ECON 6280 - Survey of International Economics Instructor : Jeffrey Kuo (jeffkuo@gwu.edu)

> Summer 2020 ECON 6280 - Survey of International Economics Final on International Macroeconomics

- This exam is DUE by 2:00 pm ET, Monday, August 10, 2020.
- You must upload your answer to the Blackboard or email to jeffkuo@gwu.edu. If you fail to upload or to send an electronic copy by the deadline, your exam will **not** be graded.
- There are **three** different versions of the exams. Please specify which **version** you received. You **must not** discuss this exam with anyone other than the instructor to the due date and time.
- Students are encouraged to come forward in good faith with evidence should the potential violations of academic integrity happened.
- Any violations of the University Honor Code will be subject to the sanctions provided by the University's code of academic integrity.

Exam Version: A. Full Name: ______. GWID: ______

1 Multiple Choice (68%, 17 questions with 4 points each)

- 1. What are the units of the real exchange rate?
 - (a) Dollars per pound.
 - (b) Domestic currency units per foreign currency unit.
 - (c) Domestic commodity baskets per foreign commodity basket.
 - (d) None of the above
- 2. Consider the general price monetary approach under rational expectations. Given a one-time, permanent, unanticipated increase in the growth rate of the money supply,

(a) Inflation and depreciation measured over an interval near the time of the policy change will actually exceed the new growth rate of the money supply.

(b) At a given level of income, the inflation rate immediately adjusts to equal the new growth rate of money supply.

(c) The nominal interest rate rises, decreasing money demand, and this increases the equilibrium price level.

(d) We see an immediate increase in the domestic price level and a proportional depreciation of the exchange rate.

Currency	2015	2016
1\$	1.5 euros	1 euro
1\$	2 Brazilian reais (real)	1.5 Brazilian reais (real)
1\$	2 British pounds	3 British pounds
1\$	45 Indian rupees	50 Indian rupees

3. According to Table 1, the U.S. dollar appreciated against the real by:

Table 1: Currency Values

(a) 2.4%	(b) 25%	(c) 75%	(d) 12.4%
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- 4. Which of the following is NOT the primary function of the money?
 - (a) A unit of account. (b) A tool of the investment.
 - (c) A medium of exchange. (d) A store of value.
- 5. Covered interest parity refers to the situation in which:
 - (a) interest rates are the same in both currencies.
 - (b) spot and forward rates are the same in both currencies.

(c) the forward rate between the two currencies is equal to the ratio of their returns times the spot rate between the two currencies.

- (d) there is an opportunity for arbitrage whenever prices are sluggish and sticky.
- 6. I was charged a 6% nominal interest rate on a loan when inflation is 3%. By how much does the inflation rate need to rise for me to see a real interest rate of -1%?
 (a) -3%
 (b) 2%
 (c) 4%
 (d) 7%
- 7. Consider the general monetary approach to exchange rate determination. When the foreign money supply increases,
 - (a) foreign output rises. (b) the domestic spot rate depreciates
 - (c) the domestic spot rate appreciates (d) domestic price level rises.

8. Consider the classical model of the monetary market:

$$M/P = L(i) \times Y$$

According to the model, when the interest rate rises,

(a) money demand goes up because people want to take advantage of the higher rate of return.

- (b) output increases.
- (c) P rises to restore money market equilibrium
- (d) M falls to restore money market equilibrium.
- 9. From uncovered interest parity, we know that when the domestic currency is expected to depreciate, the domestic interest rate should be
 - (a) greater than the foreign interest rate.
 - (b) less than the foreign interest rate.
 - (c) less than the foreign exchange rate.
 - (d) greater than the foreign exchange rate.
- 10. Which of the following reason does NOT account for the breakdown of the Absolute Purchasing Power Parity?
 - (a) There are many non-tradable goods in the real world.
 - (b) The consumption bundles of different countries are the same.
 - (c) The prices for individual goods are sticky.
 - (d) There are tariffs, quotas and voluntary export restraints.
- 11. In a small open economy with a floating exchange rate, the supply of real money balances is fixed and a rise in government spending ______

(a) raises the interest rate, so that income must rise to maintain equilibrium in the money market

(b) raises the interest rate so that net exports must fall to maintain equilibrium in the goods market.

(c) cannot change the interest rate so that net exports must fall to maintain equilibrium in the goods market.

(d) cannot change the interest rate so income must rise to maintain equilibrium in the money market.

12. According to the Mundell-Fleming model for a small open economy with flexible exchange rates, if the Federal Reserve cannot alter domestic interest rates, changes in the money supply could still influence aggregate income through changes in the:

(d) tax rates.

(a) price level. (b) level of government spending.

(c) exchange rate.

- 13. If 1 euro is priced at \$1.25 and if 1 euro will also buy 88 Japanese yen $(1 \in = 88 \ \text{¥})$, in equilibrium, with no arbitrage opportunities, how much is the cross rate between the yen and the dollar (yen-dollar rate)?
 - (a) $150 \frac{1}{5}$ (b) $70.4 \frac{1}{5}$ (c) $20 \frac{1}{5}$ (d) $5 \frac{1}{5}$
- 14. According to Figure 2 from the paper published by Kenneth Rogoff, *The Purchasing Power Puzzle (JEL, 1996)*. Which of the following that we can NOT interpret from this figure?



(a) The failure of short-run PPP between the U.S. and Germany can be solely attributed to stickiness in nominal prices.

(b) According to the data of dollar-mark exchange rate, the variance of floating exchange rate is larger than the variance of relative price indices.

(c) The US - Germany real exchange rates follow a random walk pattern under floating exchange rate regimes.

(d) Using the time series data between the U.S. and Germany, it is difficult to prove that there was any convergence toward PPP in the long run.

15. What does the following figure tell us?



(a) A country's institutions is positively correlated with the volatility of income per capita

(b) The trends of Financial Globalization have been strongest in the advanced countries, followed by the emerging markets and the developing countries.

(c) Governance does not matter. There are no large differences between countries in their economic outcomes.

(d) A country's institutions is positively correlated with the level of income per capita.

16. A manager signs a contract with a French company. The spot exchange rate is 1.15 US dollars per euro, and the French company agrees to pay one million euros in three business days. Hours after the contract was signed, a key economic data release is weaker than expected, and the exchange rate moves to 1.11. Please choose the true statements below

(a) The euro has appreciated, and the US dollar value of the incoming payment has increased.

(b) The euro has appreciated, and the US dollar value of the incoming payment has decreased.

(c) The euro has depreciated, and the US dollar value of the incoming payment has increased.

(d) The euro has depreciated, and the US dollar value of the incoming payment has decreased.

- 17. Which of the following should \underline{not} be included in the balance of payments account?
 - (a) interest payment on loan to the IMF
 - (b) imports of automobile parts
 - (c) bonus shares to equity shareholders
 - (d) dividend payment to home-country investors from a foreign subsidiary

2 Short Answer (12%. 3 questions with 4 points each.)

Use fewer than eight lines of your own words to provide the explanations of the following terms. Mathematical equations do not count into the number of sentences. If you fail to constrain your answer within eight lines, **two points** penalties will be applied accordingly.

1. (4% points) Belassa-Samuelson Hypothesis

2. (4% points) Fisher Effect

3. (4% points) Mundell-Fleming Trilemma

3 Analytical Questions (20%. 2 questions.)

(12% points) The table below shows hypothetical values for the consumer price indexes (CPI) of the U.S., the U.K., and Japan in 2014 and 2020. Their currencies are also indicated as the dollar (\$), pound (£), and yen (¥), respectively.

Country	U.S.	U.K.	Japan
Currency	\$	£	¥
CPI in 2014	100	200	150
CPI in 2020	120	230	165

Suppose that exchange rates in 2004 were

2014: $E_{\text{S}/\text{L}} = 1.60, E_{\text{Y}/\text{S}} = 100$

(a) Calculate the following exchange rates for 2014:

2014:



 $E_{/=} =$ _____

 $E_{\pounds/\Psi} =$ _____

 (b) Calculate the following exchange rates for 2020, assuming that the Purchasing Power Parity Theory holds: 2020:



2. (8% points) Note the following accounting identity for gross national income (GNI):

$$GNI = C + I + G + TB + NFIA$$

And for the gross national disposable income (GNDI):

$$GDNI = GNI + NUT$$

TB denotes the Trade Balance. NFIA denotes the Net Factor Income from Aboard. NUT denotes the Net Unilateral Transfer.

(a) Using these expressions, show that in a closed economy, gross domestic product (GDP), gross national income (GNI), gross national expenditures (GNE), and gross disposable national income (GNDI) are the same.

(b) Using these expressions, show that in a closed economy, domestic investment (I) is equal to domestic savings (S).