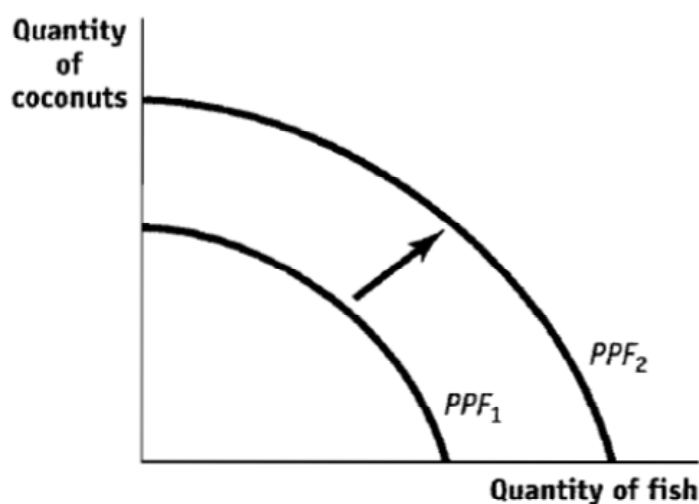


**TIP: The production possibility frontier provides a simple model to illustrate scarcity, opportunity cost, trade-offs, economic growth, and the distinction between efficient and inefficient points.**

A production possibility frontier for a person or an economy illustrates the maximum amount of two goods that can be produced in a given amount of time given a fixed level of resources and technology. The production possibility frontier is a boundary between points that are feasible but inefficient (points inside the production possibility frontier) and points that are infeasible (points outside the production possibility frontier); thus, all points on the production possibility frontier are both feasible and efficient. Moving along the production possibility frontier, we can produce more of one good only by producing less of the other good. The opportunity cost of producing more of one good is measured as the number of units of the other good that must be forgone. Economic growth occurs when the production possibility frontier shifts out from the origin: an increase in resources or an improvement in technology will shift the production possibility frontier out, indicating an expansion in the productive capacity of the economy, as shown in Figure 2.1.

**Figure 2.1**



**TIP: The model of comparative advantage illustrates why specialization and trade is advantageous to people and countries even if a person or a country does not have the absolute advantage in producing any good.**

**TIP: The model of comparative advantage illustrates why specialization and trade is advantageous to people and countries even if a person or a country does not have the absolute advantage in producing any good.**

It is possible for individuals or countries to be better off if they specialize according to their comparative advantage and then trade with one another. A country has a comparative advantage in producing a good if it can produce the good at lower opportunity cost than can another country. For example, if country A's opportunity cost of producing one more unit of fish is two units of coconuts, while country B's opportunity cost of producing one more unit of fish is three units of coconuts, then country A should produce fish

and trade with country B, which should produce coconuts. For example, even though the United States can absolutely produce more cars and textiles than a smaller country like Malaysia, there are still gains to be had from specialization according to one's comparative advantage and then trading. In this case, Malaysia has a comparative advantage in the production of textiles while the United States has a comparative advantage in the production of cars.

**TIP: The circular-flow diagram of the economy illustrates the relationship between households and firms as they interact in both the product and the factor markets.**

Households provide factors of production, while firms produce goods and services using those factors. Households use the income they earn from selling their factors of production to purchase the goods and services produced by the firms. In the circular-flow diagram (see p. 20), income equals expenditures. The circular-flow diagram depicts two flows: the flows of factors of production and goods and services, and the flows of income and expenditures.

**TIP: The distinction between positive and normative economics is that the former is about how things are, while the latter is about how things should be.**

Positive economics is concerned with descriptive, and hence objective, statements. Normative economics is concerned with prescriptive, and hence subjective, statements. Positive economics describes how the economy works, while normative economics focuses on how the economy should work. The statement "an increase in tax rates will result in a decrease in the amount of labor that will be provided in the market" is an example of a positive statement since it is a statement that can be proven true or false (it is an objective statement). While the statement "the United States should increase tax rates in order to generate higher levels of revenue for school funding" is a normative opinion that expresses what should be done from the speaker's point of view (it is a subjective statement). We can contrast the distinction between positive and normative statements by realizing that, once we agree on the facts, a positive statement will be either true or false; while, with a normative statement, the debate is not over the facts, but over the values and opinions held by different individuals.