How Does Specialization Lead to Economic Interdependence? (EA)

If you had lived in the United States 200 years ago, there is a good chance you and your family, like Birkhaman, would have been much more self-sufficient. You might have grown your own food, built your own house, made your own tools, and performed many other tasks for yourself rather than relying on others.

Although self-sufficiency may be an appealing idea, it is not necessarily economically productive. In fact, societies that emphasize self-sufficiency are less productive and have a lower standard of living than those that rely on specialization and trade. Why should this be the case?

Specialization Improves Productivity
In *The Wealth of Nations*, Adam Smith wrote about the advantages of **specialization** [specialization: the development of skills or knowledge in one aspect of a job or field of interest], an approach to production in which individual workers become highly skilled at a specific task. Smith illustrated this principle by describing a pin factory:

One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations . . . I have seen a small manufactory of this kind where ten men only were employed . . . [who] could, when they exerted themselves, make among them . . . upwards of forty-eight thousand pins in a day . . . But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day.

—Adam Smith, *The Wealth of Nations*, 1776

Smith's description illustrates the **division of labor** [division of labor: the allocation of separate tasks to different people, based on the principle of specialization] that arises from specialization. It also underscores the great efficiency and productivity that result when workers divide the individual tasks that make up a job and become expert at those specific tasks. Smith's pin workers were far more productive when each worker specialized in one step of the manufacturing process.

What was true for Smith's pin factory in the late 1700s is also true for an entire economy today. **An economy can produce more with the same inputs of land, labor, and capital when each person or business specializes in a skill or task.** As productivity increases, more products and services become available to more people, and living standards rise for society as a whole.

If specialization is so great, shouldn't all societies specialize? The answer, said Smith, has to do with population density and isolation from large markets. He observed, for example, that specialization in the late 1700s was more developed in large British cities than in less-populated rural areas, such as the Scottish Highlands:

*In the lone houses and very small villages which are scattered about in so desert a country as the Highlands of Scotland, every farmer must be butcher, baker and brewer for his own family . . . A country carpenter . . . is not only a carpenter, but a joiner, a cabinet maker, and even a carver in wood, as well as a wheelwright, a ploughwright, a cart and waggon maker.*
In big cities, however, where the market for each of these jobs was large, different specialists would have performed these tasks. These workers could specialize because they knew that there were enough customers to sustain them. But markets in rural Scotland were too small, and the region too isolated, to support a range of specialists. Therefore, people had to perform a variety of tasks to earn a living and to satisfy their wants.

A similar scenario exists in Nepal, one of the most remote and isolated countries in the world. Nepal actually has a higher population density than many countries, including the United States. But the country’s rugged, mountainous terrain and relatively undeveloped transportation system limit contact among different regions and with neighboring nations. These factors make trade difficult and help keep Nepal’s markets small, thus discouraging specialization.

The United States presents a very different picture. Even the most remote parts of this country are linked to other regions and the rest of the world through an advanced system of transportation and communications. This system promotes trade and the growth of markets and encourages the development of a highly specialized economy.

This specialization is evident in the variety of jobs performed by American workers. The U.S. Department of Labor’s *Occupational Outlook Handbook* lists thousands of types of jobs. These jobs range from familiar occupations like carpenter, engineer, and teacher to more specialized jobs like budget analyst, recreational therapist, and violin repairer. The people who work in these jobs are specialists, each pursuing a particular career.

**Key Concept**

**Specialization**

When people specialize, they become expert in one activity or field of interest. Specialization gives rise to the division of labor, which, in turn, leads to greater economic efficiency. Specialization is everywhere in a modern economy—even, as this cartoon implies, in places it does not belong.

"Everybody is specializing these days."

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Specialization Encourages Trade

When people specialize, they no longer produce everything for themselves. As a result, they must trade with others to obtain those things they do not produce. They trade not only to satisfy their own wants but also so they can focus on what they do best. As economist and author Charles Wheelan pointed out, "We trade with others because it frees up time and resources to do things that we are better at."

Wheelan noted that we could, in theory, do many more things for ourselves. We could raise our own livestock, for example, and not have to pay others for meat, milk, and cheese. But that would require an enormous amount of time and energy, and the opportunity cost—as measured by all the other things we could be doing—would be very high. After all, what do most of us know about meat and dairy production? In the end, we are better off when we specialize in activities suited to our skills and trade for everything else.

Trade is a voluntary exchange in which both parties give up something in order to get something else they want. People trade because it is in their mutual interests. As economists James Gwartney, Richard Stroup, and Dwight Lee pointed out in their book *Common Sense Economics*, "The foundation of trade is mutual gain. People agree to an exchange because they expect it to improve their well-being."

In traditional economies, trade often takes the form of barter [barter: the direct exchange of goods or services]...
without the use of money; a typical feature of traditional economies], the direct exchange of one good or service for another. For example, a farmer and a shepherd might agree to barter by exchanging a basket of potatoes for a bag of wool. Barter works well when there is a **coincidence of wants** [coincidence of wants: a situation in which each of two individuals has something the other wants; the basis for barter] —that is, when "you have something I want and I have something you want."

In market economies, barter is replaced by the use of money. **Money** [money: a generally accepted medium of exchange that can be traded for goods and services or used to pay debts] is a medium of exchange that can be traded for goods or services or used to pay debts. Money is useful only when its value is generally accepted throughout society. It facilitates trade because it is easy to carry and convenient to use for commercial transactions.

**Trade Creates Economic Interdependence**  
**Whether carried out through barter or with money, trade leads to economic interdependence** [economic interdependence: the characteristic of a society in which people rely on others for most of the goods and services they want]. When we specialize and trade, we depend on other people or countries to produce many of the goods and services we want. A modern economy consists of a complex web of economic links that connect producers and consumers throughout society and across borders.

![Figure 4.2](image)

This economic interdependence is apparent in a typical American breakfast. We might begin with a glass of juice made from Florida oranges. We might follow that with toast made from Kansas wheat, eggs from Iowa, or hash browns made from Idaho potatoes. We might also have coffee made from Colombian coffee beans. In other words, our breakfast depends on food produced by people in many different places.

Like Adam Smith, our country’s founders believed that trade and economic interdependence are essential to the nation’s economic growth. In the years just after independence, they had experienced the problems created when states erected trade barriers against each other. These **trade barriers** [trade barrier: a government measure that limits international trade, such as a protective tariff or an import quota], which included tariffs and other measures to limit interstate trade, were designed to protect local industry and promote self-sufficiency. But they prompted conflicts between states and made it difficult for the country to develop a unified national economy.

The framers of the Constitution encouraged the growth of a national market by giving Congress alone the power to regulate interstate commerce. Article I, Section 8, also known as the **Commerce Clause** [Commerce Clause: Article I, Section 8 of the U.S. Constitution, which gives Congress the power to regulate interstate trade], states, “Congress shall have Power . . . To regulate Commerce with foreign Nations, and among the several States.” This clause empowers the national government to promote trade and economic interdependence among the states. To that end, the federal government maintains an interstate highway system and regulates navigation on interstate rivers and lakes. These government actions contribute to a large and prosperous national economy.