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Department of Economics

Econ 345 Prof. Kasa
International Finance Fall 2023

MIDTERM EXAM
(Solutions)

The first five questions are True, False, or Uncertain. Briefly explain your answers. No credit without explanation. (8 points each).

1. Fiscal deficits cause current account deficits.

   UNCERTAIN. *We discussed this in class, in Lecture 1B (p. 12), when we talked about 'twin deficits'. From the national income accouting identity we have,*

   $$G - T = S_p - I + \text{Curr. Acct. Def.}$$

   where $G - T$ is the fiscal deficit and $S_p = Y - T - C$ is private saving. This says that a fiscal deficit must be financed in one of two ways: (1) borrow from domestic residents, which is only possible if they have money to lend (ie, $S_p > I$), or (2) borrow the money from foreigners, by running a current account deficit. Thus, the statement could be true, if $S_p - I$ does not respond to the fiscal deficit, but it need not be true in general.

2. Higher interest rates cause the exchange rate to appreciate.

   UNCERTAIN. *It depends on why the interest rate is rising. If rates are rising because of the real interest rate, then the statement is True. If rates are rising because of expected inflation, then the statement is False. (See Lecture 4A, p. 7).*

3. If inflation in the USA is 3% and inflation in Canada is 5%, then Purchasing Power Parity predicts that the US dollar will depreciate by 2% against the Canadian dollar.

   FALSE. *It's the exact opposite. If prices in Canada are rising faster, then the Canadian dollar must depreciate relative to the US dollar. If it didn't then goods would become more expensive in Canada.*

4. A depreciation of the (real) exchange rate increases net exports.

   UNCERTAIN. *It depends on whether the Marshall-Lerner condition is satisfied. If it is, then the statement is True. If not, then the statement is False. (See Lecture 5A, pgs. 5-6).*

5. If a country has a current account deficit then it is accumulating foreign assets.

   FALSE. *It's the exact opposite. If a country has a current account deficit it is accumulating foreign debt (or possibly selling off foreign assets).*

6. (20 points). Some people (e.g., Donald Trump) argue that China has an undervalued currency because the prices of goods and services are lower in China than in the USA (when expressed in common currency units). According to the Balassa-Samuelson model, is this a valid argument? Why, or why not?

   The first thing to note here is that an aggregate price index (e.g., the CPI) contains prices of many goods that are non-traded, and there is no reason non-traded goods prices must be equalized across countries. Second, even though China has been growing rapidly in recent years, the level of its productivity is still below the USA. As a result, wages (on average) are lower in China. Because wages are lower, so are the prices of non-traded goods (zero profit condition). This makes China's price level lower than in the USA, and makes people like Trump think that China has a 'undervalued' currency. China is in no way unusual in this regard. A similar pattern was observed in Japan in the 1960/70s and in Korea in the 1970/80s.

7. (20 points). There is currently a lot of uncertainty in the world economy, as wars are raging in both Ukraine and the middle east. This tends to produce an increased demand for liquidity (i.e., money). This is especially true for the USA, given the safe haven status of the US dollar. Use the DD-AA model to describe the effects of increased demand for US money on the US economy. How could the USA use monetary and/or fiscal policy to offset these effects? Which policy would Canada prefer? Which policy would China prefer? (Hint: Canada has a flexible exchange rate against the US dollar, whereas China has a fixed exchange rate against the US dollar).

   An increase in money demand shifts the AA curve down and to the left. As a result, output declines. The USA could offset this by either increasing the money supply (monetary policy), or by increasing government spending (fiscal policy). Either way, output returns to its original level. However, fiscal policy, which shifts the DD curve, causes US interest rates to rise and the US dollar to appreciate. This benefits Canada, since Canadian net exports become more competitive, and so Canadian net exports increase. However, to keep its exchange rate fixed to the dollar, China must match the higher US interest rates by contracting its monetary policy, which tends to reduce output in China. So China would prefer that the USA use monetary policy rather than fiscal policy.

8. (20 points). During the period 1980-2015 China had a so-called '1-child policy'. Given that children are costly to raise, and are also a source of old-age support for parents, how do you think this affected China's savings rate? Given your answer, how do you think it affected China's current account balance?

   Having fewer children will increase your disposable income (since they cost money!) At the same time, you know that you will have less old-age support available to you. For both reasons, we can expect to see savings increase in China. Then, since the current account is the difference between savings and investment, we would expect to see a surplus in China's current account. (This is exactly what happened following the imposition of the 1-child policy).