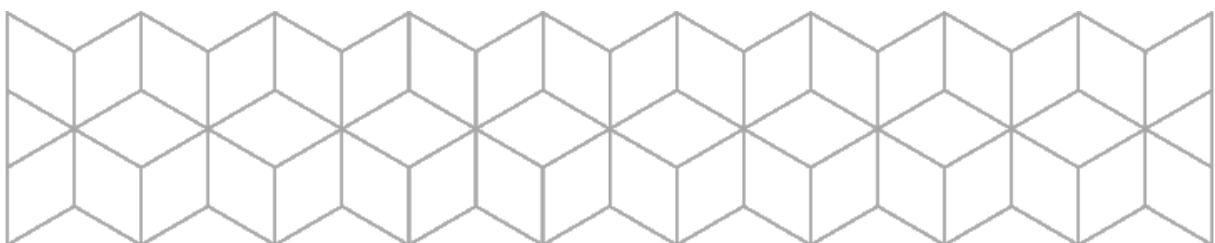


EXAMINATION

Course code: SFB11615	Course: International Economics
Date: 10 May 2017	Duration: 4 hours
Permitted sources: Calculator, mother tongue - English - mother tongue dictionary	Lecturer: Gry Tengmark Østenstad
The examination: The examination papers consist of 4 pages inclusive this page. Please check that the examination papers are complete before you start answering the questions. All questions must be answered.	
Date of announcement of the examination results: 6 June 2017 The examination results are available on the Studentweb no later than two workdays after the announcement of the examination results www.hiof.no/studentweb	



Problem 1 (30 %)

Consider two countries, France and Italy. Both countries produce cheese and ham by the use of labor. France has 120 units of labor available and Italy has 180 units of labor available. The unit labor requirements to produce cheese and ham are given by the table below.

	Cheese	Ham
France	1	3
Italy	2	3

- Graph the production possibility frontiers of France and Italy.
- What is the opportunity cost of cheese in the two countries?
- Which country has a comparative advantage in the production of cheese? Which country has a comparative advantage in the production of ham?

Suppose demand takes the following form: $\frac{\text{Demand for cheese}}{\text{demand for ham}} = \frac{\text{price of ham}}{\text{price for cheese}}$

- Draw the world relative supply curve and the world relative demand curve. Determine the equilibrium world relative price of cheese.
- Describe the resulting production and consumption patterns and the pattern of trade.
- Show that both countries gain from trade.

Problem 2 (20 %)

Consider two countries, East and West. Both countries produce two goods, X and Y, using two production inputs, labor and capital. East has a labor stock of 2 million workers and its capital stock is US \$5000 million. West has a labor stock of 3 million workers and its capital stock is US \$6000 million. The two factors of production are characterized by decreasing marginal productivity. They are mobile between sectors but not between countries. Production of X is capital-intensive and production of Y is labor-intensive.

- Which country is capital abundant and why?
- Which country would export the X good and which country would export the Y good if the two countries engage in free trade?
- Which factor of production would gain and which factor of production would lose within each country if the borders were closed? Explain in brief the mechanisms leading to this result.

Problem 3 (20 %)

Consider an industry that is characterized by imperfect competition. Firms differ in terms of their performance and supply differentiated goods. Discuss and illustrate the effects of economic integration. Which firms gain from trade and which firms lose from trade?

Tip: If you like, you can assume that each firm faces the following demand function and cost function:

$$Q = S \left[\frac{1}{n} - b(P - \bar{P}) \right]$$

$$C_i = c_i Q + F$$

where Q is quantity demanded, S is the size of the market, n is the number of firms, b is a positive constant, P is the price set by the firm, \bar{P} is the average price in the industry, C_i is the cost function faced by firm i , c_i is marginal cost faced by firm i , and F is a sunk cost.

Problem 4 (30 %)

Consider two countries, Home and Foreign. Both countries consume and produce cheese. Home's demand curve for cheese is

$$D = 90 - P$$

Its supply curve is

$$S = 10 + P$$

Foreign's demand curve for cheese is

$$D^* = 1080 - 6P$$

Its supply curve is

$$S^* = 720 + 12P$$

- Derive and graph Home's *import* demand schedule. What would the price of cheese be in absence of trade?
- Derive and graph Foreign's *export* supply curve and find the price of cheese that would prevail in Foreign in absence of trade.
- Now allow Foreign and Home to trade freely with each other, at zero transportation cost. What is the world price? What is the volume of trade?
- Home imposes a specific tariff of 5 on cheese imports. Determine and graph the effects on the following
 - The price of cheese in each country
 - The quantity of cheese supplied and demanded in Home
 - The volume of trade
 - The welfare of Home import-competing producers
 - The welfare of Home consumers
 - The income of the Home government

- e) Show graphically and calculate the terms of trade gain, the efficiency loss and the overall effect on welfare.
- f) Discuss reasons for which authorities in Home might still want to introduce a tariff, despite the net overall loss that it generates.