Examination: 5017

Principles of Economics II

Winter Semester 2005 / 06

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You are allowed to use a non-programmable calculator (in accordance with the instructions given by the examination office) and a translating dictionary from your native language to English (without any notes written into it). **All** of the **ten** (10) exam questions must be answered (the estimated time to spend on each question is provided). This examination consists of **three** (3) pages and must be completed within 120 minutes.

Question 1 (15 Minutes)

Press Release: FED, December 13, 2005

"The Federal Reserve's Open Market Committee decided today to raise its target for the federal funds rate to 4-1/4 percent.

Despite elevated energy prices and hurricane-related disruptions, the economic expansion appears solid. Nevertheless, possible increases in energy prices have the potential to add to inflationary pressures."

[The table at the right shows the annual inflation rate and the federal funds rate target set by the U.S. Federal Reserve (FED) in percentages.]

2004	Inflation	Fed Funds	2005	Inflation	Fed Funds
1	1.93	1.00	1	2.97	-
2	1.69	-	2	3.01	2.50
3	1.74	-	3	3.15	2.75
4	2.29	-	4	3.51	-
5	3.05	-	5	2.8	3.00
6	3.27	-	6	2.53	3.25
7	2.99	1.25	7	3.17	3.50
8	2.65	1.50	8	3.64	-
9	2.54	1.75	9	4.69	3.75
10	3.19	-	10	4.35	-
11	3.52	2.00	11	3.46	4.00
12	3.26	2.25	12	3.42	4.25

(a) What is the federal funds rate?

(b) What will the Open Market Committee instruct the Federal Reserve Bank in New York to do in order to raise the rate?

(c) Explain how Open Market Operations are conducted.

(d) Why does the federal funds rate seem to go up with general price inflation as measured by the annual percentage change in the CPI?

Question 2 (15 Minutes)

The Nobel Prize for Economic Science was awarded in 1987 to Professor Robert Solow at the university M.I.T. in the United States for his contributions to the theory of economic growth.

(a) Describe the Solow Model and explain why technology plays such a central role in it.

(b) Explain the difference between the "Business Cycle" and "Economic Growth." How do these two concepts differ for macroeconomic policy-making purposes?

(c) Outline some of the public policy measures that a government might undertake to stimulate economic growth.

(d) What did Professor Romer contribute to Growth Theory?

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Question 3 (10 Minutes)

Assume that in the foreign exchange market in Germany US dollars are selling for € 0.821 / $ and in New York the exchange rate is US $ 1.221 / €.

(a) If you are a foreign exchange trader in Frankfurt / Main with € 7.5 million, could you make an arbitrage profit today? If it is possible for you to make some money, show exactly how you would do it and what would be the resulting profit (loss).

(b) Explain how traders exploiting foreign exchange arbitrage opportunities bring the foreign exchange markets around the world into equilibrium?

Question 4 (10 Minutes)

The effect of changes in government spending on equilibrium GDP can be calculated by using the expenditure multiplier.

(a) How does the open economy multiplier differ from the closed economy multiplier?

(b) What does the concept of "leakage" mean in terms of multiplier analysis?

Question 5 (10 Minutes)

Consider an economy that has balanced trade, X = M, that has no government, there is no consumption of fixed capital, there is no statistical discrepancy, and GDP = GNP = 1347. Furthermore, rent = 72, interest = 312, and wages = 654.

(a) If 95% of output is consumed, what is the level of savings and investment at equilibrium?

(b) What is the level of aggregate profits in this economy?

Question 6 (15 Minutes)

Answer all of the following short-answer questions:

(a) What is the Discount Rate and how is it determined?

(b) The Expenditure Multiplier plus the Tax Multiplier equals the Balanced Budget Multiplier. Show mathematically the value of the Balanced Budget Multiplier.

(c) In the 1950's Professor Modigliani formulated the Life-Cycle Hypothesis of consumption behavior. Explain the main elements of his theory.

Question 7 (10 Minutes)

One of America's greatest mathematical economists, Professor Irving Fisher, developed what later became known as the "Fisher Equation."

(a) The Fisher Equation shows that the nominal interest rate is made up of two components. What are these two components and what does the Fisher Equation tell us about nominal interest rates?

(b) Explain why the nominal interest rate measures the monetary cost per unit of holding money per unit of time.

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Question 8 (15 Minutes)

The largest financial market in the world is the foreign exchange market with a trading volume of over US$ 1.5 trillion daily. The spot exchange rates are determined in these markets by the interaction of supply and demand.

(a) What is a flexible exchange rate system and how does it operate? What are the advantages and disadvantages of such a system?

(b) What is a fixed exchange rate system and how does it operate? How did the Gold Standard lead to a fixed exchange rate system?

(c) What happened at Bretton Woods, New Hampshire, in 1944 that altered the international financial system?

(d) Explain the concept of the Purchasing Power Parity (PPP) exchange rate. How is this concept related to the "law of One Price" when it is applied to the international marketplace?

Question 9 (10 Minutes)

Please answer the following questions about the money supply.

(a) Define these three monetary concepts: The cash holding ratio (cr), M1, and M2.

(b) What is the difference between Total Cash Reserves in the banks and the Monetary Base.

(c) If B = $ 370 billion, cr = 5%, xr = 2%, and rr = 10%, then M1 = ?

(d) What is the maximum value that the money multiplier can attain?

Question 10 (10 Minutes)

Most of the governments in the world consider "management" of the macroeconomic activity in their countries to be part of their everyday responsibility.

(e) What are the main Macroeconomic goals that these economic policymakers are trying to achieve?

(f) Explain the term Fiscal Policy and explain how it is used to achieve the goals mentioned in part (a) of this question.

(g) What does the term "Political Business Cycle" mean and why does the possibility of its existence create skepticism among many economists concerning the effectiveness and appropriateness of Fiscal Policy?

<u>This is the End of the Examination.</u>

GOOD LUCK!