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PROBLEM SET II

EE212 — Principles of Macroeconomics

Semester 2/2019-2020

Total mark: 20 points

Due date: Saturday 29 February 2020 **before midnight** to jenmana@econ.tu.ac.th.

Any late submission **will not** be graded.

Please submit in pdf form, and not word document.

Dear students,

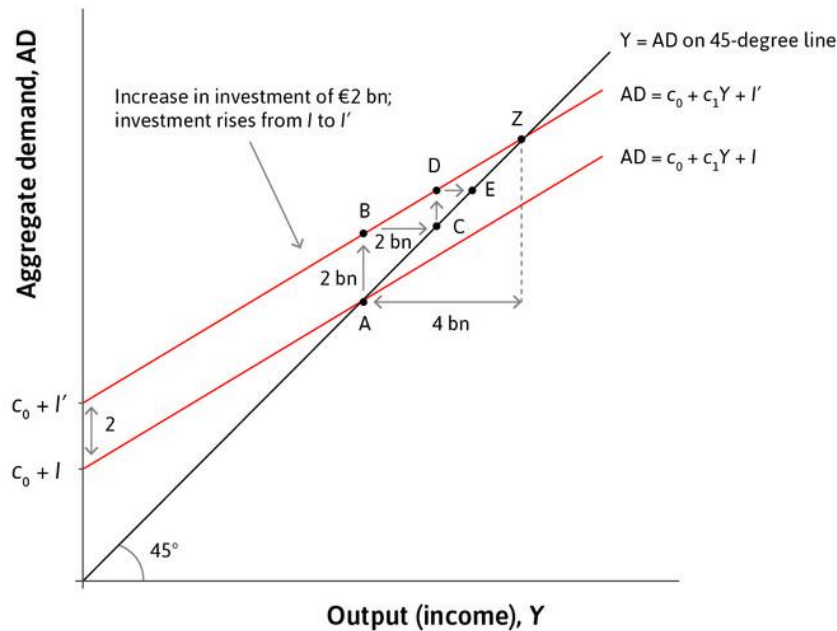
Two weeks are given to complete this assignment. As mentioned, we will have four problem sets, each making up 5% of your total grade (20% in total). These will be challenging, and will demand you to revisit the topics that have been mentioned so far in class, as well as to read the mandatory readings.

Reminder on academic policy: I encourage you all to work together and exchange ideas out of class. However, I also encourage you all as university scholars to start independently critically approach a topic, a question, or a challenge that will be posed in this class, as well as the future ones.

I expect your independent completion of the short essays, as it would be obvious if they are not your own ideas. Plagiarism and cheating will be treated with disciplinary actions. Thammasat University, our faculty, and I take academic integrity extremely seriously.

Problem I: Short answers (5 points)

1. "The Keynesian multiplier is always great than 1 if $T = 0$ and $G = 0$." True or false? Why?
2. "There is no private savings at the Keynesian equilibrium." True or false? Why?
3. Let's say there is no government spending and taxes, and no imports and exports. The consumption function is given by $C = c_0 + c_1Y$, and I (investment) is given. The economy is graphically visualised as below:



There is a \$2 billion increase in investment. The marginal propensity to consume is 0.5. Which of the following statement is correct? (multiple correct answers may be possible)

- (A) The new goods market equilibrium after the investment increase is E .
 - (B) Aggregate demand increases by a total of $\$2 \text{ billion} \times 0.5 = \1 billion due to the increase in investment.
 - (C) The multiplier is 2.
 - (D) The distance between C and D is three-quarters the distance between A and B (\$1.5 billion).
4. The Keynesian multiplier says that an increase in investment or government spending can lead to an even higher increase in total output. Explain how with intuition how it works, and how does it relate to the MPC.
 5. The fiscal (government spending) multiplier tends to be high during a recession, but they tend to be low (perhaps even lower than one) during an expansion. How could we explain this phenomenon?

Problem II: The Keynesian Cross in a small closed and open economy (10 points)

Assume that, in a closed economy:

$$C = 500 + 0.5Y_D$$

$$I = 100$$

$$T = 80$$

$$G = 200$$

- (0.5 point) Solve for (i) equilibrium consumption; (ii) “planned” aggregate expenditure (aggregate demand); (iii) disposable income. Characterise the equilibrium.
- (0.5 point) Graph – with proper labels – the equilibrium output and expenditure
- (1 point) Solve for the equilibrium private savings and public savings.
- (1 point) Calculate the Keynesian multiplier, as well as the autonomous spending. What do they mean?
- (1 point) It is election year, and the incumbent government increases their government spending from 200 to 300. Find the new equilibrium demand, output, consumption, and disposable income. How much does each increase? Graph these changes. Why would the government want to do this?

Now let’s consider a small open economy where the exchange rate and interest rate are pegged on the US.

$$C = c_0 + c_1(Y - T)$$

$$I = d_0 + d_1Y - d_2r$$

$$M = m_1Y$$

$$X = x_1Y^W$$

Let r be the exogenous interest rate, and Y^W the level of foreign outputs. G is exogenous.

- (1 point) All coefficients (e.g. c_1, d_1, d_2) are positive. According to your understanding, what is d_1 and d_2 ? What are the reasons for the signs before them (plus or minus)?
- (3 points) What is the effect of lower government spending ($G \downarrow$) on the budget balance, $G - T = G - tY$? Assuming that $(1 - c_1(1 - t) - d_1 + m_1) < 1$, and the linear tax rate t is constant.
- (2 points) Suppose that the government is budget balanced – given by $G = T = tY$. Find the equilibrium output in this economy. How does the equilibrium output change when foreign output increases?
Tip: replace G and T by tY .

Problem IV: “*you shall earn your bread in sweat*” (5 points)

Based on your mandatory reading written by Michal Kalecki in 1943, titled *Political Aspects of Full Employment*, consider the text below.

The referenced work asked a perplexing question. “*The entrepreneurs in the slump are longing for a boom; why do they not gladly accept the synthetic boom which the government is able to offer them?*” Summarise the main reasons given.

My question is this. Does the same phenomenon (existence of political obstacles from capitalists against full-employment economic policy) happens in Thailand? If not, explain; and if so, do the same reasons apply? Are there any other reasons you think are more accurate?

word count: 600 words (± 20 words are allowed)