FACULTY OF JURIDICAL SCIENCES

Lecture-8

Hecksher: Ohlin's Factor Endowment Theory

Heckscher-Ohlin theory, in economics, a theory of comparative advantage in international trade according to which countries in which capital is relatively plentiful and labor relatively scarce will tend to export capital-intensive products and import labor-intensive products, while countries in which labor is relatively plentiful and capital relatively scarce will tend to export labor-intensive products and import capital-intensive products. The theory was developed by the Swedish economist Bertil Ohlin (1899–1979) on the basis of work by his teacher the Swedish economist Eli Filip Heckscher (1879–1952). For his work on the theory, Ohlin was awarded the Nobel Prize for Economics (the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel) in 1977.

Some countries are relatively well-endowed with capital: the typical worker has plenty of machinery and equipment to assist with the work. In such countries, wage rates generally are high; as a result, the costs of producing labor-intensive goods—such as textiles, sporting goods, and simple consumer electronics—tend to be more expensive than in countries with plentiful labor and low wage rates. On the other hand, goods requiring much capital and only a little labor (automobiles and chemicals, for example) tend to be relatively inexpensive in countries with plentiful and cheap capital. Thus, countries with abundant capital should generally be able to produce capital-intensive goods relatively inexpensively, exporting them in order to pay for imports of labor-intensive goods.

In the Heckscher-Ohlin theory, it is not the absolute amount of capital that is important; rather, it is the amount of capital per worker. A small country like Luxembourg has much less capital in total than India, but Luxembourg has more capital per worker. Accordingly, the Heckscher-Ohlin theory predicts that Luxembourg will export capital-intensive products to India and import labor-intensive products in return.

Despite its plausibility, the Heckscher-Ohlin theory is frequently at variance with the actual patterns of international trade. One early study of the Heckscher-Ohlin theory was carried out by Wassily Leontief, a Russian-born U.S. economist. Leontief observed that the United States was relatively well-endowed with capital. According to the theory, therefore, the United States should export capital-intensive goods and import labor-intensive ones. He found that the

opposite was in fact the case: U.S. exports are generally more labor-intensive than the types of products that the United States imports. Because his findings were the opposite of those predicted by the theory, they are known as the Leontief Paradox.

The Heckscher-Ohlin model is an economic theory that proposes that countries export what they can most efficiently and plentifully produce. Also referred to as the H-O model or 2x2x2 model, it's used to evaluate trade and, more specifically, the equilibrium of trade between two countries that have varying specialties and natural resources.

The model emphasizes the export of goods requiring factors of production that a country has in abundance. It also emphasizes the import of goods that a nation cannot produce as efficiently. It takes the position that countries should ideally export materials and resources of which they have an excess, while proportionately importing those resources they need.

The Basics of the Heckscher-Ohlin Model

The primary work behind the Heckscher-Ohlin model was a 1919 Swedish paper written by Eli Heckscher at the Stockholm School of Economics. His student, Bertil Ohlin, added to it in 1933. Economist Paul Samuelson expanded the original model through articles written in 1949 and 1953. Some refer to it as the Heckscher-Ohlin-Samuelson model for this reason.

The Heckscher-Ohlin model explains mathematically how a country should operate and trade when resources are imbalanced throughout the world. It pinpoints a preferred balance between two countries, each with its resources.

The model isn't limited to tradable commodities. It also incorporates other production factors such as labor. The costs of labor vary from one nation to another, so countries with cheap labor forces should focus primarily on producing labor-intensive goods, according to the model.

Real-World Example of the Heckscher-Ohlin Model

Certain countries have extensive oil reserves but have very little iron ore. Meanwhile, other countries can easily access and store precious metals, but they have little in the way of agriculture.

For example, the Netherlands exported almost $506 million in U.S. dollars in 2017, compared to imports that year of approximately $450 million. Its top import-export partner was Germany. Importing on a close to equal basis allowed it to more efficiently and economically manufacture and provide its exports.

The model emphasizes the benefits of international trade and the global benefits to everyone when each country puts the most effort into exporting resources that are domestically naturally abundant. All countries benefit when they import the resources they naturally lack. Because a nation does not have to rely solely on internal markets, it can take advantage of elastic demand. The cost of labor increases and marginal productivity declines as more countries and emerging markets develop. Trading internationally allows countries to adjust to capital-intensive goods production, which would not be possible if each country only sold goods internally.

Features of the model

Relative endowments of the factors of production (land, labor, and capital) determine a country's comparative advantage. Countries have comparative advantages in those goods for which the required factors of production are relatively abundant locally. This is because the profitability of goods is determined by input costs. Goods that require locally abundant inputs are cheaper to produce than those goods that require locally scarce inputs.

For example, a country where capital and land are abundant but labor is scarce has a comparative advantage in goods that require lots of capital and land, but little labor — such as grains. If capital and land are abundant, their prices are low. As they are the main factors in the production of grain, the price of grain is also low—and thus attractive for both local consumption and export. Labor-intensive goods, on the other hand, are very expensive to produce since labor is scarce and its price is high. Therefore, the country is better off importing those goods.