LECTURE THREE – PART FOUR

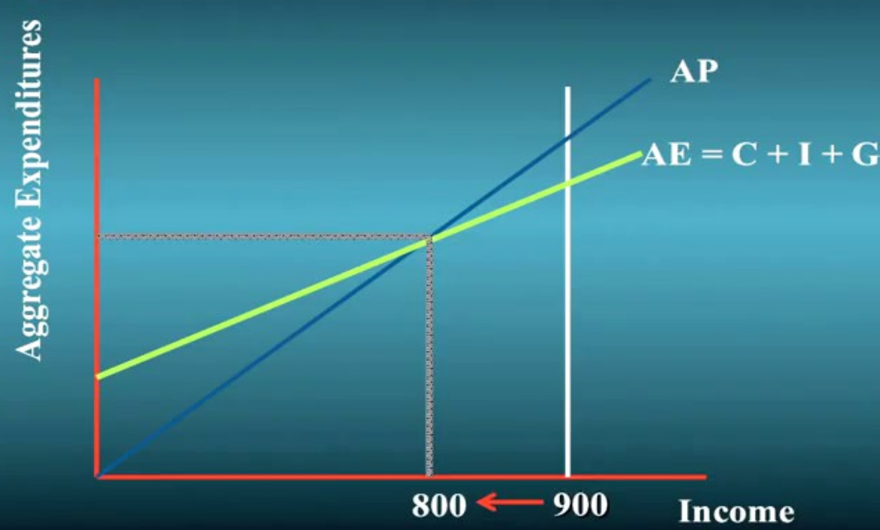
Summarizing the Keynesian Model

- The consumption function slopes upward.
- The slope of the consumption function is flatter than the aggregate production curve.
- Both the investment and government expenditure functions are represented by horizontal lines.

The Slope of the Aggregate Expenditures Function is the MPC

- Vertically summing the consumption, investment, and government expenditure curves yields the AE function.
- The slope of the AE function is the same as the slope of the consumption function because the investment & government expenditure functions are horizontal lines.
- Therefore, the slope of the AE function is the marginal propensity to consume or MPC!

The Complete AE Curve Graphed

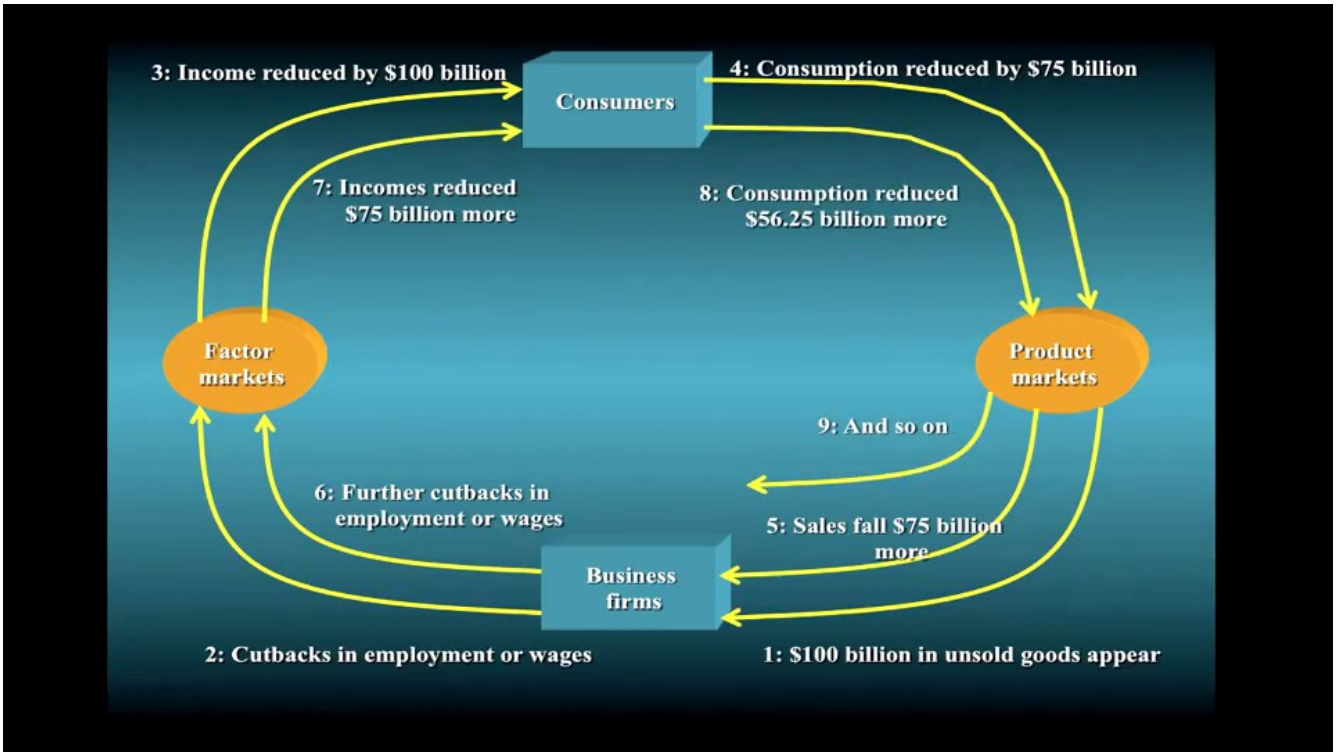


Closing a Recessionary Gap

- We can demonstrate that expansionary fiscal policy can be used to close a $100B recessionary gap.
- Before we can do this, we have to master one more concept:
  - The "Keynesian expenditure multiplier"

The Keynesian Multiplier

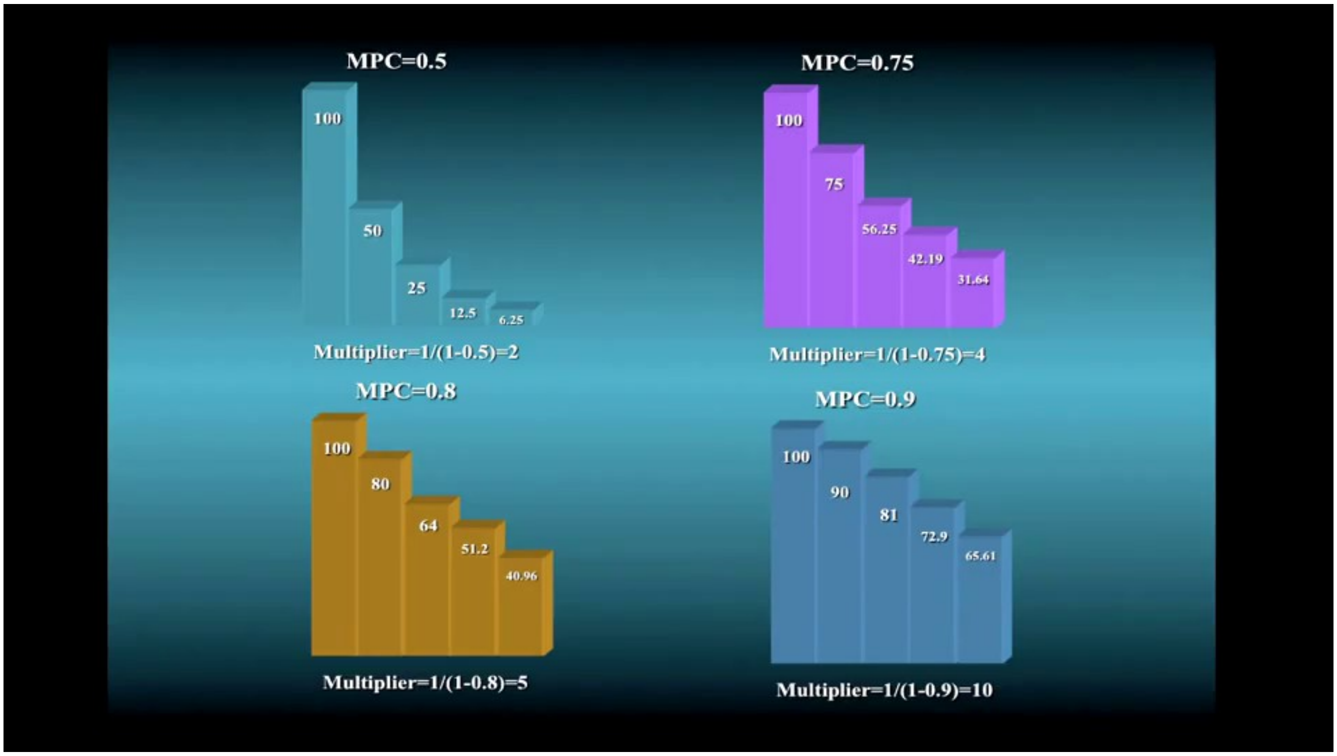
- The number by which a change in aggregate expenditures must be multiplied to determine the resulting change in total output.
- The Keynesian multiplier is greater than one because income is re-spent many times after the initial increase.



Calculating the Multiplier

Keynesian multiplier = 1/MPS = 1/(1-MPC)

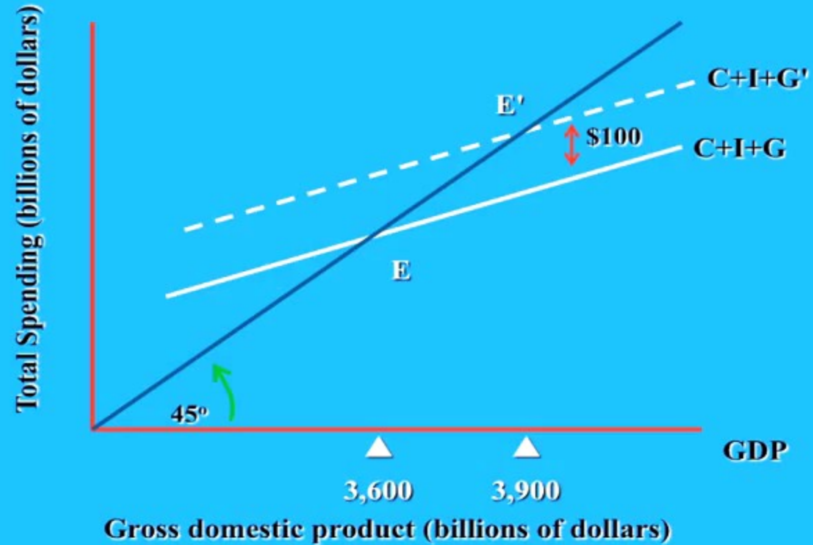
MPC	Multiplier
0.9	?
0.8	?
0.75	?
0.5	?



How the Multiplier Works -- Example

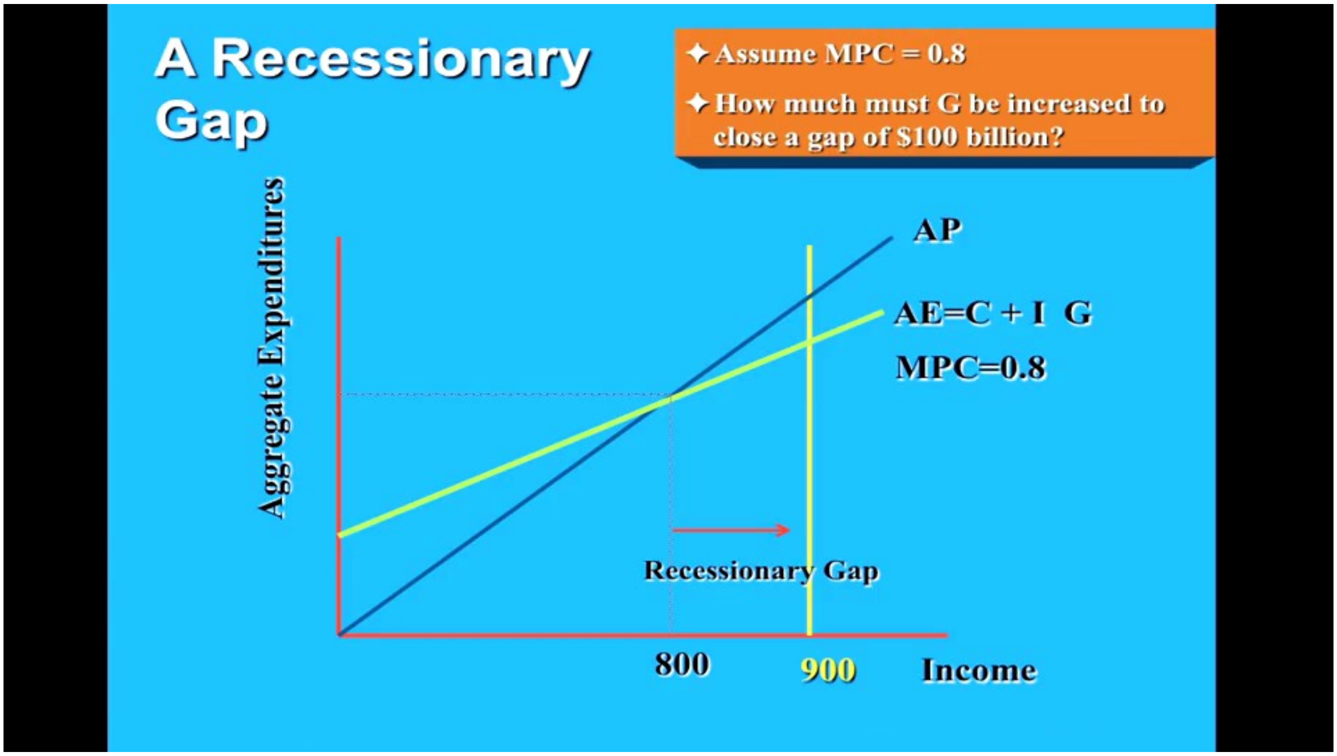
- Suppose the U.S. permanently increases defense spending by $100 billion in response to a threat to the oil fields in the Mideast.
- What will be the effect of this increase in G on the GDP?

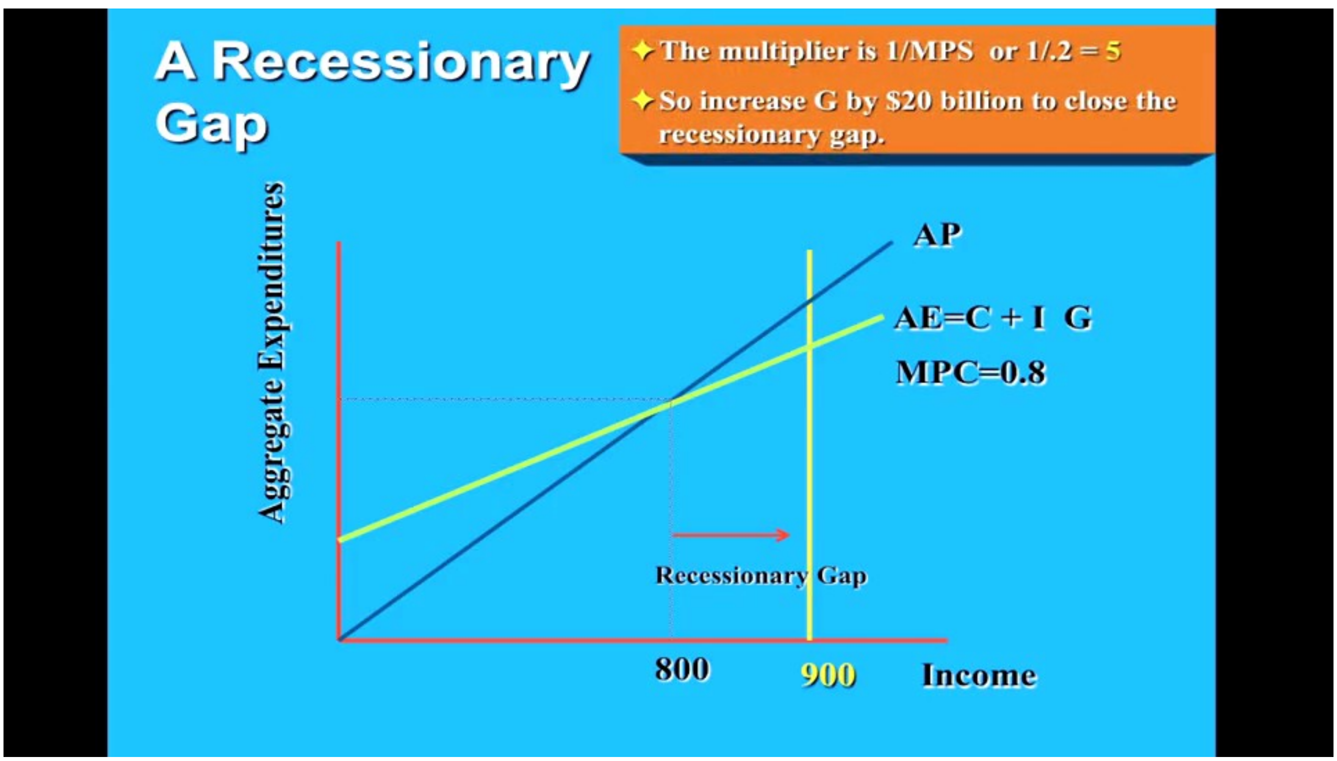
How the Multiplier Works



Using the Multiplier to Close a Recessionary Gap

We have to know the multiplier to calculate exactly how much to raise government expenditures or cut taxes to close a recessionary gap!!!!


A Recessionary Gap
✦Assume MPC = 0.8
✦How much must G be increased to close a gap of $100 billion?
Aggregate Expenditures
AP
AE=C + I G
MPC=0.8
Recessionary Gap
800
900
Income


A Recessionary Gap
✦The multiplier is 1/MPS or 1/.2 = 5
✦So increase G by $20 billion to close the recessionary gap.
Aggregate Expenditures
AP
AE=C + I G
MPC=0.8
Recessionary Gap
800
900
Income

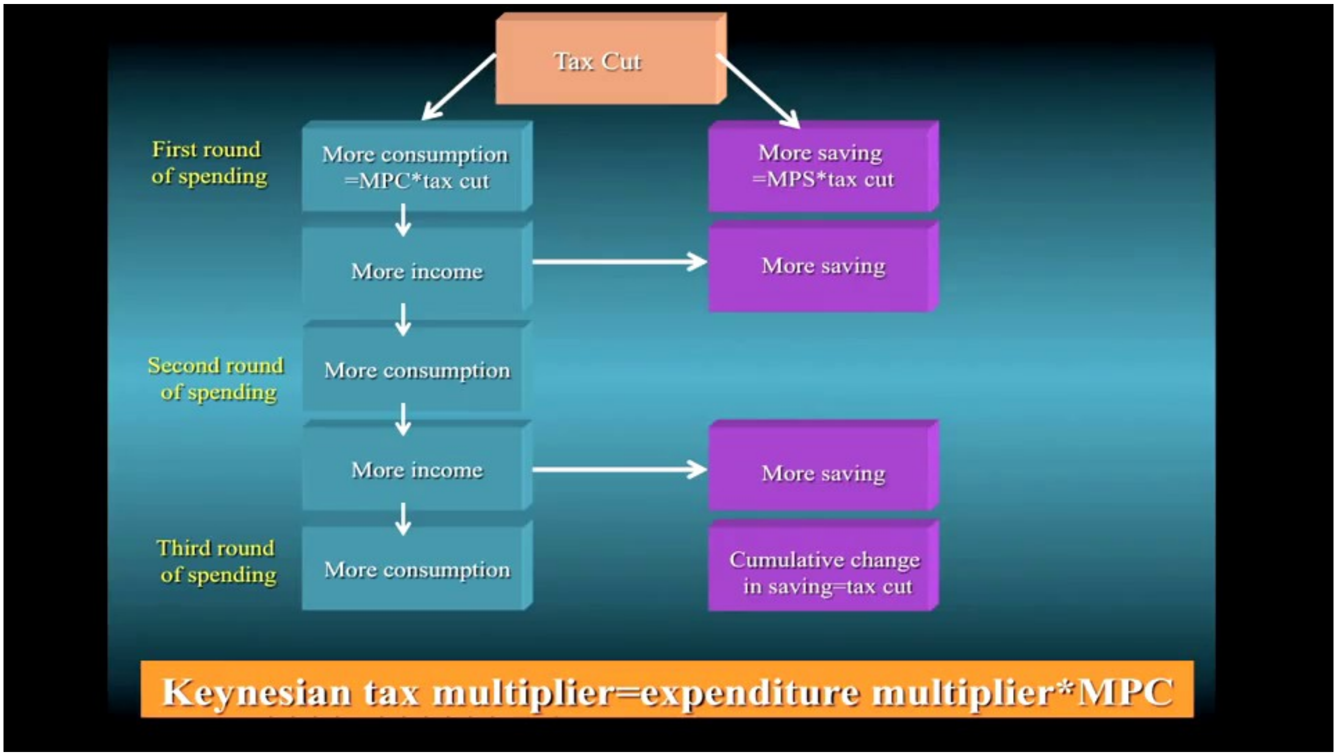
Using Tax Cuts to Close a Recessionary Gap

- We can also use a tax cut to close a recessionary gap
  - Example: The Kennedy Tax Cut of 1964
- The tax cut multiplier is a bit more complicated than the government spending multiplier!!

Tax cut multiplier = Expenditure multiplier*MPC

The Logic of the Tax Cut Multiplier

- Tax cuts have less of an expansionary effect than an increase in government spending.
- Consumers will not increase their expenditures by the full amount of the tax cut.
- Instead, they save a portion of the tax cut based on their marginal propensity to save (MPS).



EXAMPLE: Using a Tax Cut To Close a Recessionary Gap

- Assume the recessionary gap = $100 billion
- Assume the MPC = .8
- Therefore, the multiplier = 5

QUESTION
How much should taxes be cut to close the recessionary gap?

The Answer

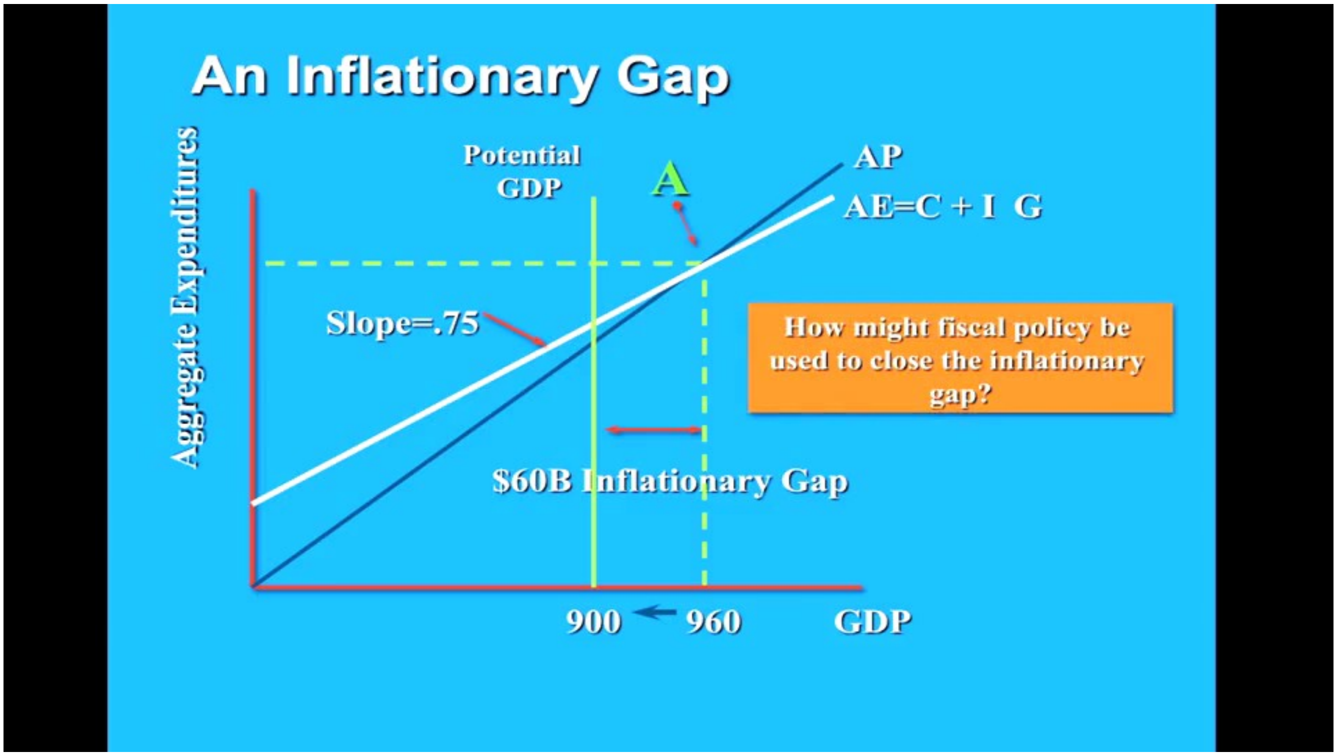
- Taxes must be cut by $25B to close a $100 billion recessionary gap.
- This is $5B more than we needed to increase G to achieve the same result.

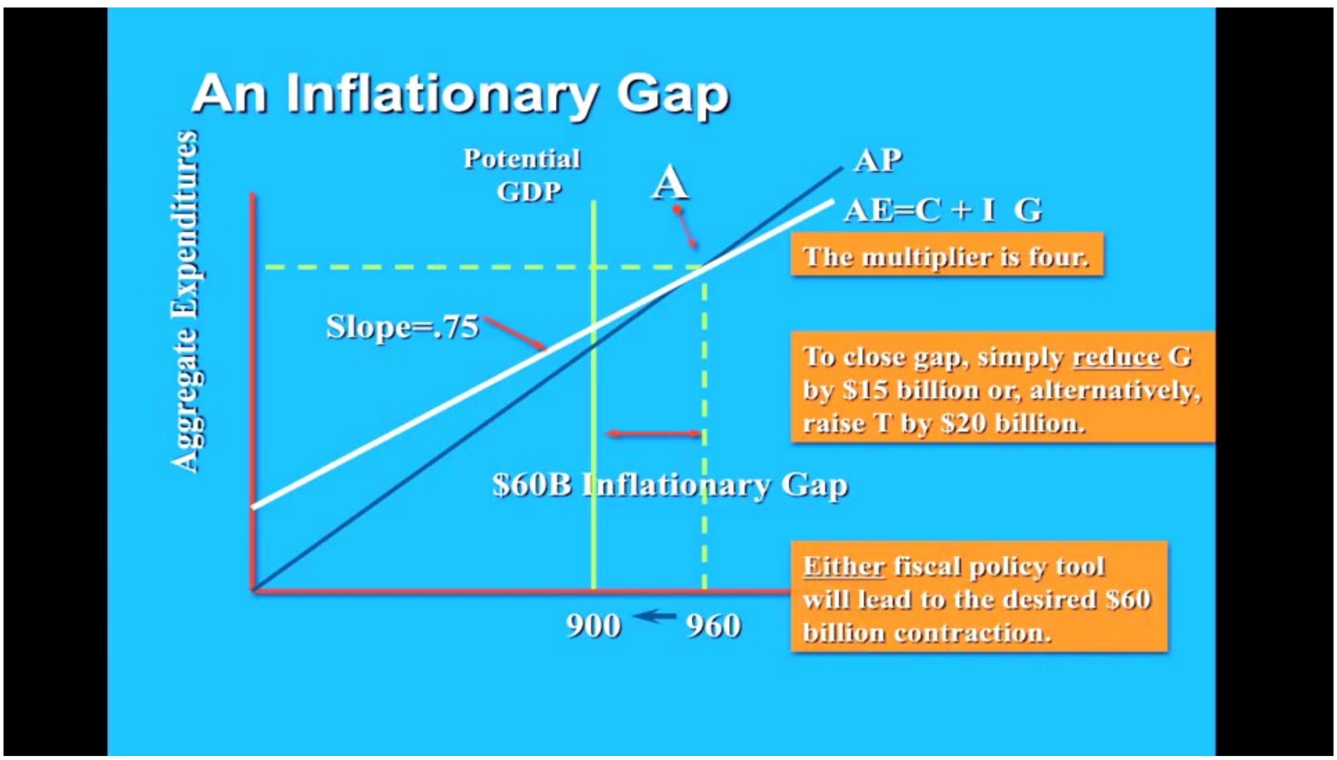
SOLUTION

- Multiply the expenditure multiplier of 5 times the MPC.
- This yields a tax multiplier of 4.
- 4 times the $25 billion tax cut yields a $100 billion expansion.

Using Contractionary Fiscal Policy To Close An Inflationary Gap

- We know how to use expansionary fiscal policy to close a recessionary gap.
- Suppose we face an inflationary gap instead.
- A classic example is the 1960s inflationary gap caused by demand-pull inflation from the Vietnam War and Great Society expenditures.


An Inflationary Gap
Aggregate Expenditures
Potential GDP
A
AP
AE=C + I G
Slope=.75
How might fiscal policy be used to close the inflationary gap?
$60B Inflationary Gap
900
960
GDP

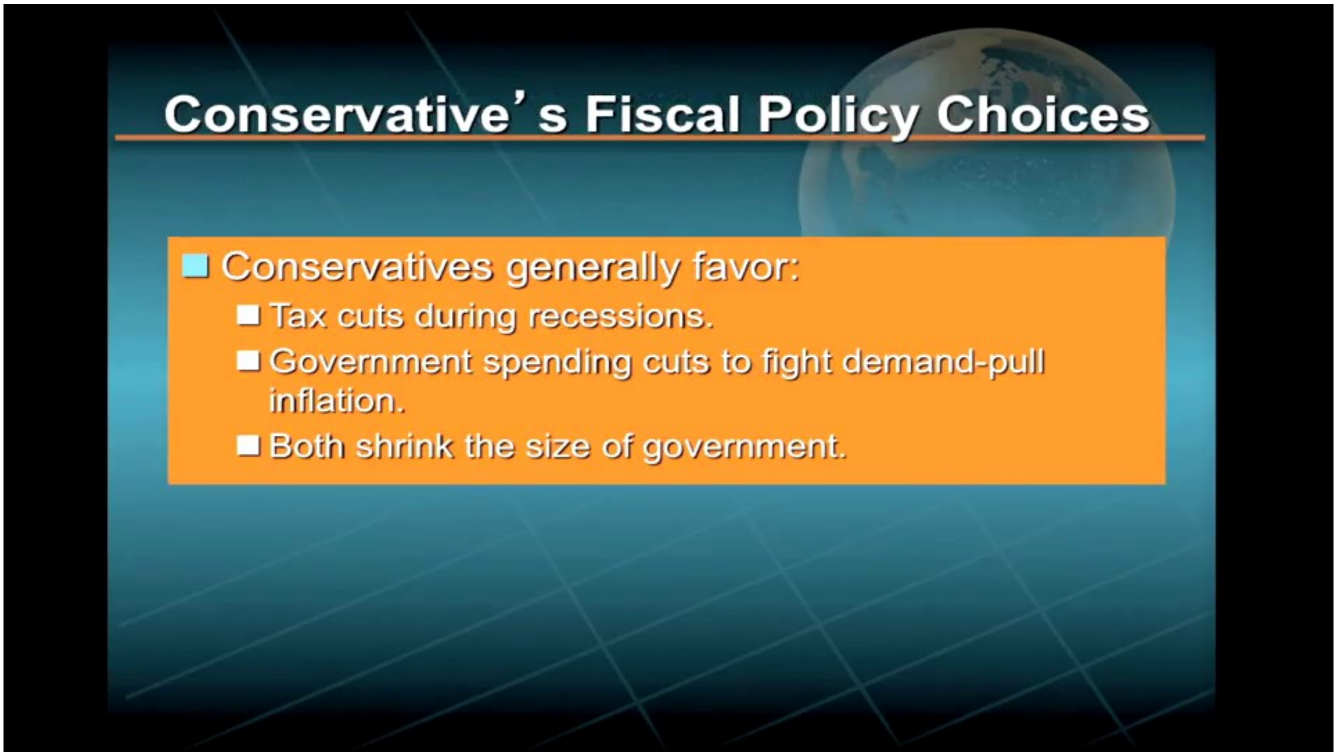

An Inflationary Gap
Aggregate Expenditures
Potential GDP
A
AP
AE=C + I G
The multiplier is four.
Slope=.75
To close gap, simply reduce G by $15 billion or, alternatively, raise T by $20 billion.
$60B Inflationary Gap
Either fiscal policy tool will lead to the desired $60 billion contraction.
900
960

Tax Cuts or Increased G?

- Is it more preferable to increase G or cut T to eliminate recessionary and inflationary gaps?
- The answer depends on one's view of the appropriate size of the government rather than pure economics.

Liberals Vs. Conservatives

- Liberals/Democrats prefer increased government spending during recessions and tax increases to fight demand-pull inflation
  - This expands or preserves the size of government.
- Conservatives/Republicans want to shrink government. What type of fiscal policies do you think they prefer?


Conservative's Fiscal Policy Choices
Conservatives generally favor:
Tax cuts during recessions.
Government spending cuts to fight demand-pull inflation.
Both shrink the size of government.