International economics (2013–2014)
Final exam

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Surnames: _____

First name: _____

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Group: _____

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

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Total points and exam duration

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).

Publication of grades and revision session

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

1. Let a_{LC} and a_{LW} be the unit labour requirements in the production of, respectively, cheese and wine in the home country (measured in hours per kilogramme of cheese and hours per litres of wine, respectively). Let a^*_{LC} and a^*_{LW} be the corresponding variables of the foreign country. Assume that $a_{LC} = 1$, $a_{LW} = 2$, $a^*_{LC} = 6$ and $a^*_{LW} = 4$. Suppose finally that the prices of cheese and wine in the world market, P_C and P_W, are both equal to 12. In all of the following questions, show your calculations.

   (a) What is the absolute productivity in the production of wine in the home country? [1]

   (b) Which country is more productive in absolute terms in the production of wine? [1]

   (c) What is the opportunity cost of cheese in terms of wine in the home country and in the foreign country? [2]

   (d) Based on the opportunity costs of cheese in terms of wine in the home country and in the foreign country, why should the home country specialize in the production of cheese and not in that of wine? [1]

   (e) Compare how much wine the home country can obtain in 1 hour if it ...

      i) ... produces wine directly? [1]

      ii) ... produces cheese and exchanges it for wine? [2]

Total for Question 1: 8

2. (a) What are economies of scale and why do they give rise to international trade? [2]

(b) What is the difference between external and internal economies of scale and to which market structure do they give rise? [2]

(c) State an example of a cost function that gives rise to economies of scale. What is the corresponding average cost function? [2]

(d) Why can trade based on external economies of scale leave a country worse off than how it would have been without trade? [2]

Total for Question 2: 8

3. (a) What is the Big Mac index? [1]

(b) Why is the Big Mac index useful? [1]

(c) At a given date, a Big Mac costs 4 A$ in country A and 10 B$ in country B. The nominal exchange rate of country A vis-à-vis country B is 2 B$ per A$.

i) What is the *real* exchange rate of country A vis-à-vis country B? [2]

ii) What should the nominal exchange rate of country A vis-à-vis country B be when it is assumed that PPP holds in the absolute version? Show your calculations. [2]

iii) Having calculated the PPP-consistent nominal exchange rate in the previous question, is the *actual* exchange rate of 2 B$ per A$ over- or undervalued? In either case, by how much is it over- or undervalued? [2]

Total for Question 3: 8

4. (a) Based on the monetary model with flexible prices, how can currency crises be explained? [2]

(b) Which alternative explanations of currency crises does the currency flow model offer? You do not need to go into much detail but should provide a structured answer. [6]

Total for Question 4: 8

	Δz_t^{HF}	Δm_t^{HF}	m_t^{HF}	$\Delta b_t^{\bar{\text{H}}\bar{\text{F}}}$	$b_t^{\bar{\text{H}}\bar{\text{F}}}$	s_t	p^{H}	p^{F}	$p^{\text{H}} - p^{\text{F}}$	q_t
							exog.	exog.		
0	0		0		2500	0				0
1	0	0	0	0	2500	0	0	0	0	0
2	0	100	100	-100	2400	0	1	0	1	1
3	-100	100	200	-200	2200	0	2	0	2	...[1]
4	-300	100	300	-400	1800	0	3	0	3	3
5	...[2]	100	400	-700	1100	0	4	0	4	4
6	-1000	100	500	...[3]	0	0	5	0	5	5
7	-1500	-1500	-1000	0	0	...[4]	6	0	6	-10
8	-500	-500	-1500	0	0	-22	7	0	7	-15
9	1000	100	-1400	900	900	-22	8	0	8	-14
10	2400	100	-1300	2300	3200	-22	9	0	9	-13
11	3700	100	-1200	3600	6800	-22	10	0	10	-12
12	4900	100	-1100	4800	11600	-22	11	0	11	-11

Table 1: Currency crisis in the currency flow model.

5. Consider table 1. Calculate the four values that are missing and state in each case the equation which you use to derive the corresponding value.

   (a) i) Value [1]: [1]

   ii) Equation [1]: [1]

   (b) i) Value [2]: [1]

   ii) Equation [2]: [1]

   (c) i) Value [3]: [1]

   ii) Equation [3]: [1]

   (d) i) Value [4]: [1]

   ii) Equation [4]: [1]

Total for Question 5: 8