QUESTIONS - CHAPTER 13 ECONOMIC INTEGRATION

Question 13.1
The European Union has some minor grapefruit producers (mostly in Cyprus, Italy, and Greece) and imports most grapefruit from the USA. On all imports of grapefruit the European Union levies a common tariff. Recently, Turkey has expressed ambitions to conquer the European grapefruit market by planting many new grapefruit trees. These new farms are not yet as productive as their US counterparts (even when transport costs are taken into account) but will be cheaper once Turkey establishes a customs union with the European Union in agricultural products. Officials from the European Union worry about what will happen with the European grapefruit market and ask for your advice.

13.1A Draw a partial equilibrium framework of the European grapefruit market. Draw the demand and supply of grapefruit within Europe and the supply curves of the USA and Turkey. Indicate clearly the price of grapefruit in Europe, European production and European imports of grapefruit.

13.1B What happens to the imports, the production, and the price of grapefruit in Europe once it establishes a full customs union with Turkey?

13.1C What are the welfare effects of a full customs union with Turkey for consumers, producers and the EU governments? What is the total welfare effect?

13.1D If the European Union still wants to pursue a full customs union with Turkey, is there a loophole to increase welfare on the grapefruit market?

Question 13.2
Many papers have analysed the net welfare effect of regional trade agreements in a multi-country general equilibrium framework. Despite the analytical advances, however, the net welfare effect of regional trade agreements remains ambiguous. Two schools of economists have arisen. One school claims that regional trade agreements are likely to be more welfare enhancing. According to the other school, trade-diversion is likely to dominate trade-creation in most situations. Their disagreement is mainly on the importance of transport costs.

13.2A Explain how the results of the general equilibrium model of Krugman (see Section 13.5) change when transport costs are introduced.
13.2B Which regional trade agreements will economists mention when they want to stress that regional trade agreements are likely to be welfare enhancing?

13.2C Which regional trade agreements will economists name when they want to indicate that regional trade agreements are likely to deteriorate welfare?

**Question 13.3**

Most countries move from a relatively shallow type of economic integration to deeper types of economic integration. The main text describes, for example, that the European Union started out as a preferential trade agreement in 1951, a customs unions in 1968 and developed into a common market in 1993. Also for other regional trade agreements such a time line can be drawn. Search the Internet (or the main text) and do this for the regional trade agreements below.

13.3A COMESA
13.3B ASEAN
13.3C EAEC
13.3D CARICOM

**Question 13.4**

Trade integration between the EU and Turkey has a long history. Already in 1963 the Treaty of Ankara envisaged Turkey becoming a full member of the EU. Even though Turkey’s application for full membership of the EU in 1987 was rejected, trade liberalisation between the EU and Turkey continued. As a result, on January 1st 1996 the EU and Turkey established a Customs Union for *industrial products*.

Figure 1 below shows Turkish net exports for different industries. Most trade consists of industrial products (“iron and steel” to “clothing”) that are included in the Customs Union Decision. For food, minerals, and fuels no trade agreement exists (thus they are not affected by the Customs Union).
The following information is given on the three sectors that do not fall under the Customs Union Decision:

**Agriculture** (food sector) is an important part of the Turkish economy. In 2001 it contributed 14 percent to GDP and employed 36 percent of the Turkish labor force. The Turkish agricultural sector is more heavily regulated than its EU counterpart (can you imagine?): more financial support for farmers and higher import-barriers.

Turkey is a net importer of **minerals**. Currently, it imports these minerals from other economies than the EU. In principle however, these imports could also be from the European Union. Assume that Turkey currently applies the same import tariffs on minerals from the EU as from third countries.

Given the limited oil- and gas-resources within the European Union, Turkey has to import **fuels** (gas and oil) from third countries (currently mainly Russia, Libya, and Algeria). Assume that at present import restrictions on fuels are stricter in Turkey compared to the EU.

**13.4A** Do you think Turkish welfare increases when the fuel sector becomes part of the customs union?
13.4B What about when the mineral sector joins the customs union?

13.4C Some European politicians oppose full membership of Turkey because it would form a threat to the Common Agricultural Policy of the European Union. Too much of the funds would be diverted to Turkey. Do you think, based on the information above, that Turkish farmers are in favor of full membership?

13.4D Do you think Turkish welfare will increase when the agricultural sector joins the customs union?

Question 13.5
Theoretically it is not clear whether the trade creation of trade diversion effect will dominate when forming regional trade bloc. Economic integration is therefore a fruitful topic for research. Economists analyze every individual trade agreement for its merits and demerits. Below we have listed a number of studies that estimate the trade diversion and trade creation effects for different regional trade agreements. These papers are freely downloadable from the internet. Choose one of the papers, locate it on the internet and summarize its findings. Does the author of the paper favor the regional trade agreement or not? Of course you can also search the internet yourself for another analysis of maybe another regional trade agreement.

F. Wihelmsson, “Trade creation, diversion and displacement of the EU enlargement process”, mimeo Lund University, June 2006.


Question 13.6
The Excel file for question 13.6 offers you the opportunity to experiment with the Krugman regionalism model. In the main text we only dwelled on the effects of different parameter settings on total world welfare. This simulation on top of that also shows the effects on country level. It specifically tells you from which sources a country is earning its income and what this income is worth in welfare terms.

13.6A What happens to our specific country when the world moves from ten to nine trading blocs (with the number of countries remaining equally divided among the trading blocs in both regimes)? Explain the changes in total income and welfare of our country.

13.6B As the number of trading blocs in the world decreases further, at a certain moment the welfare of our country starts to increase. At which point does this happen and why does welfare (suddenly) increase after this point?

13.6C Increase the tariff to one instead of a half. At which number of trading blocs is the welfare at a minimum level? Why is this minimum level reached at a different number of trading blocs compared to 13.6B?