

Examination: 5017

Principles of Economics II

Summer Semester 2006

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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) examination questions must be answered (the estimated time to spend on each question is provided). This examination consists of **four** (4) pages and must be completed within 120 minutes.

Question 1 (10 Minutes)

The management of macroeconomic activity is considered to be a key responsibility of the governments in the world today.

- What is Fiscal Policy? Explain using an AD / AS curve analysis how Fiscal Policy can be used to achieve the economic goals desired by the government.
- 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?

Question 2 (15 Minutes)

Invented in 1986, the Economist's Big Mac Index is based on the theory of purchasing-power parity.

	Big Mac prices		Implied PPP* of the dollar	Actual dollar exchange rate May 22nd	Under (-)/ over (+) valuation against the dollar, %
	in local currency	in dollars			
United States†	\$3.10	3.10	-	-	-
Argentina	Peso 7.00	2.29	2.26	3.06	-26
Australia	A\$3.25	2.44	1.05	1.33	-21
Brazil	Real 6.40	2.78	2.06	2.30	-10
→ Britain	£1.94	3.65	1.60†	1.88†	+18
Canada	C\$3.52	3.14	1.14	1.12	+1
Chile	Peso 1,560	2.94	503	530	-5
→ China	Yuan 10.5	1.31	3.39	8.03	-58
Czech Republic	Koruna 59.05	2.67	19.0	22.1	-14

- The cheapest Big Mac on the chart (Yuan 10.5) is sold in China. Explain the PPP theory.
- In Britain the Big Mac (£ 1.94) is the most expensive. Explain the under / over valuation concept.
- Explain the concept of the real exchange rate. How is this concept related to the "law of One Price" and what is the relationship between the real exchange rate and the PPP exchange rate.

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Question 3 (5 Minutes)

Macroeconomics is the field of economics that studies the behavior of the aggregate economy.

- (a) The Economic Report of the President (February 2006) in the U.S. states: "This Report reviews the state of the economy and the economic outlook, discussing a number of economic policy issues of importance." Name the key macroeconomic indicators that are of primary interest.
- (b) Who is called the "Father of Macroeconomics" and WHY is this the case?

Question 4 (15 Minutes)

Answer all of the following short-answer questions:

- (a) What is the "Discount Rate", how is it determined, and how can it be used to alter M1?
- (b) The Expenditure Multiplier plus the Tax Multiplier equals the Balanced Budget Multiplier. Show mathematically the value of the Balanced Budget Multiplier.
- (c) In a book published in 1957, Professor Milton Friedman proposed the permanent income hypothesis. Explain the main elements of his theory.
- (d) What happened in July of 1944 at Bretton Woods, New Hampshire? How was the international financial system changed to meet the world's post war needs?

Question 5 (15 Minutes)

Please answer the following questions about the money supply.

- (a) Define these three monetary concepts: the cash holding ratio (cr), the excess reserves ratio (xr), and M1.
- (b) What is the difference between Total Cash Reserves in the banks and the Monetary Base.
- (c) If: $cr = 3\%$, $xr = 5\%$, and $rr = 12\%$, what would be the value of the money multiplier? What is the maximum value that the money multiplier can attain (explain carefully under what set of circumstances that this could happen)?

Question 6 (10 Minutes)

Assume that in the foreign exchange market in Paris US dollars are selling for € 0.78095 / \$ and in Chicago the exchange rate is US \$ 1.2793 / €.

- (a) If you are a foreign exchange trader in New York with \$ 25 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?

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Question 7 (15 Minutes)

Economic growth is one of the central questions of economics because increases in GDP per person is generally taken as an increase in the standard of living of its inhabitants. A growth rate of 2.5% per annum will lead to a doubling of GDP within 30 years, while a growth rate of 8% per annum will lead to a doubling of GDP within 10 years.

- Define Economic Growth.
- The “exogenous growth model” known as the Solow Model predicts: In the long-run the economy enters an equilibrium steady state in which the capital stock fails to grow. Explain this statement in terms of this model and explicitly name the factors that cause this to be the case.
- The “endogenous growth theory” was developed in the 1980s and is attributed to Professor Paul Romer. Explain in detail this contribution to our understanding of economic growth and how does it differ from the Solow Model?

Question 8 (10 Minutes)

The effect of a change in exogenously determined investment spending upon equilibrium GDP can be calculated by using the expenditure multiplier.

- How does the open economy multiplier differ from the closed economy multiplier?
- What does the concept of “leakage” mean in terms of the open economy multiplier?

Question 9 (15 Minutes)

Press Release: FED, June 29, 2006

“The Federal Reserve’s Open Market Committee decided today to raise its target for the federal funds rate to 5-1/4 percent.

Recent indicators suggest that economic growth is moderating from its quite strong pace earlier this year. However, the high levels of resource utilization and of the prices of energy and other commodities have the potential to sustain inflation pressures.”

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

	U.S.	Fed		U.S.	Fed
2005	Inflation	Funds	2006	Inflation	Funds
1	2.97	2.50	1	4.00	4.25
2	3.01	2.50	2	3.60	4.50
3	3.15	2.75	3	3.36	4.50
4	3.51	2.75	4	3.55	4.75
5	2.8	3.00	5	4.17	5.00
6	2.53	3.25	6		5.25
7	3.17	3.50	7		
8	3.64	3.50	8		
9	4.69	3.75	9		
10	4.35	3.75	10		
11	3.46	4.00	11		
12	3.42	4.25	12		

- Explain the relationship that you see in the table between the U.S. inflation and the target for the federal funds rate set by the Open market Committee.
- After its meeting on June 29, 2006, what will the Open Market Committee meeting in Washington D.C. instruct the Federal Reserve Bank in New York to do in order to raise the federal funds rate?
- Explain how Open Market Operations are conducted by central banks.

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Question 10 (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 in detail why the nominal interest rate measures the monetary cost per unit of holding money per unit of time.

This is the End of the Examination.

GOOD LUCK!

