



Problem sets 2: Keynesian business cycles

EE312: Intermediate macroeconomics

Semester 2/2018

Instructor: Dr. Kittichai Saelee

Due on Feb 12th, 2019 at the BE office. (before 3 pm)

Instruction

1. There are two parts. Part I is true/false questions. Part II has one question that requires long answer. Attempt all!
2. Please put the answer of part I and part II in two separate paper. I will grade part 1 and your TA will grade part 2. In part I, make it precise. The most effective way to answer True/false question is to strike to the point, and find a rebuttal case if you believe that it is incorrect. (As you may guess, the most likely answer should be either false or uncertain.)
3. In part II, the question is divided into several parts. Answer the question sequentially.

Part I:

- 1.1 IS (random) shocks can generate a bigger volatility in real GDP under elastic money demand than under inelastic money demand.
- 1.2 The effect of fiscal policy is strongest when monetary authority chooses to accommodate the government policy by fixing the interest rate.
- 1.3 Given the positive comovement between inflation and output in the data, Thai business cycle is *solely* responsible by demand shocks.
- 1.4 Interest rate is a procyclical variable under supply shocks.

Part 2:

Consider a two country model, namely A and B. Suppose for now that both are closed economy; that is, both A and B do not have exports and imports. The general economic structure of the two countries are identical, expect that the tax system of the two are different. ***The marginal tax rate of country A is higher than that of country B.*** Consider the following problems.

- 2.1) Using the IS-LM diagram, how can we capture the difference between the tax system of the two countries?

- 2.2) Based on your answer in (2.1), do you find monetary policy more effective in country A than in country B? Use the IS-LM diagram to show your analysis. Explain your answer.
- 2.3) Based on your answer in (2.1), do you find fiscal policy more effective in country A than in country B? Use the IS-LM diagram to show your analysis. Explain your answer
- 2.4) Based on your answer in (2.2) *and* (2.3), do you think the AD curve of country A is flatter or steeper than that of country B? Why? Explain your answer.

Suppose that country A is now importing final products from country B, but not the vice versa. The imports are only used for the household consumption. Assume that country A imports by a fixed fraction out of its domestic output (real GDP), and no other factors affect the import decision of household in country A. Consider the following problems

- 2.5) As graphically illustrated by the IS-LM model, how does the introduction of imports affect the structure of country A's working economy?
- 2.6) Compared to its closed-economy version, does the AD curve of country A become flatter or steeper under the opened trade structure?
- 2.7) Under the AD-AS model, do the demand shocks generate more pronounced business cycle volatility for country A when it can import than when it cannot import.
- 2.8) Suppose in the data, the real GDP of both countries are *positively* correlated. Do you think that it makes sense if one argues for the role of technology shocks in country B as the primary source (global) business cycles? Agree or disagree? Why? State out the conclusion that makes more sense if you find the claim is wrong.