

## Final Exam (Answers)

### (Part 1)

1	C	11	D
2	C	12	B
3	A	13	B
4	B	14	A
5	C	15	B
6	A	16	C
7	C	17	D
8	B	18	B
9	D	19	C
10	D	20	C

### (Part 2)

- (A) The closed economy model correctly predicted that national saving would fall and the interest rate would rise. But, the closed economy model predicted that investment would fall as much as saving; actually, investment remained almost unchanged. Also, the closed economy model by definition could not have predicted the effects on the trade balance or exchange rate.

(B) The small open economy model correctly predicted what would happen to investment,  $NX$ , and the real exchange rate, but incorrectly predicted that the interest rate would not change.
- (A) An increase in world interest rate will decrease nominal exchange rate but raise national income

(B) The introduction of a tax on checks makes people more reluctant to use checking accounts as a means of exchange. Therefore, they hold more cash for transactions purposes, raising the currency-deposit ratio. The higher the currency-deposit ratio, the lower the proportion of the monetary base that is held by banks in the form of reserves and, hence, the less money banks can create. The reduction in money supply shifts the  $LM^*$  curve left, lowering output under a floating system. This was not a sensible action to take during the Great Depression

3.

- A)  $IS \rightarrow Y = -500r + 5000$
- B)  $LM \rightarrow Y = 1000r + 2000$
- C)  $Y = 4000, r = 2, S = 1000$
- D) Since the IS curve is steeper than the LM curve, fiscal policy is relatively more effective than monetary policy
- E)  $Y = 3500, r = 3$
- F)  $Y = (10,000/3) + (2000/3P)$  or  $Y = 3333 + 667/P$

4. (A) If the Fed targets the real interest rate, then money demand shocks are offset by changes in the money supply, so the LM curve does not move. Since the shock causes the money supply to change, but does not affect output, the money supply is acyclical. By following the interest-rate-targeting rule, the AD curve is unaffected by money-demand shocks (since they are offset by money-supply changes), so it is more stable than if the Fed did not respond at all

(B) When there are IS shocks, the rule does not work very well. Suppose a shock shifts the IS up and to the right. Targeting the real interest rate requires the Fed to increase the money supply to shift the LM curve down and the right. While this maintains the real interest rate at its initial level, output is above full-employment output. The money supply is procyclical, since the shift in the IS curve caused output to rise, and the increase in the money supply caused output to rise further. This response to IS shocks makes the aggregate demand curve less stable, as it shifts the AD curve farther to the right in response to an  $\$IS\$$  shock than it would have if the LM curve did not respond

5. (A) When the aggregate demand increases unexpectedly, the price level rises. Because the price level is above the expected price level, output increases temporarily above the natural rate in the short-run. In the long run, the expected price level rises, causing the short-run aggregate supply curve to shift upward. The economy returns to a new long-run equilibrium, where output is back at its natural rate

(B) If the change in monetary policy is fully expected, the Phillips curve shifts upward to the right in the short run. Therefore, unemployment rate stays the same, but inflation rate will be higher than what it was initially

6. (A) i) MPC is between zero and one  
ii) APC falls as income rises  
iii) Income is the primary determinant of consumption and the interest rate does not have an important effect on consumption

(B) Studies of household data and short time-series found a relationship between consumption and income similar to the one Keynes conjectured (short-run consumption function). But studies of long time-series found that the APC did not vary systematically with income (long-run consumption function)

(C) The LCH stresses that income varies over a person's life, and it predicts that consumption should depend on both wealth and income, since these determine a person's lifetime resources. In the short run, with wealth fixed, we get a conventional consumption function. In the long run, wealth increases, so the short-run consumption function shifts upward. Therefore, in the long run, the APC is almost constant since it depends on the income-wealth ratio, and income and wealth tend to grow together over time