Problem sets 3: Foreign exchange market (Solution)

EE312: Intermediate macroeconomics

Semester 1/2018

Instructor: Dr. Kittichai Saelee

Due on September 19 ,2018 at the BE office. (before 3 pm)

Question 1: The law of one price revisited. (This question will not be graded. This is for your own review)

a) In class, we discussed an important proposition/theorem in international trade, known as the *law of one price*. The theorem suggests that, under the international trading system without trading frictions/ restrictions, the price of an identical product must be the same across countries. *Explain the mechanism why the theorem holds true*.

b) Suppose instead that international trading system is full of frictions. For example, government might impose tax on imports/exports of goods. Do you think the law of price can still hold if the imposition is to be lasting forever?

c) Find a line of your own argument and convince that even under the trading frictions as mentioned in (b), *law of one price can still be established if factor inputs and firms can freely relocate across border*. Analyze the possibility that the statement can be correct with some economics intuitions provided.

Question 2: (Graded by your TA) Use the exchange rate theorem and analyze the impact of the following developments on the market exchange rate, i.e. the value of Thai baht against the USD. (When you answer each question, use the diagram that we discussed in class, and provide some economics intuitions that support your narrative answer.)

My answer will omit the diagram.

a) Market expects that the Bank of Thailand will raise its policy rate soon.

An expected increase in policy rate is likely to create an upward expectation on the opportunity of financial investment in Thailand. Foreign capital will be moving into Thailand, causing an increase in the supply of the USD in the market. Thai Baht should appreciate then.

b) Productivity growth in Thailand is expected to decline rapidly.

An expected decline in productivity will cause an expected future depreciation in Thai Baht. Why? Following the PPP theorem, a country with lower productivity will experience a depreciation in its currency. As a result, foreign investors expect to make less return on the investment in Thai market. They will receive lowered net return if they include or take into account the loss due to the expected depreciation in Thai baht. Then, (foreign) investors are reluctant to invest in Thai market, causing less supply in the USD in the foreign currency market.

c) Market expects that US dollar will be appreciating in the future.

Investors will likely take the money out of Thailand. The dollar should be appreciating while the Thai baht should be depreciating. This occurs because of the capital outflow; the money moves back to the US causing a rise in the USD in the foreign currency market.

d) Rumor about the trouble in Thai banking sectors has become materialized.

The similar effects to "c". Thailand will then experience a capital flight problem. Investors withdraw money from bank. Foreign investors will leave the market, causing the demand for US to rise. Thai baht should likely be depreciating.