Final Study Guide

April 30, 2012

The final exam on Tuesday, May 8th will cover material from the entire course. 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 Wednesdays and 10:30AM - 12:30PM Friday, May 4th in Hanson Hall 3-128), TA (3:30-5:30 PM Wednesday)

Sufficient to study: Lecture Notes for topics 1-16, Knowledge Assessments 1-5, Data Analyses 1-5, the Practice Final, and these extra calculation problems. You can also find extra problems to work through in your weekly recitation 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 final UNDER REAL TEST CIRCUMSTANCES, i.e. delete the answers from the word document, print, and give yourself 120 minutes to complete the whole thing. However, there is **a lot** of material from this course and so there is a very large pool of questions. To ensure that you do well, you need to *understand* the material and be able to answer questions that are not simply on old exams or the practice final.

Test Composition

The test was written by another instructor and more closely reflects the practice exams available online. Questions are generally shorter, but focus on the same type of material. Material we covered only in our class will not be on the final, including: the Solow Model (though you should understand how savings and investment can promote economic growth), and the demographic dividend. I cannot give you a page-by-page breakdown of the test, but here are general characteristics:

1. Approximately 50 questions

2. Pages broken down by topic like on our tests

3. There are simple calculations, graph manipulation, data questions, definitions, and short answer questions

4. There are no multiple choice questions

5. Most pages have replacement points like on our tests

6. ONLY NON-PROGRAMMABLE CALCULATORS ARE ALLOWED (in caps to draw your attention since I have not cared about this during our exams); pens are required for a regrade opportunity

Practice Questions

1) Suppose Macland is in long-run equilibrium, then a growing demand for Android products from North Korea drives up imports. Depict this shock on an AS-AD diagram and explain how the economy could return to long-run equilibrium.

2) Suppose Macland is in long-run equilibrium, then many workers strike demanding better labor conditions. Depict this shock on an AS-AD diagram and explain how the economy could return to long-run equilibrium (and not through resolving the strike).

3) Draw and completely label cash flow in a circular flow diagram for the United States with four agents—households, firms, the government, and Canada—and three places of exchange—output market, financial market, and input market.

4) Depict how the introduction of a binding minimum wage might impact the aggregate economy in the short-run, through an AS-AD diagram. (Note that you can interpret the impact in a few ways.)

Questions 5 - 6 require use of the following data:

Employment Statistics						
Children under 16	Employed	Not employed, Not seeking job	Not employed, Seeking job	Striking, Employed	Imprisoned	Retired
20	36	5	12	15	50	12

5) What is the size of the labor force?

6) What is the participation rate of this country? Unemployment Rate?

Questions 7 - 12 require use of the following data:

Year*	Bottles of Water	Price of Water bottle	Bottles	Price of Bottle
2003 = Base	2,000	$1.25	5,000	$.50
2004	3,000	$2.00	6,500	$1.00
2005	4,000	$2.25	7,000	$.75
2006	5,000	$2.25	7,100	$1.25
*Note that 1 bottle is used in the production of 1 bottle of water				

7) What is the real GDP in 2005?

8) What is the GDP Deflator in 2005?

9) What is the inflation rate between 2005 and 2006?

10) Suppose the market basket for this country is 2 bottles of water and 1 bottle. What is the CPI in 2005 and 2006?

11) What is CPI inflation between 2005 and 2006? How does this compare to the general inflation rate?

12) Suppose Seve earned $100 in 2005 and $150 in 2006. In real terms has his income increased or decreased from 2005 to 2006?

13) What is the present value of a prize in which you receive $1000 tomorrow when interest rates are 60%? Give an intuitive interpretation to this number.

14) Suppose you can choose one of the two options each at a cost of $1000: i) a risk-free 5% interest rates, ii) a risky option that returns 100% interest with 1% probability, 5% interest with 90% probability, -10% interest with 9% probability. with Assuming you want the option that will give you the most money, which would you choose?

Questions 15 - 21 require use of the following data:

RGDP: $4500	NRO: $5000
Money Demand = 1000 - 6000i	Loanable Funds Demand = 1500 - 5000i
Initial Deposits =$50	MPC = .5
Reserve Ratio = .2	

15) What is the initial change in spending in the output market that would return this economy to long-run equilibrium?

16) Suppose the government wanted to close the GDP gap using taxes. How (increase/decrease) and by how much should it change taxes?

17) Suppose the government wanted to close the GDP gap using government spending. How and by how much should it change spending?

18) Calculate the new level of investment required to close the gap if the government had done nothing.

19) Calculate a monetary policy using the reserve ratio the Federal Reserve could implement to achieve that level of investment and close the gap.

20) Calculate a monetary policy using OMOs the Federal Reserve could implement to achieve that level of investment and close the gap.

21) Assume velocity of money is 2. Using long-run equilibrium GDP and this new money supply, calculate the price level in the economy.

Questions 22 - 26 require use of the following data. Note both countries only have 8 hours per day.

	USA Production in 8 hours
Corn	12 bushels
Wood	24 logs

	Canada Productivity
Corn	1 hour / bushel
Wood	30 min / log

22) Determine US productivity levels (i.e. time spent / bushel and time spent / log) in corn and wood production.

23) Which country has the absolute advantage in production of corn? In wood?

24) What is the opportunity cost of corn and wood production in the US and in Canada?

25) If the two countries were to trade, which would import corn?

26) What are the maximum and minimum terms of trade in this setting?

27) Suppose the exchange rate of Euros to USD, $e = 5\epsilon/\$$, and the price of coke in Germany is $2\epsilon/\text{coke}$. Calculate the foreign price of coke in US dollars.

28) Calculate the real exchange rate if $e = 5\epsilon/\$$, price of coke in Germany is 2ϵ/coke and price of coke in the US is $1/coke. Does the PPP theory hold here?

29) Suppose that the abolition capital tax in the United States causes a massive capital influx (think, the opposite of capital flight). First draw the three markets connecting domestic markets to the foreign exchange market in equilibrium. Then, represent this shock on the three diagrams and label the timing of each action.

30) Does real exchange rate increase or decrease?

31) Suppose in the previous example the government hoped to maintain a fixed exchange rate. What are two policies that would achieve that fixed exchange rate?

Questions 32 - 34 require the following graph. Note Sao Tome and Principe is a (very) small country.
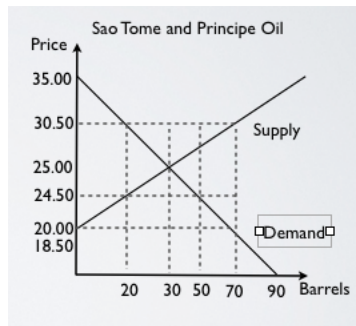

32) Suppose that world price is $24.50 per barrel of oil. Will the country import or export? What is the quantity of imports and exports?

33) Calculate the consumer, producer, and government surplus in the case of free trade with a world price of $20.00. Who is better off from the autarky situation?

34) Suppose that world price is $20.00 but the government of Sao Tome and Principe has introduced a $4.50 tariff. Calculate the consumer, producer, and government surpluses with the tariff. How much smaller is the total surplus now? (Note this difference from the free trade scenario is the deadweight loss)

Questions 35 - 36 require the following two graphs. Note that Canada and the US are large countries.
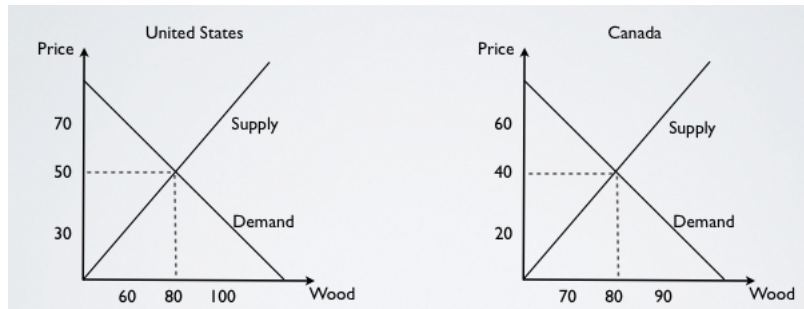
35) What is the maximum potential price in a free trade equilibrium and the minimum potential price? Explain.

36) Find the equilibrium price. How much is the importing country importing and the exporting country exporting in equilibrium?