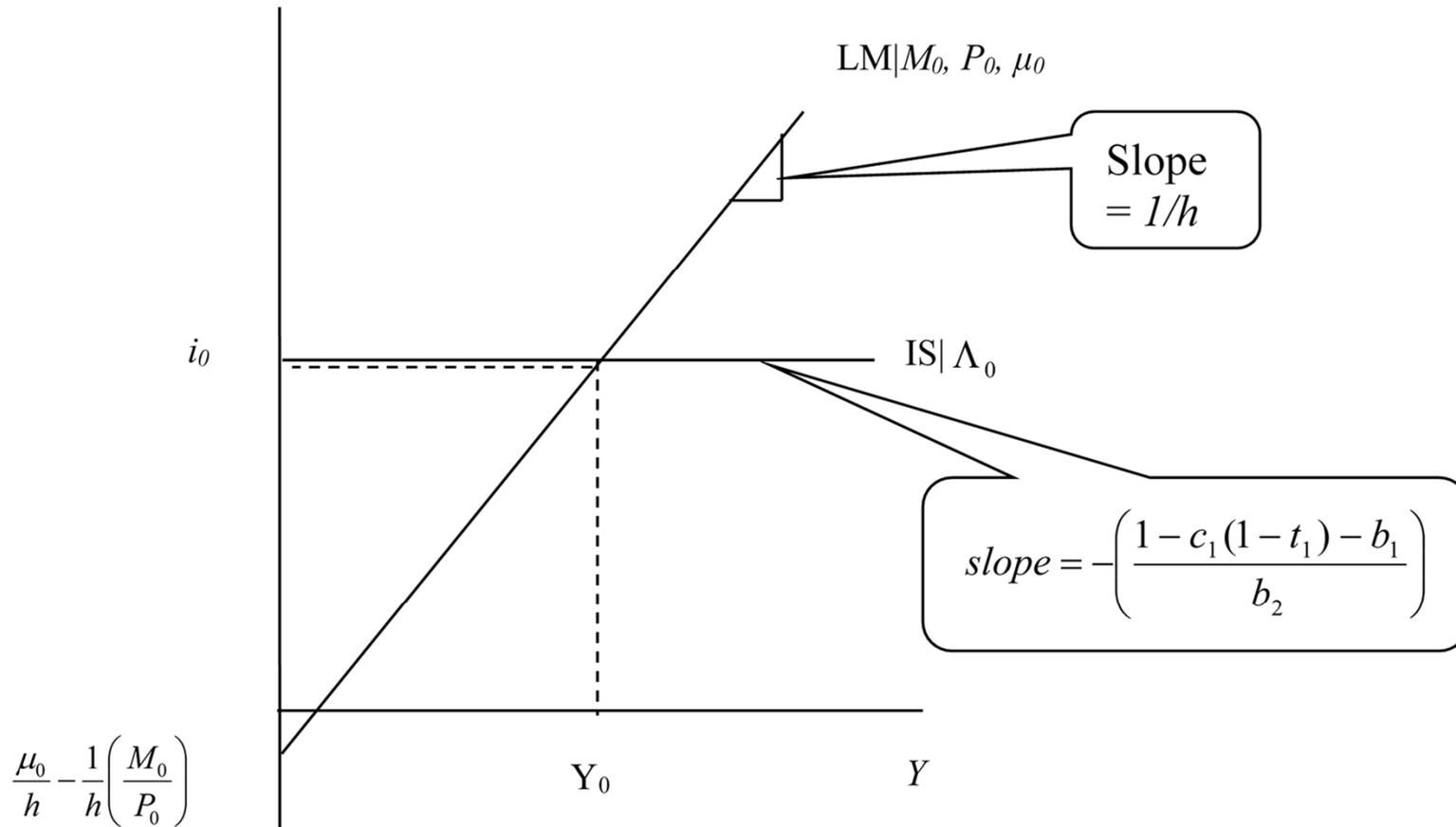
Or

5. Neo-Ricardian equivalence, as put forward by Barro, holds.

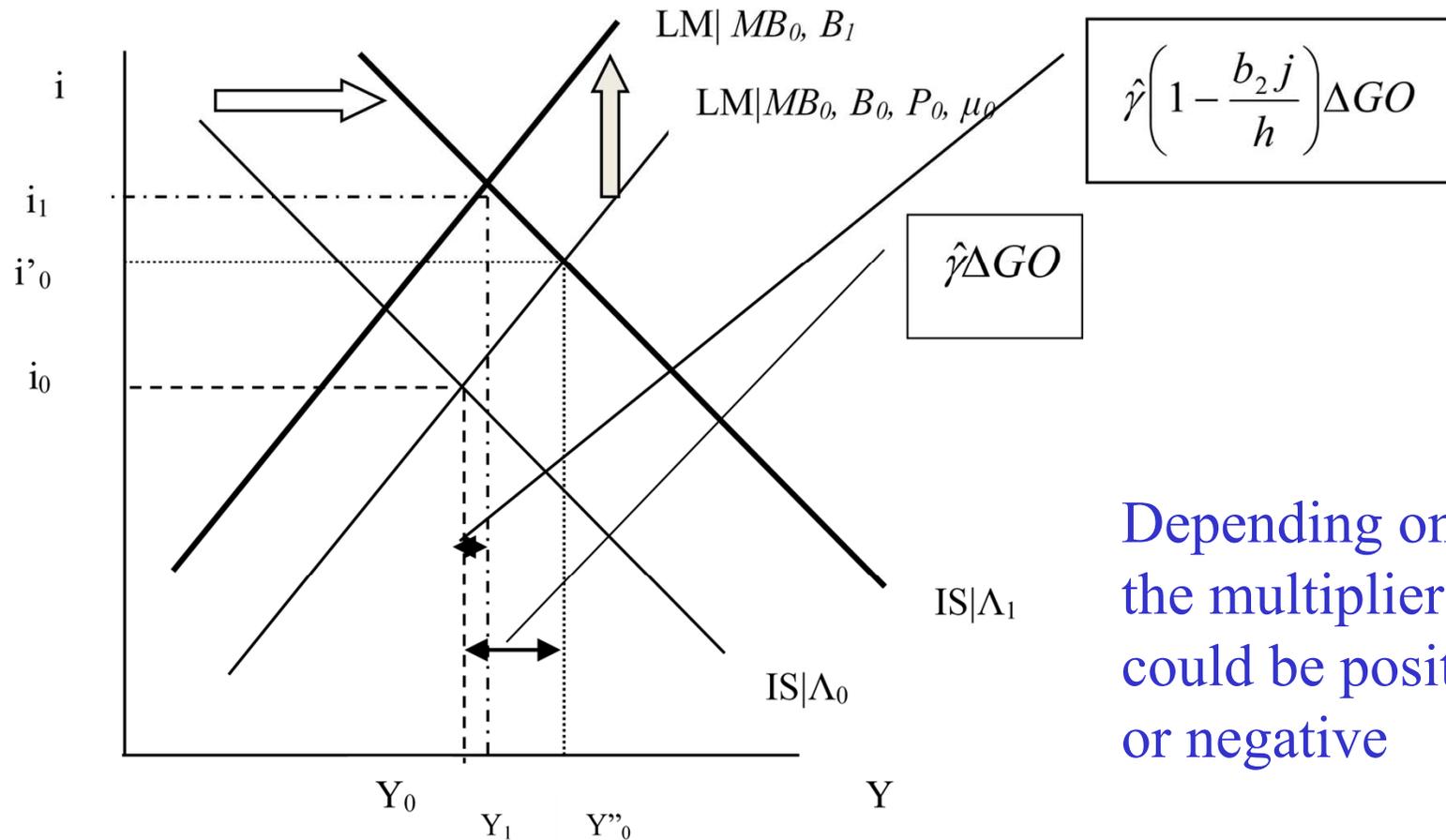
# Zero Interest Sensitivity of Money Demand



# Infinite Interest Sensitivity of Investment



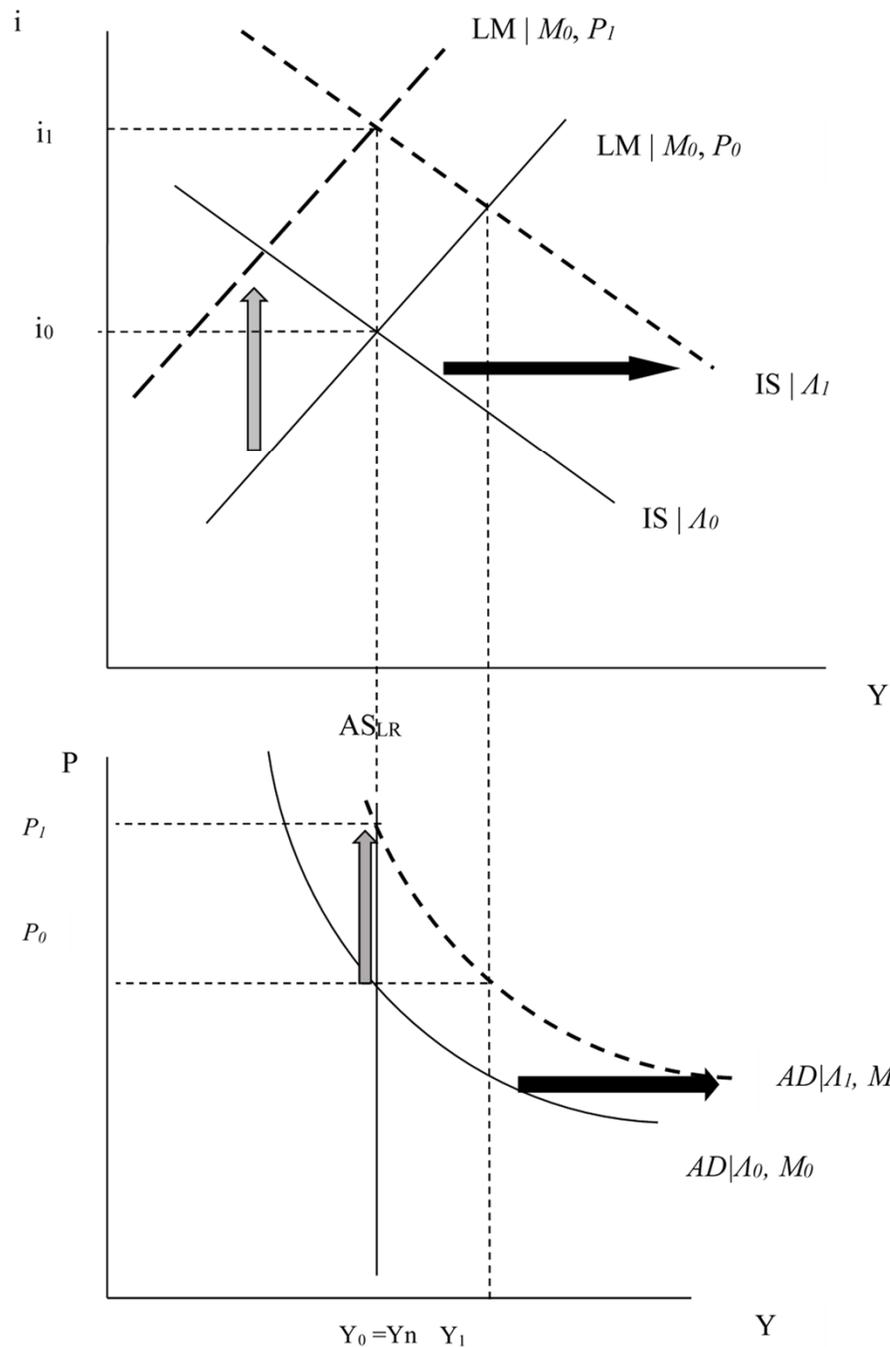
# Wealth Sensitivity of Bond Demand Is Low (1-j) Is Low



Depending on  $j$ ,  
the multiplier  
could be positive  
or negative

# Full Price Flexibility at Full Employment

When AD, IS shifted out, if prices are fully flexible (say at  $Y_n$ ), then  $P$  rises from  $P_0$  to  $P_1$  so LM shifts up. Output remains constant



# Ricardian Equivalence

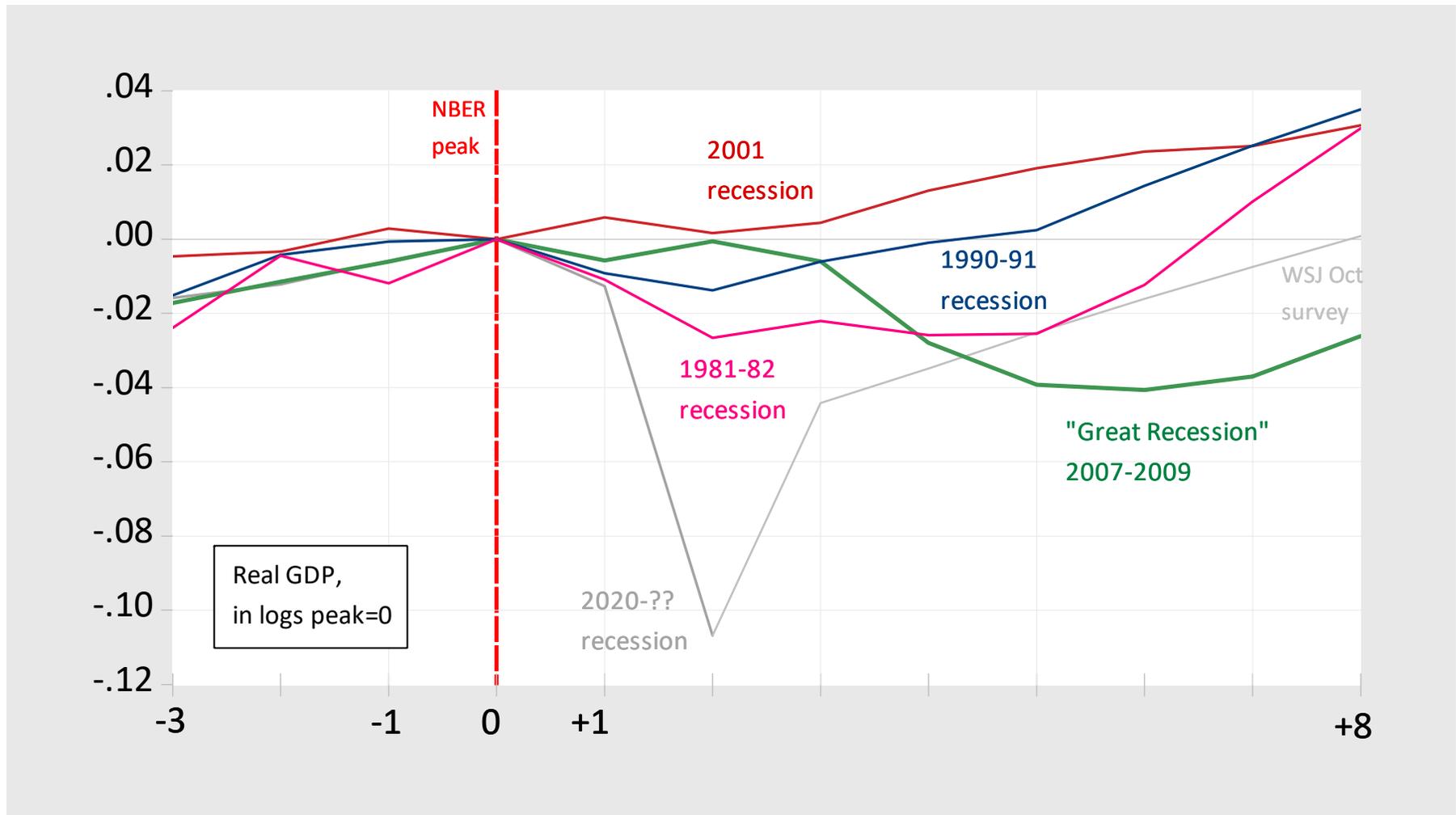
Suppose that markets are perfect and taxes are non-distortionary. Then, equilibrium allocations and prices are independent of either the initial level of public debt, or the mixture of deficits and taxes that the government *uses to finance government spending*.

(Non-distortionary means lump-sum taxes)

(So for a given spending path)

# Fiscal Policy Reconsidered

# The Depth and Length of the Recession



# Con

- Nobel Laureate Eugene Fama

“Government bailouts and stimulus plans seem attractive when there are idle resources - unemployment. Unfortunately, bailouts and stimulus plans are not a cure. The problem is simple: bailouts and stimulus plans are funded by issuing more government debt. (The money must come from somewhere!) The added debt absorbs savings that would otherwise go to private investment. In the end, despite the existence of idle resources, bailouts and stimulus plans do not add to current resources in use. They just move resources from one use to another.”

# Con

- Casey Mulligan, fmr CEA Chief Econ:

“When the government hires employees or makes purchases, the ultimate economic effect of the actions depends on what private sector activity is displaced.

In one situation — called “crowding out” in economic jargon — some (but not necessarily all) of the new government employees are people who quit their private sector jobs in order to accept better positions offered by the public sector, and many (but not necessarily all) the new government purchases just take items that would have been purchased by a household or private business.”

<https://economix.blogs.nytimes.com/2009/01/21/stimulus-plans-might-do-good-but-not-actually-stimulate/>

# Con

Brian Riedl:

“But there is one problem with the government stimulus theory: No one asks where Congress got the money it spends.

Congress does not have a vault of money waiting to be distributed. Every dollar Congress injects into the economy must first be taxed or borrowed out of the economy. No new spending power is created. It is merely redistributed from one group of people to another.”

<https://www.washingtontimes.com/news/2010/aug/31/riedl-the-fatal-flaw-of-keynesian-stimulus/>

# Pro

- Cristina Romer
- Larry Summers
- Tim Geithner
- Paul Krugman
- Many others