

Assignment example

[Literature](#), [Russian Literature](#)



ALGOMA Department of Business and Economics ID: and Econ1007BW15

Principles of Macroeconomics Paper: Assignment_4

Marks: 35

Instructor: Dr. Murshed Chowdhury

Submission Deadline: Wednesday, March 4, 2015 (beginning of the lecture).

No late submission would be accepted.

INSTRUCTION TO STUDENTS:

You are required to answer

All questions of section A on the following table. Write it clearly. Don't keep any ambiguity.

All questions of section B in the given space on exam booklet

Table: : Put the correct answer for multiple choice questions on the following table:

Question No

Correct Answer

Question No

Correct Answer

1

8

2

9

3

10

4

11

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12

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13

7

14

SECTION A: MULTIPLE CHOICE QUESTIONS: Choose the one alternative that best completes the statement or answer the question.

1) Desired investment expenditure will generally fall as a result of which of the following changes?

- A) an increase in business confidence
- B) a decrease in interest rates
- C) an increase in sales volume
- D) a decrease in business confidence
- E) an increase in government purchases

2) Consider a simple macro model with demand-determined output. If z is the marginal propensity to spend out of national income, Y is national income and A is autonomous expenditure, then the simple multiplier is equal to

- A) z .
- B) $Y/(1-z)$.
- C) $1/z$.
- D) $1/(1-z)$.
- E) $1 - z$.

N/B: expenditure multiplier is given by $1/MPS$.

3) Consider the simplest macro model with demand-determined output. Suppose an increase in business confidence leads firms to increase investment in new equipment by \$100 million. The marginal propensity to spend in this economy is 0.75. What is the eventual total new expenditure in this economy due to the increase in investment?

- A) \$100 million
- B) \$25 million

C) \$500 million
D) \$75 million

E) \$400 million

4) In the simple macroeconomic model, " autonomous expenditures" are

A) dependent on national income. B) those which are constant.

C) not dependent on national income. D) non-domestic expenditures.

E) induced expenditures.

5) The marginal propensity to consume is defined to be

A) the change in desired consumption divided by total disposable income.

B) the change in desired consumption divided by the change in saving.

C) the change in desired consumption divided by the change in disposable income.

D) total desired consumption divided by the change in disposable income.

E) total desired consumption divided by total disposable income.

6) If the marginal propensity to consume (MPC) is equal to 0.9, an increase in household income causes desired consumption expenditure to

A) rise by less than the full increase in income.

B) rise by more than the increase in income.

C) remain constant, because the MPC is also constant.

D) rise by the full increase in income.

E) fall, as an increase in income will increase saving.

7) A rise in the real rate of interest _____ the opportunity cost of holding an inventory of a given size, and therefore _____ desired investment expenditure.

A) decreases; decreases
B) increases; increases

C) decreases; increases
D) decreases; leaves unaffected

E) Increases; decreases

Consider the following information describing an economy with demand-determined output. There is no government or foreign trade. All dollar figures are in billions.

1. equilibrium condition is $Y = C + I$

2. marginal propensity to save = 0.20

3. the autonomous part of C is \$50

4. investment is autonomous and equals \$25

8) Refer to the above information, the equilibrium level of national income is

A) \$375. B) \$155. C) \$75. D) \$249. E) \$93.75.

9) Consider the government's budget balance. Suppose $G = 300$ and the government's net tax revenue is equal to $0.14Y$. When $Y = 2000$, the government is running a budget

A) surplus of 20. B) deficit of -20. C) surplus of 40.

D) balance. E) Deficit of 20.

10) Consider the net export function. An increase in domestic national income, other things being equal, is assumed to cause

A) no effect on net exports. B) the net export function to shift upward.

C) the net export function to pivot downward.

D) movement to the right along the net export function.

E) the net export function to pivot upward.

11) Consider a simple macro model with a constant price level and demand-determined output. The equations of the model are: $C = 120 + 0.86Y$, $I = 300$, $G = 520$, $T = 0$, $X = 180$, $IM = 0.12Y$. Total autonomous spending in this model is

A) 600. 0. B) 828. 8. C) 420. 0. D) 120. 0. E) 1120. 0.

12) Consider the following news headline: " Business community gloomy about the economy-investment plans axed." Assuming that aggregate output is demand-determined, what effect will this have, all other things equal, on the AE function and on equilibrium national income?

A) The AE function will shift down parallel to itself and equilibrium national income will fall.

B) The AE function will rotate upward (become steeper) and equilibrium national income will rise.

C) The AE function will rotate downward (become flatter) and national income will fall.

D) The AE function will shift up parallel to itself and equilibrium national income will rise.

E) There will be no change in the AE function or in equilibrium national income.

13) Bob Tetleys disposable income rose from \$40 000 per year to \$42 000 and his desired consumption expenditure rose from \$38 000 to \$39 500. It can be concluded that his

A) average propensity to save is always 0. 25.

B) marginal propensity to consume decreased.

C) marginal propensity to save is 0. 25.

D) marginal propensity to consume is 0. 25.

E) average propensity to consume is constant.

14) Consider a simple macro model with a constant price level and demand-determined output. Suppose desired aggregate expenditures are less than

the current level of national income. The vertical distance between the AE curve and the 45-degree line represents

- A) desired accumulation of inventories.
- B) the amount by which output exceeds desired expenditures.
- C) the output gap.
- D) desired decumulation of inventories.
- E) the amount by which desired expenditures exceeds output.

SECTION B: NUMERICAL PROBLEMS AND SHORT ANSWER QUESTIONS (21):

Question 15 (9 Marks):

Imagine that initially you are given the following information about a simple economy

a. Calculate the level of income (Y), the level of Consumption (C)

$$Y = C + I = 200 + 0.7Y + 100$$

$$Y = 300 + 0.7Y$$

$$0.3Y = 300$$

$$Y = 1000$$

$$C = 200 + 700 = 900$$

b. Find the value of multiplier and interpret it

$$1/1-mpc$$

Hence, consumers spend 0.7 and save 0.3 of every \$1 of extra income, the multiplier will be:

$$1/1-0.7$$

$$= 1/0.3$$

$$= 3.33$$

Hence, the multiplier is 3.33, which means that every \$1 of new income

generates \$3.33 of extra income.

Now assume that the economy is becoming more realistic and the consumption function has changed and economy has government expenditure and net exports. Therefore, the information changes to:

Now you are asked to do the following:

i) Calculate the level of income (Y), disposable income (YD), Consumption (C), and M (imports)

$$Y = C + I + G + X - M$$

$$Y = 200 + 0.75[Y - 0.25Y] + 100 + 500 + 200 - 0.2Y$$

$$Y = 1000 + 0.5625Y - 0.2Y = 1000 + 0.3625Y$$

$$0.6375Y = 1000$$

$$Y = 1568.6275, Y_d = 1176.4706, C = 1082.353, M = 313.7255$$

ii) Is that economy having budget deficit or budget surplus? How much?

There is a budget surplus of 1481.48 - 400 = 1081.48

iii) Now assume that the tax rate has increased from 0.25 to 0.35 and MPC is changing from 0.75 to 0.9, what would be the new level of income (Y)

$$Y_d = 0.65Y,$$

$$Y = 200 + 0.585Y + 100 + 500 + 200 - 0.2Y$$

$$Y = 1000 + 0.385Y$$

$$Y = 1626.0163$$

iv) Illustrate the change in Y from i) to iii) in AE and Y diagram

Question 16 (4 Marks):

Explain how the change in the following factors would influence the level of consumption?

i) change in the interest rate

Generally, a decline in interest rates significantly boosts consumption, for this induces individuals to borrow from banks; borrowings used for consumption expenditures. An increase in the interest rate, however, sends negative signals to the market, in effect, reducing borrowings used for consumption expenditures.

ii) the change in the expectations about future income

A brief look suggests that anticipated changes in income, which may entail tax changes, indeed impacts consumption in one way or the other. The precise effect, however, depends on whether the perceived changes are temporary or permanent. An anticipated cut on income will automatically reduce consumption expenditures. Increases in income will thus boost consumption. The challenge, therefore, depends on the specific expectations and contexts in which the increases or decreases are implemented.

Question 17 (4 Marks):

Each of the following headlines describes an event that will have an effect on desired aggregate expenditure. Which component (or sector) of AE would be affected? What will be the effect on equilibrium national income? Explain

a. Finance minister pledges to cut income-tax rates

The component of aggregate expenditure that would be affected with the minister's pledge is the Consumption component. Basically, the announcement will leave workers with an increment in their income, giving them a wider leverage to consume more goods and services. Accordingly, equilibrium national income will also increase because consumption is but part and parcel of aggregated national income.

b. High mortgage rates discourage new house purchases

Changes in mortgage rates basically affect investments. By discouraging new investments, high mortgage rates will, therefore, reduce equilibrium national income.

c. Weak dollar spurs (increase) exports from Ontario manufacturer

Weak dollars dollar affects both exports and imports, in effect triggering the urge to exports more while discouraging imports. This results in the swelling of the equilibrium national income.

Question 18 (4 Marks):

Assume that the government of Canada (or the government of your home country, if you are a non-Canadian) hires you as an economist and the Minister of Finance is asking you to explain the idea of Multiplier. How would you explain it?

Among other things, Keynes, the father Keynesian economics, contends that any injection into the economy through investment and/or government expenditure produces proportional income increases that ultimately find way into the overall national income. The basic premise in Keynes theory is that such expenditures usually have carry-over effects which generate other expenditures, thus, the multiplier effect, which basically attempts to map out the size of such " carry-over effects".

More generally, the multiplier effect comes about due to additional demands for goods and services [injections] into the circular flow of income, in effect, stimulating further rounds of spending; that is, " one entity's expenditures becomes another's income", and the circle continues, leading to a bigger effect both on output as well as employment. With \$1 million, therefore, an

investment into the energy sector would most convenient at this time. To be sure, the world has been reeling from the effects of global downturn with reverberations being felt throughout economy, right from the bases of production to the consumer at the very end; a fact that shows how intertwined our future is to the history has led us to the current circumstances. As it is, the energy industry supports more than 7 percent of the country's employment either directly and indirectly. Each calorie of food consume, for example, requires certain amounts of fossil fuel, amount that rises with other special foods. From direct job creation to efficiency in other environments, we require energy.