

International economics (2017–2018)
Final exam
Part on international macroeconomics

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12 January 2018, 12.00

Surname: _____

First name: _____

ID or passport number: _____

Group: _____

Question	Points	Obtained
1	8	
2	8	
3	8	
4	8	
5	8	
Total	40	

Instructions

The exam consists of **five questions**.

In total, it is possible to obtain up to **40 points**.

Duration of exam: **1 hour** (= 1.5 minutes per point or 12 minutes per question).

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1. (a) What is the definition of a stock variable? [1]

- (b) Let S_t be a stock variable and F_t be the corresponding flow variable. Show mathematically how S_t is related to F_t . [1]

- (c) Give an example of a stock variable together with its corresponding flow variable. [1]

- (d) Do the components of the balance of payments represent all stock variables, all flow variables or both stock and flow variables? [1]

- (e) What is a real asset? Give two examples. [1]

- (f) What is a financial asset? Give two examples. [1]

- (g) What does the "financial account" of the balance of payments measure? (This question refers to the general definition of the "financial account", not to its subcomponents.) [1]

- (h) What are the four main subcomponents of the "financial account"? [1]

Total of question 1: [8]

2. (a) What does Δq_t measure and what is it approximately equal to? [1]
- (b) If absolute PPP holds, what can you say about q_t and Δq_t ? [1]
- (c) The standard argument for why PPP should hold is that whenever prices of the same goods differ in two countries (when converted to the same currency), good market arbitrage will trigger price adjustments towards PPP. However, even if good market arbitrage works, why may it not be able to fully equalize prices across countries (even if the nominal exchange rate is fixed)? [1]
- (d) State the definition of the real exchange rate in logarithms. [1]
- (e) State the nominal exchange rate equation that forms the basis of the currency flow model. [1]
- (f) Combine the equations of the answers to parts d and e of this question. In the equation you derive, show that there is a "price level effect" of prices on the real exchange rate and a "nominal exchange rate effect" of prices on the real exchange rate and that both effects exactly offset each other provided the nominal exchange rate is flexible (the purchasing power parity fallacy). [2]
- (g) In the light of your answer to the previous part of this question, what can you say about the capacity of good market arbitrage to bring about PPP if the nominal exchange rate is flexible? [1]

Total of question 2: [8]

3. (a) What does *NFIA* stand for and what are its two subcomponents? [1]
- (b) What is $CA - TB - NFIA$ equal to? [1]
- (c) According to the intertemporal approach to the current account (section "Gains from globalization" in the lecture notes), what is the effect of a temporary positive income shock on the current account? [1]
- (d) According to the intertemporal approach to the current account (section "Gains from globalization" in the lecture notes), what is the effect of a permanent positive income shock on the current account? [1]
- (e) Suppose a country finds that its external financial assets increase and that its external financial liabilities decrease. Is the country experiencing a "capital inflow", a "capital outflow" or neither of both? Explain your answer briefly. (Note that this question refers only to non-monetary, non-reserve financial assets and liabilities.) [2]
- (f) What are official reserves and why do central banks hold them? [2]

Total of question 3: [8]

4. Consider the following table with the Big Mac index for the United States and Japan:

	Big Mac price in local currency (LC)	Big Mac price in USD	PPP-consistent exchange rate (LC/USD)	Actual exchange rate (LC/USD)	Under- or overvaluation of LC versus USD in percent
United States	3.00	3.00			
Japan	[1]	3.60	[2]	120	[3]

The Japanese currency is the yen (JPY), the currency of the United States the US dollar (USD).

Now answer the following questions:

(a) Compute the real exchange rate of the United States vis-à-vis Japan. Show how you arrive at your result. [2]

(b) Compute the missing value [1] in the table. Show how you arrive at your result. [2]

(c) Compute the missing value [2] in the table. Show how you arrive at your result. [2]

(d) Compute the missing value [3] in the table. Show how you arrive at your result. [2]

Total of question 4: [8]

5. (a) What is a currency crisis? [1]
- (b) Give an example of an important currency crisis that occurred during one of the recent decades. State the country, or group of countries, that was affected and the year in which the crisis occurred. [1]
- (c) Based on the currency flow model, explain briefly how currency crises come about. Instead of writing a long text, you can simply use variables, equations, arrows, bullet points etc. to indicate the sequence of events. [6]

Total of question 5: [8]

