

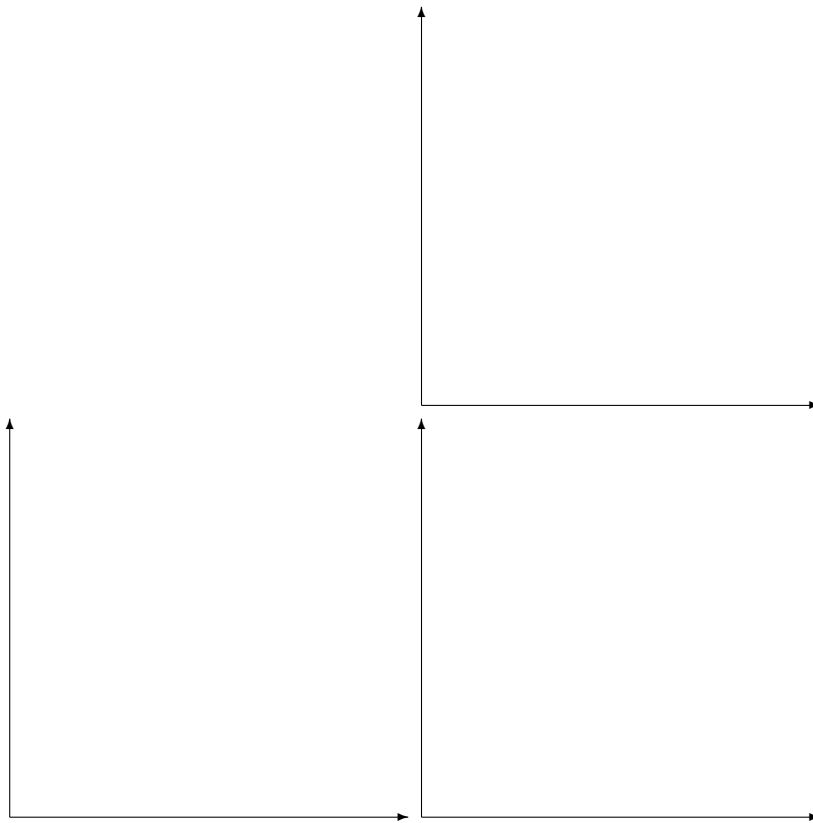
ECON 423 - Problem Set#3

Instructions: Answer each of the following questions in the space provided. The problem set is due on *Wednesday, 15 October at the beginning of class*.

Consider the following macroeconomic model:

Income Identity	$Y \equiv C + I + G$	Consumption Function:	$C = \alpha_1 + \beta_1(Y - T)$
Disposable Income:	$Y_d = Y - T$	Investment Function:	$I = \alpha_2 + \beta_2 Y - \gamma_2 R$
Money Demand Function:	$\frac{M_D}{P} = \alpha_4 + \beta_4 Y - \gamma_4 R$	Money Mkt. Equilib.:	$\frac{M_D}{P} \equiv \frac{M_S}{P}$

- Using the axes below, show the equilibrium level of GDP and interest rates in the model.

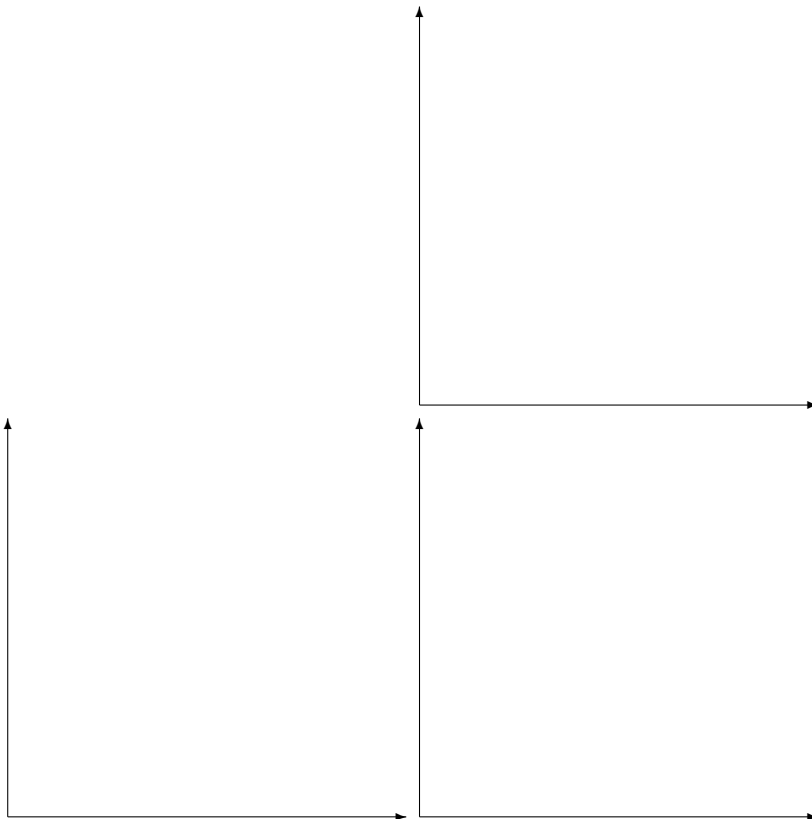


2. Define what the IS and LM curves mean. Algebraically solve for the IS and LM curves.

3. Calculate the government spending multiplier for this model. Define this concept and discuss the factors that affect the size of this multiplier.

4. Suppose that the parameter α_4 is very small. Explain what this means in terms that someone not enrolled in ECON 423 could understand. What effect does this have on the IS/LM model and on the effectiveness of monetary and fiscal policies?

5. Using the axes below, show the effects of contractionary fiscal policy on the level of GDP and interest rates in the model.

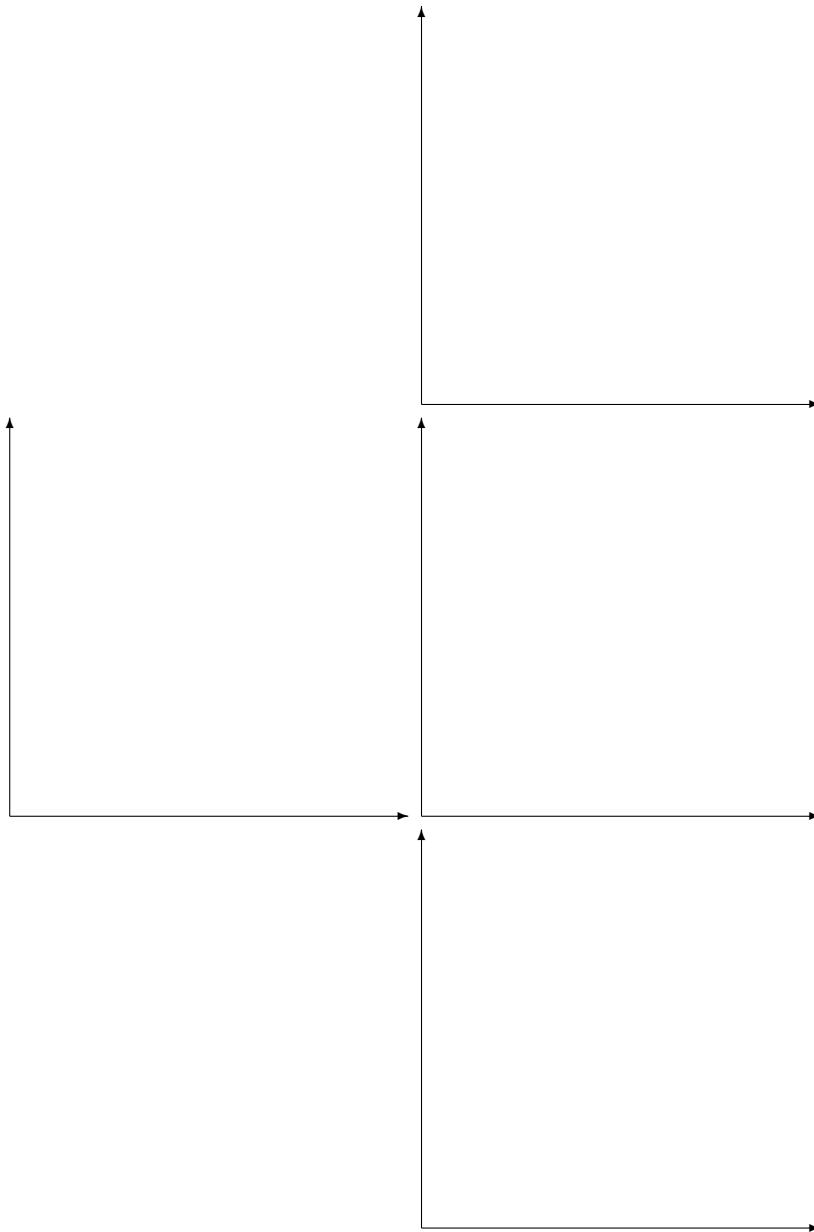


6. Now suppose that the following two equations are added to the model.

Aggregate Production: $Y_{fe} = \alpha_5 \bar{K}^{\beta_5} L_{fe}^{\gamma_5}$ Phillips Curve: $\frac{P_t - P_{t-1}}{P_{t-1}} = \alpha_6 + \beta_6(Y_t - Y_{fe})$

Describe the effect of these additional equations on the behavior of GDP, interest rates and prices in the model.

7. Show the determination of the equilibrium level of GDP, interest rates and prices in the model using the axes below.



8. Using the axes below, show the effects of expansionary monetary policy on the long run equilibrium level of GDP, interest rates and prices in the model. Discuss the effects of this policy on the inflation rate.

