

EXAMINATION

Course code: SFB11615	Course: International Economics
Date: 16.5.2018	Duration: 4 hours
Permitted aids: Simple calculator	Lecturers: Tor Arne Moxheim
The examination: The examination papers consist of 5 pages including this page. Please check that the examination papers are complete before you start answering the questions.	
Date of announcement of the examination results: 6.6.2018 The examination results are available on the Studentweb www.hiof.no/studentweb	



1. Weight 30%

Poland's labor pool is 12000 units, and labor force in France is 20000 units. The unit labor requirements demanded to produce one unit finished goods is given below.

	Vodka	Wine
Poland	3	0,5
France	8	1

- a) Draw the production possibility frontiers of Poland and France.
- b) What is the opportunity cost of vodka in the two countries?
- c) Which country has an absolute advantage in the production of vodka? Which country has an absolute advantage in the production of wine?
Which country has a comparative advantage in the production of vodka? Which country has a comparative advantage in the production of wine?
- d) Draw the world relative supply curve of vodka and simulate different world relative demand curves. Determine the equilibrium world relative price of vodka in the diagrams.
- e) At which relative price range of vodka will both countries gain from trade? Indicate the benefit for Poland if they specialize in Vodka. Determine if Poland may experience internal economies of scale in production of Vodka as well.

2. 15% weight

Look at the specific factors model and distinguish between potato farmers and grape growers (vineyards) in Poland. The two types of production depend on two different kinds of soil, which are the specific factors in each economy. Labor is the mobile factor and both countries have a labor pool of 20000.

We will assume that world market price of vodka is greater than the pre-trade price in Poland and world market price is greater than the pre-trade price of wine in France.

Price in autarky	Vodka	Wine
Poland	300	50
France	480	60

Trade world market price 400

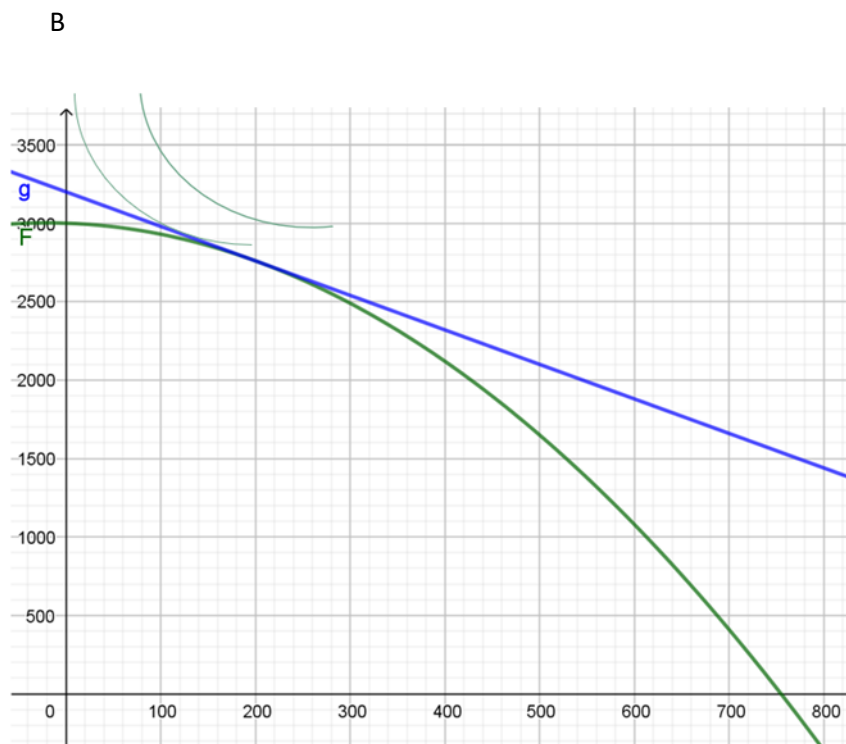
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	Marginal productivity of labor in Poland in		Marginal productivity of labor In France	
	Vodka	Wine	Vodka	Wine
4000	0,45	2,3	0,3	3
8000	0,35	2	0,25	2,5
12000	0,30	1,8	0,22	2,2
16000	0,27	1,7	0,2	2
20000	0,26	1,65	0,19	1,9

- What are the characteristics of the specific factors model compared to the Riccardo model.
- Who gains and who loses from trade in this scenario; workers, potato farmers and grape growers? Look at both countries and show in diagram and explain.

3. 25% weight

We are looking at the standard trade model and an open economy for a given country producing two goods A and B.



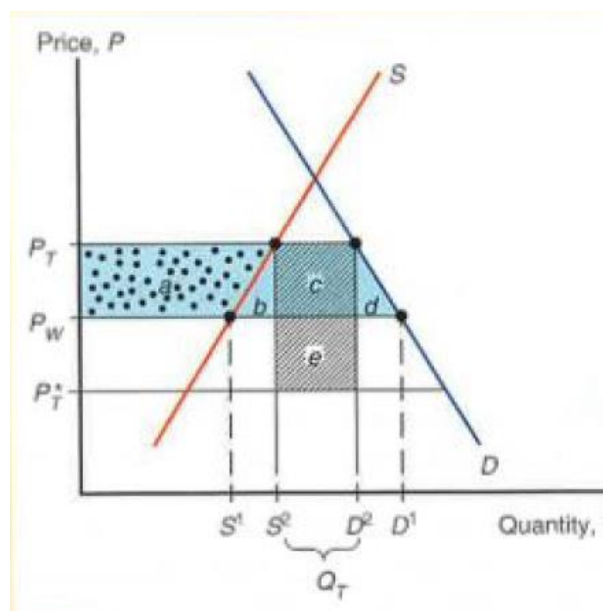
Good A on the x-axis and Good B on the Y-axis. The top left convex-looking curves are indifference curves (expressing two different welfare levels, draw in more when required). (Detail: The mathematical expression to the PPF curve is: $f(x)=0,005x^2-0,2x+3000$ – not important)

World price of A is 440 and price of B is 200.

- Look at the intersection between the production possibility frontier and the iso-value line – what is this point?
- What will be the best outcome for this country when engaging in trade. Show imports and exports.
- Simulate a new relative price – assume world price of A increases to 1040. How do you derive the countries relative supply and relative demand curve for good A?
- Look at how an export subsidy of Good A affects the terms of trade and production in this country.

4. 20% weight

- Explain how an import tariff influence prices and volumes for home and foreign producers, and the effects on producers/ consumers surplus.



P_W = world equilibrium price without tariff. P_T = price in Home including tariff t . P_T^* = $P_T - t$ = price in Foreign after introducing the tariff t .

- Let us consider an import quota instead. Draw a new diagram and show and explain how this will interfere in the market in terms of prices, volumes and producers/ consumers surpluses.
- What is the main difference between a quota and the tariff concerning government revenues?

5. 10% weight

Consider you are an European investor who considers buying US bonds (\$) with 10-year treasuries at 3% annual yield. The alternative would be to buy German bonds (Euro) at 0,65% yield. Future exchange rate for the Euro is 1,229 USD one year from now.

- a) At what spot exchange rate will we find that these two ways of saving is giving the same yearly expected rate of return.
- b) Show how the market forces directs the Euro/USD spot rate according to the interest rate parity principle.

Formula for this exercise:

$$R_{\$} = R_{\text{€}} + (E_{\$/\text{€}}^e - E_{\$/\text{€}}) / E_{\$/\text{€}}$$