Examination – SFB 11615 International Economics

SPRING 2021

Question 1 (15 %)

Assume that the two countries Switzerland and Norway both produce mobile phones and beer. The following table shows production per labor hour.

	Switzerland	Norway
Mobile phones (number per hour)	1	1/2
Beer (gallons per hour)	1/4	1

(a) Explain absolute advantages from the table above. Can absolute advantages be used as an argument for international trade in this case? Determine the trade pattern.

(b) Calculate the relative prices in autarky for both goods. Determine the trade pattern based on these prices and the theory of comparative advantage.

(c) Will the trade pattern be different in (a) and (b)?

Question 2 (30 %)

Assume that Sweden and Denmark both produce the sweater x, and the pencil y. Both goods make use of the inputs capital (K) and labor (L), at given input prices r and w respectively. The sweater is labor intensive, and Denmark har a relatively large amount of labor.

(a) Formulate production functions for both countries.

(b) Compare the relative factor endowments in the two countries. Illustrate the two countries production possibilities frontier in the same diagram.

(c) Compare the relative price on sweaters between the countries and determine and draw the no-trade equilibrium. You can assume the preferences are identical in the two countries, and you can use the same diagram as in (b).

(d) Is the no-trade equilibrium Pareto-optimal?

(e) Assume that the two countries open for international trade. What do we know about the world relative price on sweaters?

(f) Draw the free-trade equilibrium.

(g) Describe the trade pattern.

(h) Is the free-trade equilibrium Pareto-optimal?

Question 3 (30 %)

In the small economy Netherlands, the market for tooth pickers is described by the following demand and supply functions:

Demand: P = 130 – 2X   Supply: P = 10 + 2X

where P is price and X is quantity.

(a) Calculate the equilibrium price and quantity. Draw the market equilibrium.
(b) Calculate the consumer surplus, producer surplus and the social surplus (welfare) in this market.
(c) Assume that Netherlands opens up to international trade, and that the world price on tooth pickers is P^W = 8. Calculate Netherlands export of tooth pickers.
(d) Who will win and who will lose in the Netherlands as a result of the free trade situation?
(e) Calculate the consumer surplus, producer surplus and social surplus after international trade.

Question 4 (25 %)

Covid-19 has reduced macroeconomic activity in several countries. In Italy both fiscal and monetary policy measures have been considered. Due to the implementation of euro Italy has a fixed exchange rate system.

(a) Assume that the LM-curve and the BOP-curve is familiar. Develop the IS-curve for an open economy.
(b) Show how an expansive fiscal policy will affect GDP and the interest-rate in the economy.
(c) Show how an expansive monetary policy will affect GDP and the interest-rate in the economy.

Good luck!