contradict the earlier theory of comparative advantage. Instead, they help to broaden the concept.

In intra-industry trade, climate or geography do not determine the level of worker productivity. Even the general level of education or skill does not determine it. Instead, how firms engage in specific learning about specialized products, including taking advantage of economies of scale determine the level of worker productivity. In this vision, comparative advantage can be dynamic—that is, it can evolve and change over time as one develops new skills and as manufacturers split the value chain in new ways. This line of thinking also suggests that countries are not destined to have the same comparative advantage forever, but must instead be flexible in response to ongoing changes in comparative advantage.

## 19.4 The Benefits of Reducing Barriers to International Trade

#### **LEARNING OBJECTIVES**

By the end of this section, you will be able to:

- Explain tariffs as barriers to trade
- · Identify at least two benefits of reducing barriers to international trade

**Tariffs** are taxes that governments place on imported goods for a variety of reasons. Some of these reasons include protecting sensitive industries, for humanitarian reasons, and protecting against dumping. Traditionally, tariffs were used simply as a political tool to protect certain vested economic, social, and cultural interests. The World Trade Organization (WTO) is committed to lowering barriers to trade. The world's nations meet through the WTO to negotiate how they can reduce barriers to trade, such as tariffs. WTO negotiations happen in "rounds," where all countries negotiate one agreement to encourage trade, take a year or two off, and then start negotiating a new agreement. The current round of negotiations is called the Doha Round because it was officially launched in Doha, the capital city of Qatar, in November 2001. In 2010, the WTO noted that the Doha Round's emphasis on market access and reforms of agricultural subsidies could add \$121-\$202 billion to the world economy.

In the context of a global economy that currently produces more than \$80 trillion of goods and services each year, this amount is not large: it is an increase of less than 1%. But before dismissing the gains from trade too quickly, it is worth remembering two points.

- First, a gain of a few hundred billion dollars is enough money to deserve attention! Moreover, remember that this increase is not a one-time event; it would persist each year into the future.
- Second, the estimate of gains may be on the low side because some of the gains from trade are not
  measured especially well in economic statistics. For example, it is difficult to measure the potential
  advantages to consumers of having a variety of products available and a greater degree of competition
  among producers. Perhaps the most important unmeasured factor is that trade between countries,
  especially when firms are splitting up the value chain of production, often involves a transfer of knowledge
  that can involve skills in production, technology, management, finance, and law.

Low-income countries benefit more from trade than high-income countries do. In some ways, the giant U.S. economy has less need for international trade, because it can already take advantage of internal trade within its economy. However, many smaller national economies around the world, in regions like Latin America, Africa, the Middle East, and Asia, have much more limited possibilities for trade inside their countries or their immediate regions. Without international trade, they may have little ability to benefit from comparative advantage, slicing up the value chain, or economies of scale. Moreover, smaller economies often have fewer competitive firms making goods within their economy, and thus firms have less pressure from other firms to provide the goods and prices that consumers want.

The economic gains from expanding international trade are measured in hundreds of billions of dollars, and the gains from international trade as a whole probably reach well into the trillions of dollars. The potential for gains from trade may be especially high among the smaller and lower-income countries of the world.

## IINK IT UP

Visit this website (http://openstax.org/l/tradebenefits) for a list of some benefits of trade.

### From Interpersonal to International Trade

Most people find it easy to believe that they, personally, would not be better off if they tried to grow and process all of their own food, to make all of their own clothes, to build their own cars and houses from scratch, and so on. Instead, we all benefit from living in economies where people and firms can specialize and trade with each other.

The benefits of trade do not stop at national boundaries, either. Earlier we explained that the division of labor could increase output for three reasons: (1) workers with different characteristics can specialize in the types of production where they have a comparative advantage; (2) firms and workers who specialize in a certain product become more productive with learning and practice; and (3) economies of scale. These three reasons apply from the individual and community level right up to the international level. If it makes sense to you that interpersonal, intercommunity, and interstate trade offer economic gains, it should make sense that international trade offers gains, too.

International trade currently involves about \$20 trillion worth of goods and services moving around the globe. Any economic force of that size, even if it confers overall benefits, is certain to cause disruption and controversy. This chapter has only made the case that trade brings economic benefits. Other chapters discuss, in detail, the public policy arguments over whether to restrict international trade.

# BRING IT HOME

#### Just Whose iPhone Is It?

Apple Corporation uses a global platform to produce the iPhone. Now that you understand the concept of comparative advantage, you can see why the engineering and design of the iPhone is done in the United States. The United States has built up a comparative advantage over the years in designing and marketing products, and sacrifices fewer resources to design high-tech devices relative to other countries. China has a comparative advantage in assembling the phone due to its large skilled labor force. Korea has a comparative advantage in producing components. Korea focuses its production by increasing its scale, learning better ways to produce screens and computer chips, and uses innovation to lower average costs of production. Apple, in turn, benefits because it can purchase these quality products at lower prices. Put the global assembly line together and you have the device with which we are all so familiar.