



**UNIVERSITAS INDONESIA  
FACULTY OF ECONOMICS AND BUSINESS  
DEPARTMENT OF ECONOMICS,  
REGULAR UNDERGRADUATE PROGRAM AND  
INTERNATIONAL UNDERGRADUATE PROGRAM**

**FINAL-EXAM  
INTERMEDIATE MACROECONOMICS  
(MAKROEKONOMI I – ECEU600201)  
EVEN SEMESTER 2018/2019  
Duration: 3 hours  
Closed Book**

<b>REGULAR UNDERGRADUATE PROGRAM</b>		
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<b>No.</b>	<b>Lecturer</b>	<b>Assistant</b>
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**Please answer all the problems below. Simple calculator  
(without excel and other computer program) is allowed.**

**PROBLEM 1. Going Deeper on the Role of Expectation in Financial Markets (25 Points)**

a. The following news is taken from the New York Times (March 22, 2019):

*“The yield on the 10-year Treasury note tumbled to 2.44 percent Friday, its lowest level since January 2018. That was just below the 2.45 percent yield on three-month Treasury bills”.*

(<https://www.nytimes.com/2019/03/22/business/yield-curve-inverted-recession.html>)

In the normal time, as explained using arbitrary principle, the short-term bond yield should lower than long term bond yield; however sometimes there is an “inverted yield curve” as shown in the news above. Explain why sometimes short-term bond yield higher than long term bond yield. **(10 Points)**

b. When the Central Bank lower its interest rate, the stock prices should increase as we learned from the arbitrary principle; however, sometimes the stock prices do not change. Explain. **(7.5 Points)**

c. What is the fundamental value of stock price? Sometimes the price of assets, especially stocks price, are underpriced or overpriced compared to its fundamental value because of “rational speculative bubbles” and “fads”. Explain. (7.5 Points)

**PROBLEM 2. The Role of Expectation in Consumption, Investment, Output**

**and Policy (25 Points)**

- a. Consider an economy in which its people are expecting a raise in their income and firms are expecting an increase in sales. Give your explanation what would happen to the consumption and investment decision due to people’s and firms’ expectations if:
- i. The raise in income and sales are expected to be temporary (for example due to the upcoming Idul Fithri Celebration). Explain how the change in consumption and investment would be similar! (3 Points)
  - ii. The raise in income and sales are expected to be permanent. Explain how the change in consumption and investment would be different! (3 Points)
- b. Suppose that a firm is currently planning its next investment to buy a new machine. The machine is expected to bring a constant real profit per machine of \$50 per year starting at time  $t+1$ , and the machine is expected to start depreciating a year later at time  $t+2$  at a constant rate of 2.5% per year. The real interest rate is expected to be constant at 10% per year. Based on this information, suppose that the new machine will only be used until year  $t+2$
- i. Calculate the net present value of profit from buying that machine at time  $t$ ! (5 Points)
  - ii. If the cost of the machine at time  $t$  is \$100. Give your suggestion whether or not the firm should make that investment in buying the new machine! (2 Points)
- c. The impact of a policy on output would be different depending whether or not the expectation variable is taken into account. Imagine that the central bank decided to implement an expansionary monetary policy due to the fear of recession. Explain and draw the IS-LM diagrams what would happen to the level of output, interest rate, expected output, and expected interest rate
- i. if the above policy comes as NO surprise to investors, firms, and consumers and expected to be only temporary! (6 Points)
  - ii. if the above policy comes as a surprise to investors, firms, and consumers and expected to last in the long-run! (6 Points)

**PROBLEM 3. Going Deeper on Exchange Rate Regime & Debate on Policy and Policy Maker (25 Points)**

- a. We learned that the right mix of fiscal and monetary policies could potentially help a country out of a recession, improve its trade position, slow down an overheating economy, stimulate investment and capital accumulation, etc. This conclusion, however, appears to be at odds since there were many cases that show policy makers could not effectively stabilize the economy. Some factors that may disrupt the effectiveness of such policies include:
- i. time inconsistency
  - ii. political business cycle
  - iii. wars of attrition

Explain briefly all factors above and give one example each. (9 Points)

- b. Consider a country operating under fixed exchange rates. Suppose that the real exchange rate has been too high (domestic currency is overvalued). Financial investors start believing there may soon be an exchange rate adjustment.
- Explain how this situation may lead to an exchange rate crisis (4 Points)
  - What should policy makers do to overcome that problem? Explain your answer. (4 Points)
- c. The following headlines are observed in Indonesia recently.
- “Neraca Perdagangan Defisit, Rupiah Melemah Terus [Deficit of Trade Balance, Rupiah Depreciation Continued]”  
(<https://ekonomi.kompas.com/read/2018/08/07/152022226/neraca-perdagangan-defisit-rupiah-melemah-terus>.) – 7 Agustus 2018
  - “Rupiah Tertekan Rencana Kenaikan Suku Bunga The Fed [Rupiah is Under Pressure due to the Plan of the Fed to Increase Its Interest Rate]”  
(<https://www.liputan6.com/bisnis/read/3652712/rupiah-tertekan-rencana-kenaikan-suku-bunga-the-fed>) – 26 September 2018
  - “Neraca Dagang Surplus, Kok Rupiah Malah Melemah [Surplus of the Trade Balance, Why the Rupiah Depreciated]?”  
(<https://www.cnbcindonesia.com/market/20190315095013-17-60828/neraca-dagang-surplus-kok-rupiah-malah-melemah>) – 15 Maret 2019

Using appropriate theory or equation for exchange rate movement under flexible exchange rates, do the above headlines make sense? Label each headlines true, false, or uncertain and explain briefly. (8 Points)

(Hint: Use the equation related to flexible exchange rate)

#### **PROBLEM 4. The Story of Macroeconomics (25 Points)**

In macroeconomics, we basically study how an equilibrium state is achieved when the starting point is a disequilibrium condition where the level of output deviates from the level of natural rate of output. The evolution of macroeconomics since the Great Depression until today have been essentially characterized by efforts to improve the theories and models about what causes the deviation ( $Y_t \neq Y^N$ ), and also to understand why in some cases a crisis occurred such that the process of adjustment towards equilibrium was so slow, potentially pushing the economy into a depression (a sustained recession).

- Explain the similarity and the difference between the New Keynesian and the New Classical in terms of the deviation between the levels of actual output ( $Y_t$ ) and natural rate of output ( $Y^N$ ). (7.5 Points)
- What is the key difference between the “Core” models and the “Periphery” models in macroeconomics, and how would the future macroeconomics deal with those models. In the same context, while DSGE models in the “Core” have been widely used especially by the central banks around the world, show the serious drawbacks and the danger of using such models. (10 Points)
- For developing countries, where poverty and income inequality are among the major socio-economic problems and challenges, it would be desirable if we could link macroeconomic concepts with poverty and inequality. By using the 4-quadrant framework discussed in class, show how such a link can be used to evaluate the impact of lowering the aggregate demand (due to, for example, an overheated economy) on poverty and inequality. (7.5 Points)