



**UNIVERSITAS INDONESIA  
 FAKULTAS EKONOMI & BISNIS  
 DEPARTEMEN ILMU EKONOMI  
 PROGRAM STUDI S-1 REGULER DAN  
 PROGRAM STUDI S-1 KELAS KHUSUS INTERNASIONAL**

**Final Exam  
 MACROECONOMICS 1  
 Even Semester 2016/2017  
 Duration: 3 hours  
 Closed Book**

<b>No.</b>	<b>Lecturers</b>	<b>Assistants</b>
<b>A</b>	<b>Regular Class</b>	
1	<b>Maddaremmeng A.Panennungi (Koord.)</b>	Ahmad Fahriza
2	Tjhjanto Budisatrio / Rima Prama Artha	Alvin Ulido
3	Sartika Djamaluddin	Teuku M. Riefky Hasan
4	M. Shauqie Azar ( <i>Bhs. Inggris</i> )	Goldy Fariz Dharmawan
5	Nanda Nurridzki	M. Alvin Prabowosunu
6	Dhaniel Ilyas ( <i>Bhs. Inggris</i> )	Filza Amalia
7	Maria Agriva	Goldy Fariz Dharmawan
8	Ninasapti Triaswati / Dewi Meisari	Estiana Cahyawati
9	Ninie L. Gyat	Luh Putu Ratih K. D.
10	Widyanti Soetjipto	Eldo Malba Simanjuntak
<b>B</b>	<b>International Class</b>	
1	Isfandiary Djafaar, M.Soc.Sc	Umara Arda
2	Farma Mangunsong, MSE	Rully Endepe
3	Irfani Fitria, MSE	Muhammad Alvin Hidayat
4	Amalia Annis, ME	Ekky Setianingtyas
5	Isfandiary Djafaar, M.Soc.Sc	England Rys Chan
6	Muhammad Shauqie Azhar, MPP	Aliya Hanifah

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Please answer all questions below. It is allowed to use a simple calculator.

### **1. The Economy in the Short Run: Small Open Economy (20 Points)**

- a. The Mundell-Fleming model assumes a **Small Open Economy** and **Perfect Capital Mobility**. Explain the meaning and implications of these two underlying assumptions. **(5 points)**
- b. Write down the equations that represent the goods market (IS\*) and money market (LM\*) equilibriums in the Mundell-Fleming model. Determine the (positive or negative) relationship between dependent variables and independent variables in each equation. Draw the open economy short-run equilibrium. Explain. **(5 points)**
- c. The Indonesian government enacts a budget deficit policy that aims to accelerate infrastructure development. Using the Mundell-Fleming model, predict the impact of this policy on **national income**, **domestic exchange rate**, and **trade balance**, *ceteris paribus*. In your answer, state Indonesia's exchange rate regime and detail the changes in the economic variables that occur in both the goods and money markets. **(5 points)**
- d. Due to economic recovery, the consumption and import of the US and China are predicted to increase in the years to come. By revising the trade balance equation of the basic Mundell-Fleming model to become  $NX = NX(e, Y_f)$ , where  $Y_f$  is the income of trading partners, predict the impact of the event on Indonesia's **national income**, **exchange rate**, and **trade balance**, *ceteris paribus*. Use IS\*-LM\* curves to explain changes in the economic variables that occur in both the goods and money markets and consider the Indonesian exchange rate regime. **(5 points)**

### **2. The Economy in the Short Run: Theory of Aggregate Supply (20 Points)**

There is supply and demand framework in microeconomics theory; and there is aggregate supply (AS) and aggregate demand (AD) framework in macroeconomics theory.

- a. What are the differences between Short-Run Aggregate Supply curve and Long-Run Aggregate Supply curve? Elaborate your answer with graphical explanation. **(5 points)**
- b. Why does supply shock often also be called as price shock? Elaborate your answer with providing at least 3 examples of supply shocks and its effect on price in the short term? Use graphical explanation to complete your answer. **(5 points)**
- c. What is stagflation? Provide one empirical case of this phenomenon (you can use the case of Indonesia or other countries). **(5 points)**
- d. With using AD-AS framework, what kind of policy that theoretically can be done to stabilize an economy with stagflation? **(5 points)**

### 3. The Economy in the Very Long Run: Economic Growth (20 Points)

Suppose an economy of country 'Skyrim' described by the Solow Model represented by the following equation:

$$Y = K^{\frac{1}{2}}(LE)^{\frac{1}{2}}$$

where  $Y$  is total output,  $K$  is capital,  $L$  is labor and  $E$  is 'efficiency' of labor. Answer the following questions based on the Solow Growth Model:

- How do you measure the effective number of workers from the model? Explain the reasons behind the measurement! Explain how the technological progress is incorporated in the model! Give technology implementation examples related to the Solow model specification above! **(5 points)**
- Suppose  $k$  is capital per effective worker and  $y$  equal output per effective worker. Transform the production function above using the new variable  $y$  and  $k$ ! **(5 points)**

Assume  $g$  is the (constant) growth rate of  $E$ ,  $\delta$  is the (constant) depreciation rate of  $k$  and  $n$  is the (constant) growth rate of  $L$  due to population growth. By using demand for good equation:  $y = c + i$  and consumption function  $c = f(y)$ , the Solow model also implies that:

$$i = sf(k) \text{ and } \Delta k = sf(k) - (\delta + n + g)k$$

where  $i$  is investment per effective worker,  $c$  is consumption per effective worker,  $\Delta k$  is the change of capital per effective worker,  $s$  is the saving rate of output per effective worker and  $(\delta + n + g)k$  is called the *break-even* investment.

- Write down the steady state condition using *one of the implied equations* above! Explain the steady state condition intuitions *in details* by using the investment-saving equilibrium and the break-even investment terms! **(5 points)**
- If saving rate  $s = 0.36$ , depreciation rate  $\delta = 0.05$ , labor growth  $n = 0.03$  and  $g = 0.01$ , calculate the steady state value of  $k^*$ ,  $y^*$ ,  $i^*$ , and  $c^*$ ! **(5 points)**

### 4. Understanding Macro from Micro Perspectives: Consumption (20 Points)

Contribution of consumption has the largest share in Indonesia Gross Domestic Product (GDP) by expenditure. This fact provide evidence that it is very important to understand the factors that affect consumption. Economists have developed some theories to understand the determinant factors that affect consumption.

- Keynes, pioneer in consumption theory, proposed three important concepts: *Marginal Propensity to Consume (MPC)*, *Average Propensity to Consume (APC)*, and the relation between income and consumption. Explain all of the concepts above! **(5 points)**
- Empirical study of *Average Propensity to Consume (APC)* shows that the earlier studies provided supporting evidences of the APC prediction from Keynes; however, empirical study of Kusnetz with longer times series data provides different result. This phenomenon is so-called *the Keynesian Consumption Puzzle*. Explain what is *the Keynesian Consumption Puzzle*. **(5 points)**
- Mogdiliani and Friedman developed theory to solve *the Keynesian Consumption Puzzle*. Explain both of the theories! (Hint: Explain how they explain APC in short run dan long run both from Mogdiliani and Friedman). **(5 points)**

- d. Use the Fisher Consumption Model to explain the differences of consumption between “it is allowed to borrow” and “it is not allowed to borrow”! **(5 points)**

**5. Understanding Macro from Micro Perspectives: Investment (20 Points)**

- a. Understanding on Investment:
- i. Describe types of investments and the differences **(2 points)**
  - ii. Explain why investment is negatively related to interest rate **(3 points)**
- b. Understanding on Rental Rate:
- i. Draw and explain how competitive firm determines its equilibrium rental rate based on the Cobb-Douglas production function **(3 points)**
  - ii. What happens to the rental rate in the event of a massive inflow of population migration from outside? Explain. **(2 points)**
- c. What is the effect of Investment Tax Credit (ITC) on Investment? Explain. **(5 points)**
- d. Please explain the motives for firms in holding inventories. **(5 points)**
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