Economics 302 Sec. 001   Menzie D. Chinn
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Midterm 2 Exam

This exam is 70 minutes long, and is worth 70 points. Part I is multiple choice, Part II is a short answer. The points are allocated in proportion to the time you should spend on each problem.

PART I: Multiple Choice [26 minutes total, 2 points each]. Do NOT explain.

1. In 1968, the Johnson administration passed a temporary surcharge on the personal income tax. Which of the following most closely describes the public's response?
a) Consumers significantly increased consumption by drawing down their savings.
b) Consumers significantly decreased consumption and began saving even more.
c) Consumers only minimally increased consumption while saving less.
d) Consumers decreased savings while maintaining the similar consumption levels.
e) Consumers significantly decreased both savings and consumption.

2. The expectations-augmented Phillips curve identifies several ways to reduce inflation. They include
a) running the economy far above its potential.
b) working to lower expected inflation by policy and encouragement.
c) reducing the sensitivity of prices to gaps between actual and potential GDP by rigidly controlling prices and wages.
d) eliminating a government spending surplus whenever actual GDP falls short of potential GDP.
e) none of the above.

3. Open market operations involve:
a) The Treasury selling Treasury bonds to the public
b) The Fed selling Treasury bonds to the public
c) The Fed buying Treasury bonds from the public
d) The Fed buying Treasury bonds directly from the Treasury
e) Both (b) and (c).

4. In the long run, an acceleration in the growth rate of the money supply
a) increases GDP by increasing investment.
b) increases inflation.
c) decreases GDP by reducing the real wage and thus labor supply.
d) increases the real wage.
e) both (b) and (c).

5. The impact of a large reduction in defense spending *that induces higher investment (and hence a larger capital stock)* in the long-run includes
a) an increase in actual GDP.
b) an increase in potential GDP.
c) a reduction in inflation.
d) no change in GDP.
e) both (a) and (b).

6. Which of the following rankings accurately lists the major components of consumption expenditure in terms of their volatility over the business cycle?
a) Nondurables > durables > services
b) Durables > nondurables > services
c) Durables > services > nondurables
d) Services > durables > nondurables
e) Nondurables > services > durables

7. Given an expectations-augmented Phillips curve, such as

$$\pi_t = 0.7 \times \pi_{t-1} + 0.3 \times \pi_{t-2} + f\left(\frac{Y_{t-1} - Y^*}{Y^*}\right),$$

a policy designed to maintain actual GDP 5% above potential indefinitely
a) would produce constant, positive inflation and unemployment below the natural rate.
b) would produce accelerating inflation with unemployment below the natural rate.
c) would produce constant disinflation with unemployment above the natural rate.
d) would produce accelerating disinflation with unemployment above the natural rate.
e) none of the above.

8. Which of the following circumstances is likely to exaggerate the expected shift in an IS curve in response to a reduction in taxes?
a) A perception that the tax change is temporary
b) A perception that the tax change is permanent
c) A prior anticipation of higher taxes throughout the foreseeable future
d) The certain knowledge that nothing is certain but death and taxes
e) None of the above

9. As consumption becomes more sensitive to the real rate of interest, the
a) IS curve gets steeper and monetary policy grows more effective in manipulating GDP in the short run.
b) IS curve gets flatter and monetary policy grows more effective in manipulating GDP in the long run.
c) IS curve gets flatter and monetary policy grows more effective in manipulating GDP in the short run.
d) IS curve is unaffected, but monetary policy grows we a ker nonetheless.
e) IS curve gets steeper and monetary policy grows less effective in manipulating GDP in the long run.

10. Portfolio crowding-out of investment, and hence of income:
a) possibly makes fiscal policy completely ineffective.
b) is caused by the increased transactions demand for money associated with higher levels of income.
c) is caused by higher interest rates due to the increased supply of government bonds associated with a budget deficit.
d) both (a) and (c) above.
e) none of the above.

11. If RE/D = 0.20, no currency circulates, and no excess reserves are held, then when the Fed increases reserves by 10 billion,
a) the money supply will increase by 10 billion.
b) the money supply will increase by 50 billion
c) the money supply will be unchanged
d) the money supply will increase by 20 billion
e) none of the above

12. An intuitive explanation of the observed discrepancy between short- and long-run marginal propensities to consume must focus on why
a) consumption falls by less than income in the short run but eventually achieves over 90 percent of income's decline.
b) consumption climbs slower than income in the short run but eventually exhausts over 90 percent of income's increase.
c) consumption moves more slowly in either direction than income in the short run but eventually matches either move almost exactly.
d) both (a) and (b).
e) none of the above.

13. Suppose money demand depends on GDP, the interest rate, and real wealth. Starting from budget balance in period 1, the government increases spending in period 2, then in period 3 reduces it back to where it started from. Assuming an upward sloping LM and downward sloping IS curve, then:
a) Output in period 3 will be lower than in period 1.
b) Output in period 3 will be higher than in period 1.
c) Output in period 3 will the same as that in period 1.
d) One cannot determine the end result from the given information.
e) The interest rate in period 3 will be lower than in period 1.

PART II: Short Answer (44 minutes total)

1.1. (4 points) Carefully indicating the curve shifts (using IS-LM/AD-AS diagram), show what happens in the *short run* when autonomous consumption and autonomous investment collapes (in period 1); you can assume $\pi_t^e = 0$. Which curve has shifted (indicate by how much)? You may assume the initial price level, P_0, equals 1, the initial income level, $Y_0 = Y^*$, and price adjustment is described by:

$$\pi_t = \pi_t^e + f\left(\frac{Y_{t-1} - Y^*}{Y^*}\right) + Z_t$$

1.2. (10 points) Using the IS-LM/AD-AS graphs and words, indicate what path the economy takes to long run equilibrium in the above model, assuming the government undertakes no actions. Briefly explain *why* the economy takes this path.

1.3. (4 points) Redo question 1.1, assuming that oil prices rise at the same time autonomous spending falls in period 1. Now you can assume that $\pi_t^e = \pi_{t-1}$, with initial expected and actual inflation equal to 0.

1.4 (4 points) Repeat 1.3, but assuming the Fed changes the money supply to set output equal to potential GDP in period 1. Show your answer using the AD-AS graph.

1.5 (10 minutes) Using the AD-AS graph and words, indicate what path the economy takes to long run equilibrium in the above model, assuming the government undertakes no further actions. Briefly explain *why* the economy takes this path.

2. Consider an economy described by a CCLM model, where the CC curve, LM curve and the lending rate are given below. Now in this economy, a large and prominent insurance firm has just become bankrupt. Stories of mismanagement arise. Banks are now worried that other firms in the same industry are being mismanaged. That is, banks now believe that lending has become riskier.

$$Y = \overline{\alpha}(A_0 - dR - \gamma\rho) \tag{5}$$

$$\rho = \varphi_0 + \varphi_1 R + \varphi_2 Y - \varphi_3[m(\text{Re } s)(1-r)] + \varphi_4 Z \tag{7}$$

$$R = \frac{\mu_0}{h} - \frac{1}{h}\left(\frac{m(\text{Re } s)}{P}\right) + \frac{k}{h}Y \tag{4}$$

2.1 (4 points) What does this do to the supply of loans in this economy?
2.2 (4 points) Graphically illustrate what happens to the CC and LM curve? What does this imply for equilibrium Y and R?
2.3 (4 points) If the Fed wanted to return output back to its original level what actions could it take? Graph this on the CCLM diagram.

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