# Chapter D: Multinationals

# (represents chapters: 15)

**Multinational corporation or transnational corporation:** A company that is producing and selling products in more than one country. Multinationals are becoming increasingly important for the global economic system. The most multinationals are in the OECD countries.

Becoming a multinational requires foreign direct investment (FDI). This can through either three ways:

- **Greenfield investments**: Setting up a foreign factory or subsidiary.
- **Acquisitions:** Buying foreign parts of existing firms.
- **Mergers:** Forming a new company with a foreign firm

In all cases, host-country assets are placed under the governance of multinational firms, but Greenfield investments also contribute to the growth of an international production system. The majority of the FDI is in the form if mergers and acquisitions (M&A).

We can distinguish between three types of mergers and acquisitions

- **Horizontal M&A:** Between competitors in the same industry. Often to capture economies of scale or to gain market power. The majority of mergers and acquisitions are horizontal.
- **Vertical M&A:** Between client and supplier or between buyer and seller. To reduce transaction costs and uncertainty.
- **Conglomerate M&A:** Between companies in unrelated activities. To diversify risk.

Data on foreign direct investment have been gathered systematically by the UNCTAD. FDI has increased enormously since 1993 but though with large fluctuations.

According to Dunning, to become a multinational three conditions need to be satisfied. This has become known as the OLI approach:

- *Ownership advantages*. Allows a firm to overcome disadvantages of a foreign location. E.g. technology to which competing foreign firms do not have access.
- *Location advantages.* E.g. input prices, trade policy or tariff structures that favor production in foreign locations.
- *Internalization advantages.* For a reason, the firm is perceived to be better off if production is done within the boundaries of the firm rather than outside these (dealing with foreign partner that is familiar with local environment).

Characteristics for multinationals:

- High ratios of R&D
- They employ large numbers of scientific, technical workers
- High value of intangible assets
- New/technically complex products
- Negatively associated with plant-level scale economies
- Associated with product-differentiation variables
- A minimum level of firm size is important for whether a firm can be a multinational
- They tend to be older and more established

In the Markusen and Venables model we focus on horizontal multinationals. We analyze two countries (A and B) and two products (F and M).

- Food: produced in A and B according to the same technology, perfect competition.
- Manufactures: homogeneous good, only labor used (no capital), firm-level and plant-level fixed costs and constant returns to scale.

The production of manufactures, which uses only labor, is characterized by four parameters:

- *c*: Constant marginal production costs (expressed in labor units, to be multiplied by national wage rates)
- *t*: Transportation costs per unit of M, from country A to country B,
- *F*: Fixed costs per firm in terms of labor (e.g. R&D to develop product)
- *G*: Fixed costs per plant in terms of labor

Cost functions for firms with headquarters in country A, national and multinational can be found in attachment D.1.

There are several possible national/multinational regimes. See attachment D.2.
There are in total fifteen regimes. To simplify this they are divided into three groups:

1. Mixed regimes
2. National firms only
3. Multinational firms only

In attachment D.3 we can see all possible distributions of the world endowment of capital and labor between two countries for the three main types; mixed firms, national firms and multinational firms. From this model we can derive the following conclusions:

- If country A and country B are similar in size and have similar factor endowments, so the capital-labor ratio is about the same size: multinational firms are dominant in the equilibrium.
- If one of the countries is very large: national firms become more important in the equilibrium.
- If the countries have very different relative endowments: national firms dominate the equilibrium.
- For intermediate endowment distributions, both national and multinational firms are important.

The decision to start up a multinational firm depends on the size of the extra fixed plant costs relative to the transport costs. Looking at endowment ratios and size between two countries:

- If the endowment ratio between two countries is very different, there is a strong incentive for Heckscher-Ohlin inter-industry trade. The labor abundant country will specialize in the product that intensively uses labor. Labor is expensive in the capital abundant country and therefor it is too costly for this country to set up an extra production plant. Therefore the equilibrium is characterized by national firms in the labor abundant country only.

- If one country is small compared to the other, it is less attractive as a home base for production and as a basis for a foreign affiliate. Therefore the equilibrium is characterized by national firms in the large country only.