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ECON 202
MACROECONOMIC THEORY **8 June 2010**
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Final Exam

1. (**15 Points**) Suppose that the following equations describe an open economy:

$C = 18.5 + (0{,}85)(Y - T)$, $T = 10$, $I = 10$, $G = 10$, $X = 10$, $M = (0{,}3)Y$ ve $\epsilon = 3$.

Hint: Do not forget to take into consideration the real exchange rate, ϵ, as it is done in your major textbook, namely Macroeconomics (Blanchard).

(a) Find the **multiplier** and equilibrium **GDP** values of this economy.
(b) Find the equilibrium **net export** value of this economy.
(c) What should be equilibrium GDP to make net exports balanced (=zero).

2. (**20 Points**) Compare and contrast the impact of a **decrease in taxes** under small open economy for both fixed exchange and flexible exchange regimes. **Do not forget to support your answer by illustrations**.

3. (**30 Points**) Please do solve the following short questions.

3.1 Consumption
Let's assume that you have 4 periods of life: **younghood**, **young-adulthood**, **old-adulthood** and **retirehood**. During younghood, you do not earn any income. You earn $140,000 (real dollars) and $160,000 (real dollars) per period, when you are young-adult and old-adulthood, respectively. Again there is no income during your retirehood. Given that you do not like any deviation in your consumption level (=you want your consumption to be smooth), what should be your consumption per period? The real rate of interest is 2% per period.

32. Investment
Suppose that the cost of investment project is $200. The first year, the return is $100 and the second year, the return is $120. The project ends in the two years. If the real rate of interest is 10%, should the firm make the investment?

3.3 Real Exchange Rate (RER)
Suppose that 1 kg of apple is $2.5 in the United States and €1.245 in Spain. Given that the nominal exchange rate is €0.79/$, find the real exchange rate and interpret it.

3.4 Interest Parity condition

Consider a financial investor choosing between US bonds and Japanese bonds. Suppose that one year interest rate on US bonds is 5% and the one-year interest on Japanese bonds is 14%. Suppose that the current (nominal) exchange rate is 100 (1 dollar is worth 100 yen) and the expected exchange rate a year from now is 110 (Yen depreciates!). In which bond should the investor invest?

3.5 Real interest rate versus nominal interest rate

Suppose that real interest rate is 5% and expected inflation is 2%. What is the nominal rate of interest?

3.6 Marshall-Lerner Condition

Suppose that a 1% depreciation leads to a proportional increase in exports of 0.9% and to proportional decrease in imports of 0.8%. How does the trade balance change? Improve or deteriorate? By what percentage?

4. (**15 Points**) An increase in government spending leads to an increase in output and to a trade deficit; however, an increase in exports leads to an increase in output and to a trade surplus. Do discuss and illustrate this statement. Hint: Use the simple Keynesian framework.

5. (**20 Points**) Compare and contrast the impact of an **increase in money supply** under large open economy for both fixed exchange and flexible exchange regimes. **Do not forget to support your answer by illustrations**.