Problem Set 8
Due at the start of class, Monday, November 15, 2004

1. Back to the Basics of IS-LM-FE. For each of the following changes, which equilibrium curve (IS, LM, or FE) is shifted? Draw the change in the underlying demand or supply curves (for example, money supply and money demand for the LM curve) and show how equilibrium changes.
   
   (a) expected inflation increase
   (b) the future marginal productivity of capital increases
   (c) labor supply decreases
   (d) future income declines
   (e) there is a temporary beneficial productivity shock
   (f) the underground economy grows increasing the demand for dollars

2. More Basics For each of the following changes, what happens to the real interest rate and output in the very short run, before the price level has adjusted to restore general equilibrium?
   
   (a) wealth rises
   (b) money supply rises
   (c) the future marginal productivity of capital increases
   (d) expected inflation declines
   (e) future income decline

3. Use the IS-LM model to determine the effects of each of the following on the general equilibrium values of the real wage, employment, output, the real interest rate, consumption, investment, and the price level.
   
   (a) A increase in the effective tax rate on capital that decreases desired investment.
   (b) An influx of working-age immigrants increases the labor supply (ignore any other possible effects of increased population).
   (c) The introduction of automatic teller machines reduces the demand for money.

4. Explain why stagflation (rising prices coinciding with declining output) is difficult to reconcile with a stable FE curve.

5. Using the Lucas misperceptions model, consider the economy of Marekistan that has been undergoing an average inflation rate of 30 percent per year for many years, with M1 growing at an average 30 percent a year, and real output growth essentially flat.
   
   (a) Now suppose the M1 growth rate is reduced to 5 percent, that money growth is maintained at this rate, and that everyone understands this new policy from the outset. What will happen to the inflation rate, the nominal interest rate and the price level under this policy change?
(b) Now assume that the monetary policy described in part (a) is initiated and maintained but that the public believe (incorrectly) that money growth will soon return to 30 percent. What will happen to the inflation rate, the nominal interest rate and the price level under this policy change?

(c) How, if at all, would you expect the time paths of real output to differ in these two cases? Explain briefly.