Chapter 1

# The changing world economy

Picture credit: Linda McCarthy

The perspective of this book is global. Although local, regional, and national circumstances remain important, what happens in any given locale is increasingly influenced by its role in and relationship to systems of production, trade, and consumption that are global in scope.

In the 1970s, only a few **less developed countries** (LDCs) had opened their borders to trade and investment. About one-third of the world's labor force lived in countries with centrally planned economies. Another third lived in countries insulated from international markets by protective trade barriers and currency controls.

Today, more than 7 billion people populate our planet, and most live in countries that have been integrated into global markets. Three population blocs—China, India, and the republics of the former Soviet Union—account for more than 40 percent of the world's labor force and are important participants in the global market. Many other countries such as the **newly industrializing economies** (NIEs) of Brazil, Hong Kong, Singapore, South Korea, and Taiwan have also become vital contributors to the world economy.

More than two decades ago, Robert Reich, former U.S. Secretary of Labor, underscored the significance of the rapid pace of globalization:

> We are living through a transformation that will rearrange the politics and economics of the coming century. There will be no national products or technologies, no national corporations, no national industries. There will no longer be national economies, at least as we have come to understand that concept. . . . As almost every factor of production—money, technology, factories, and equipment—moves effortlessly across borders, the very idea of a U.S. economy is becoming meaningless, as are the notions of a U.S. corporation, U.S. capital, U.S. products, and U.S. technology.
>
> (Reich, 1991: 3, 8)

People are not only increasingly interconnected; they are interdependent as the following narratives generated by the **World Bank** illustrate:

> Joe lives in a small town in southern Texas. His old job as an accounts clerk in a textile firm, where he had worked for many years, was not very secure. He earned $50 a day, but promises of promotion never came through, and the firm eventually went out of business as cheap imports from Mexico forced textile prices down. Joe went back to college to study business administration and was recently hired by one of the new banks in the area. He enjoys a comfortable living even after making the monthly payments on his government-subsidized student loan.

> Maria recently moved from her central Mexican village and now works in a U.S.-owned factory in Mexico's ***maquiladora*** sector. Her husband, Juan, runs a small car upholstery business and sometimes crosses the border during the harvest season to work illegally on farms in California. Maria, Juan, and their son have improved their standard of living since moving out of subsistence agriculture, but Maria's wage has not increased in years; she still earns about $10 a day but does not complain because she has heard rumors that the company is considering moving the factory to China.

> Xiao Zhi is an industrial worker in Shenzhen, a Special Economic Zone in China. After three difficult years on the road as part of China's floating population, fleeing the poverty of nearby Sichuan province, he has finally settled with a new firm from Hong Kong that produces garments for the U.S. market. He can now afford more than a bowl of rice for his daily meal. He makes $2 a day and is hopeful for the future.

The complex relationships revealed in this anecdote would have been unthinkable 30 years ago.

Although the outcomes in this tale are positive—Joe secured a position at a bank and earns a comfortable living; Maria and her family improved their standards of living; and Xiao Zhi escaped poverty—not everyone benefits from globalization. Although the world is increasingly *flat* with capital crossing borders in nanoseconds in the pursuit of the highest rate of return and corporations locating operations where labor markets, tax codes, and regulatory regimes are most favorable, it is not necessarily increasingly *fair*.

In a hypothetical sequel to the World Bank narratives, the bank where Joe worked leveraged its portfolio with uncollateralized debt and had to close its doors at the height of the global financial crisis. With no income and a mortgage that exceeded the value of his house, Joe was forced to file for bankruptcy, but he still owes $830 per month on his student loans. He was fortunate enough to find a part-time job at a Wal-Mart warehouse, but with a one-way commute of 56 miles and gas prices nearing $4 per gallon, he cannot afford health insurance.

Juan was detained by border patrol and has joined approximately 390,000 other illegal immigrants incarcerated indefinitely in U.S. detention centers. The recession bloated inventories and decreased the demand for textiles produced in the factory where Maria worked. When she was laid off, she was forced to withdraw her son from school, move in with relatives, and return to subsistence farming.

And poor Xiao Zhi contracted a skin infection when he was forced to handle chemicals in the factory without protective gloves. The floor manager fired him when he could no longer maintain the required pace of production. After many failed attempts to secure another job in Shenzhen, he returned to Sichuan province but remains hopeful that the herbal remedies prescribed by the village doctor will heal him sufficiently so, one day, he will be able to earn $2 per day again.

## 1.1 STUDYING THE WORLD ECONOMY

How can one make sense of these stories? On the surface, cause-and-effect seem straightforward—the demand for textiles declined; Maria lost her job—but in the undercurrent one discovers a complex array of forces that have broad and dramatic effects that can often produce surprising and unexpected results. Deciphering the impact of those forces, interpreting their local, regional, and national implications and how they alter the contours of the economic landscape is the job of the economic geographer.

What are the implications of the Arab Spring; persistently high unemployment rates in EU countries such as Italy and Spain; the AIDS pandemic in Africa; continued environmental degradation in China; increased immigration to the EU from countries in North Africa and the Middle East; growing income inequality and increasingly polarized political landscape in the United States; technological advances such as **fracking** that enable the extraction of previously unprofitable carbon fuels; and the greater magnitude and frequency of natural disasters?

In addition to these headline-grabbing phenomena, what are the local, regional, and national implications of less newsworthy but equally profound changes in the world economy such as **resource grabbing** in Africa by **developed countries**, the rapid spread of genetically modified organisms (GMOs) in agricultural production, and technological advances that have enabled cost-effective 3-D printing?

How can we interpret the significance of specific changes that have been occurring in the world's economic landscapes: The **deindustrialization** of traditional manufacturing regions (for example, the Rustbelt around the Great Lakes in the United States, northern England, the Ruhr region in Germany), the economic revival of formerly "lagging" regions (for example, New England, Bavaria), the spread of **branch plants** in the towns and cities of some NIEs (for example, Taipei, Seoul), the emergence of high-technology complexes (for example, Silicon Valley in California, the Research Triangle in North Carolina), the consolidation of global financial and corporate control functions in a few cities (London, New York, Tokyo), and the unprecedented rates of urbanization in China's coastal regions?

Our task is to develop an understanding of the general economic forces and socioeconomic relationships within the world economy and of the unique features that represent local and historical variability.

But first we need to clarify the use of the terms "general" and "unique" as well as a third term, "singular":

- *General*: Widespread phenomena, such as migration or colonialism.
- *Unique*: Distinctive phenomena—where there are no other instances of it—but its distinctiveness can be explained by a particular combination of general processes and individual responses. An example of this would be the migration streams prompted by the famine in Ireland in the mid-1800s. The general processes that precipitated the famine were environmental (potato blight) and governmental (laissez-faire policy); in response, many people emigrated, including to the United States.
- *Singular*: Distinctive phenomena that cannot be accounted for by combinations of general processes and individual responses. An example would be the growth of the automobile industry in Detroit. With no established pattern of manufacturing, automobile manufacture could have developed in any number of cities; but Detroit was Henry Ford's home town (his father had emigrated to Michigan from Ireland to flee the famine), and he put his ideas into practice there.

With these concepts in hand, we can begin to map some of the interrelationships between economic organization and spatial change.

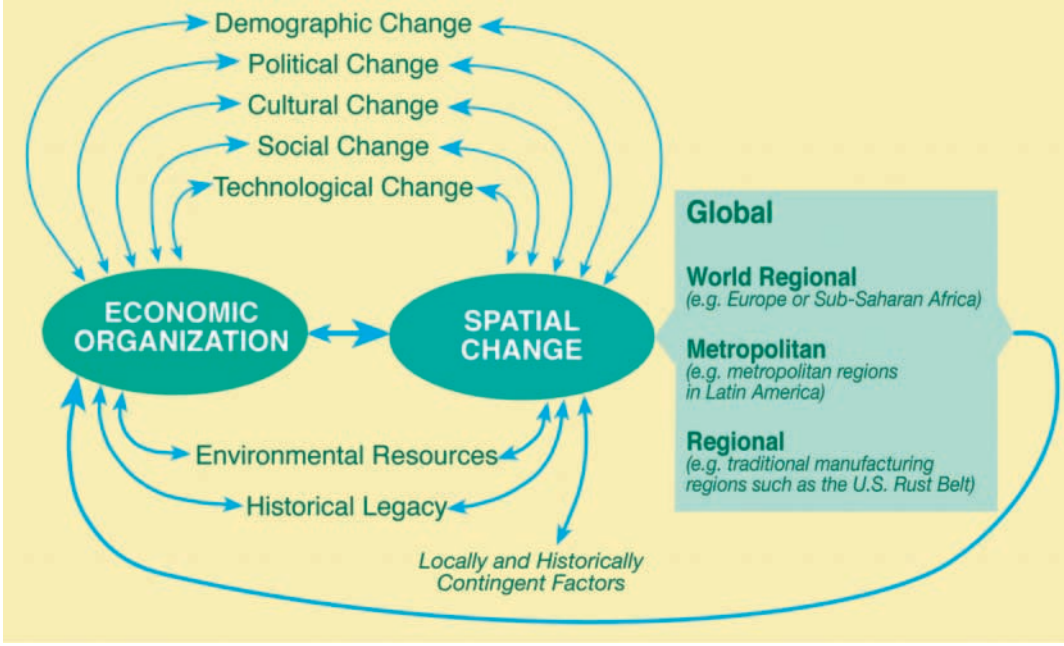


**Figure 1.1** The inter-relationships surrounding economic organization and spatial change

Figure 1.1 shows that economic organization, while critical to spatial change, is implicated with demographic, political, cultural, social, and technological change. Many important interactions also emerge, for example, between political and cultural change and between locally contingent factors and spatial change.

All these direct, indirect, and interaction effects are important to developing a holistic understanding of spatial change: *They are implicated in and account for the general and the unique*. The task of the economic geographer is to unravel these relationships to develop a coherent and comprehensive explanatory framework.

To accomplish this goal, first we must gain a clear perspective on the central relationship between economic organization and spatial change. In the next section, we outline the most important aspects of this relationship and introduce several concepts that we will refer to throughout the book.

## 1.2 ECONOMIC ORGANIZATION AND SPATIAL CHANGE

At the most basic level, the idea of economic organization approximates to the concept of **mode of production**: The way in which societies organize productive activities to advance and reproduce their socioeconomic life. The theoretical and historical identification of modes of production is a difficult and controversial matter, but five major forms of economic organization are commonly recognized:

1. subsistence
2. slavery
3. feudalism
4. capitalism
5. socialism.

These broad categories also can be broken down into more specific forms of economic organization. For example, scholars have often found it useful to differentiate between **merchant capitalism** (or **mercantilism**), industrial (or **competitive**) capitalism, **organized capitalism**, and **advanced** (or globalized) **capitalism**.

What distinguishes these forms of economic organization are differences in the relationships between the **factors of production** such as land and other natural resources, labor, and physical and human capital. Under slavery, for example, the laborer is private property and may be bought and sold similar to any other instrument of production. Under **feudalism** (or rank redistribution), peasant laborers are legally tied to specific tracts of land. They may own some of the instruments of production, but the land and a percentage of the product of their labor is the property of the feudal lord. Under capitalism, the laborers own no instruments of production, but they are free to sell their labor power.

Different forms of economic organization are also characterized by different *forces of production* (for example, technology, machinery, means of transportation) and *social formations* (with specific proportions of participants from various social classes).

The economic "logic" of these different forms of economic organization results in substantially different forms of spatial organization. Where feudalism translates into a patchwork of self-sufficient domains with little trade and, therefore, few market centers, merchant capitalism requires a highly developed system of market towns and an inherent tendency to colonize new territories to amass the wealth and resources necessary to sustain ever expanding markets.

In contrast to feudalism and mercantilism, industrial capitalism requires spatial restructuring that enables the exploitation of new energy sources, development of increasingly efficient production techniques, and the adoption of new forms of corporate organization. Mining and manufacturing towns appear, and whole regions, such as the manufacturing cities around the Great Lakes or the Ruhr region of Germany, become specialized in certain kinds of industrial production.

The "classic" sequence of transformation from one form of economic organization to another runs from **subsistence economies** through slavery, feudalism, mercantilism, **industrial capitalism**, and **advanced capitalism**.

This sequence is also distinctly European. The rise of capitalism in much of Europe and the subsequent drive to acquire resources to propel economic growth led to different sequences of development in other regions. In North America, capitalism was imposed directly on the subsistence economies of Native American communities. In Japan, feudalism was uprooted suddenly by state-sponsored industrial capitalism. In Russia, an embryonic industrial capitalism was displaced by a **socialism** that soon gave way to state capitalism. Today, in many lesser developed countries, aspects of multiple forms of economic organization may also coexist. As a result of these variations, important regional differences have emerged in the world economy.

Spatial change and further regional differentiation also occurs with the evolution of forms of economic organization. So a regional agricultural landscape must be seen as one of a number of possible realizations rather than a straightforward reflection of a particular form of economic organization. Each economic landscape should be interpreted, therefore, as the product of broad economic forces interacting with local social, cultural, political, and environmental factors: A product of the *general* and the *unique*.

## THE EVOLUTION OF CAPITALISM

The evolution of the capitalist system of economic organization has been perhaps the most important influence on the development of the world's economic landscape. Its evolution can be traced through three broad phases: Competitive, organized, and globalized capitalism.

### Competitive capitalism

The earliest phase began in the late 1700s in the United Kingdom. It spread through much of northwestern Europe and North America, and continued until the end of the nineteenth century. This phase of **competitive capitalism** was the heyday of free enterprise and laissez-faire economic development. Competition between small family businesses characterized the markets, and there were few constraints or controls imposed by governments or public authorities (see Figure 1.2).

In the earlier years of this phase, the dynamism of the system rested on the profitability of agriculture and, increasingly, manufacturing and **machinofacture**, which involved industrial production based less on handicraft and direct labor power than on mechanization, automation, and intensively used skilled labor.

Manufacturing boosted the wealth of NIEs, and their collective prosperity was further consolidated through **imperialism**, which ensured supplies of raw materials and markets for manufactured goods. Gradually, competition led to consolidation. Some businesses prospered and expanded their operations while less nimble, well-capitalized, or adept entrepreneurs saw their businesses contract and eventually become absorbed by their more successful counterparts.

As companies expanded operations to serve regional and national markets rather than exclusively local ones, business owners also experimented with new organizational structures. Labor markets became more organized as wage norms spread. And as private interests acquired ever greater wealth, the need for governments to regulate public affairs and mediate between increasingly powerful interests become apparent.

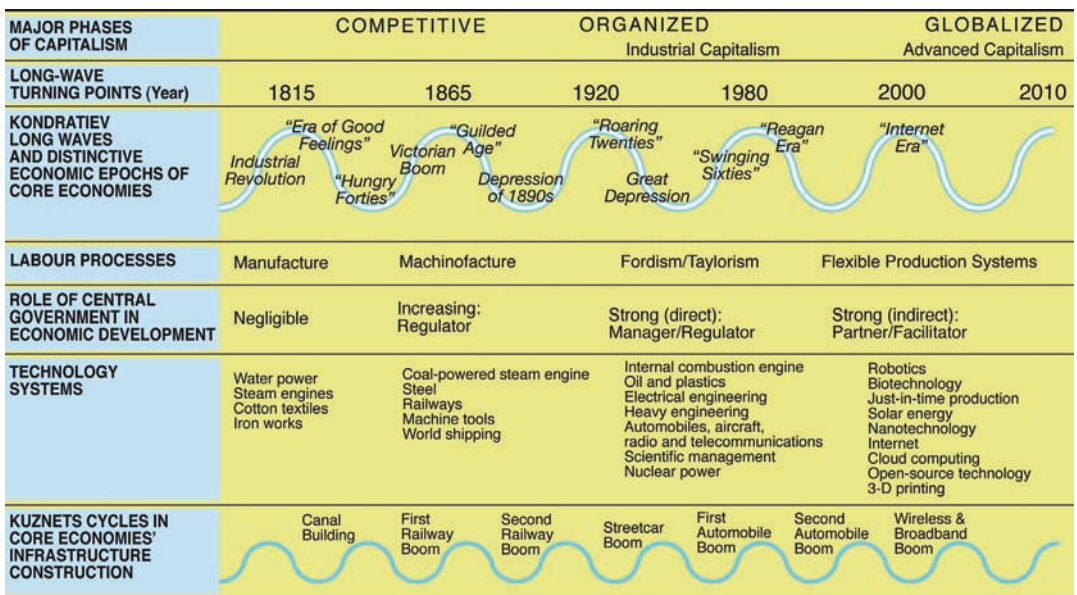


**Figure 1.2** Major features of economic change in the world's developed economies

Near the end of this phase of capitalism, the United States also surpassed the United Kingdom as the leading industrial economy.

## Organized capitalism

By the early 1900s these trends had altered the nature of the capitalist enterprise so significantly that a new phase—**organized capitalism**—was demarcated.

In the early decades of the twentieth century, profitability became increasingly dependent on new labor processes. **Fordism**, named after the automobile manufacturer Henry Ford, ushered in the era of mass production using assembly-line techniques. Frederick Winslow Taylor, an engineer and early critic of Fordism, also outlined the principles of scientific management (often known as **Taylorism**) which became central to the efficiency movement in manufacturing.

During this period, mass production lowered the costs of many goods, and higher wages and sophisticated advertising techniques fuelled mass consumption. In turn, mass consumption and production initiated the race to find ever more efficient production processes and untapped markets.

A hallmark of this period was the emergence of a workable relationship between business interests and labor unions. Unions had grown in size and strength in the **progressive era**, and constituted another increasingly important element of "organization." Government also expanded the scope of its activities in part to mediate the relationship between organized business and labor.

The market failures that triggered the Great Depression of 1929–1934 undermined the legitimacy of classical economic liberalism and led to its eclipse in the **New Deal era** by an egalitarian liberalism that relied on the state to manage economic development and soften the unwanted side-effects of free market capitalism.

In this expanded role, government assumed responsibility for the management of the national economy and the organization of various dimensions of social well-being. This type of economic policy, which seeks to mitigate the deleterious effects of private market activity in aggregate through active fiscal and monetary policy, is known as **Keynesianism** after the eminent economist John Maynard Keynes.

## Globalized capitalism

After the Second World War, another important transformation in the nature of capitalism began to take place and led to a third major phase: Advanced or globalized capitalism.

This period is characterized by a shift away from industrial production and toward services, particularly sophisticated financial and **business services**, as the basis for profitability within the more developed economies. Labor-intensive manufacturing declined although manufacturing *production* continued to expand in these countries as sophisticated, technology-intensive manufacturing processes gained prominence.

The globalizing of the economy also meant that large **transnational corporations** (TNCs) were able to outmaneuver the national scope of governments and labor unions and contributed to a destabilization of the "organized" relationship between business, labor, and government. By the mid-1990s, the world's largest TNCs accounted for two-thirds of international trade, and the largest ten reported total income that exceeded that of the world's 100 poorest countries.

Meanwhile, Fordism became a victim of its own success as many markets were saturated with low-cost goods. As profit margins in conventional markets narrowed, many enterprises chased revenues by catering to specialized market niches. Such specialization required **flexible production systems**. The overall result has sometimes been labeled **disorganized capitalism** for

its distinct contrast to the orderly interdependence of business, labor, and government in the system of organized capitalism.

One of the driving forces behind growth during this phase of capitalism has been the global **information** (or knowledge) **economy**, a form of production and management where productivity and competitiveness rely heavily on knowledge generation and on gaining access to and the rapid assimilation of new information.

A second critical driver of this era has been the ubiquity of high technology. In particular, the Internet has affected nearly every facet of the economy and sparked **disruptive innovation** that has radically altered the dynamics of marketplaces and industries such as news and media, music, publishing, and advertising. Although the first phase of euphoric investment in Internet technologies culminated in the bursting of the dot.com bubble in 2000, from its ashes emerged a number of robust and dynamic businesses such as Google, eBay, and Amazon.com that continue to transform the economic landscape. With the expansion of broadband and wireless technologies, cloud-computing, open source development tools, and the advent of Web 2.0, numerous platform technologies and social media enterprises such as YouTube, Twitter, Facebook, Flickr, and WordPress continue to change how people, companies, and institutions collaborate, communicate, and compete with each other.

There is some question, however, about the sustainability of technological change as a driver of economic growth. We may have reached a technological plateau in which we continue to exploit yesterday's ideas rather than develop new ones. For example, 80 percent of total growth in U.S. GDP between 1950 and 1993 came from the application of previously discovered ideas plus huge investments in education and scientific research that cannot be easily repeated in the future. The overall rate of innovation from medieval times to the present peaked in the nineteenth century and has gone downhill since. So, we should be careful not to presume that somehow technological change will necessarily continue to endlessly create more growth.

## TECHNOLOGY AND ECONOMIC DEVELOPMENT

> The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrate the same process of industrial mutation . . . that incessantly revolutionizes the economic structure *from within*, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism.
>
> (Schumpeter, 2010/1943: 73)

Coined by the Austrian economist Joseph A. Schumpeter, the term **creative destruction** captures the essence of the capitalism system—the relentless drive to innovate in the competition for markets—perhaps better than any other concept.

Creative destruction is at the heart of the broad structural shifts that occur in the development of **technology systems** (see Table 1.1). The transportation system provides perhaps the starkest example of creative destruction at work. With each advancement new markets opened, industries developed, and cities were built, but not without costs. The railroads that opened the West in the United States also effectively closed the canal systems that had been built in the previous decades.

Technologies also destroy old jobs even as they create new ones. Typically, more primitive technologies are associated with higher levels of labor inputs than are more sophisticated ones. So as technology has become more central to economic development, employment, particularly in limited or semi-skilled jobs, has suffered. The newest technologies today require "leaner" and more skilled labor than did the older ones. By way of example, in 1900 nearly 350,000

**Table 1.1** Technology systems and the evolution of the world economy

| | |
|---|---|
| **I:** | **Water (around 1785 in England)**<br>• Water power and steam engines<br>• Cotton textiles, pottery, and iron working<br>• Transportation systems (e.g. river systems, canals, turnpike roads) |
| **II:** | **Steam transport (late 1820s)**<br>• Coal-powered steam engines<br>• Steel<br>• Railroads<br>• Global shipping<br>• Machine tools |
| **III:** | **Steel and electricity (late 1870s)**<br>• Internal combustion engine and automobiles<br>• Oil and plastics<br>• Electrical and heavy engineering<br>• Radio and telecommunications<br>• Airplanes |
| **IV:** | **Fordist (around 1915 in the United States)**<br>• Nuclear power<br>• Durable goods and consumer industries<br>• Aerospace industries<br>• Electronics<br>• Petrochemicals |
| **V:** | **High technology (late 1970s–present)**<br>• Microprocessors<br>• Biotechnology<br>• Robotics<br>• Broadband and wireless systems<br>• Genetic engineering<br>• Nanotechnology<br>• Internet technology (e.g. cloud-computing, open-source applications) |

people were employed as blacksmiths or carriage and harness manufacturers. Today, thanks to the internal combustion engine, few earn a living in these professions, but millions of people work as auto mechanics, long-haul truckers, and taxi drivers, and millions of others are employed in production, sales, and manufacturing jobs related to the auto industry.

The evolution of systems does not only impact the markets for goods, services, and labor. As one system is eclipsed by another, so different regions are favored or disadvantaged. A city such as Chicago, which aggressively invested in railroads, saw its population increase fourfold in the span of a decade in the mid-1800s. From this small **initial advantage**, Chicago became the dominant city in the Midwest, the hub of transcontinental trade. By the time it supplanted Philadelphia as the second largest city in the United States, it had developed a diverse economy with leading corporations in industries as diverse as iron and steel, garment production,

publishing, banking, insurance, and mail-order retail. During this rapid period of growth, it also surpassed older and initially larger cities such as St. Louis, which depended on and were invested in steamboat commerce.

As this example illustrates, changes in technology are crucial to understanding the **geographical path dependence** of economic activities, that is, the historical relationship between present economic activities associated with a place and its past experience. As new technologies eclipse old ones, industries—and sometimes entire industrial regions—are "dismantled" (or, at least, neglected) as investors shift capital to fund the creation of new centers of profitability and employment.

## 1.3 SPATIAL DIVISIONS OF LABOR

The evolution of capitalism has also brought about changes in the **spatial division of labor**. The division of labor within and between firms and over space is not fixed; rather, it responds to changes in the historical-structural context in which firms operate.

For example, during the Fordist period in countries such as Britain and the United States, the basic division of labor was organized primarily within regional parts of the national economy. Plant, firm, and industry were national phenomena. They were organized around national markets and industries, and they created national social (class) divisions. Although capital, labor, and technology were often imported and exported, these factors of production were subject to intensive regulation by national governments.

The internal geography of a national economy such as Britain's reflected its position in the **international division of labor**. In the 1930s Britain specialized in certain key manufacturing industries such as coalmining, iron and steel manufacturing, and shipbuilding. Previous investments in these industries and the **increasing returns to scale** and **external economies of scale** they generated defined Britain's trading patterns. Elsewhere, different industries, often newer, mass-production ones based on larger firms, also took root. As a result, trade reflected cumulative **competitive advantages** in sectors where each had a "head start."

The locational consequences in the British case are laid out by Massey (1984: 28–29) as follows:

> It was the United Kingdom's position as an imperial power, its early lead in the growth of modern industry, and its consequent commitment to free trade and its own specialization in manufacturing *within* this international division of labor, which enabled the rapid growth, up to the First World War, of these major exporting industries. The spatial structures that were established by those industries were those where all the stages of production of the commodity are concentrated within single geographical areas. The comparatively low level of separation of functions within the process of production, and the relatively small variation in locational requirements between such potentially separable functions, were not sufficient to make geographical differentiation a major attraction.

In other words, the spatial division of labor of key industries within national economies was based largely on different regional industrial specializations. And **agglomeration** was a major feature of economic organization across a number of manufacturing industries.

Similarly, in the United States during this period, the northeast contained a vast array of specialized manufacturing clusters—steel in Pittsburgh, automobiles in Detroit, chemicals in Wilmington, and photographic equipment in Rochester—as well as regional areas of specialization in agricultural (for example, tomatoes and sweet corn in the Garden State of New Jersey, low-bush blueberries in Maine, maple syrup in Vermont), and raw materials (for

example, stone quarries in the "granite state" of New Hampshire). In this respect, places and regions could readily be associated with specific products.

## GLOBALIZATION AND CHANGING SPATIAL DIVISIONS OF LABOR

Under the conditions of **flexible production**, such regional specialization has been challenged and undermined to a considerable degree. Spatial divisions of labor are now structured in a variety of ways depending on the needs and characteristics of particular industries. In addition to (1) *regional specialization* and (2) *regional dispersal* (which has characterized **consumer services** such as stores, restaurants, and hospitals, and some manufacturing industries such as shoe production and food processing), four additional spatial divisions of labor can be identified:

1. *Three-tier regional functional separation*
   a. management and research activities in major metropolitan regions
   b. skilled labor in "old" manufacturing areas
   c. unskilled labor in regional peripheries (to exploit lower wages and non-unionized labor forces).
2. *Two-tier regional functional separation*
   a. management and research activities in major metropolitan regions
   b. semi-skilled and unskilled labor in regional peripheries.
3. *Regional and global functional separation*
   a. management, research, and skilled labor in advanced industrial regions
   b. unskilled labor in the global periphery.
4. *Divisions by areas of growth and decline*
   a. some areas characterized by investment, technical change, and job expansion
   b. other areas characterized by stagnant and progressively less competitive production and job loss.

These new spatial divisions of labor have been possible because transportation and communications technologies have created an environment in which firms can decentralize activities associated with **primary production** yet maintain central control. A firm can remain headquartered in New York, Zürich, or Hamburg, but locate manufacturing facilities in a location such as Chennai, India, or the Monterrey-Nuevo Laredo corridor in Mexico and reap the benefits of non-union labor forces, easier access to concentrated regional markets, and favorable regulatory environments.

Under this **new international division of labor** (NIDL), investment and production are no longer organized primarily around national economies. The process of production—most obviously in the examples of the automobile, electronics, and software industries—is now global. Components or specific services are sourced from multiple suppliers in different countries and assembled in several locations (see Box 1.1).

In fact, many products no longer have any obvious nationality. It is difficult to distinguish some "U.S." from some "Japanese" cars, for example, now that U.S. car companies import vehicles under "their" names from Japan, and Japanese companies now manufacture cars in the United States (for example, Honda in Marysville, Ohio, and Toyota in Blue Springs, Mississippi). Even manufacturing the Barbie doll, an all-American icon, includes operations in a number of countries (see Box 1.2).

## Box 1.1 Outsourcing and global commodity chains

International outsourcing affects millions of people (see Figure 1.3) and is a controversial topic, particularly during periods of high or rising unemployment such as the Great Recession that followed the global financial crisis of 2008. But neoclassical economists see international outsourcing as a beneficial and natural consequence of free trade:

> In February 2004, when N. Gregory Mankiw, a Harvard professor then serving as chairman of the White House Council of Economic Advisers, caused a national uproar with a "textbook" statement about trade, economists rushed to his defense. Mankiw was commenting on the phenomenon that has been clumsily dubbed offshoring (or offshore outsourcing)—the migration of jobs, but not the people who perform them, from rich countries to poor ones. Offshoring, Mankiw said, is only "the latest manifestation of the gains from trade that economists have talked about at least since Adam Smith . . . More things are tradable than were tradable in the past, and that's a good thing." Although Democratic and Republican politicians alike excoriated Mankiw for his callous attitude toward U.S. jobs, economists lined up to support his claim that offshoring is simply international business as usual.
>
> (Blinder, 2006:1)

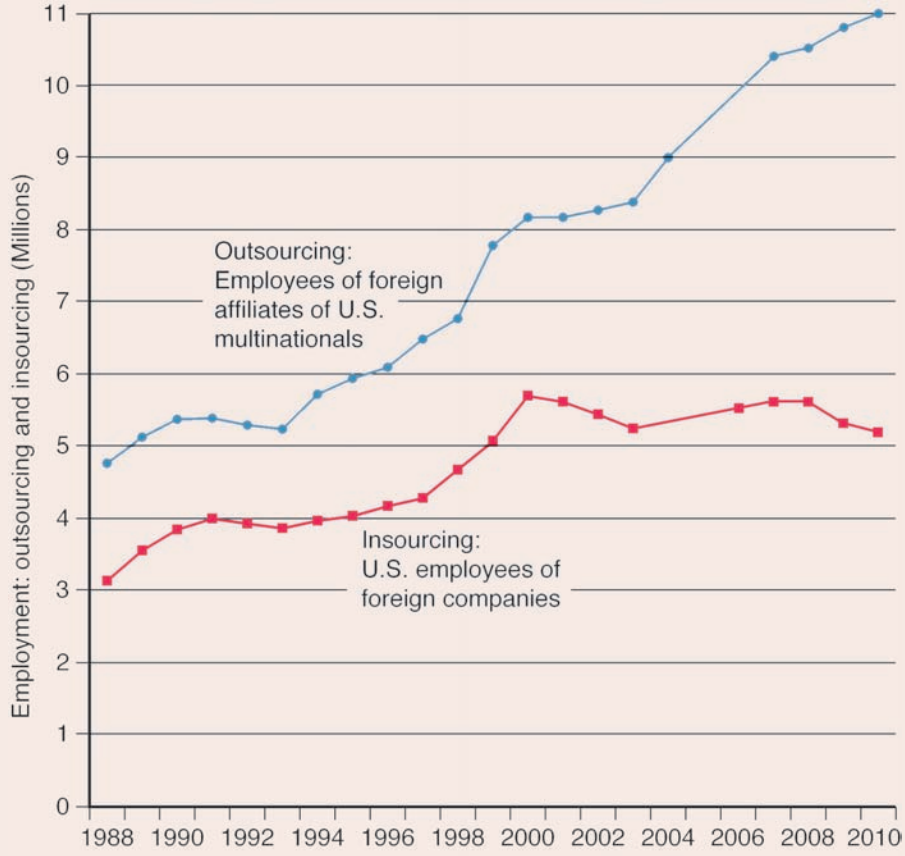


**Figure 1.3** Employment outsourcing and insourcing, United States

*Source:* Adapted from Mankiw and Swagel (2006: 27, Figure 2)

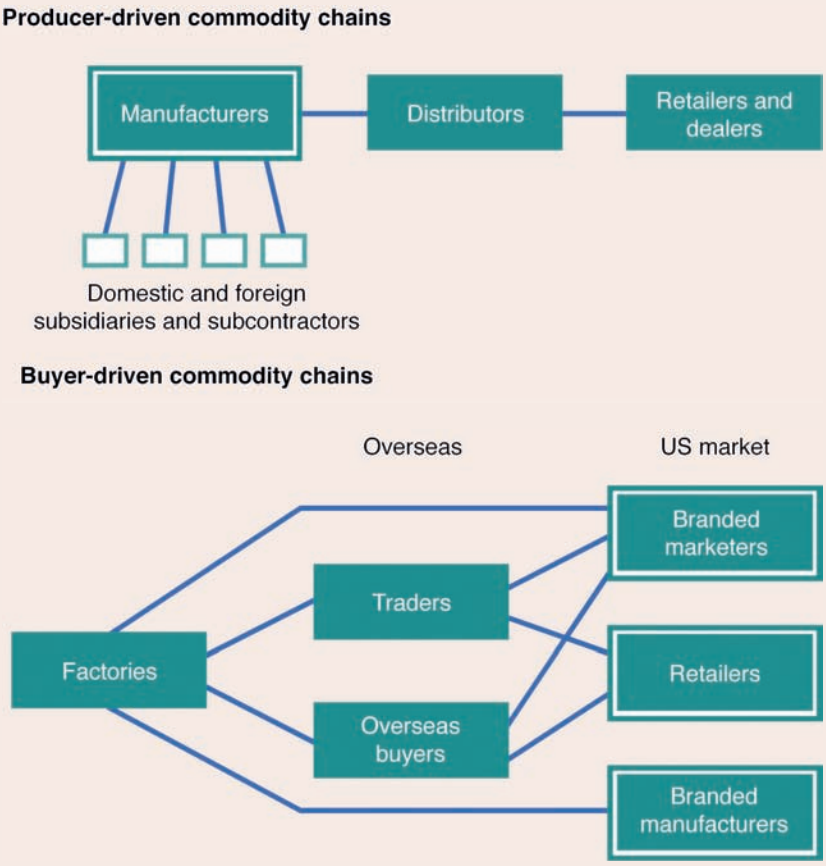


**Figure 1.4** Basic elements of commodity chains

*Source*: Based on Gereffi (2001: 1619, Figure 1)

The world economy is constituted through numerous **commodity chains** (see Figure 1.4) that crisscross the globe. Commodity chains link the supply and processing of raw materials, the production of components, and the assembly and distribution of finished products in vast global systems. As we will see in subsequent chapters, these global assembly systems are increasingly important in shaping economic landscapes.

Global assembly systems also provide manufacturers several advantages.

First, a global assembly system for standardized products can maximize economies of scale. Second, it enables corporations to take greater advantage of the full range of geographical variations in costs for production and assembly. Basic wages in manufacturing industries, for example, are between 25 and 75 times higher in advanced industrial countries than in some LDCs. With a global assembly system, labor-intensive work can be done where labor is cheap, raw materials can be processed near their source of supply, and assembly can be done close to major markets. Finally, a global assembly system means that companies are less dependent on a single source of supply for specific resources, thereby reducing its vulnerability to industrial troubles and other disturbances.

## Box 1.2 Barbie: American icon and global product

The famous (and impossible) physique of the Barbie doll says "Made in America" but the box it comes in says "Made in China." Tracing Barbie's production path raises interesting questions about how its place of origin can be identified and how the globalization of production ties together disparate locations in the world economic core and the periphery (a topic that will also be covered in greater detail in the next chapter).

Although Barbie is an American icon and a team of over 100 designers, beauticians, tailors, and sculptors at the headquarters of Mattel Corporation in El Segundo, California collaborate on her spring, fall, and holiday collections every year, Barbie has *never* been made in the United States. The first doll was produced in Japan in 1959. As costs rose in Japan, production was moved to other sites in Asia including Taiwan, Hong Kong, and the Philippines. Following a strike in 1988, Mattel closed its two Philippine factories resulting in the loss of 4,000 jobs.

Mattel closely guards its proprietary manufacturing process; however, in 1996 *Los Angeles Times* staff reporter, Rone Tempest, did some sleuthing and discovered the following about Barbie: She is made from ethylene, refined oil imported from Saudi Arabia, which is turned into pellets by a firm in Taiwan. Barbie's nylon hair comes from Japan. Her cardboard packaging is made in the United States. The manufacturing and packaging is managed from Hong Kong.

The production story begins, however, in Mattel's commodity management center where information about commodity prices and wage rates is used to decide on the best locations to buy the plastic resins, the cloth, the paper and other materials, and bring them together at a final point of assembly.

At one time, Japan and Taiwan were the main toymakers to the world economy. As their economies diversified into more capital-intensive production, they became the suppliers of the plastics that previously had come from the United States and Europe. At that time, production shifted to lower wage sites such as China, Thailand, and Indonesia (Foek, 1997).

Making Barbie is extremely labor intensive. Workers must operate plastic molds, sew clothing, and paint the details on the dolls. A typical Barbie requires 15 separate paint stations. Machines cannot perform these tasks. So the two Barbie plants in China employ about 11,000 workers, mainly unmarried women between 18 and 23 from poor regions of interior China brought to work at the factories for two to five years (Tempest, 1996).

So, Barbie is made in China. In the trade ledgers—where country trade deficits and surpluses are defined—Barbie is one of its exports. But a number of firms in different countries contributed to its production and reaped profits from the final product. Tempest estimated that Chinese firms and workers obtained only about 35 cents out of the $2 export value placed on each doll. In contrast, Barbie retails in the U.S. for $12–18.

In recent years, global sales for Barbie have fluctuated somewhat. Nevertheless, Barbie continues to account for $3 billion annually in retail sales for Mattel, and the secondary market for all things Barbie remains hotter than her "Barbie pink" toenail polish.

For many transnational corporations, national markets for capital, labor, and plant and office location exist only as parts of global **commodity chains**. Even small firms now have the opportunity to operate globally, outsourcing web development and design, production and packaging, customer service, and nearly any other facet of its business while competing for customers in local, regional, and global markets. So these "new" conditions cannot be solely identified with multinational corporations.

The pace of economic globalization has accelerated since the late 1960s. Between 1961 and 1976, for example, the number of employees of German firms outside Germany increased tenfold. The number of firms with foreign operations doubled during the same period of time. Today, the 30 largest corporations headquartered in Finland employ more than 50 percent of their employees outside Finland. German and Finnish firms have generally been less willing to expand foreign operations compared to U.S. and British firms, so these figures indicate something of a lower bound among countries with long histories of industrialization.

Paralleling and stimulating this trend has been the emergence of international devices for steering capital beyond national control (for example, the **eurodollars** in circulation outside the United States, see p. 54) and the **offshore financial centers** (see p. 340) that, rather like some city-states in the past, now service the new international division of labor. Table 1.2 highlights the rapid growth in the size and depth of the global foreign exchange market, where daily volumes now exceed to 25 percent of U.S. GDP. Some small countries such as Luxembourg and Switzerland have successfully cashed in on the world economy to the extent that they now have median household income levels higher than those of the "old" national manufacturing economies such as the U.K. and Germany.

National economies, therefore, are no longer the sole building blocks of the world economy. For an increasing proportion of agricultural and manufactured commodities and for some services, production and markets have become worldwide. This shift has had important

**Table 1.2** Global foreign exchange market turnover (daily averages, US$ billions)

| | 1989 | 1992 | 1995 | 1998 | 2001 | 2004 | 2007 | 2010 |
|---|---|---|---|---|---|---|---|---|
| Spot transactions[1] | 317 | 394 | 494 | 568 | 386 | 631 | 1,005 | 1,490 |
| Outright forwards[2] | 27 | 58 | 97 | 128 | 130 | 209 | 362 | 475 |
| Foreign exchange swaps[3] | 190 | 324 | 546 | 734 | 656 | 954 | 1,714 | 1,765 |
| Estimated gaps in reporting | 56 | 43 | 53 | 61 | 26 | 107 | 128 | 144 |
| Total 'traditional' turnover | 590 | 820 | 1,190 | 1,491 | 1,198 | 1,901 | 3,209 | 3,874 |

1 Single outright transactions involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) within two business days.

2 Transactions involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery at some time (more than two business days) in the future.

3 Transactions involving the actual exchange of two currencies on a specific date at a rate agreed at the time of conclusion of the contract (the short leg), and a reverse exchange of the same two currencies at a date further in the future and at a rate agreed at the time of the contract (the long leg).

*Source*: Based on Bank for International Settlements (2010: 7, Table B1)

consequences for the spatial distribution of economic activities both globally and within countries.

Globally, it has given rise to the growth of newly industrializing economies such as South Korea and Brazil. It has also contributed to a significant polarization of income and wealth. According to the World Bank (2010), the average per capita income in the richest 20 countries is 47 times that of the poorest 20. Within the "core" of advanced industrial national economies, the new international division of labor has led to a reorientation in employment away from manufacturing to services and a massive restructuring of regional economies. In Britain, for example, three sorts of local area have fallen victim to the loss of traditional manufacturing industries and the failure of new ones to replace them:

1. the centers of nineteenth-century industrialization in the north of England, south Wales, and central Scotland
2. the inner cities of London and other large metropolitan areas with concentrations of poor people and few of the unskilled jobs that they used to fill
3. the centers of the growth industries (specifically vehicles and engineering) of the 1950s and 1960s in the West Midlands and northwest of England.

We will draw on this framework throughout the remainder of the book as we analyze and describe the geography of the world economy. In the next chapter, we establish the major dimensions of the contemporary economic landscapes within the world economy. In Chapter 3, we outline a comprehensive global historical framework that serves as the context for the rest of the book.

In Part 2, we trace the emergence of three of the world's core economies—Europe, North America and Japan—and follow their paths towards increasing scale and complexity. Part 3 focuses on the rest of the world and pays special attention to the spatial transformations that have occurred as a consequence of colonialism and global capitalism that emanated from the core economies as well as the role of agriculture and manufacturing industries in economic development and spatial change.

Finally, in Part 4, we examine some of the reactions to the emergence of ever larger and more powerful economic forces that have come to characterize the world economy. In particular, we describe the spatial consequences of transnational political and economic integration and decentralist reactions: Nationalism, regionalism, and grassroots movements towards economic democracy.

## SUMMARY

In this introductory chapter, we provided the orientation for the book by outlining the relationships between the organization of the world economy and spatial change. We stressed how studying the world economy involves developing an understanding of the general economic forces and socioeconomic relationships within the world economy and of the unique features that represent local and historical variability. We introduced the interrelated concepts of economic organization and spatial change and discussed the five major forms of economic organization commonly recognized: Subsistence, slavery, feudalism, capitalism, and socialism. We established some of the basic ideas and outcomes associated with globalization including technology, economic development, and changing spatial divisions of labor.

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