Midterm 2 Study Guide

March 27, 2012

Midterm 2 on Tuesday, April 3rd (time to be voted on in class) will cover topics 6 (business cycles) through 11 (inflation). Use this study guide for extra practice problems and other suggestions to guide your preparation for the exam.

Resources

Office Hours: Instructor (2:00-4:00 PM Wednesday and 10:00AM - Noon Friday, March 30th in Hanson Hall 3-128), TA (3:30-5:30 PM Wednesday)

Sufficient to study: Lecture Notes for topics 6-11 (note some ideas are carried from the beginning of the course, but they are quite clearly used again in these lecture notes), Knowledge Assessments 3-4, Data Analyses 2-3, the Practice Midterm, and these extra calculation problems. You can also find extra problems to work through in your weekly recitaiton materials; answers for the practice questions included in every week's recitation outline are available online.

Suggestions for preparation: Study the material and work through these practice problems. When you are comfortable, take the practice midterm UNDER REAL TEST CIRCUMSTANCES, i.e. delete the answers from the word document, print, and give yourself 50 minutes to complete the whole thing. Be sure to look at the answer key from the previous midterm. Many of you were bogged down in early pages by answering too much. Figure out a concise explanation of concepts from the course to save time.

Test Composition

The composition of the test will be similar to the first midterm, but a bit shorter:

1. Definitions (20-25 pts): Definitions of key terms from lecture notes 6-11
2. Short Answer (25 pts): Non-numerical questions regarding any of the 6 topics
3. Policies in Action (30-35 pts): Calculation of, evaluation of, and general questions about fiscal and monetary policy
4. Fast Calculations (20-25 pts): Non-fiscal / monetary policy calculation questions

Practice Questions

1) Suppose Steve has won the lottery. He can take \$500 today or \$100 payments over the next eight years including this year. Determine which plan he would choose with the following interest rates: $10\%, 20\%$

2) Suppose Steve has \$500 to use today. Which of the following options should Steve choose? (assume he can only choose one)

a) A 1-year T-bill paying 5% real interest

b) Stocks that will return next year $i = -1$ with 5% probability, $i = .05$ with 45% probability, $i = .1$ with 45% probability, and $i = .5$ with 5% probability

For the following questions (3-5), you will need to use the following data about iIsland:

Year	iPhones Produced	Nom. Price of iPhones	MacBooks Produced	Nom. Price of MacBooks	Nokia Phones Produced	Nom. Price of Nokia Phones
2005*	0	0	150	\$900	300	\$40
2007	200	\$100	190	\$950	350	\$30
2010	800	\$150	250	\$1100	10	\$5

*Base year

3) Let the market basket be 3 Nokia phones and 2 MacBooks. Determine CPI Inflation from 2005 to 2007. 2007 to 2010?

4) With the introduction of the iPhone in 2007, economists decided readjust the market basket to be 3 iPhones and 2 MacBooks. Determine CPI Inflation from 2007 to 2010. Compare this to the result from question 3.

5) Suppose Steve was earning a wage of \$5000 in 2007, and by 2010 earned a wage of \$5500. Is he richer or poorer in 2010? Does it depend on which market basket you use?

For the rest of the questions, you will need to use the following data about iKingdom in long-run equilibrium:

RGDP: \$5500	Natural Rate of Unemployment = .03
Money Demand = 2000 - 6000i	Loanable Funds Demand = 2500 - 6000i
Initial Deposits =\$150	MPC = .75
Reserve Ratio = .1	Government Purchases = \$1000
Price Level = \$10	Tax Revenue = \$700

6) What is the velocity of money in iKingdom?

Now suppose that the country has fallen into a recession. The short-run RGDP has been calculated to be \$5300:

7) Consider the equation for unemployment. If actual inflation is 5%, unemployment is 10%, and $A = 1$. What must expected inflation be?

8) In the short-run, how would an expansionary fiscal or monetary policy impact the level of unemployment? Use the equation used from question 7 to explain.

9) What is the GDP gap?

10) If the government were to implement a fiscal policy to close the GDP gap, how much would it need to change taxes by? Government spending?

11) Consider at least two reasons why, even if the ideal plan is implemented in 8 (i.e. there is no political problem), the fiscal policy may fail to close the GDP gap.

12) The Central Bank believed Congress would fail to implement a policy, and so creates its own to close the GDP gap. Answer the following questions:

a) If the Central Bank can only target investment spending, what change in investment would close the GDP gap?

b) Provide the three initial conditions for this scenario.

c) What will the new money supply be to achieve the policy in (a) given what you found in (b)?

d) Use the reserve ratio to achieve this new money supply that will close the GDP gap.

e) Use OMOs to do the same.

f) Explain how the discount rate could be manipulated to achieve the same goal.

g) Provide at least one reasons why the fiscal policy may fail to impact aggregate demand.