

Economics 102 Fall 2007 Homework 4

1. You are given the following aggregate expenditures and output information as well as the table below describing investment and savings behavior for a small open economy with a balanced budget.

$$\text{GDP} = 50,000$$

$$C = 25,000$$

$$X = 8,000$$

$$M = 12,000$$

i	I	S_p
8	7,900	30,000
3	21,900	15,000

- Assume a linear relationship, and find the demand equation for the loanable funds market.
 - Assume a linear relationship, and find the supply equation for the loanable funds market. (Note: Check Capital Inflows (KI))
 - What is the equilibrium investment spending in this economy?
 - What is private savings in this economy?
 - What is government expenditure for this economy?
2. If you were a classical economist, what would your opinion be if you overheard the following statements? Do you agree or disagree with the statements and why?
- “The interest rate is rising too fast; we should increase government spending to reduce it!”
 - “We are heading toward a recession; the government could slow this if they were to only spend less.”
 - “Classical economist cannot be correct; otherwise you would have never seen people standing in line to get the latest Play station version and having a few go home empty handed.”
 - “Our current trade deficit is reducing the rate of return on my savings!”
3. The following data (in millions) was gathered for Whyme in 2006, and provides insight into household, business, and government activities that year. Use this information for the following questions.

Consumption spending	1000
Government transfer payments	10
Government expenditures on goods and services	50
Private Savings	$S_p = 280 + 20i$
Private Investment	$I = 400 - 5i$
Government Surplus	10

- a. According to the classical model, what are the equilibrium interest rate, private savings, and private investment in the loanable funds market? (Hint: The government surplus needs to be added to the supply for loanable funds!)
- b. With the classical model that includes a foreign sector we know that leakages must equal injections. What must be true in Whyme in 2006 for this to hold?
- c. What is GDP for Whyme in 2006?
- d. The government of Whyme is contemplating a policy of a one-time gift to its neighboring country Whynot that would result in Whyme having a balanced budget. The government is concerned as to what would happen to its citizens and businesses, and has asked you to do an analysis for them. Assuming the relationship that describes private savings and private investment remain the same, output from the economy does not change, and that capital inflow and net taxes remain the same what would be the new level and percentage change (rate of change) compared to the levels without the policy in each of the following for Whyme if they make this one-time gift to Whynot?
 - i. The interest rate
 - ii. Private investment
 - iii. Private savings
 - iv. Government Spending
 - v. Consumption
 - vi. Is this a policy you would recommend if you were a consumer, why or why not?
 - vii. IS this a policy you would recommend if you were a business, why or why not?
- e. Rather than giving a onetime gift to Whynot, Whyme is considering a government spending program that changes the incentive to purchased goods from Whynot. The program would result in a balanced budget, and a 10 million dollar increase in imports. Once again the government is concerned about its citizens and businesses, and has asked you to do an analysis for them. Assume the relationship that describes private savings and private investment remain the same, output from the economy does not change, exports and net taxes remain the same. What are the new levels of consumption, investment spending, private savings and the interest rate under this program?