

Principles of Economics II

Winter Semester 2007 / 2008

Dr. John E. Brennan

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 **twelve** (12) 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)

Year	Nominal GDP (\$, billion)	Real chained GDP (2000)	CPI 1982-1984 = 100	Unemployment Rate
1990	5,803.1	7,112.5	130.7	5.6
1991	5,995.9	7,100.5	136.2	6.9
1992	6,337.7	7,336.6	140.3	7.5
1993	6,657.4	7,532.7	144.5	6.9

Using the data in the table above, calculate the following:

- The consumer price inflation rate in 1993.
- The output growth in 1992.
- Inflation as measured by the GDP Deflator in 1991.

Question 2 (10 Minutes)

In most countries the Central Bank conducts Monetary Policy.

- Explain how open market operations are conducted by a central bank and how this affects the money supply.
- If a country is experiencing a rather severe increase in inflation, explain the "practical" aspects to consider when suggesting the use of fiscal policy. Can monetary policy be used to combat this problem? How would each of these two macroeconomic policy instruments be applied?

Question 3 (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?

Please turn to Page 2

Question 4 (10 Minutes)

Answer all of the following short-answer questions:

- What is the "Discount Rate", how is it determined, and how can it be used to alter M1?
- The Expenditure Multiplier plus the Tax Multiplier equals the Balanced Budget Multiplier. Show mathematically the value of the Balanced Budget Multiplier.

Question 5 (10 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

- 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.

Question 6 (10 Minutes)

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

- 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?
- Explain in detail why the nominal interest rate measures the monetary cost per unit of holding money per unit of time.

Question 7 (10 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.

- The 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 new 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)

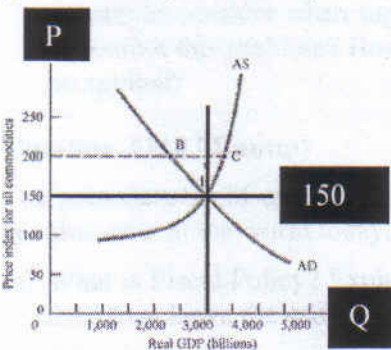
Assume that in the foreign exchange market in Paris US dollars are selling for € 0.78095 / \$ and in Chicago the exchange rate is US \$ 1.2793 / €.

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

Question 9 (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 10 (10 Minutes)

Assume that you are an economic policymaker at the central bank of your country. The economy is presently at an equilibrium where output is at potential GDP = 3000 and the price level, $P = 150$. You want to keep the price level constant at $P = 150$, no matter what happens to output. You can use monetary policy to affect aggregate demand, but you cannot affect aggregate supply in the short run. What would you recommend if:

- There is a sudden decrease in consumer spending.
- There is a sharp increase in the cost of production due to a big price increase in imported crude oil.

Please turn to Page 4

Question 11 (10 Minutes)

Consider a closed economy that has no government, no consumption of fixed capital, no statistical discrepancy, and $GDP = GNP = 2349$. Furthermore, rent = 82, interest = 497, and wages = 954.

- (a) If nine-tenths ($9/10$) 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 12 (10 Minutes)

Of all the concepts in Macroeconomics the single most important measure of economic performance is gross domestic product.

- (a) What is the difference between GDP, GNP, and NNP?
- (b) What is included in Gross Private Domestic Investment, I?

This is the End of the Examination.

GOOD LUCK!