

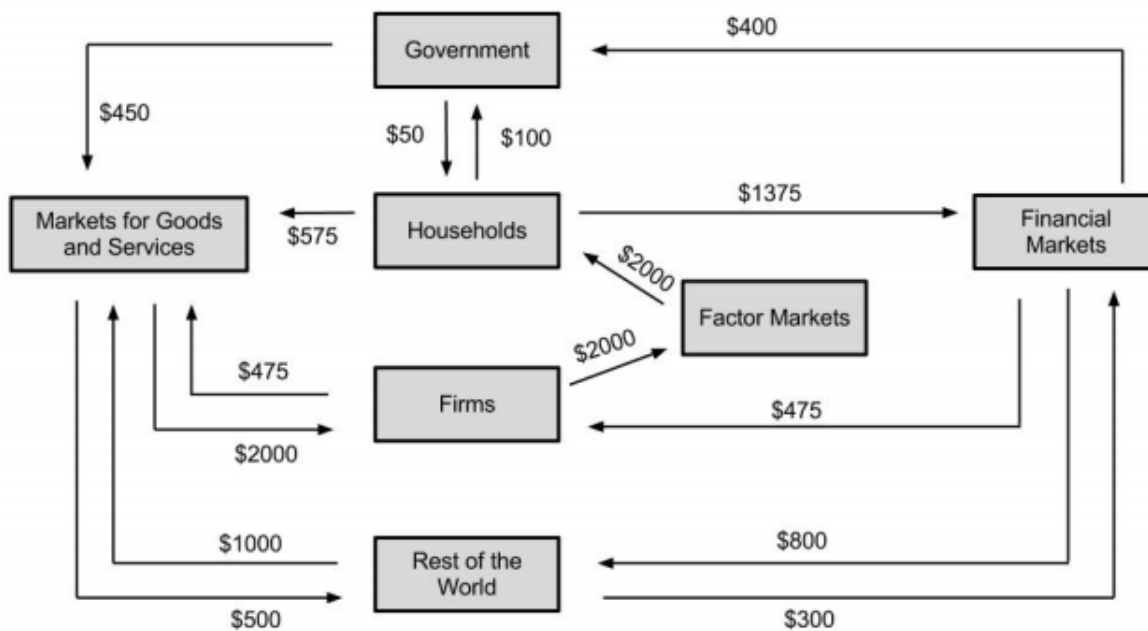
Handout Week 14

Econ 102, Spring 2014

Exercises

1. Capital Inflow (KI)

Consider this circular flow chart:



- What is the total value of leakages?
- What is the total value of injections? Make sure this matches your answer to part a.
- What is the value of net capital inflows?
- What is the value of national savings?
- Is the government running a surplus or a deficit?

2. Keynesian Economics

Assume that the government runs a balanced budget, that the economy is closed, and that there are no transfer payments (i.e. $TR=0$). Taxes are constant at $T=\$500$. Assume that people in this country always save 30% of their income. In a given year, GDP is measured at $Y=\$5500$, investment spending is measured at $\$1000$ and consumer spending is measured at $C=\$4000$.

- a. Find the consumption function, or the total amount consumers consume as a function of disposable income.
- b. Find the aggregate expenditure function, AE, as a function of disposable income.
- c. Plot Y and AE against Y, and find the equilibrium point. (I.e. where $AE=Y-T$)
- d. Suppose the economy is now at an AE level that is to the right of the equilibrium point, what happens to inventory? Is this an economic boom or recession? What policies can government use so that the economy will move to the equilibrium point?

In lecture, we will show you that we can set $AE=Y$ and solve for Y. This yields the following equation:

$$Y = 1$$

$$1-[a - b(T - TR) + I + G + (X - M)]$$

The first term, $(1/(1-b))$ is called the expenditure multiplier, and tells you by how much Y increases per dollar change in autonomous expenditure.

- e. By how much will Y increase if we increase “a” by \$100?
- f. Will Y increase or decrease if we change the MPS to .4?

Exam-Style Problems

1. Capital Inflow (KI)

For the next two questions, consider the following information about the Macroland economy in 2012:

GDP=\$15 billion

Taxes = \$4 billion

Private savings = \$3 billion

Investment = \$4

Consumption = \$9

Net Capital Inflows = \$0

1. Does the government run a deficit or a surplus? (Hint: You need to find G and TR.)
 - a. Deficit
 - b. Surplus

2. Which is larger: Leakages or National Savings?
 - a. Leakages
 - b. National Savings

3. The government of Mankiwland runs a budget surplus. If the budget surplus decreases, the interest rate will _____ and private investment will _____.
 - a. increase, increase
 - b. decrease, increase
 - c. increase, decrease
 - d. decrease, decrease

2. Keynesian Economics

1. In the closed economy of Macroland, the supply of loanable funds is given by $r = 1 + .002S$ and the demand for loanable funds is given by $r = 8 - .005S$. Suppose the government suddenly begins running a \$700 deficit. As a result of this deficit, consumer spending will _____.
 - a. increase by \$500
 - b. decrease by \$500
 - c. increase by \$200
 - d. decrease by \$200

2. If net exports are positive, which must be larger: national savings or investment?
 - a. national savings
 - b. investment

3. Krugmanland in a closed economy. The supply of loanable funds is given by $r = .25S$. The demand for loanable funds is given by $r = 10 - .25S$. Suppose Krugmanland opens to trade and private savings increase by 4. What is the value of capital inflows?
 - a. 8

- b. 4
- c. -4
- d. -8

4. Suppose a closed economy suddenly opens to trade and runs a trade deficit. Suppose the government also begins to run a deficit. Compared to the initial, closed-economy, deficit-free equilibrium, the equilibrium interest rate will _____.

- a. increase
- b. decrease
- c. be indeterminate
- d. there is not enough information to answer this question