

**Economics 227: Intermediate Macroeconomics**  
**Problem Set #5**

**This assignment is due by 5PM on Monday, May 16th**

1. Consider the two exogenous shocks to the economy below. Determine what happens to consumption, investment, the interest rate, GDP, and national saving in the long run. Then determine what happens to these variables in the short run. Show that with flexible prices, the economy will eventually converge to the long run equilibrium.
  - (a) Autonomous consumption spending  $c_0$  falls.
  - (b) The government increases spending and taxes by the same amount.
  - (c) The Central Bank increases the money supply.
  
2. Suppose that the demand for real money balances depends on the interest rate and disposable income  $Y - T$ , so  $\frac{M}{P} = L(r, Y - T)$ . In the short run, can you determine the effect of a tax cut on  $C, I, Y$ , and  $r$ ?
  
3. Suppose that taxes are the following function of income:  $T(Y) = t_0 + t_1 Y$ . How does an increase in the tax rate  $t_1$  affect the slope of the IS curve? How does this alter the effects of monetary and fiscal policy on  $Y$  in the short run? Explain.
  
4. Suppose the Central Bank announces that next year it will double the money supply. Does this announcement affect the economy today? How?