



Department of Economics

Course name: International Economics
Course code: EC2301
Examiner: Anders Åkerman
Number of credits: 7,5 credits
Date of exam: Monday 9 January 2016
Examination time: 3 hours [16:00-19:00]

Write your identification number on each paper and cover sheet (the number stated in the upper right hand corner on your exam cover).

Use one cover sheet per question. Explain notions/concepts and symbols. If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked. **No aids are allowed.**

Answer in Swedish or English.

The maximum number of credits is 99 (for answers on the exam) + 15 (for assignments). Credits correspond to grades as follows:

90 – 115	A
80 – 89	B
70 – 79	C
60 – 69	D
50 – 59	E
0 – 49	F

Your results will be made available on your “My Studies” account (www.mitt.su.se) on January 30 at the latest.

Good luck!

1. Explain the following concepts in 50 words maximum for each concept. (3 points per concept, i.e. maximum 24 points).

- a) Gravity model of international trade
- b) Differentiated goods
- c) Absolute advantage
- d) Comparative advantage
- e) External economies of scale
- f) Terms of trade
- g) World Trade Organization (WTO)
- h) Quota rents

2. This question will ask you to use the **Heckscher-Ohlin model** of international trade to analyze the integration of two countries that differ in their relative endowments of skilled to unskilled workers.

Suppose that there are only two production factors, unskilled and skilled workers. These two production factors produce two goods, computers and T-shirts. The computer sector is “skill intensive”, i.e. it uses skilled workers intensively. The T-shirt sector uses unskilled workers intensively. There are two countries in the world, Home and Foreign. The two countries are of the same size, but a larger share of workers in Home than in Foreign have a university degree. Home is therefore abundant in skilled labor and Foreign is abundant in unskilled labor.

- a) Which of the two countries has the highest difference in wages between skilled and unskilled workers in autarky? Explain your answer using the model. (6 points)
- b) Assume now that Home and Foreign start to trade with each other. How does income inequality (the difference between wages of skilled and unskilled workers) change with trade? Explain using a graph what happens in both Home and Foreign. (7 points)
- c) Even if some groups may lose from international trade, what does the model predict for the effect on aggregate welfare for each country? Explain your answer using a graph. (6 points)
- d) Suppose that education policies in Foreign raise the share of Foreign’s workers that are skilled, such that it is now the same as in the Home country. How would this change your answer to b) and c)? (6 points)

THE EXAM CONTINUES ON THE FOLLOWING PAGE

3. International trade agreements

It is often argued that international discussions on trade liberalization follow the structure of a so-called prisoner's dilemma. Consider the following game between Home and Foreign, where Figure 1 contains a matrix which describes the payoffs in terms of welfare for Home and Foreign depending on which country has import tariffs.

		Foreign	
		No tariff	Tariff
Home	No tariff	0, 0	5, -15
	Tariff	-15, 5	-10, -10

Figure 1. Payoff matrix.

- a) Describe the coordination problem for two countries with this payoff structure and show possible outcomes for situations when the two countries can negotiate and when they cannot. Explain. (7 points)

The number of Preferential Trade Agreements (PTAs) has increased rapidly in recent decades. A PTA refers to an agreement when a set of countries removes all import tariffs between each other.

- b) Explain the difference between a free-trade area and a customs union. (7 points)
c) Explain the difference between trade creation and trade diversion. How do they affect welfare? (7 points)
d) It would seem that PTAs violate the most favored nation principle. How can it be that many WTO countries implement them despite this? (4 points)

4. A small country is producing potatoes and carrots. Every worker can produce either 3 kilos of potatoes or 9 kilos of carrots per week. Use the **Ricardian model** to answer the following questions. Assume throughout that consumers want to consume at least a small amount (i.e. not zero) of each good.

- a) Draw the Production Possibility Frontier (PPF) for the country. Moreover, in autarky when the country is not trading with any other country, what will the relative price be for the two goods? (6 points)
b) Assume now that the relative world market price of potatoes in terms of carrots is 1, and that the small country we study can trade on the world market. Will the small country trade? If so, what good(s) will it export and what will it import? What will be the new price in the country? (7 points)
c) Analyze the welfare effects of international trade by computing how the real wages in the Home country change. Explain your answers. (6 points)
d) Assume now that technology in the Home country evolves so that a worker can now produce 9 kilos of potatoes per week instead of just 3 kilos as before. How will this technological progress affect the way in which Home trades with the rest of the world? (6 points)