

International economics (2014–2015)
Final exam
Part on international macroeconomics

Nikolas A. Müller-Plantenberg*

8 January 2015, 12.00

Surnames: _____

First name: _____

ID or passport: _____

Group: _____

Question	Points	Score
1	8	
2	8	
3	8	
4	8	
5	8	
Total:	40	

*E-mail: nikolas@mullerpl.net. Address: Faculty of Economics and Business Administration, Universidad Autónoma de Madrid, 28049 Cantoblanco, Madrid, Spain.

Total points and exam duration

This part of the exam consists of **five questions**.

In this part of the exam, it is possible to obtain up to **40 points** in total.

Duration of this part of the exam: **1 hour** (= 1,5 minutes per point or 12 minutes per question).

Publication of grades and revision session

Information regarding the publication of grades and the revision session will be provided on the course website.

1. (a) Write down two different definitions of the current account, CA, in terms of the following variables: FA, GDP, GNDI, GNE, GNI, KA, NFIA, NUT, TB. [4]

- (b) Write down two different definitions of the gross domestic product, GDP, in terms of the following variables: CA, FA, GNDI, GNE, GNI, KA, NFIA, NUT, TB. [4]

Total for Question 1: 8

2. (a) What is a "capital inflow"? How is it recorded in the balance of payments? [4]

(b) Does a country receiving a "capital inflow" become richer, poorer or neither of both? Explain. [4]

Total for Question 2: 8

3. (a) Write down the definition of the real exchange rate based on the notation used in the course. [1]
- (b) Interpret the equation you have just written down in economic terms. [2]
- (c) Take logarithms of both sides of the equation and then apply the difference operator to the resulting equation. [1]
- (d) Interpret this new equation in economic terms. [2]
- (e) If domestic inflation is higher than foreign inflation, does this necessarily lead to a real appreciation? Explain. [2]

Total for Question 3: 8

4. Suppose you have received an income of 10.000€ in the first of two years. In the second year you have no income.

(a) Now you want to consume goods for over the two years. Explain why the usual shape of the utility function, $u(C)$, implies that the added utility of both years is higher when you consume the same amount (5.000€) in each year, rather than a low amount (say, 2.500€) in the first year and a high amount (say, 7.500€) in the second year. That is, why is it the case that:

[6]

$$u(5.000) + u(5.000) > u(2.500) + u(7.500)? \quad (1)$$

(b) If you are the only inhabitant of a country and if there is no real investment, what can you say about the current account balance of your country in year 1 and year 2?

[2]

Total for Question 4: 8

5. Based on the notation used in class, the balance of payments identity of a given country can be written as follows:

$$\Delta z_t^{\text{HF}} = \Delta e_t^{\text{HF}} + \Delta b_t^{\text{HF}} + \Delta m_t^{\text{HF}} + \Delta b_t^{\overline{\text{HF}}}. \quad (2)$$

Use this identity to answer the following questions.

- (a) What should the level of official intervention be when a country tries to stabilize its real exchange rate, q_t ? [2]
- (b) What should the level of official intervention be when a country tries to stabilize its nominal exchange rate, s_t ? [2]
- (c) What is the net inflow of money into a country when a country abstains from official intervention? [2]
- (d) What can be said about the sum of the country's net money inflows and official reserve acquisitions during periods when capital inflows exceed the deficit on current account balance? [2]

Total for Question 5: 8

