

SIMON FRASER UNIVERSITY
Department of Economics

Econ 345
International Finance

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Fall 2008

MIDTERM - Solutions

Questions 1-4. Answer True, False, or Uncertain. Briefly explain your answer. No credit without explanation (10 points each).

1. FALSE. In a growing economy with infinite horizon, the desire to smooth consumption over time can mean that a country accumulates a stock of debt that it never pays off. In fact, it continues to issue debt (i.e., run current account deficits) forever! Of course, the rate of growth in debt must be less than the interest rate, otherwise interest payments (as a share of GDP) would explode. Eventually, the economy must run a TRADE surplus, but the current account (which includes interest payments) can stay in deficit. (See the notes to Lecture 6).
2. TRUE. With a J-curve the DD curve is *negatively* sloped (and steeper than the AA curve). Shifts in the AA and DD curves now produce larger swings in the exchange rate than when the DD curve slopes up. For example, now when the money supply increases the interest rate must fall a lot to clear the money market (and therefore the exchange rate must depreciate a lot) because income actually *falls* initially, which *lowers* money demand at the same time money supply is increasing. To maintain equilibrium in the money market, interest rate must fall more. (See the notes to Lecture 6).
3. FALSE. According to UIP,

$$R = R^* + \frac{E^e - E}{E}$$

This condition ensures that expected rates of return on domestic and foreign investments are the same, when expressed in common currency units. Intuitively, if domestic interest rates are higher, there must be an expected capital loss (i.e., domestic currency *depreciation*) to offset the interest rate advantage.

4. UNCERTAIN. It depends on *why* the foreign interest rate increases. If the foreign interest rate rises due to expected foreign inflation, then this would tend to appreciate the domestic currency. However, if the foreign interest rate rises because of a rise in the real rate (due perhaps to contractionary foreign monetary policy combined with sticky prices), then the rise in the foreign interest rate would tend to depreciate the domestic currency.

The following questions are short answer. 20 points each.

5. If you want to maintain the original distribution of income then you should recommend fiscal expansion if the recession was caused by a leftward shift of the DD curve, whereas you should recommend monetary expansion if the recession was caused by a leftward shift of the AA curve. (Geometrically, you want to return to the original intersection of the DD-AA curves). You know output has been falling. If at the same time the exchange rate has depreciated,

then this suggests a leftward shift of DD, and therefore supports fiscal expansion. On the other hand, if the exchange rate has been appreciating, then this suggests a leftward shift of AA, and therefore supports monetary expansion.

6. Either temporary monetary or fiscal expansion will be effective at raising output. However, fiscal expansion will *appreciate* the exchange rate and crowd out net exports, which makes the current account deficit worse (assuming Marshall-Lerner). Therefore, monetary expansion is called for. Not only does this help offset the recession, it would also lower the current account deficit by depreciating the exchange rate (again, assuming Marshall-Lerner). (See the notes to Lecture 6 for the graph).
7. The combination of declining output and an appreciating currency (i.e., $E \downarrow$), suggests a leftward shift of the AA-curve. What might have caused this? It's highly doubtful that it's the result of contractionary monetary policy. If anything, the Fed has been easing lately. (There is a more sophisticated view of the money supply process which might lend some support to a monetary contraction. In practice, there is an endogenous "money multiplier" linking the monetary base to broader measures of the money supply. It's conceivable that the panic produced such a large drop in the money multiplier that despite Fed easing the overall money supply declined enough to shift AA left. Empirically, this seems rather doubtful, but it's theoretically possible).

A more likely explanation is that uncertainty about the strength of the financial system is causing an increase in money demand (and overall liquidity). An increase in money demand has the same effect on the AA-curve as a decrease in money supply. (Why?). Of course, mechanically speaking, there are other possibilities (e.g., a cut in foreign interest rates, with domestic rates constant, or an exogenous expected future appreciation), but it's hard to see why these would have resulted from the financial crisis.