QUESTIONS - CHAPTER 15 MULTINATIONALS

Question 15.1
Several academics have wondered why a firm establishes a production plant abroad since this involves extra costs compared to home production (think, for example, of the cost of transferring people to a foreign country, of acquiring information, of overcoming language barriers, and of fighting cultural differences).

15.1A What is required according to Dunning before firms establish or purchase production plants abroad? Describe all the conditions carefully.

15.1B Give an example of every condition that is not mentioned in the main text.

15.1C How are the conditions modelled in the multinational model of Markusen and Venables (see Section 15.5)?

15.1D Why do all conditions have to be satisfied before a firm becomes a multinational?

Question 15.2
Chapter 15 first describes some empirical observations on the foreign direct investment flows between countries. The Markusen and Venables model (see Section 15.5) explains some of the most important empirical observations. This question reviews the empirical observations and their theoretical explanations.

15.2A Are the FDI flows into the least developed nations large or small? What is the theoretical explanation for this in the Markusen and Venables model?

15.2B Are the FDI flows into the developed nations large or small? What is the theoretical explanation for this in the Markusen and Venables model?

15.2C What other factors could explain FDI flows between countries?

Question 15.3
Imagine a machine manufacturer operating in East Germany. Before the fall of the Berlin Wall the manufacturer is only producing for the national market and prohibited from exporting to other countries. After the fall of the Berlin Wall, the manufacturer is allowed to sell machines to other countries. In contemplating how to deal with the new situation the manufacturer uses the model of Markusen and Venables. She wants to sell the machines in four countries with the following characteristics:
• West Germany is more advanced and capital abundant compared to East Germany. Because they are neighbouring countries, transport costs are low. Moreover, the German government provides a subsidy to East German firms establishing a plant in West Germany.

• Poland is also a neighbouring country with low transport costs. The Polish government does not provide a subsidy for the establishment of a plant. The level of development (measured by the endowment ratio) is more or less the same as in East Germany, but the Polish economy is considerably larger.

• As a result of newly introduced safety controls at the border, transport costs to the Czech Republic are very high. Like Poland, the Czech government does not provide a subsidy for the establishment of a new plant. East Germany and the Czech Republic are broadly equal in size and in level of development.

• Slovakia is not a neighboring country, such that transport costs are high. The establishment costs for a plant are high due to a tax. Also Slovakia and East Germany have the same level of development, but the Slovakian economy is smaller than the East German economy.

The manufacturer has to decide if she should establish a plant in the other country or produce the machines in East Germany and export the products.

**15.3A** At which node of the decision tree in Figure 15.8 is the manufacturer?

**15.3B** Consider for each of the four countries if it is likely that the manufacturer establishes a new plant according to the Markusen and Venables model. In which country is the producer most likely to establish a plant and in which least likely?

**Question 15.4**

Bicfun is a bicycle producing multinational firm with three production plants in three different countries. The Bicfun assembly-plant is situated in country A, the Bicfun frame-plant in country B, and the Bicfun parts-plant in country C. The Bicfun frame-plant produces a frame and the Bicfun parts-plant a package of bicycle parts, both of which are then shipped to country A to be assembled in the Bicfun assembly-plant, resulting in a complete bicycle which is sold on the market for 700 Euro.

The production cost of producing one bicycle frame in country B is 200 Euro. The production cost of the package of parts is 300 Euro. Assembling the bicycle in country A costs 50 Euro.
The transfer price (excluding taxes) of frames and parts between the Bicfun plants may not deviate more than 50 Euro from the production price and profits should not be negative, otherwise the tax authorities of the different countries will suspect that Bicfun is evading their taxes and consequently give Bicfun a large fine. Countries A, B, and C levy different taxes on profits. The assembly-plant in country A has to pay a 35% tax on its profits, compared to a 25% tax in country B, and a 20% tax in country C. Furthermore, it is given that country A imposes a 10% tariff on the value of imports coming into country A.

15.4A Calculate the optimal transfer price for a bicycle frame and a package of parts (the prices that the frame-plant and parts-plant demand from the assembling-plant for their products) if it is assumed that the multinational strives for maximum profits. Denote only the local prices (without the tariffs).

15.4B What are the profits for every separate plant and what are the profits for the multinational as a whole?

Suppose that country A increases the import tariff to 20%.

15.4C What are the optimal transfer prices in this case? Denote only the local price.

15.4D What is the profit of every separate plant and what is the profit of the multinational as a whole?

Question 15.5
Determine for every merger listed below if it is a horizontal, vertical, or conglomerate merger. Search the internet for information if necessary.

15.5A Procter & Gamble and Gillette

15.5B America Online and Time Warner

15.5C Microsoft and Winternals software

15.5D Mittal Steel and Arcelor

15.5E Vivendi and Seagram

15.5F Air France and KLM Royal Dutch Airlines
Question 15.6
The Excel file for question 15.6 gives the full top one hundred multinational list from the UNCTAD World Investment Report. This dataset allows us not only to analyze the Transnationality index as described in the main text, but also the so called Internationalization index. This is an index which describes the geographic spread of multinationals by dividing the number of affiliates abroad by the total number of affiliates.

15.6A Calculate the Transnationality index for every one of the top one hundred multinationals. Check whether the assertion in the main text, that most international oriented companies are to be found in smaller countries, also holds in the extended list of companies.

15.6B Calculate the Internationalization index for every company. Describe this statistic. So for example indicate what the minimum, maximum and average value is. What does this tell you about the geographic spread of multinationals?

15.6C Are companies that are located in small countries in general also the ones that are geographically most spread?