

It is differences between the relative prices between countries (as reflected in costs of labour to produce the goods) that underpin the incentive to engage in trade.<sup>4</sup> The divergence between self-sufficiency and free trade prices only partially explains the gains from trade. A more complete explanation of those gains should also take into account the underlying factors that give rise to different prices, thereby creating the conditions for mutually beneficial trade. These factors are the ones that lie behind the sources of comparative advantage. They include such things as differences in technology and differences in natural endowments. In addition, there are other gains from trade that are not linked to differences between countries. In particular, countries trade to achieve economies of scale in production or to have access to a broader variety of goods. Moreover, if the opening-up of trade reduces or eliminates monopoly power or enhances productivity, there will be gains from trade beyond the usual ones. Finally, trade may have positive growth effects.

### *Differences in technology*

As already mentioned, differences between countries are one of the main reasons why they engage in trade. The Ricardian model and its extensions point to technological differences as the source of comparative advantage. This was illustrated in Ricardo's example of England and Portugal by using labour as the only factor of production,<sup>5</sup> so

that differences in technology show up as differences in the amount of output that can be obtained from one unit of labour. These differences allowed each country to exploit its comparative advantage and expand the size of the economic pie.

### *Differences in resources endowments*

Given that the Ricardian model assumes labour as the only factor of production, differences in labour productivity thus provide the only possible source of comparative advantage between countries in that model. Clearly, however, differences in labour productivity are not the only source of comparative advantage. Differences in resource endowments also play a role. For example, countries that are relatively better endowed with fertile land than others are more likely to export agricultural products.

The idea that international trade is driven by differences in relative factor endowments between countries forms the core of the Heckscher-Ohlin trade model. Because this model focuses on another source of comparative advantage—factor endowments, it provides an additional explanation of trading patterns. The model rests on the theory that a country has a production bias toward, and hence tends to export, the good that intensively uses the factor with which it is relatively well endowed. However, the gains from trade in the Heckscher-Ohlin framework are fundamentally similar to those in

4 The gains from trade rest on the premise that if a country can trade at any price ratio other than its domestic prices, it will be better off than by producing everything itself (i.e. being self-sufficient—which economists call a state of “autarky”). There are three fundamental axioms about gains from trade: i) free trade is better than self-sufficiency; ii) restricted trade (i.e. trade restricted by trade barriers) is better than self-sufficiency; and, iii) for a small economy (i.e. one too small to influence world prices) free trade is better than restricted trade.

5 That labour is the only factor of production is specific to the Ricardian model. Most of the other conditions, such as perfect competition, no trade costs, constant returns to scale, fixed endowments, and international immobility of factors, are standard in traditional trade models.