# Lecture 17 International Trade: Economics 181 Foreign Direct Investment (FDI) and Multinational Corporations (MNCs)

### I. Summary on Trade and Increasing Returns

So we have two types of models of trade:

- A. Trade Based on Relative Differences across countries:
- Pattern of trade is determined by comparative advantrage that stems from relative differences in technology, endowments, or tastes across countries.
- Yields interindustry trade.
- Free trade is optimal for a country as a whole.
- Distributive conflicts due to trade liberalization
- B. Trade in industries with increasing returns to scale, differentiated products and imperfect competition.
- Pattern of trade cannot be explained by some systematic differences among countries, but is due to historical incidence and government policy.
- Trade is driven by economies of scale, love of variety, imperfect competition
- Yields intra-industry trade
- Trade Liberalization does not generate the stark distributive conflict within a country, although some firms may go out of business as firms rationalize production.
- Trade can generate conflicts among countries as some of them employ trade restrictions and other industrial policies to foster or capture industries that are regarded as particularly desirable for a modern nation.

### II. Introducing Foreign Investment: Some Definitions

- A multinational Corporation (MNC) is defined as a corporation with "controlled" operations in two or more countries. The "parent" is the operation of the firm in its incorporated country. The "affiliates" are the firm's operations in other countries in which "control" consists of at least a 10 percent stake in the voting control of the affiliate.
- Foreign Direct Investment (FDI) is an international capital flow undertaken by an MNC. FDI can be either (1) greenfield (a brand new facility is established in the host country) or (2) merger and acquisition (the MNC purchases an existing facility in the host country).

We can also distinguish between:

- Vertically integrated MNCs (locate different stages of production in different countries)
- Horizontally integrated MNCs (locate the same stages of production in different countries)

### **III.** How important are MNCs?

- 500 largest MNCS control over ½ of global trade flows and 1/5 of global gdp.
- For countries that have an extensive network of overseas affiliates—such as the US, UK, netherlands, and switzerland, affiliate sales tend to swamp export flows.
- In manufacturing and primary products, local sales by US-owned affiliates are over 4 times the level of US exports to the UK, Germany, Norway, Brazil and Spain.
- In 1998, sales of MNCs were about 11 trillion (\$), compared to almost \$7 trillion in world exports.
- Nearly 80 % of two-way trade between US and Japan goes from parent to foreign subsidiary and vice versa.

## IV. The Analytical Framework for Direct Foreign Investment (DFI): why do firms move?

Why move abroad? Let's consider a concrete problem. Consider the Mexican auto industry. In terms of production, Mexico is largely self-sufficient in autos. But firms that produce autos are mostly US subsidiaries. This leads us to two questions:

- (1) Why don't US firms concentrate all their production in the US and export cars to Mexico?
- (2) Why don't Mexican firms produce the autos themselves?

#### The answers:

#### A. Market-seeking DFI

Why is being near the target market important?

- (1) Tariff or quota jumping DFI.
- (2) Industries where transport costs are important.
- (3) Any service oriented business.
- (4) Sectors where consumers shape product specifications or locating near specialized suppliers is important.
- (5) Technology spillovers.

BUT in a world where scale economies are important (cars, steel, etc) there will be <u>tradeoffs</u> between the gains from locating near consumers and the losses from not locating all production in a single location. One way to minimize the trade-off is to set up foreign subsidiaries or joint ventures where the potential market is very large.

Implication: more DFI in regions with large internal markets. China is currently the biggest recipient of DFI in Asia, and the largest destination for non-developed country DFI.

B. Factor-seeking DFI Foreign investors seek natural resources, cheap labor.

With nationalizations of many natural resource sectors such as petroleum and copper in the 1970s, natural-resource seeking DFI became less important. But as global competition becomes tougher, more and more firms are moving in search of cheaper labor. Examples: Japanese firms locating in other Asian countries to offset higher labor costs at home.

This kind of DFI is likely if:

- (1) Stages of production can be separated.
- (2) Clearly, countries need to differ in either factor endowments or returns to factors.
- C. <u>Internalization</u> This explanation for locating abroad focuses on firm-specific attributes that would lead to the establishment of a subsidiary. For a multinational to serve foreign markets via direct investment instead of exporting or licensing, there must exist some "internalization" advantage for the firm to do so. One case would be where the firm cannot sell its ideas through licensing or franchising because contract enforcement is a problem. It's also possible that franchising is not desirable because the firm cannot impose quality or set standards through the franchise. Another reason to locate abroad, in a high tech company, could be that licensing may impart technology to a future competitor. On the other hand, there are many reasons why arms-lengths agreements could be desirable--especially if resources involved in setting up production abroad are large, the venture appears risky, and the target market is small.

D. <u>Exchange Rates</u> Fluctuating exchange rates can lead firms to locate abroad for two reasons. First, a weak exchange rate can mean that foreign assets can be acquired at a bargain. Second, locating abroad can help firms hedge both production costs and final goods prices (hence revenues) against exchange rate movements.

# V. Look at the evidence: what support does the data provide for our framework?.

- A. Some Aggregate Trends:
- (1) 1970s-1995 (Tables I.1, 3.1, Annex B)
- (2) 1995-1998 (Table 6)
- (3) Changes in country policies; rising importance of M & A
- B. Market-seeking foreign direct investment (FDI):
- (1) FDI in Europe.
- (2) Toyota in the US.
- (3) US companies locate abroad mainly to serve foreign markets
- (4) The fact that most foreign investment is between similar countries with similar endowments and factor prices (wages) suggests that market access is important.
- (5) The increase in foreign investment in services also reflects the importance of market access.
- C. Evidence for <u>factor-seeking</u> foreign investment.
- (1) Recent growth in DC-LDC investment flows.
- (2) In the case of US electronics companies locating abroad to minimize labor costs for re-export, clearly local market size matters less because these firms are using host countries as a base from which to export to other markets.
- While US firms mainly locate abroad to serve foreign markets, much of Japanese DFI has been in southeast Asia, where firms are locating to cut labor costs. The Japanese pattern of FDI suggests that factor-seeking FDI still matters
- (4) Within regions where all other factors are equal (like market access), we do see movement to lower wage areas.
- (5) High quality labor.
- D. What about tax considerations?
- E. Exchange Rate Hedging
- Toyota in the US seeks to avoid effects of big swings in the yen.
- Britain less attractive because of lack of membership in EMU (but still wins because of language advantage, lower labor costs and less regulations).
- F. Speculative Reasons.
- Enormous devaluations in East Asia and Latin America, elsewhere leading to surging acquisitions. But how important are they? Overall, cross-border M and A's rose from less than ½ of all DFI flows in 1996 to 2/3 of all flows in 1998. In Asia, the importance of M & A activity quadrupled in 1997. But in Asia, M & A as a form of DFI is still small relative to the rest of the world: 20 percent of all DFI in 1997 was driven by M & A activity in Asia, compared to 50 percent globally, 80 percent in Europe and 70 percent in the USA.
- Impact of Crisis on patterns of FDI.
- Overall, investment in Singapore, Indonesia, India is down; investment in China is stable but not growing much, but investment in Korea and Thailand has surged (see Table)
- Fire-sale DFI?