

## Econ 102 – Principles of Macroeconomics Discussion Section Handout # 9

**Announcement:**

Homework #10 is due on Friday April 20<sup>th</sup> no later than 5 pm. Drop it in your TA's mailbox – mailboxes are located on the 7<sup>th</sup> floor of the Social Science Building.

**Key concepts:**

Monetary policy. Money markets. Monetary policy and economic activity. The Taylor rule. Fiscal policy and its effects on aggregate demand. Fiscal policy multipliers. Crowding out.

**Examples:**

(1) How much did the interest rate change on a Treasury bill that pays \$600 next year if the price of the bill goes down from \$500 to \$480?

(2) The information in the following table shows the situation in country A if the Fed does not use monetary policy. However, suppose that the Fed underestimates the aggregate demand for 2008. Describe what would be the Fed's policy as well as the effects on all relevant variables (real GDP, potential real GDP, inflation rate and unemployment rate).

| Year | Real GDP      | Potential Real GDP | Price level (GDP Deflator) |
|------|---------------|--------------------|----------------------------|
| 2007 | \$8 trillion  | \$8 trillion       | 100                        |
| 2008 | \$10 trillion | \$10 trillion      | 120                        |

(3) Suppose that the Federal Reserve follows the Taylor rule. Using the following information, what should the federal funds target rate be?

| Current Inflation Rate | Target Inflation Rate | Real GDP | Potential GDP | Real Equilibrium Fed Funds Rate |
|------------------------|-----------------------|----------|---------------|---------------------------------|
| 1%                     | 3%                    | 98       | 100           | 4%                              |

(4) Suppose that the real GDP is \$200 billion below the potential real GDP and that the government is trying to “solve” this problem.

a – Assume  $C = \bar{c} + 0.8(Y - T)$ , where T is a fixed amount of taxes. What should be the change in G? What should be the change in T?

b – Assume that  $C = \bar{c} + 0.8(1 - t)Y$ , where t is the tax rate and  $t = 0.25$ . What should be the change in G?