

## Appendix I

# David Ricardo's Theory of Comparative Advantage in International Trade

In his 1817 book, *Principles of Political Economy and Taxation*, David Ricardo laid the foundation for our present world economic order with his theory of comparative advantage. As an example he used the trade in wine and cloth between England and Portugal and, being the gentleman he was, he allowed Portugal to be more efficient than England in the production of both wine and cloth. Ricardo attempted to prove that it could still be mutually beneficial for both countries to specialize and trade if each country specialized where it was relatively most efficient (or less inefficient) compared to the other country.

In addition to the standard assumptions stated at the end of this appendix, one problem with this theory is that it does not allow for the possibility that after specialization one country's production may get caught in the spiral of diminishing returns and rising production costs (as would wine production) while another country might find its production costs falling as production increased due to increasing returns (as would cloth production). Using American economist Frank Graham's 1923 example, Appendix III shows how this would make one nation (the industrial country) specialize in

being rich and the other (the agricultural country) specialize in being poor.

It is important to understand that this theory represents the world economy as a process of bartering of labour hours which are devoid of any skills or other characteristics. A labour hour in Silicon Valley equals a labour hour in a refugee camp in Darfur in the Sudan. Ironically, capitalist trade theory in its purest form does not consider the role of capital; instead it is based on the labour theory of value. Therefore it does not consider that one country's production process might potentially absorb much knowledge and capital (like Microsoft's products) while the other country's production process might remain highly labour-intensive, in processes where capital cannot profitably be employed (as in the baseball example mentioned in Chapter 4).

The example below demonstrates Ricardo's logic, but I have also included a qualitative, technological, and developmental element by using 'industrial goods' and 'stone-age goods' instead of cloth and wine. The example shows an initial situation where Portugal is more efficient than England both in stone-age goods and industrial goods, but in the end specializes in stone-age technology.

Table 1

Country	Industrial goods		Stone-age goods	
	Cost per unit in man-hours		Cost per unit in man-hours	
England	15		30	
Portugal	10		15	

In Table 1, a unit of stone-age goods in England costs the same amount to produce as 2 units of industrial goods. Production of an extra unit of stone-age goods means foregoing production of 2 units of industrial goods (economists would say that the opportunity cost of a unit of stone-age goods is 2 units of industrial goods). In Portugal, a unit of stone-age goods costs 1.5 units of industrial goods to produce (i.e. the opportunity cost of a unit of stone-age goods is 1.5 units of industrial goods in Portugal).

Because relative or comparative costs differ, it will still be mutually advantageous for both countries to trade even though Portugal has an absolute advantage in both commodities.

Portugal is relatively better at producing stone-age goods than industrial goods: so Portugal has a comparative advantage in the production of stone-age goods. England is relatively better at producing industrial goods than stone-age goods: so England is said to have a comparative advantage in the production of industrial goods.

Table 2 shows how trade might be advantageous. Costs of production are as set out in Table 1. England is assumed to have 270 man-hours available for production. Before trade takes place it produces and consumes 8 units of industrial goods and 5 units of stone-age goods. Portugal has fewer labour resources with 180 man-hours of labour available for production. Before trade takes place it produces and consumes 9 units of industrial goods and 6 units of stone-age goods. Total production between the two economies is 17 units of industrial goods and 11 units of stone-age goods.

Table 2

Country	Production			
	Before trade		After trade	
	Industrial goods	Stone-age goods	Industrial goods	Stone-age goods
England	8	5	18	0
Portugal	9	6	0	12
Total	17	11	18	12

If both countries now specialize – with Portugal producing only stone-age goods and England producing only industrial goods – total production is 18 units of industrial goods and 12 units of stone-age goods. By keeping Portugal in the stone-age, free trade and specialization have made the world as a whole richer: world production has increased by 1 unit of industrial goods and 1 unit



of stone-age goods. However, in this book I argue that there are other and much better arguments for free trade than Ricardo's comparative advantage, and that the theory of comparative advantage actually may lock poor countries into a poverty trap, into primitivization: specializing in being poor.

As we saw in Chapter 5, the core economic policy at the time of Ricardo was the prohibition of manufacturing in the colonies. The main consequence of his theory of comparative advantage was that for the first time colonialism was made morally defensible. Before Smith and Ricardo most economists understood that colonies were kept poor on purpose, and many therefore predicted they would rebel in order to industrialize as did the United States in 1776. During the nineteenth century all presently rich countries understood that it was not in their interest to follow Ricardo's theory of comparative advantage until they had industrialized themselves. In Chapter 5 we observed how, after 1989, free trade deindustrialized Mongolia and created a situation where the only 'industrial' growth sector was the collection of bird feathers, 'combed down' as it is called in the trade statistics. Mongolia's development after 1989 was indeed tantamount to specializing in stone-age activities rather than in industrial activities.

The theory of comparative advantage outlined above makes other important assumptions:

- there are no transport costs
- there are only two economies producing two goods
- that traded goods are homogeneous (i.e. identical)
- factors of production are perfectly mobile
- there are no tariffs or other trade barriers
- there is perfect knowledge, so that all buyers and sellers know where the cheapest goods can be found internationally.