

## Homework Assignment #5

### Answer Keys

#### Question 1:

Explain how and why fiscal policy can have different effects on the output level depending on whether it is implemented in a fixed or floating exchange rate regimes.

- Fiscal policy under a floating exchange rate regime leads only to currency appreciation while it causes no change on the output level (as long as we assume capital is allowed to flow freely).
- Fiscal policy under a fixed exchange rate regime needs to be done with foreign exchange interventions. Basically, monetary policy would be accommodative, i.e., monetary authorities need to implement expansionary monetary policy when fiscal authorities implement expansionary fiscal policy. Otherwise, the fixed exchange rate will be unsustainable.
- Hence, fiscal policy under a fixed exchange rate regime would have a bigger impact on the output level than under a flexible exchange rate regime (i.e., no impact on the output level)

#### Question 2:

Explain why temporary and permanent fiscal expansions do not have different outcomes under fixed exchange rates, as they do under floating.

The reason that the effects of temporary and permanent fiscal expansions differ under floating exchange rates is that a temporary policy has no effect on the expected exchange rate while a permanent policy does. The AA curve shifts with a change in the expected exchange rate. In terms of the diagram, a permanent fiscal expansion causes the AA curve to shift down and to the left which, combined with the outward shift in the DD curve, results in no change in output. With fixed exchange rates, however, there is no change in the expected exchange rate with either policy since the exchange rate is, by definition, fixed. In response to both temporary and permanent fiscal expansions, the central bank must expand the money supply (shift AA out) to prevent the currency from appreciating (due to the shift out in the DD curve). Thus,  $Y$  goes up and  $E$  does not change after a permanent or temporary fiscal expansion when exchange rates are fixed.

#### Question 3:

Discuss why countries with undervalued fixed exchange rates tend to experience inflationary expectations? Answer this question using models we learned in class.

The central bank with undervalued currency will need to mitigate excess demand for the currency by

intervening the foreign exchange market; it will purchase foreign reserves and sell the domestic currency. An increase in the holding of foreign reserves is essentially the same as an increase in the monetary base. That means foreign exchange interventions occur in the form of expansionary monetary policy.

**Question 4:**

Think that you are conducting a research on Country X that is currently experiencing speculative attack on its currency, *osep*. International investors have been rumoring that the fundamentals of the country's economy are not that strong, and that Country X's currency, *osep*, is being overvalued compared to its fixed value (to the U.S. dollar).

The rumors have been shared by many international investors for years. The country has been run by a dictator-like president, a former army general who took over the government through a military coup, for more than 30 years. Although he has achieved economic growth especially for the last few years by allowing foreign multinational corporations to do joint ventures with local, quasi-public corporations run by his family members, he has been also notorious for corruption and discretionary ruling through overly concentrated political power.

The government is also highly indebted because of the president's pork barrel public works spending policies and underdeveloped tax base – a large portion of the people living in the rural areas are sympathetic toward anti-government guerrillas who do not let any government officials, including tax collectors, enter their territories. For the last few years, the portion of the national debt denominated in U.S. dollars and held by international investors has been increasing rapidly.

The Central Bank of Country X has been fiercely trying to defend the currency by massive foreign exchange interventions, but only to keep losing foreign reserves. The President of Country X finally, but very reluctantly, decided to start negotiations with the IMF for short-term rescue loans to weather the speculative attack.

1) Why do highly indebted countries like Country X tend to experience speculative attacks especially when they are under a fixed exchange rate system? Answer this question using a model for the *osep* foreign exchange market as we learned in class.

– Deficit spending → High national debt → monetization attempt → high money growth → high expected rate of inflation → high expected exchange rate

2) Read the following dialog between Finance Minister of Country X and a delegate from the IMF.

*IMF delegate*: “Minister, here is a list of conditions (or just *conditionality*) for us (the IMF) to provide your country with a rescue loan of \$25 billion.”

*Finance Minister*: “What is this?! We cannot accept such conditionality. It says that we must privatize most of our public corporations and halt most of our public works projects. These corporations have led our economy to grow for years, and these projects are so essential for our economic development!”

*IMF delegate*: “Well, you cannot ignore the fact that your country needs foreign reserves to weather the current speculative attack. We cannot lend you that much funds without any commitment from your side. Our loan is so necessary for you to calm down the *osep* and other financial markets, right? Well, even if you insist on not agreeing on the terms for the rescue loan, your economy will soon experience a severe recession anyway. I think it's wise for you to accept our conditionality.”

*Finance Minister:* “You are just acting for the sake of international investment bankers, aren’t you? You are suggesting we calm down the financial markets, but not for our people’s sake, but for the sake of those western capitalists! And you just want us to privatize our public corporations so that those international investors can make a fortune from reselling the privatized firms! Well, I must warn you, if you press us too hard, our president might be willing to declare default or moratorium on our debt, that can upset the international financial markets quite a bit! You shouldn’t make us too upset. But in any case, let me talk to our president.”

*IMF delegate:* “Please do. But keep in mind that you don’t have time to waste.”

Why does the IMF delegate think that economic recession is about to occur in Country X? Explain the reason using the EX-ROR-M/P diagram. Does recession *always* follow a currency crisis?

- An economy with overvalued currency usually experiences upward pressure on the interest rate, which can be exacerbated if the central bank tries to attract (back) international investors by raising the interest rate. But the by-product of it is that a rise in the interest rate also means a rise in the cost of borrowing, leading to depressed investment and a recession.
- It is not always true that a currency crisis leads to a recession. A currency crisis usually involves a rapid and significant currency depreciation which can lead to an improved competitiveness of the country’s exports and thereby an improvement of its current account. Hence, even if a currency crisis leads to an abortion of the fixed exchange rate regime, the improved current account balance can lead to even an economic expansion.

3) Why is the IMF often very unpopular among the countries that receive rescue loans? You may explain descriptively.

- The IMF often thinks that the main cause of the currency crisis is the crisis-country’s mismanagement of the government budget (that often leads the country to monetize the debt). Hence, in its conditionality for a rescue loan, the IMF often requires the loan-recipient country to balance the budget, which usually includes tax increases and reductions in government spending, both of which mean that the recipient country has to implement a contractionary fiscal policy in the midst of a risk of recession. Therefore, it is often criticized that the IMF *causes* the crisis-country to experience a recession.

Also, see your lecture notes.

**Question 5:**

Some people claim that Mr. Winston Churchill triggered the beginning of the end of the British Empire. What do they mean?

See the textbook and your lecture notes.