94
V good!

LEBANESE AMERICAN UNIVERSITY- BYBLOS

Macroeconomics - ECO 202

Second Exam

Fall 2013

Name: George Chalhoub

I - 48
40
88

16

Part I- Multiple choice. (20 questions; 60 points).

1. Suppose the economy is in equilibrium and that $G = T$. Given this information, we know that it must also be true that
   a. $S = PI$.
   b. $S < PI$.
   c. $S + T > PI + G$.
   d. $S + T < PI + G$.
   e. none of the above

2. Which of the following statements is FALSE?
   a. Investment in economics does not refer to the purchase of financial instruments.
   b. A firm decides to invest in a project only if the expected benefits cover the costs.
   c. Interest cost is usually a small cost of an investment project.
   d. An increase in the interest rate will cause a decrease in the level of planned investment.
   e. An increase in business confidence will usually cause an increase in the level of planned investment.

3. Assume aggregate consumption is $C = 400 + .75Y$ and planned investment is \$200 billion. If aggregate income is \$1200 billion, then the unplanned inventory change is \$_____ billion.
   a. -200
   b. -300
   c. 200
   d. 100
   e. 300

4. In a closed economy without government, which of the following is a FALSE assumption?
   a. even when planned investment equals actual investment there is no guarantee that the economy will be in equilibrium.
   b. If an injection of planned investment is matched by a leakage of saving, then there is equilibrium.
   c. Aggregate income equals consumption plus saving.
   d. Saving is a leakage into the spending stream.
   e. If planned investment is exactly equal to saving, then planned aggregate expenditure is exactly equal to aggregate output.

saving is leakage out of stream or is the int o correc

5. If planned spending is _____ than output, there will be an unplanned _____ in inventories.
   a. smaller; decrease
   b. larger; increase
   c. larger; stabilization
   d. smaller; increase
   e. none of the above

6. The problem of the Lebanese public debt is often mentioned in the news. The reason this is cause for concern for economists and other observers is that
   a. The volume of the public debt in this country is large relative to other public debts around the world.
   b. The volume of the primary deficit in this country is large relative to other deficits around the world.
   c. Most of the public debt in this country is owed to foreign governments unlike other similar countries around the world
   d. The public debt in this country is too large as a stock variable.
   e. None of the above.

7. The speculation motive for money demand makes use of the following knowledge of how financial markets operate:
   a. Outstanding bonds appreciate when the market interest rate increases.
   b. Outstanding bonds depreciate when the market interest rate decrease.
   c. Outstanding bonds appreciate when the market interest rate decrease.
   d. Outstanding bonds retain their value throughout their life because the value of each bond is predetermined upon issue.
   e. None of the above

8. Suppose the required reserve ratio is equal to 20%. An increase in bank reserves leads to a(n) _____ one-for-one _____ in the money supply.
   a. less than; increase
   b. exactly; increase
   c. greater than; increase
   d. less than; decrease
   e. None of the above

9. The size of the multiplier depends on the
   a. marginal propensity to consume.
   b. level of equilibrium output.
   c. level of autonomous investment.

d. point of intersection of the 45Ø line and planned aggregate expenditure.
e. point at which consumption intersects the vertical axis.

The reason firms make plans to invest in inventories of finished goods is that it is wise to do so from a(an) _____ perspective.

a. Keynesian
b. classical
c. management
d. socialist
e. empirical

In the Keynesian cross model, the flatter the PAE line,

a. the smaller the marginal propensity to consume and the larger the expenditure multiplier.
b. the smaller the marginal propensity to consume and the smaller the expenditure multiplier.
c. the smaller the marginal propensity to save and the larger the expenditure multiplier.
d. the smaller the marginal propensity to save and the smaller the expenditure multiplier.
e. None of the above.

When planned aggregate expenditure declines in an economic or financial crisis, Keynesians would advise the government to implement a(n)

a. contractionary fiscal policy to address the problem of inflation.
b. contractionary monetary policy to address the problem of inflation.
c. expansionary fiscal policy to increase aggregate spending and stimulate the economy.
d. expansionary monetary policy to increase savings
e. none of the above

The difference between what a government spends and what it collects in taxes in a given period is called _____.

a. the trade deficit or surplus
b. disposable income
c. the unplanned inventory change
d. government purchases
e. None of the above

14. Assume consumption equals $C = 100 + .75Y_d$ and planned investment equals 150. If government expenditures and taxes both equal 500, then the balanced-budget multiplier is
    a. -4.
    b. 5.
    c. 2.
    d. 0.
    e. None of the above

15. Assume that $C = 100 + .8(Y - T)$, net taxes are $100 billion, government purchases are $200 billion, and planned investment is $100 billion. Then an output of $1,500
    a. equals the equilibrium level of output.
    b. is below the equilibrium level.
    c. is above the equilibrium level.
    d. results in a negative change (reduction) in unplanned inventory.
    e. leads to less job creation in the economy.

16. One of the key equations in accounting practices
    a. assets + liabilities = net worth.
    b. liabilities - net worth = assets.
    c. assets + net worth = liabilities.
    d. assets + net worth + liabilities = 0.
    e. None of the above

17. Assume there is an economy with a single bank, and the central bank sets the reserve requirement ratio at 20%. Assume also that this single bank had no transactions (i.e., no loans, reserves, or deposits) prior to the following event.
The Event: Someone deposits cash in the amount of $2000 in the bank, and the bank gives out loans to the maximum extent possible. At the end of this process, bank deposits will equal $_____.
    a. 2,000
    b. 2,200
    c. 10,000
    d. 500
    e. none of the above

18. Assume there is an economy with a single bank, and the central bank sets the reserve requirement ratio at 10%. Assume also that this single bank had no transactions (i.e., no loans, reserves, or deposits) prior to the following event.

19. *The Event:* An individual deposits $500 of currency in this bank, and the bank gives out loans to the maximum extent possible. At the end of this process, the amount of loans will equal
   a. $2,000.
   b. $4,500.
   c. $2,500.
   d. $1,000.
   e. $500.

20. Which of the following are determinants of money demand?
   a. Consumption, saving, and the interest rate
   b. The price level, the rate of inflation, and the national debt
   c. Planned investment, unemployment, and income
   d. Unemployment, inventories, and saving
   e. Income, the interest rate, and the price level

21. A(n) _____ in _____ the equilibrium interest rate.
   a. reduction; *Y* increases
   b. increase; *Y* decreases
   c. decrease; *P* increases
   d. increase; *P* decreases
   e. none of the above

Part II- Essays/Problems (40 points): Answer the following two questions

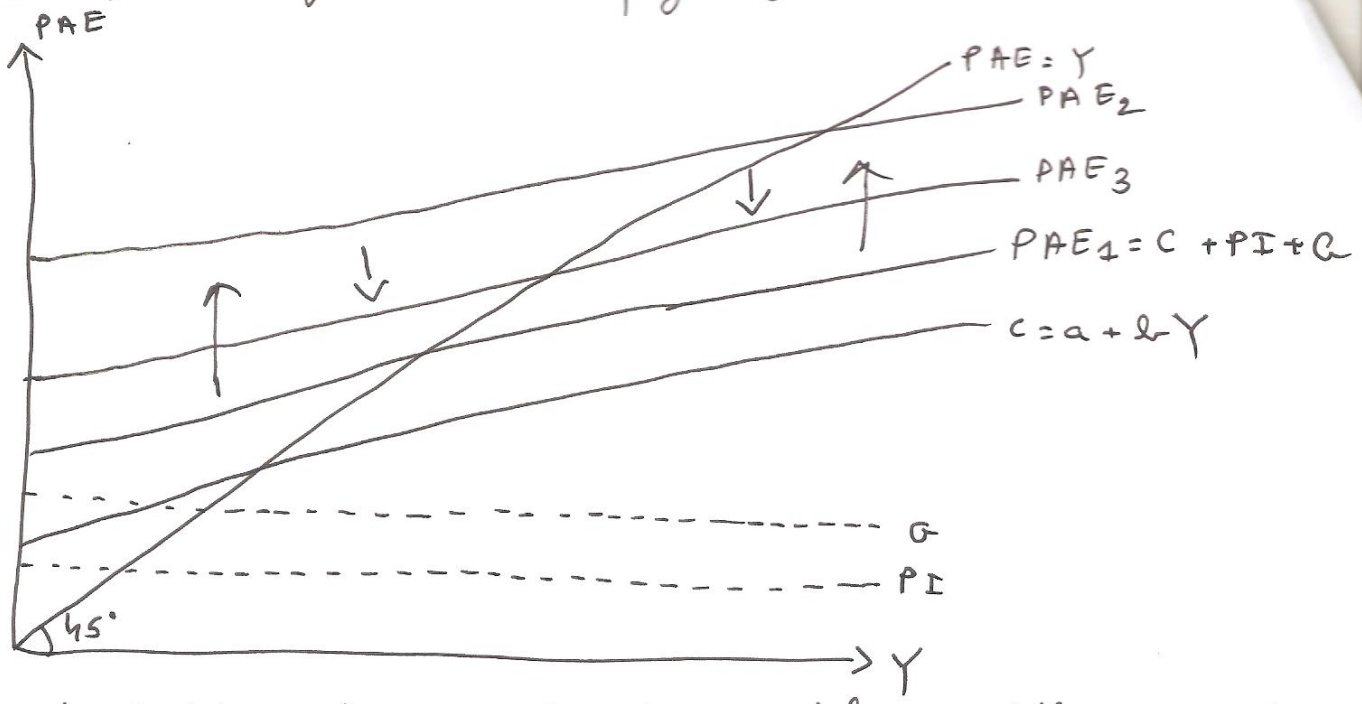
1) You are given the following data concerning Lebanesia. Use this information to calculate the terms required in a-d. Show your formula/method and all your work.

(1) Consumption function: C = 400 + .80 Y
(2) Planned investment function: PI = 800
(3) PAE = C + PI
(4) PAE = Y

a. Calculate the multiplier
b. Graph equations (3) and (4) and solve for equilibrium income.
c. Suppose PI increases by 50. By how much does equilibrium income change as a result?
d. Explain the general relationship, according to the Keynesian model, between actual and planned investment. [A full explanation is required.]

2) Draw a graph of the aggregate expenditure function of an economy with government. Using the graph, explain how equilibrium output is determined. Show graphically the effect on this level of output if government spending and taxes are increased by the same amount. What is the balanced-budget multiplier? Why?

2)



Aggregate output (= income) is measured on the horizontal axis and the components of planned aggregate expenditure are measured on the vertical axis.

The purpose of the 45° line (the equality line) is to show the equality condition PAE = Y. At any point on the line, we have equality between the two sides of the model (PAE and Y).

The consumption function is shown by the first line, labeled C. The equation of this functions is labelled $C = a + bY$ (where b is the MPC). Consumption is part of the planned consumption. The constant lines PI and G designate planned investment and government expenditure respectively.

Planned aggregate expenditure (PAE), which is consumption plus planned investment and government expenditures, is shown by the PAE1 line which is equal to C + PI + G.

The point of intersection of PAE1 and the equality line is the point where there is equilibrium between PAE1 and Y because this will mean that $PAE_1 = Y$ and $Y = C + PI + G$. Economists refer to this diagram as the "Keynesian cross". The value of that coordinate

is the equilibrium output value Y^* and it exactly corresponds [page 2] to what the economy had planned to spend on consumption and investment.

The ~~budget~~ balanced-budget multiplier is "1".

~~Explanation~~:

The increase in G increases PAE and the point of intersection (the equilibrium income by)

$$\frac{1}{1-b} * B$$

This will shift C+PI+G line by ΔG. The shift will appear in the graph. While the increase in T decreases PAE (shifts it down) and decreases cuts equilibrium income by:

$$\frac{b}{1-B} * \beta$$ (i.e, lowers the point of intersection)

After the increase in G (the shift up) and the increase in T (the shift down), we can say that net increase in PAE and in the equilibrium income is the difference

$$\left(\frac{1}{1-b} - \frac{1}{1-b}\right) * b$$

it turns out that

$$\frac{1}{1-b} - \frac{b}{1-b}$$ is indeed 1

so the difference, the net increase is equilibrium income, is exactly $\Delta C = \Delta G = \Delta T$)

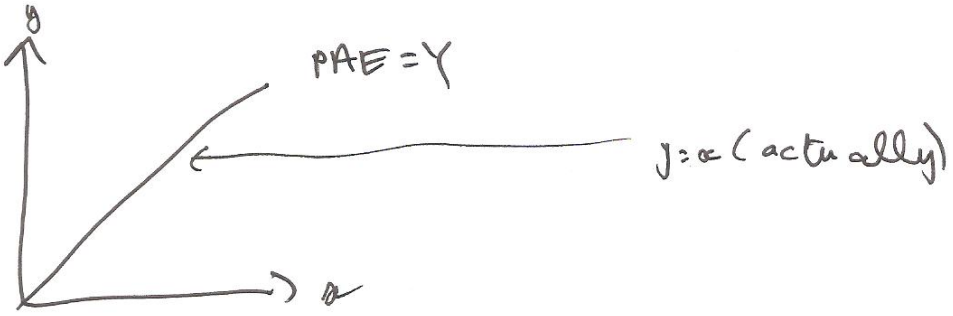
So graphically, the lines shifts up until PAE=Y (the equality line) at the new Y* point as its point of intersection. Another way of putting this, is to say that in the simple Keynesian model,

the balanced budget multiplier is one.

i) a) $\frac{1}{1-MPC} = \frac{1}{1-0.8} = \frac{1}{0.2} = 5$

b) $PAE = C + PI = 400 + 0.8Y + 800 = 1200 + 0.8Y$

(4)



Equilibrium is intersection

c) change in Y = change in PI * multiplier = 50 * 5

d) Had no time to write full explanation, so here's the summary:

i) aggregate output > planned aggregate expenditure

→ actual inventory investment is greater than planned inventory investment

→ ~~firms have~~ actual total investment is greater than total planned investment.

→ firms have positive unplanned inventory investments

→ firms cut back on production the same period in order to get rid of inventories

4) planned aggregate expenditure < aggregate output

→ planned inventory investment is greater than actual inventory investment

→ planned total investment is greater than actual total investment

→ firms have negative unplanned inventory investment

→ firms increase production the next period in order to replenish inventories