Econ 371: Answer Key for Practice Questions (Chapter 12-16)

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Part One

A letter T in front of the statement denotes that the question is true, and F denotes that it is a false statement.

Chapter 12

1. F: According to the current account identity, government budget is always balanced in a closed economy.

2. T: When balance of payments of a country has a negative sign, that country is borrowing from the rest of the world.

3. F: Industrialized countries are all creditor countries.

4. F: In order to correct the U.S. fiscal deficits, American firms have to export more to the rest of the world.

Chapter 13

5. T: The uncovered interest parity implies that Mexican peso deposit is as safe as U.S. dollar deposit.

6. F: Announcements of policy changes made by the Federal reserve are more important than the actual policy changes in determining exchange rate.

7. F: Forward exchange rate is a good indicator of future spot exchange rate.
8. T: When U.S. interest rate exceeds European interest rate, there is positive forward
premium on euro against dollar.

Chapter 14

9. F: Credit cards make transactions convenient and therefore people do not need to
hold a large amount of cash. Therefore credit cards reduce money demand.

10. T: One of the reasons that exchange rate exhibits high volatility is that good prices
are sticky.

11. T: If prices are all flexible, there will not be exchange rate overshooting.

12. F: Exchange rate overshooting will not occur if output also responds to monetary
policy changes.

Chapter 15

13. T: The relative purchasing power parity assumes that real exchange rate is constant.

14. F: According to the monetary approach, a permanent rise in nominal interest rate
causes exchange rate to appreciate.

15. T: According to the general theory of long run exchange rate determination, nominal
exchange rate depends on output demand and supply.

16. F: According to the general theory of long run exchange rate determination, a
permanent rise in nominal interest rate causes exchange rate to appreciate.

Chapter 16

17. T: That Americans spent less on traveling to foreign countries in the past 12 months
is consistent with the aggregate demand theory, given the decline of U.S. dollar.

18. F: The goal of monetary and fiscal policy in the short run is to increase output.

19. F: An expansionary monetary policy and an expansionary fiscal policy both causes
exchange rate to appreciate.

20. T: We observe exchange rate depreciation in response to a contractionary fiscal
policy.
Part Two

1. What does a positive or negative sign of current account balance mean? What is its implication on the direction of capital flows? Use the current account identity to explain how a nation will reduce its current account deficits.

ANSWER: A positive sign means that country exports more than imports, and vice versa. A positive sign implies that that country experiences capital inflows. Current account identity implies that, current account is a sum of net savings in the private sector \((S^p - I)\) and net savings in the public sector \((T - G)\). Hence, to reduce current account deficits, that country has to save more, invest less, tax more, or cut government spending.

2. What is Fischer effect? Explain the current upward trend in the U.S. nominal interest rate in the context of Fischer effect? Explain how the upward trend in U.S. nominal interest rate will affect dollar-euro exchange rate? Will your answer change if the European Central Bank begins raising its interest rate too?

ANSWER: Fisher effect states that a rise in inflation has to be offsetted by a rise in nominal interest rate, in order to keep real interest rate constant. The current upward trend in the U.S. nominal interest rate reflects the upward trend of the U.S. inflation rate. According to the monetary approach, a rise in nominal interest rate reduces money demand and and therefore raises the price level. This implies that the U.S. dollar will depreciate with respect to the euro. Or this can also be understood with the uncovered interest parity condition. That is, an upward shift in the expected future exchange rate (reflecting the upward trend in inflation) combined with a rise in nominal interest rate will raise exchange rate or create exchange rate depreciation. If the European Central Bank also raise interest rate, the money demand in the euro zone will also fall and that will increase price in the euro zone. So that will mitigates the effects of a rise in the U.S. interest rate on exchange rate. The U.S. dollar will depreciate less than without an interest rate hike in the euro zone.

3. What is the Balassa-Samuelson effect? What is its implication on exchange rate of fast growing country such as China? If we are to apply the Balassa-Samuelson effect to the U.S. case, when will be the appriate period in the history? (Hint: contrary to the popular belief, the U.S. was actually a developing country. When was it?)

ANSWER: Balassa-Samuelson effect states that when a country experiences higher productivity growth in the traded sector relative to its trading partners, the domestic price level will increase faster than other countries and therefore its national currency will experience real appreciation. This is because high productivity growth in the traded sector drives up the wages in the traded sector, and also other sectors (i.e. nontraded sector) in its economy. Then the good prices must also increase following
an increase in wages. In the U.S. case, this can apply to the period when the U.S. was still a developing country, trying to catch up with European countries particularly Great Britain. To answer precisely about the period, you need to know more than international finance so it is sufficient to stop your answer at this. The precise answer is from the the second half of the 19th century to the World War II. The U.S. emerged as the most economically powerful country around the World War II, although U.S. exports of industrial products such as iron have surpassed Great Britain since the end of the World War I.

4. Suppose the economy is at the full employment level today. Suppose the Federal reserve announces that it will increase money supply temporarily one month from now. Explain the effects of such an announcement on today exchange rate using the AA-DD framework. Explain also the effects of money supply expansion on exchange rate one month later. Write down the time path of money supply and exchange rate.

ANSWER: See figures in the next pages. Point 1 and 1’ are the initial equilibrium. Point 2 and 2’ are the equilibrium right after the announcement. Point 3 and 3’ are after money supply expands. Even if money supply does not expand today, we all know based on the money-market-foreign-exchange-market model that money supply expansion will reduce interest rate and push the exchange rate up. So everybody will adjust expectation of future exchange rate right after the announcement. At the time of announcement, the AA-curve shift up because of such an expectation shift. When money supply really expand one month later, interest will falls. So the exchange rate depreciates (Point 2’). However, people will adjust their expectation of future exchange rate to the original level because the announcement effect is over. Keep in mind that this is a "temporary" money expansion, unlike the overshooting story we discussed in class. With temporary money expansion, people do not expect inflation to rise in the future and do not expect exchange rate to change once the Fed acts according to its announcement. The exchange rate after the temporary money expansion is the same as the exchange rate after the announcement. Intuitively, people have taken into account the information from the announcement and the exchange rate after the announcement already reflects that. The time path shows that exchange rate adjusts right after the time of announcement and stay there.
Money-market-and-foreign-exchange-market model

AA-DD model
Time path of money supply

\[ M \]

Time path of exchange rate

\[ E \]

\( t_a = \) time of the announcement
\( t_0 = \) when money supply expands
\( t_1 = \) when the temporary expansion in money supply is over