



**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 (ECEU600201)  
 Even Semester 2017/2018  
 Duration: 200 minutes  
 Closed Book**

| <b>PROGRAM STUDI S-1 REGULER</b>       |   |                           |
|--|---|---------------------------|
| <b>No.</b>                             | <b>Lecturers</b>  | <b>Assistants</b>         |
| 1                                      | Maddaremmeng A. Panennungi                                | Jazman Ihsanuddin         |
| 2                                      | Qisha Quarina (Bhs. Ing.)                                 | Aurora Maria Sarah        |
| 3                                      | M. Shauqie Azar (Bhs. Ing.)                               | Nicholas Eric Darmawan    |
| 4                                      | Ainul Huda / Risna Triandhari                             | Nabil Rizky Ryandiansyah  |
| 5                                      | Widyanti Soetjipto / H. Achmadi Ringoringo                | Clifert Timothy Walandouw |
| 6                                      | Nanda Nurridzki / Rima Prama Artha                        | Nicko Yosafat             |
| 7                                      | Iwan Jaya Aziz / Ari Kuncoro / Teguh Dartanto (Bhs. Ing.) | Fandy Rahardi             |
| <b>PROGRAM STUDI S-1 INTERNASIONAL</b> |   |                           |
| <b>No.</b>                             | <b>Lecturers</b>  | <b>Assistants</b>         |
| 1                                      | Ainul   | Nicko Yosafat             |
| 2                                      | Eugenia Mardanugraha                                      | Eldo Malba                |

**Please answer all the problems below (1-4 problem sets are for all classes, while only for Prof. Iwan's class, there are 5 problem sets). It is allowed to use a simple calculator (non programmable).**

**1. The Role of Expectation in Financial Markets (25 Poin)**

Macroeconomic condition and financial market have interrelated relation. Suppose that an investor has a choice between buying a three-year bond with a face value of \$60 and a stock paying a constant dividend of \$20 per year, which the investor plans to hold for three years. The real interest rate on the stock and the bond is the same, 5%. In addition, the risk premium on the stock is constant at 10%; on the bond, the risk premium 5%.

- Compare the present value of the two instruments. Which one should the investor choose? **[6 Poin]**
- [6 Poin]**

- c. Suppose the risk premia on the stock and the bond were to be equalized at 5%. How would that affect the choice made in part 1 (a). **[6 Point]**
- d. Imagine economy is in a recession and Central Bank decides to decrease the policy rate. Explain how the stock market reacts! **[6 Point]**
- e. Suppose there is an unexpected increase in consumer spending, describe the impact on the stock market! **[7 Point]**

## **2. The Role of Expectation in Consumption, Investment, Output and Policy; and Exchange Rate Regime (25 Point)**

- a. Suppose investment function is specified as:  $I_t = I\left(\frac{\pi_t}{r_t + \delta}\right)$

Let  $\pi_t$  = profit rate,  $r_t$  = interest rate,  $\delta$  = depreciation rate

What is the interpretation of that function? Please also explain what is the relation between the current profit ( $\pi_t$ ) and investor's investment decision. **[6 Point]**

- b. Suppose aggregate spending equation is given by:  $Y = A(Y, T, r, x) + G$  where  $Y$  = income,  $T$  = tax,  $r$  = real policy rate,  $x$  = risk premium,  $G$  = government spending. Specify the aggregate spending equation which also include variables with expected values. Please also draw the IS-LM curves. **[6 Point]**
- c. What are the differences between the IS curve with and without expectation? Explain graphically if there is a decrease in the expected future taxes! **[6 Point]**
- d. Suppose a country decides to have fixed exchange rate regime. Please explain why in the medium run its real exchange rate can adjust even the nominal exchange rate is fixed. **[7 Point]**

## **3. Policy, Policy Maker, and Revisited Fiscal and Monetary Policy (25 Points)**

There was a general election in a hypothetical economy in Year 1, and to gain more popularity, the incumbent government tried to stimulate the economy by increasing its spending, and keeping the tax level constant. Thus, this economy had the following characteristics:

|                  |                     |
|------------------|---------------------|
| Debt in Year 0   | : 300,000 (million) |
| Debt in Year 1   | : 350,000 (million) |
| Inflation        | : 3%                |
| Nominal Interest | : 6%                |

- a. Calculate what is the (inflation-adjusted) primary deficit/surplus in Year 1? Explain what can you conclude, is there a primary deficit or a primary surplus? **[6 Points]**
- b. Now assume that the tax level in this economy had always been equal to zero, and inflation and interest rate always constant. If at Year 2 the new elected government of this economy decided to repay its entire debt in Year 5 through taxation, show and explain what will happen to the tax level in that year? Illustrate your answer using the path of debt and taxes for Year 1 until Year 5, by assuming that the primary deficit during the new elected government regime is equal to zero! **[6 Points]**
- c. To counteract the fiscal policy at Year 5 in point (b), the Central Bank decided to set a new policy rate. Given additional information where  $U_t=10\%$  (unemployment rate),  $U_n=5\%$  (natural unemployment rate), real interest = neutral rate of interest, inflation rate always equal to its target rate, and the Central Bank cares for both inflation and unemployment equally by a weight of 0.5. Using the Taylor Rule formula, calculate what is the new policy rate that will be set by the Central Bank? Explain how the new policy rate may help the economy to return to its initial level of output! **[6 Points]**
- d. Explain what are the possible challenges and problems, both from the public and politicians that should be considered by the policy makers in this hypothetical economy when trying to implement their policies! **[7 Points]**

#### **4. Crises and Behavioral Economics (25 Points)**

The IS Curve represents the equilibrium in the goods market and the LM Curve represents the equilibrium in the money market. The following are the equations for the IS-LM curve:

**IS relation :  $Y = C(Y - T) + I(Y, r + x) + G$**

**LM relation :  $r = \bar{r}$**

Y=Output, C=Consumption, T=Tax, I=Investment, G=Government Expenditure; r=interest rate, x=risk premium.

Answer all of the following questions:

- a. What is unconventional monetary policy? When the central bank should conduct this kind of monetary policy? Give an example of unconventional monetary policy. **[6 Poin]**
- b. Draw the IS-LM movement of unconventional monetary policy and tell the story behind it. **[6 Poin]**
- c. What is Behavioural Economics? **[6 Poin]**
- d. Why the Behavioural Economics become more and more popular today? **[7 Poin]**

#### **5. Special Problem for Prof. Iwan's Class Only [20 Points]**

Major macroeconomic events that started in 1980s was first characterized by a relatively long period of Great Moderation that boosted the credibility of macroeconomics. The episode, however, ended up with Global Imbalances in mid-2000 and subsequently the Global Recession in 2008.

- a. Explain the main features of Great Moderation
- b. During the period where the Global Imbalances expanded, many deficit countries suffered from twin-deficits. Explain how in an open economy the effect of increased income on demand for domestic goods is smaller than in a closed economy, and how it could lead to twin deficits.
- c. How has the Global Recession influenced the economy of emerging market including Indonesia (relate your answer with the current fluctuations in Indonesia's financial market, including the Rupiah exchange rate)