

UNIVERSITY OF OSLO
DEPARTMENT OF ECONOMICS

Postponed exam: **ECON4415 – International trade**

Date of exam: Thursday, January 8, 2009

Time for exam: 09:00 a.m. – 12:00 noon

The problem set covers 3 pages (incl. cover sheet)

Resources allowed:

- No resources allowed

The grades given: A-F, with A as the best and E as the weakest passing grade. F is fail.

International Trade-ECON4415

Final Exam, Fall 2008

The exam consists of 100 points. Please allocate your time to each question accordingly.

Question 1. (20 points)

Explain the following

- a. Gains from trade
- b. Why autarky prices may differ across countries.
- c. Specific factor model of trade.

Question 2. (20 points)

- a. In Krugman's core-periphery model, explain and illustrate why firms may only locate in one region.
- b. Suppose that there are two regions, North and South, and that North initially has all manufacturing production. Explain why a higher share of manufacturing firms makes a core-periphery pattern more likely.

Question 3 (30 points)

Suppose two countries Home and Foreign have the same preferences, and technologies. However, suppose that Home has a higher capital/labor ratio than Foreign. Suppose that both countries can produce two goods good 1 and good 2. Suppose that the production of good 2 is labor intensive.

- a. Draw the production possibilities frontiers (PPFs) for these two countries.
- b. Show that the relative price of good 1 is lower in the Home country under autarky.
- c. Determine the effect of trade opening on relative prices, the term of trade and the pattern of specialization. Please show export and imports on the PPFs.
- d. Determine the distributional effect of free trade. In other words, in each country show who gains and who loses from free trade.

Question 4 (30 points)

Suppose that two countries H and F produce cars and textiles with the following worker requirements:

	Cars (per unit)	Textiles (per tonn)	Total labor force
Home	$a_H^C = 1/2$	$a_H^T = 1$	$L_H = 100$
Foreign	$a_F^C = 4$	$a_F^T = 2$	$L_F = 400$

Preferences are Cobb Douglas with cars having a share $1/2$.

- Draw the production possibility frontier (PPF) for each country
- Solve for the equilibrium prices and quantities when countries are not allowed to trade. Where is the relative price of cars greater? Why?
- Now suppose that countries are allowed to trade. Compute the world relative price of cars and relative wages.
- Explain the pattern of trade using the PPFs for both countries.
- Show that both countries benefit from trade.