

Finance 30220
Macroeconomic Analysis
Problem Set 7b

1) Consider the following IS/LM/FE model:

$$\text{FE: } Y^* = 10,000$$

$$\text{IS: } Y = 14,000 - 500r$$

$$\text{LM: } r = 2 + .05Y - .823\left(\frac{M}{P}\right)$$

Where Y is real GDP in billions, r is the real interest rate as a percentage, P is the price level and M is the money supply in billions.

- a) Assuming that the money supply is currently 600 billion, solve for the equilibrium interest rate and price level.
 - b) Suppose that the Federal Reserve increases the money supply by 10% to 660 billion. Solve for the short run impact on the interest rate and real GDP
 - c) Calculate the long run impact on price:
- 2) Continuing with the same model, suppose that the government provides an incentive that raises corporate investment. As a result, at the initial interest rate, expenditures rise by 10%.
- a) Calculate the short term effect on output and interest rates.
 - b) Calculate the long term effect on prices: