LECTURE EIGHT - PART FOUR

How Budget Deficits Cause Problems

- The problems budget deficits and a growing public debt cause depend on how the budget deficit is actually financed.

Key Concept
Three major ways to finance a budget deficit:

1. Raise taxes
2. Borrow money
3. Print money

Financing the Deficit Through Taxes

GDP=C + I + G

$25 Billion

Assume
- Budget initially in balance
- Government undertakes expansionary fiscal policy to close a recessionary gap.

#1: The Raise Taxes Option

- How can the economy expand if taxes & expenditures go up by the same amount?
- The answer lies in the dynamics of the marginal propensity to consume (MPC).

An Example of a Tax-financed Stimulus

IF:
A $25 billion tax hike to finance the $25 billion stimulus AND the MPC = .8

THEN:
Consumption only falls by $20 billion.

MATH: (0.8 * 25 billion)

We Discover the Balanced Budget Multiplier!!

- The "net" stimulus is therefore $5 billion after the tax hike!!!!!!!
- From a previous lesson, we know if MPC = .8, then the Keynesian multiplier is 5.
- If you multiply the net $5 billion increase in aggregate expenditures by this multiplier, total economic expansion will be $25 billion.
- This is exactly equal to the original outlay of government expenditures!!!!!!!

A Really Cool Phenomenon!

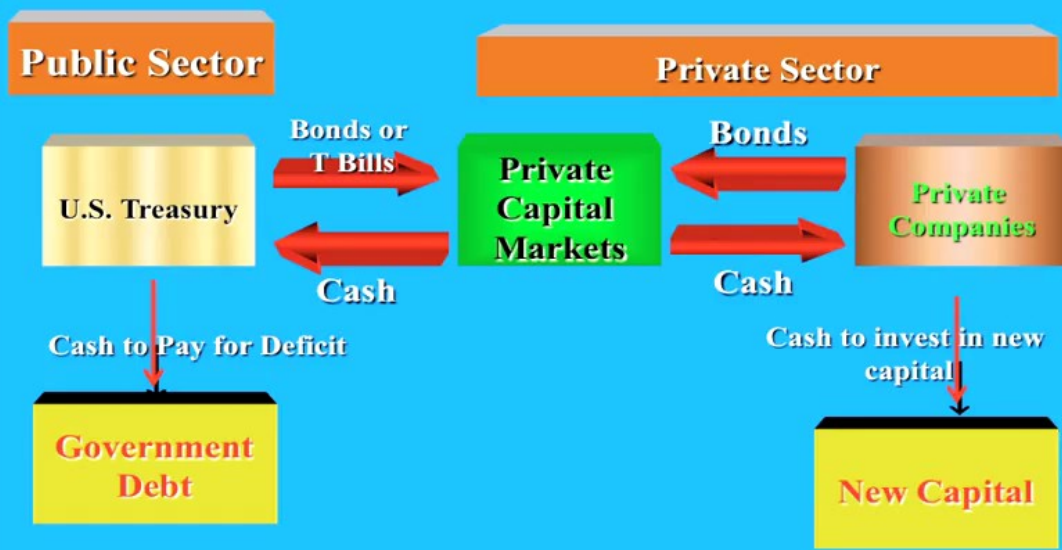
- Macroeconomists refer to this phenomenon as the "balanced budget multiplier."

> The Balanced Budget Multiplier
> When you simultaneously increase government expenditures and increase taxes by the same amount, you get an economic expansion exactly equal to the increase in government expenditures.

The Political Problem With The Raising Taxes Option

- Raising taxes is rarely used to finance a Keynesian stimulus.
- Why? Because tax hikes are politically unpopular.
- The remaining options: Borrow money or print money.

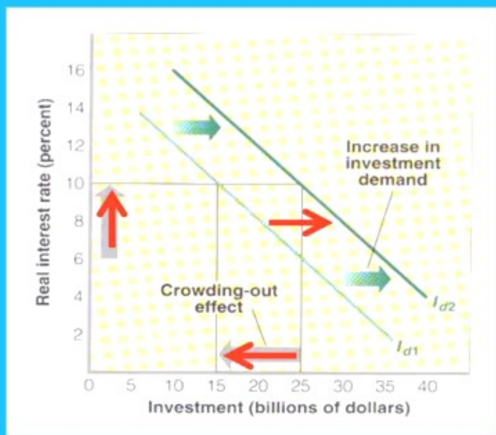
#2: The Borrow Money Option



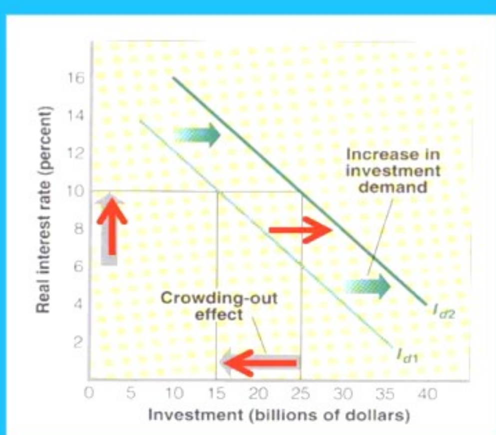
Key Concept: Crowding Out

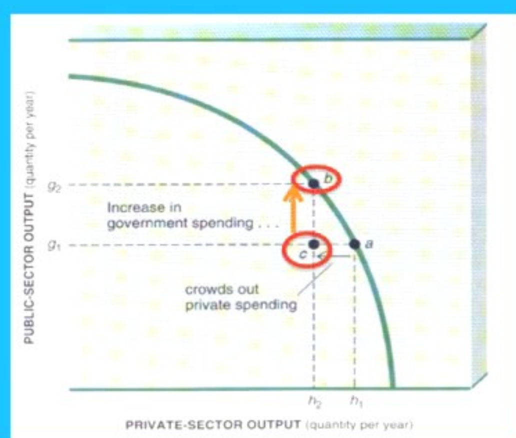
- To compete for scarce investment dollars, the Treasury raises its interest rate.
- Zero Sum Game: Funds to finance the deficit would otherwise be spent on private sector investment!
- In this case, deficit spending is said to "crowd out" private investment.

Crowding Out Revisited



Crowding Out Revisited



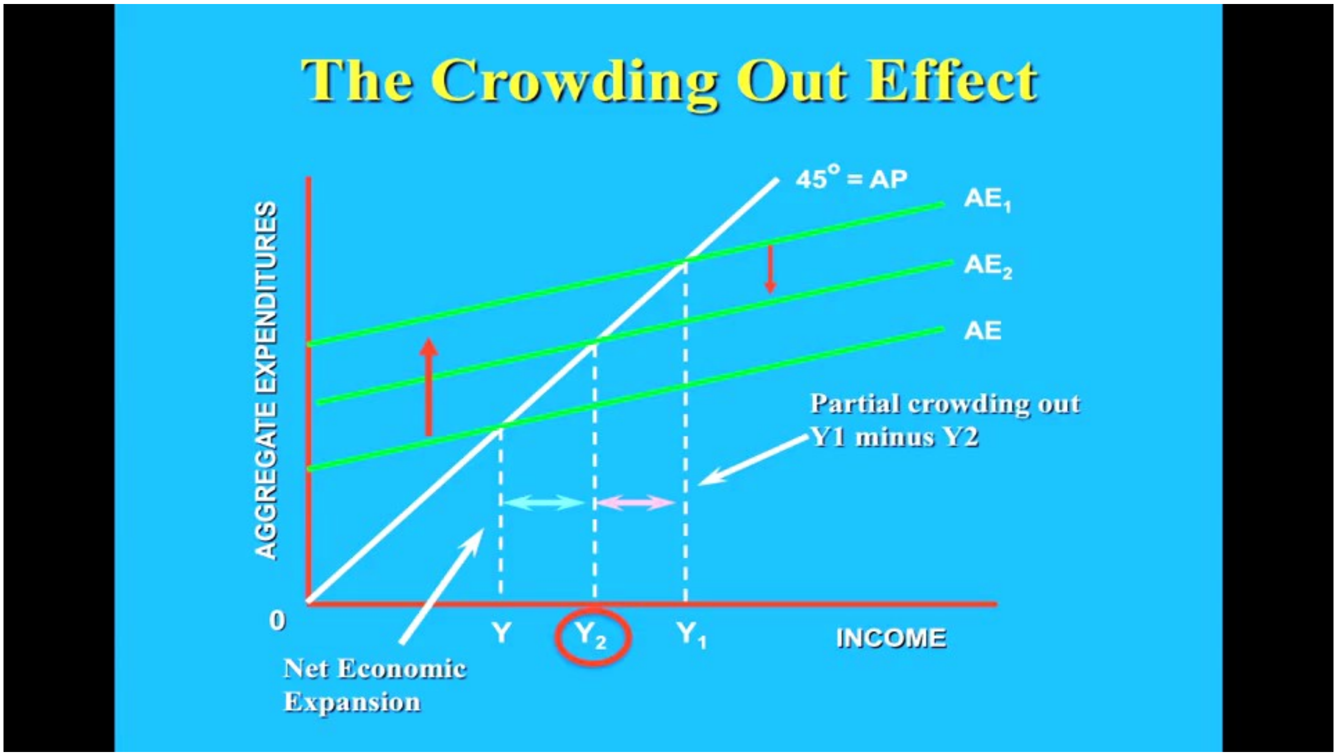


The Broader Point

- Crowding out applies only to structural deficits.
- If the cyclical deficit rises because of a recession, the logic of crowding out simply does not apply!

The Link Between Deficits & Investment

- Recession causes a decline in money demand and leads to lower interest rates.
- The Fed also tends to loosen monetary policy.
- Implication: There is no automatic link between deficits and investment.



How Complete Is Crowding Out?

- Critics of discretionary Keynesian fiscal policy argue crowding out makes it a weak policy tool.
- Monetarists: Crowding out is almost complete so that fiscal policy is totally ineffective.
- Keynesians: Crowding out is minimal so stimulus is warranted.

#3: The Print Money Option

- To avoid crowding out, the Fed "accommodates" the Treasury's expansionary fiscal policy.
- The Fed buys the Treasury securities by printing new money.
- This increase in M can cause inflation!

Key Point

If inflation drives interest rates up and private investment down, crowding out can happen indirectly!!!!!!