The Ownership-Location-Internalization Framework

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Take a quick inventory of the things around you. It is likely that most of these things were made by multinational firms: I am typing on a Microsoft computer; I drove a Toyota to work today; I brushed my teeth this morning with Crest toothpaste (a Proctor and Gamble brand) after drinking Starbucks coffee; and my mobile phone is made by Samsung. Given the ubiquity of multinational-firm products, it might seem obvious that multinational firms should exist, but, as in most things economic, there is an important underlying tension between costs and benefits.

The costs of going multinational

Compared to a *domestic firm* — one that only operates in one country — a multinational firm faces extra costs and difficulties. A multinational firm has to manage operations in another country, which may involve a different working language, a different (and possibly worse) legal structure, differences in time zones, costly long-distance communication, the cost of internationally shipping inputs and outputs, and the extra costs of expatriate personnel.

If, compared to a a domestic firm, a multinational firm faces extra costs, then there must be advantages to multinational production that — at least in some cases — outweigh the extra costs. Otherwise, why would multinational firms exist?

The benefits of going multinational

The ownership-location-internalization (OLI) model is a simple "big picture" framework for organizing our thoughts about the benefits of multinational production. We discuss each component of the framework below.

Ownership. The ownership condition says that the firm must own some asset that generates enough value to make it worth the extra costs of multinational production. This asset might be a blueprint, a patent, or copyright. A pharmaceutical company, for example, may own a patent on a cholesterol drug. This patent gives the firm market power (since other firms cannot produce this drug) which increases the firm's profits. Other kinds of assets include things such as managerial talent, a brand's reputation, or some other *intangible capital* owned by the firm. Note that some of these assets are explicit and legally protected (e.g., Pfizer's patent on Lipitor) while others are not (e.g., Google's work culture).

Location. A multinational firm, by definition, operates in more than one country. To make this worthwhile, there must be some advantage from operating in that location. One type of location advantage is a saving in transportation and tariff costs. This kind of advantage is most important for goods that are expensive to ship abroad (i.e., to export). It would be very expensive, for example, for McDonald's to ship hot Big Macs to Canada for sale, so McDonald's produces Big Macs in Canada to sell to the Canadian market. This type of arrangement is often called *horizontal foreign direct investment*.

Another location advantage might arise from differences in production costs across countries. Assembling Barbie dolls, for example, requires low-skilled labor. If low-skilled labor is cheaper in Vietnam than in the United States, then Mattel may choose to assemble Barbie in Vietnam rather than in the United States. This type of arrangement is often called *vertical foreign direct investment*.

Internalization. The internalization advantage says that there must be a gain from keeping the international expansion within the firm. One way an internalization advantage arises is when the firm's assets (its ownership advantage) are easy to copy. Producing within the firm, rather than licensing to an outside firm, may make it easier for a firm to protect its assets.

Another internalization advantage may arise when it is difficult to write a contract between two firms for the good or service to be produced. In this case, it may be easier to produce within the firm and retain complete control over the process. This idea is related to the "hold-up problem" that you may have encountered in a microeconomics or industrial organization class. [We will discuss hold-up problems later in the semester.]

When these three conditions are met, it may be most profitable to organize the firm as a multinational. If one condition is not met, it may be most profitable to organize in a different way.

- Without a location advantage, the firm could produce in its home country and export to serve other markets.
- Without an internalization advantage, the firm could license its production process to a separate foreign firm who produces the good or service.
- Without an ownership advantage, it is unlikely that the firm can produce enough value to exist at all.

Review questions

For each example below, discuss how the process fits into — or does not fit into — the OLI framework. What are the ownership advantages? What are the location advantages? What are the internalization advantages? Is one advantage particularly strong or weak?

1. BMW AG operates the BMW U.S. Manufacturing Company in South Carolina, where it assembles X-series SUVs. These SUVs are sold in the United States and other countries.
2. Coca-Cola Co. owns secret formulas for its sodas and supports Coca-Cola brands. Coca-Cola Co. produces drink syrups, which it sells to licensed bottlers around the world. The licensed bottlers mix the syrups with local water and sell the resulting soft drinks in their countries.
3. Starwood Hotels and Resorts, Inc. operates over 1,000 hotels, resorts, and spas worldwide.

Review question solutions

1. **BMW.** Ownership: The BMW production process, reputation for quality, and brand equity. Location: Access to the U.S. market and lower production costs compared to Germany. Internalization: Probably weak (most car companies buy from outside suppliers), but owning the facility makes it easier to monitor and ensure quality.

2. **Coca-Cola.** Ownership: The secret recipe and brand recognition. Location: Shipping Coca-Cola is expensive — it's mostly water. Instead, use domestic water. Internalization: The Coca-Cola recipe is easily stolen, so ship the syrup to bottlers and keep the recipe within the company. O-, L-, and I-advantages are all strong in this case.

3. **Starwood.** Ownership: Brand reputation and organizational assets that create efficient hotels. Location: Very strong advantage — the only way to serve foreign customers is to build the hotel where they are. Internalization: Weak for this industry. Starwood operates some hotels as franchises, for example, choosing not to internalize the process.