

# Modeling Trade under a Ricardian 2 x 2 x 1 World

Example 1. case where each country has an absolute advantage in the production of one of the goods; identical preferences.

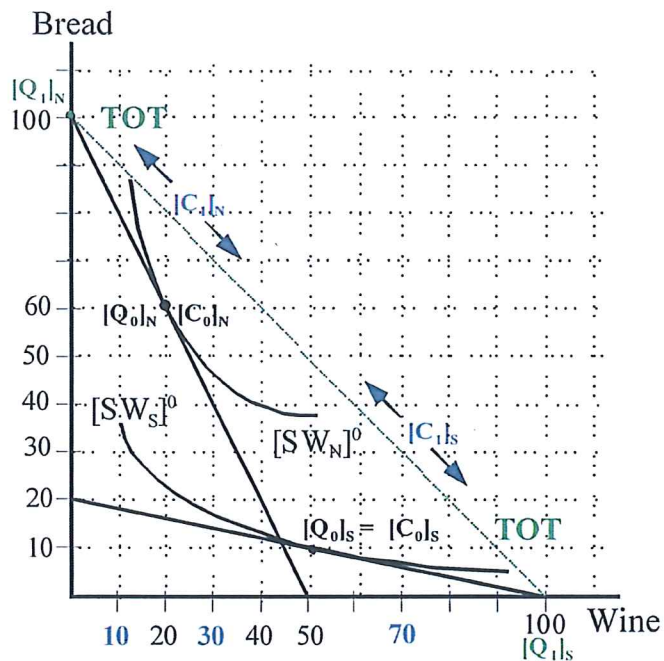
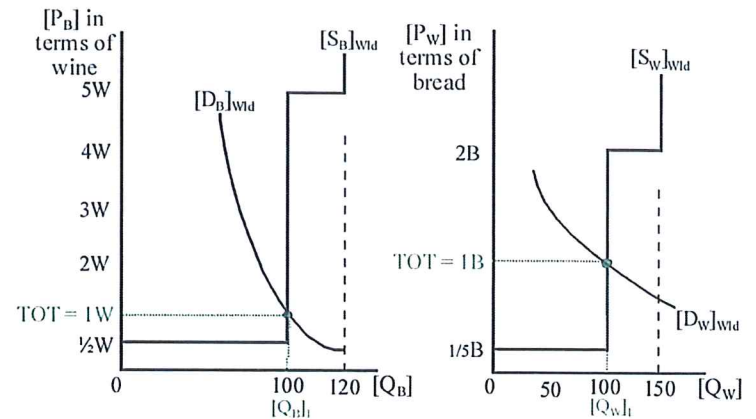
Pre-trade market situations in North (N) and South (S) – closed economies

	Production possibilities		Production levels		Consumption levels		Pre-trade prices		Feasible range of trade prices and terms of trade (TOT)	
	N	S	N	S	N	S	N	S		
Bread (B)	100	20	60	10	60	10	1 B = 1/2 W	1 B = 5 W		1B: 1/2 W < P <sub>Trade</sub> < 5 W
Wine (W)	50	100	20	50	20	50	1 W = 2 B	1 W = 1/5 B		1W: 2 B > P <sub>Trade</sub> > 1/5 B
									$[P_W/P_B]_N > [P_W/P_B]_{TOT} > [P_W/P_B]_S$	

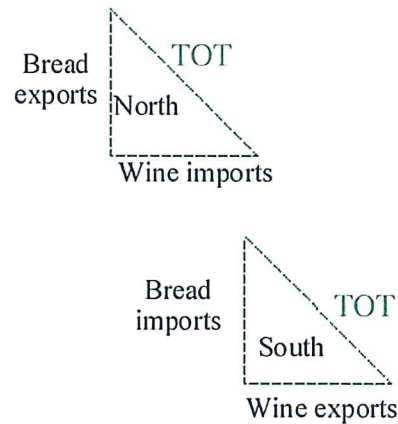
Given: free trade prices

	Price	Quantity
B		1B = 1 W
W		1W = 1B
TOT	$[P_W/P_B]_{TOT} = 1/1$	$[B/W] = 1/1$

$[2/1] = [P_W/P_B]_N$   
 $[1/1] = [P_W/P_B]_{TOT}$   
 $[1/5] = [P_W/P_B]_S$



Trade triangles:



Free trade market situation – open economies

	Production levels		Consumption levels		Quantity traded	
	N	S	N	S	N	S
B	100	0				
W	0	100				
World total			World total			
B	100		100			
W	100		100			

## Modeling Trade under a Ricardian 2 x 2 x 1 World

Example 2. case where one country (North) has an absolute advantage in the production of both goods.

Pre-trade market situations in North (N) and South (S) – closed economies

	Production possibilities		Production levels		Consumption levels		Pre-trade prices		Feasible range of trade prices and terms of trade (TOT)	
	N	S	N	S	N	S	N	S		
Bread (B)	100	30	70	20	70	20	1 B = 1 W	1 B = 3 W		1B: 1 W < P <sub>Trade</sub> < 3 W
Wine (W)	100	90	30	30	30	30	1 W = 1 B	1 W = 1/3 B		1W: 1 B > P <sub>Trade</sub> > 1/3 B
									$[P_W/P_B]_N > [P_W/P_B]_{TOT} > [P_W/P_B]_S$	

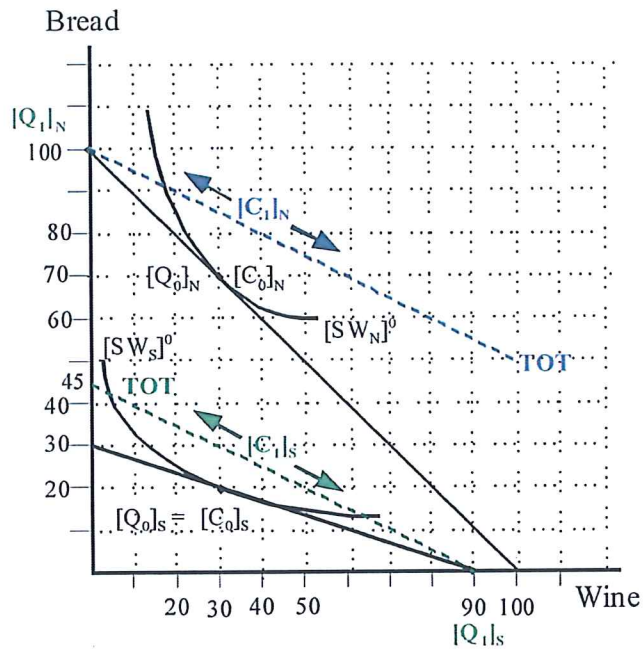
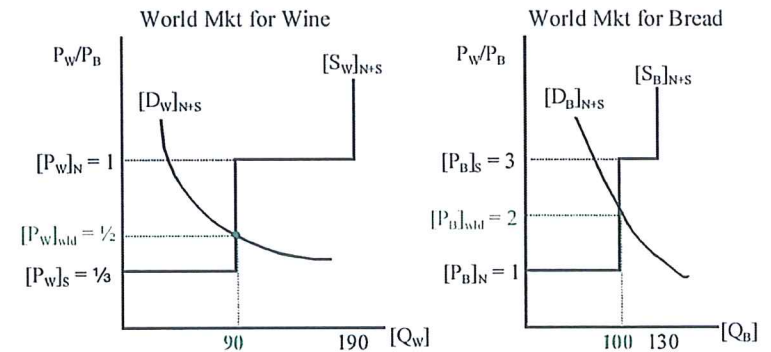
Given: free trade prices

	Price	Quantity
B		1B = 2 W
W		1W = 1/2 B
TOT	$[P_W/P_B]_{TOT} = 1/2$	$[B/W] = 1/2$

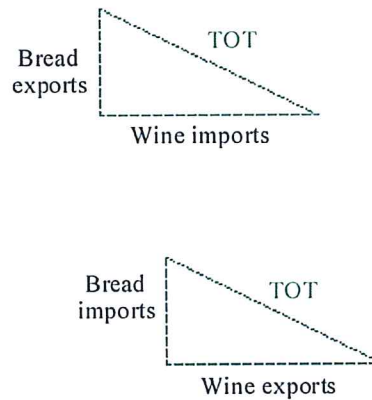
$$[1/1] = [P_w/P_b]_N$$

$$[1/2] = [P_w/P_b]_{TOT}$$

$$[1/3] = [P_w/P_b]_S$$



Trade triangles:



Free trade market situation – open economies

	Production levels		Consumption levels		Quantity traded	
	N	S	N	S	N	S
B	100	0				
W	0	90				
World total			World total			
B	100		100			
W	90		90			