

# Chapter 15

## Homework Assignment

- For each of the following, use an AD - AS graph to show the short-run effects on output and inflation. Assume the economy starts in long-run equilibrium.
  - a tightening of monetary policy by the Fed
  - a decrease in government purchases due to Congressional budget cuts
  - a decrease in autonomous net exports due to decreased demand for U.S. products abroad
- Assume the aggregate demand in the fictitious country "Alpha" depends on real GDP and the real interest rate according to the following equation:

$$AD = 2000 + .75Y - 1000r$$

The Central Bank of Alpha has announced that it will set the real interest rate according to the following policy reaction function:

Rate of inflation	Real interest rate
0.0	.01
0.01	.02
0.02	.03
0.03	.04
0.04	.05

For the rates of inflation given, find aggregate demand in Alpha and graph the AD curve.

- An economy is described by the following equations:

$$C = 800 + .3(Y - T) - 1000r$$

$$I^P = 1000 - 400r$$

$$G = 1000$$

$$NX = 40$$

$$T = 1000$$

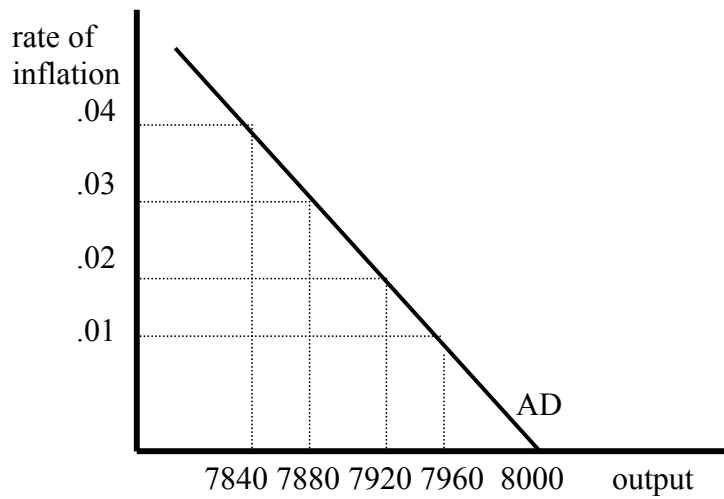
The central bank's policy reaction function is the same as in problem 2 above.

- a. Find an equation that relates AD to output and the real interest rate.
- b. Make a table showing the relationship between AD (short-run equilibrium output) and inflation for inflation rates between 0% and 4%.
- c. Graph the AD curve for the economy.

**Key**

- 1a. AD curve shifts left
- b. AD curve shifts left
- c. AD curve shifts right

2.



3a.  $AD = 2540 + .3Y - 1400r$

b.	inflation rate	output
	0.0	3629
	0.01	3609
	0.02	3589
	0.03	3569
	0.04	3549

