APPENDIX: THE BENEFIT OF FREE TRADE PROVEN WITH HOT DOGS

Country A and Country B produce only hot dogs and have, by amazing coincidence, 935,000 workers each.

In Country A it takes 40 workers to produce 100 sausages per day. Country B is less efficient, requiring 60 workers to produce the same 100 sausages.

In Country A it takes 45 workers to produce 100 rolls per day, and in Country B 50. Bearing in mind that each country produces exactly the same number of sausages as rolls to make hot dogs (one sausage plus one roll) the total hot dogs produced per day by Country A is 1,100,000, and by Country B, just 850,000.

Should Country A trade with Country B when Country A can produce both sausages and rolls more efficiently than Country B? The answer is yes (as proved in Table A).

TABLE A - BENEFITS OF FREE TRADE EXPLAINED IN HOT DOGS

	COUNTRY A	COUNTRY B
Workforce	**935,000**	**935,000**
Workers needed to produce 100 Sausages	40	60
Workers needed to produce 100 Rolls	45	50
Total Workers needed to produce 100 Hot Dogs per day	**85**	**110**
Arrangement Of Workforce Before Trade		
Workers Producing Sausages	440,000	510,000
Workers Producing Rolls	495,000	425,000
Total	935,000	935,000
Total Hot Dogs Produced Pre Trade	***1,100,000***	***850,000***
Workforce Optimised By Free trade		
Workers Producing Sausages	836,000	
Workers Producing Rolls	99,000	935,000
Total	935,000	935,000
Sausages Produced	2,090,000	0
Rolls Produced	220,000	1,870,000
Exports		
Sausages from Country A to Country B	935,000	
Rolls from Country B to Country A		935,000
Post Trade Total Sausages Available	1,155,000	935,000
Post Trade Total Rolls Available	1,155,000	935,000
Total Hot Dogs Produced Post Trade	***1,155,000***	***935,000***
Increase in Daily Hot Dog Production	55,000	85,000
Increase in Daily Hot Dog Production %	5.00%	10.00%

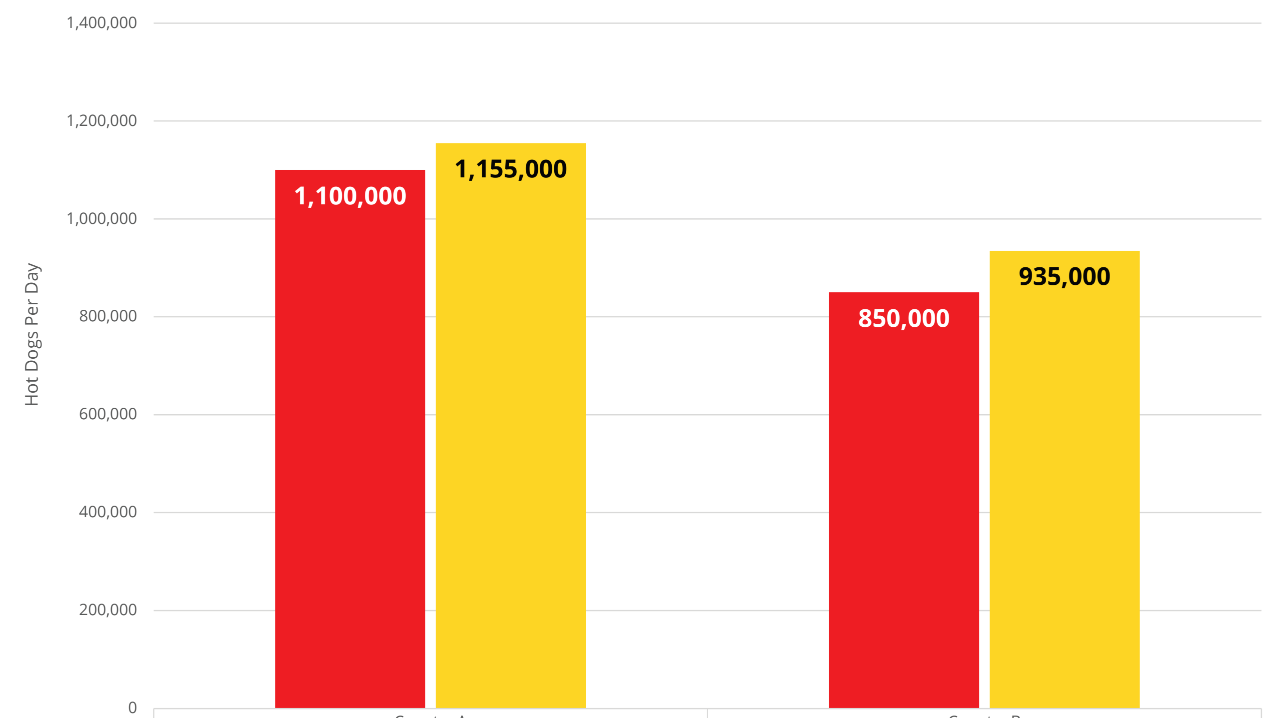
Source: COURTIERS

Ricardo said that the less productive country should produce the goods for which it has a “comparative advantage”, ie., the goods that it produces with the least amount of inefficiency. In the case of our hot dogs, Country B produces sausages 50% less efficiently than Country A, but it produces rolls 11% less efficiently. According to Ricardo, Country B should devote all its resources to producing rolls and not sausages.

The outcome is extraordinary. With its 935,000 workers producing just rolls, Country B produces 1,870,000 per day. It offers to exchange half of them with Country A in return for 935,000 sausages. To accommodate this trade, and to maximise production of hot dogs, Country A puts 836,000 of its workforce towards producing sausages and 99,000 towards producing rolls. It now produces 2.09 million sausages per day and 220,000 rolls. It exchanges 935,000 sausages with Country B for 935,000 rolls.

If you do the maths, you find that, post trade, Country A has 1.155 million hot dogs per day to consume, and Country B 935,000. As if by magic, Country A is better off in hot dogs by 55,000 (5%) per day and Country B by 85,000 (10%) per day.

CHART: FREE TRADE BOOSTS HOT DOG OUTPUT



	Country A	Country B
Pre Trade	1,100,000	850,000
Post Trade	1,155,000	935,000

Source: COURTIERS

SUBNOTE

The sharp-eyed economists among you may have noticed that the ratios of efficiency with which Country A and Country B produced rolls and sausages follows the same ratio as in Ricardo’s example of English and Portuguese cloth and wine production in “*On the Principles of Political Economy and Taxation*”. In converting Ricardo’s cloth and wine into hot dogs, I borrowed from an excellent article by Paul Krugman of 24th January 1997 in which he uses hot dogs to prove the benefit of globalisation. Imitation is the greatest form of flattery: Ricardo and Krugman were free-thinkers with original ideas, I have merely copied them.