- Absolute advantage differs from comparative advantage, which refers to the ability to produce specific goods at a lower opportunity cost.

Key Terms

- **Absolute advantage**: The capability to produce more of a given product using less of a given resource than a competing entity.

Absolute advantage refers to the ability of a country to produce a good more efficiently than other countries. In other words, a country that has an absolute advantage can produce a good with lower marginal cost (fewer materials, cheaper materials, in less time, with fewer workers, with cheaper workers, etc.). Absolute advantage differs from comparative advantage, which refers to the ability of a country to produce specific goods at a lower opportunity cost.

A country with an absolute advantage can sell the good for less than a country that does not have the absolute advantage. For example, the Canadian economy, which is rich in low cost land, has an absolute advantage in agricultural production relative to some other countries. China and other Asian economies export low-cost manufactured goods, which take advantage of their much lower unit labor costs.

China and Consumer Electronics: Many consumer electronics are manufactured in China. China can produce such goods more efficiently, which gives it an absolute advantage relative to many countries.

Imagine that Economy A can produce 5 widgets per hour with 3 workers. Economy B can produce 10 widgets per hour with 3 workers. Assuming that the workers of both economies are paid equally, Economy B has an absolute advantage over Economy A in producing widgets per hour. This is because Economy B can produce twice as many widgets as Economy B with the same number of workers.

Party	Widgets per hour	Number of Employees
A	5	3
B	10	3

Absolute Advantage: Party B has an absolute advantage in producing widgets. It can produce more widgets with the same amount of resources than Party A.

If there is no trade, then each country will consume what it produces. Adam Smith said that countries should specialize in the goods and services in which they have an absolute advantage. When countries specialize and trade, they can move beyond their production possibilities frontiers, and are thus able to consume more goods as a result.

Defining Comparative Advantage

A country has a comparative advantage over another when it can produce a good or service at a lower opportunity cost.

Key Points

- Even if one country has an absolute advantage in the production of all goods, it can still benefit from trade.
- Countries should import goods if the opportunity cost of importing is lower than the cost of producing them locally.
- Specialization according to comparative advantage results in a more efficient allocation of world resources. A larger quantity of outputs becomes available to the trading nations.
- Competitive advantage is distinct from comparative advantage because it has to do with distinguishing attributes which are not necessarily related to a lower opportunity cost.

Key Terms

- **Opportunity cost**: The cost of an opportunity forgone (and the loss of the benefits that could be received from that opportunity); the most valuable forgone alternative.
- **comparative advantage**: The ability of a party to produce a particular good or service at a lower marginal and opportunity cost over another.
- **competitive advantage**: Something that places a company or a person above the competition

Comparative Advantage

In economics, comparative advantage refers to the ability of a party to produce a particular good or service at a lower marginal and opportunity cost over another. Even if one country is more efficient in the production of all goods (has an absolute advantage in all goods) than another, both countries will still gain by trading with each other. More specifically, countries should import goods if the opportunity cost of importing is lower than the cost of producing them locally.

Specialization according to comparative advantage results in a more efficient allocation of world resources. Larger outputs of both products become available to both nations. The outcome of international specialization and trade is equivalent to a nation having more and/or better resources or discovering improved production techniques.

Determining Comparative Advantage

Imagine that there are two nations, Chiplandia and Entertainia, that currently produce their own computer chips and CD players. Chiplandia uses less time to produce both products, while Entertainia uses more time to produce both products. Chiplandia enjoys and absolute advantage, an ability to produce an item with fewer resources. However, the accompanying table shows that Chiplandia has a comparative advantage in computer chip production, while Entertainia has a comparative advantage in the production of CD players. The nations can benefit from specialization and trade, which would make the allocation of resources more efficient across both countries.

Production without Trade

Product	Chiplandia	Entertainia
1 Computer Chip	5 hours	24 hours
1 CD Player	10 hours	12 hours
Total	15 hours	36 hours

Opportunity Cost of Production

Product	Chiplandia	Entertainia
1 Computer Chip	½ CD Player	2 CD Players
1 CD Player	2 Computer Chips	½ Computer Chip

Production with Trade

Chiplandia		Entertainia	
1 Computer Chip for Chiplandia	5 hours	1 CD Player for Entertainia	12 hours
1 Computer Chip for Entertainia	5 hours	1 CD Player for Chiplandia	12 hours
Total	10 hours		24 hours

Comparative Advantage: Chiplandia has a comparative advantage in producing computer chips, while Entertainia has a comparative advantage in producing CD players. Both nations can benefit from trade.

For another example, if the opportunity cost of producing one more unit of coffee in Brazil is 2/3 units of wheat, while the opportunity cost of producing one more unit of coffee in the United States is 1/3 wheat, then the U.S. should produce coffee, while Brazil should produce wheat (assuming Brazil has the lower opportunity cost of producing wheat).