

# From Choice to Demand

My goal for today: Back up, start again, and make sure everyone understands the transition from solving individual choice problems to the concept of the demand curve.

Please sit by your number and say hello to your partner.

First name	Last name	Pair
Shamial	Ahmad	4
Finn	Arffmann	6
Jessica	Bernal	1
Simona	Clausnitzer	4
Johannah	CordonHill	3
Sara	Gladwin	2
Maria	Gomez Mercedes	9
Betsy	Helm	7
Liz	Kellam	3
Megan	Kilmer	5
Lisa	Merrick	5
Jenna	Myers	1
Ian	Oxenham	9
Anisa	Salat	6
Agatha	Sloboda	2
Alison	Spain	7
Sophia	Weinstein	8
Kelsey	Weymouth-Little	8

We started off with two isolated individuals:

David and John, who produce and consume wood and shortbread cakes

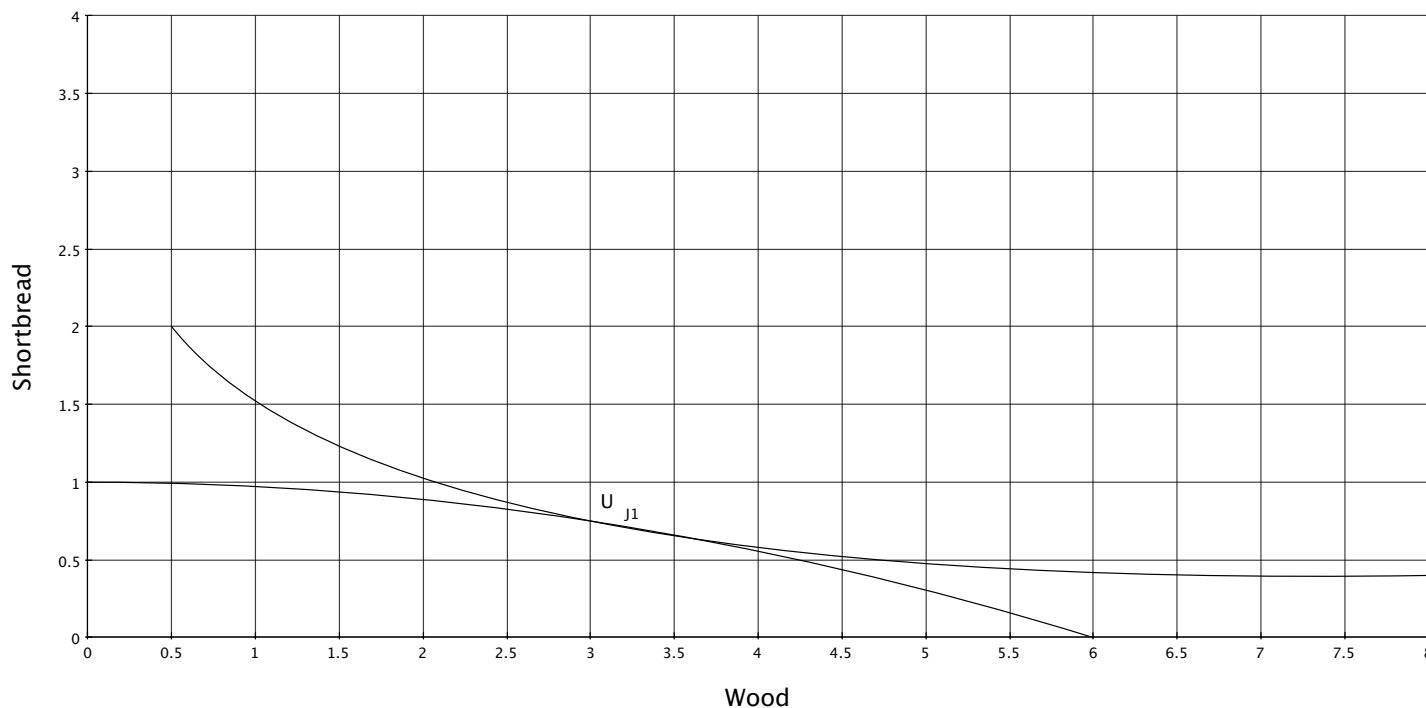
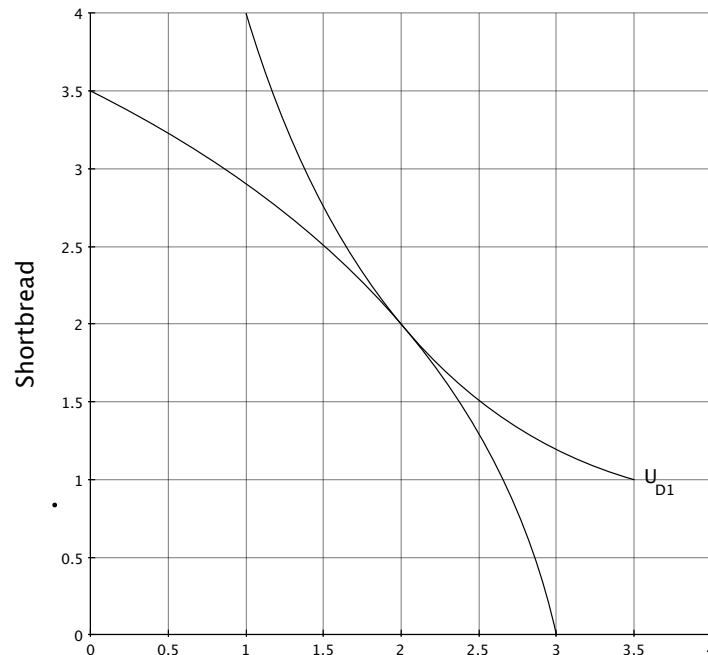
David

Ignoring each other, David chooses 2 cords of wood and 2 dozen shortbread cakes (2,2)

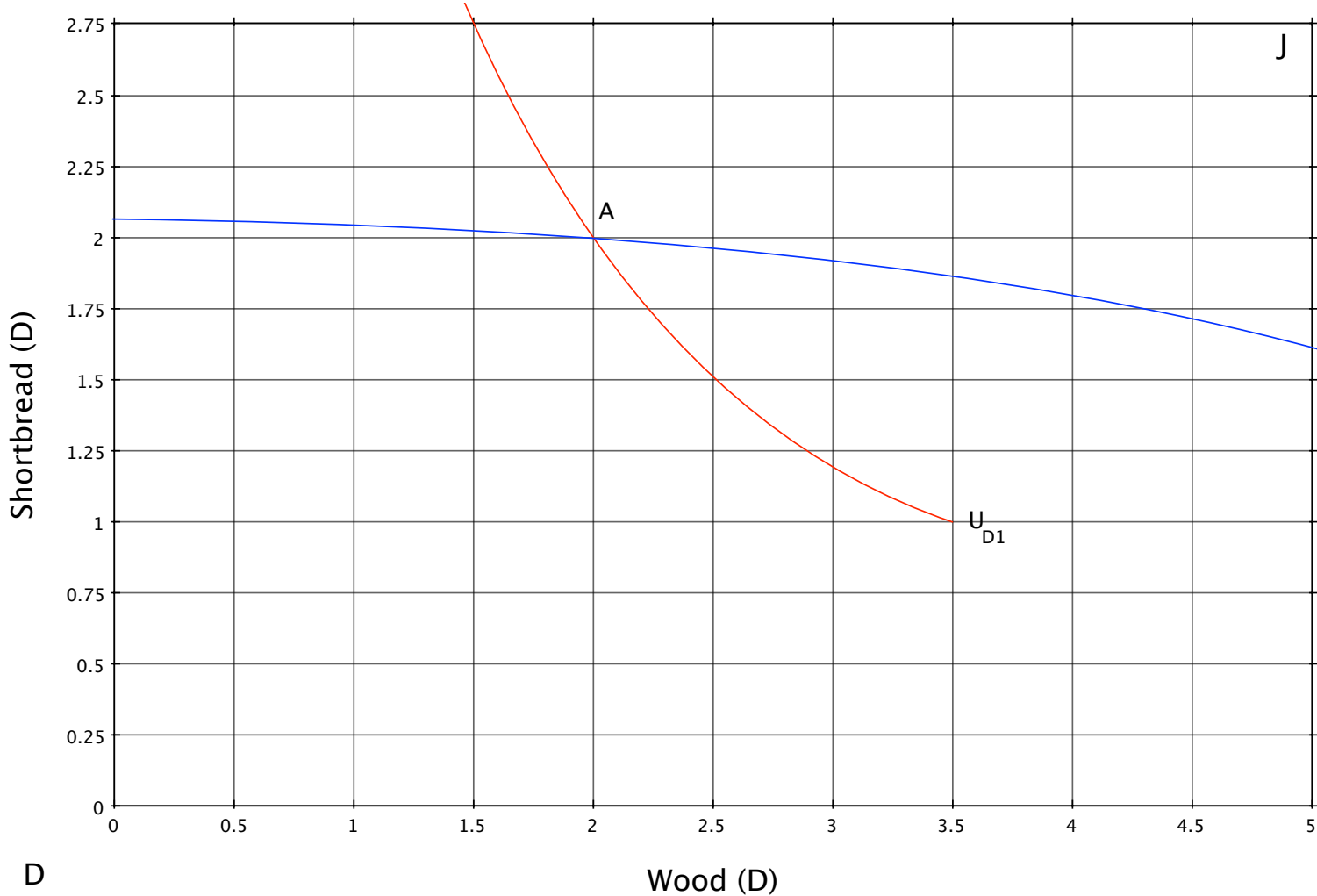
John chooses 3 cords and 8 cakes (3,.75)

John

John is much better at producing wood than David, but at current consumption levels, he has a much stronger preference for shortbread.



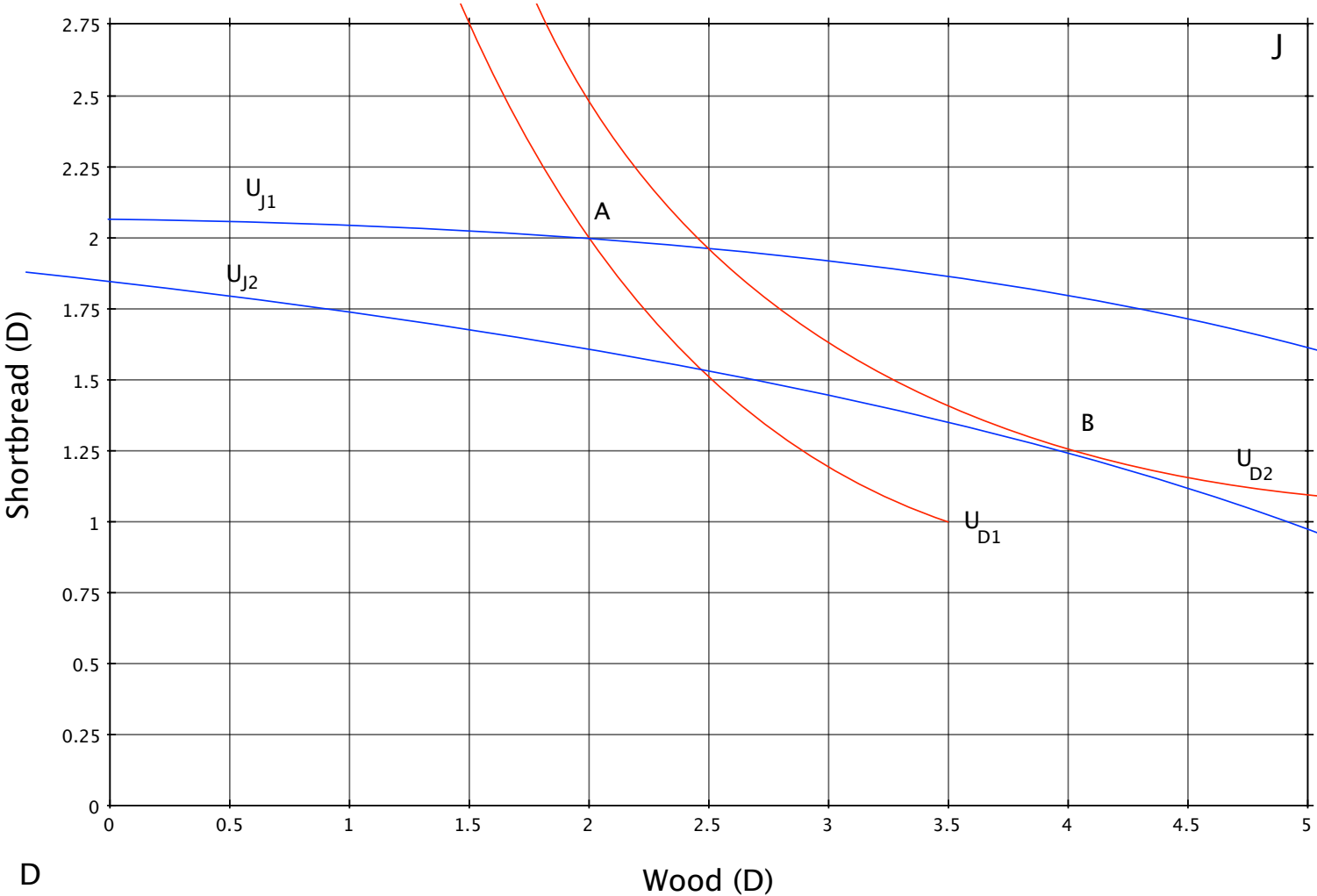
# Our Complete Economy:



Additional gains to trade arise until they reach a deal in which David and John have the same MRS

David gets  
(4,1.25)  
John  
(1,1.5)

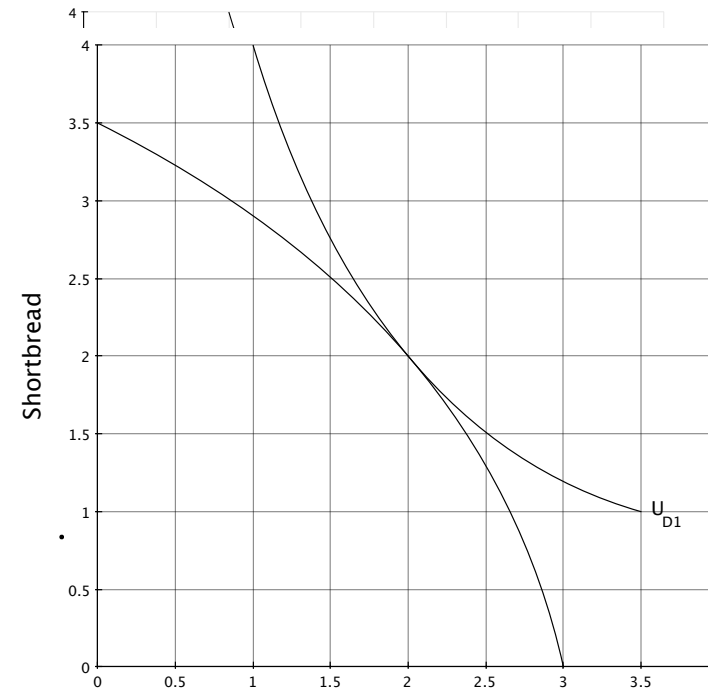
The exchange,  
hence the  
mutual gain in  
welfare, is  
entirely  
voluntary



But, they can do better by specializing

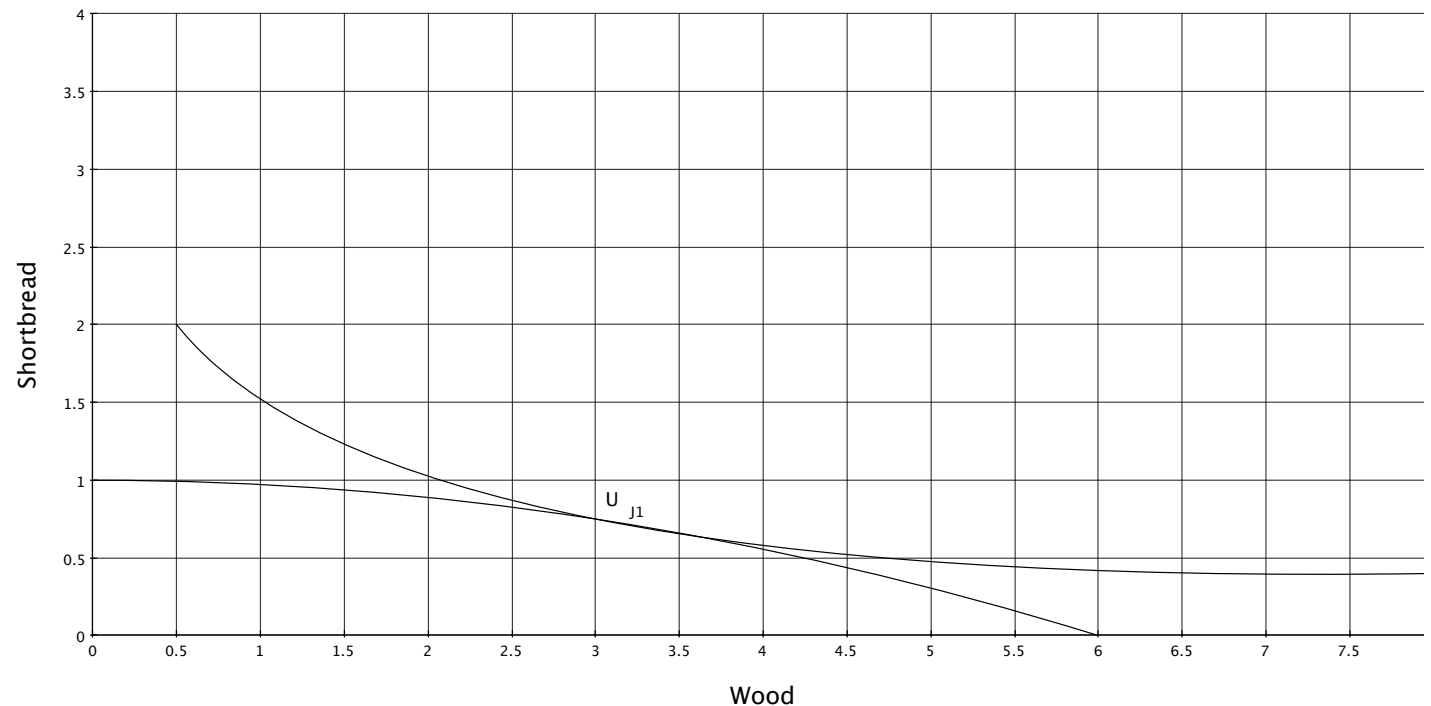
John and David can be better off if they recognize that each has different opportunity costs in production. David is relatively better at producing shortbread and John is relatively better at producing wood.

David



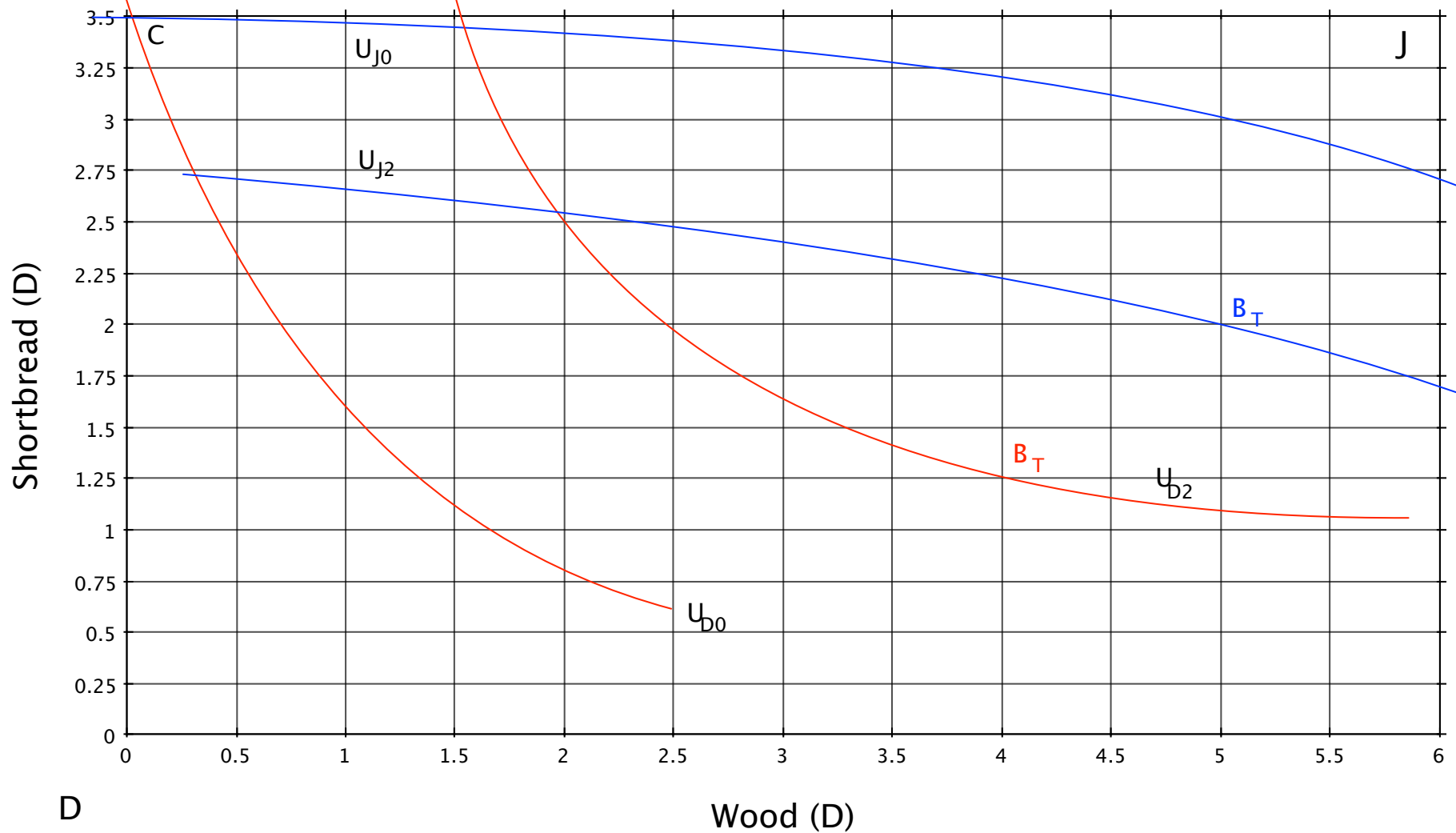
If John specializes in producing wood, and David in shortbread, then they can move from a (5, 2.75) economy to a (6, 3.5) economy and both be better off.

John

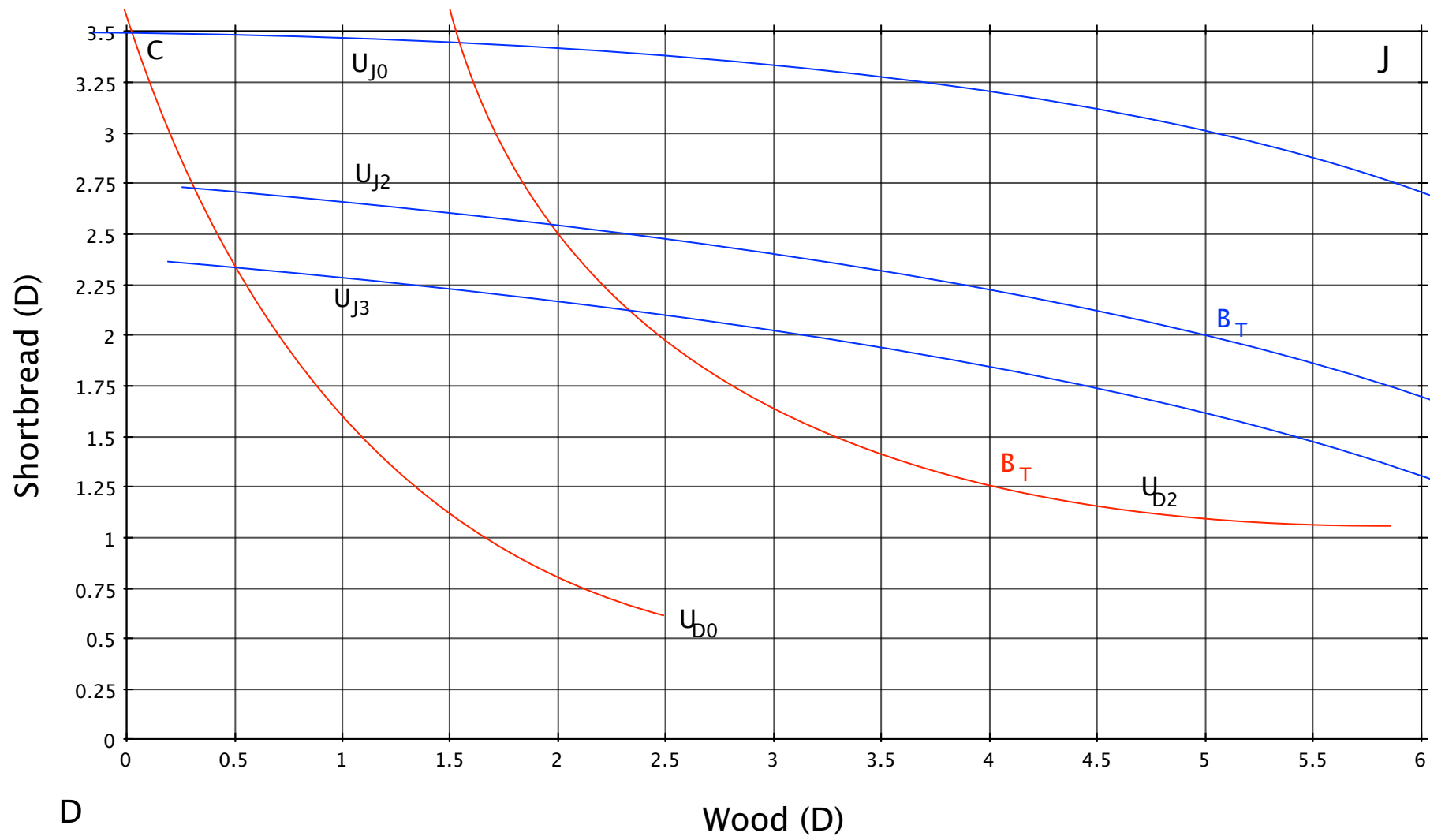


If John is producing 6 cords of wood and David 3.5 dozen shortbread cakes, now there is a lens of trading opportunities between the consumption bundles (hence utility levels) they achieved through their previous bargain which left

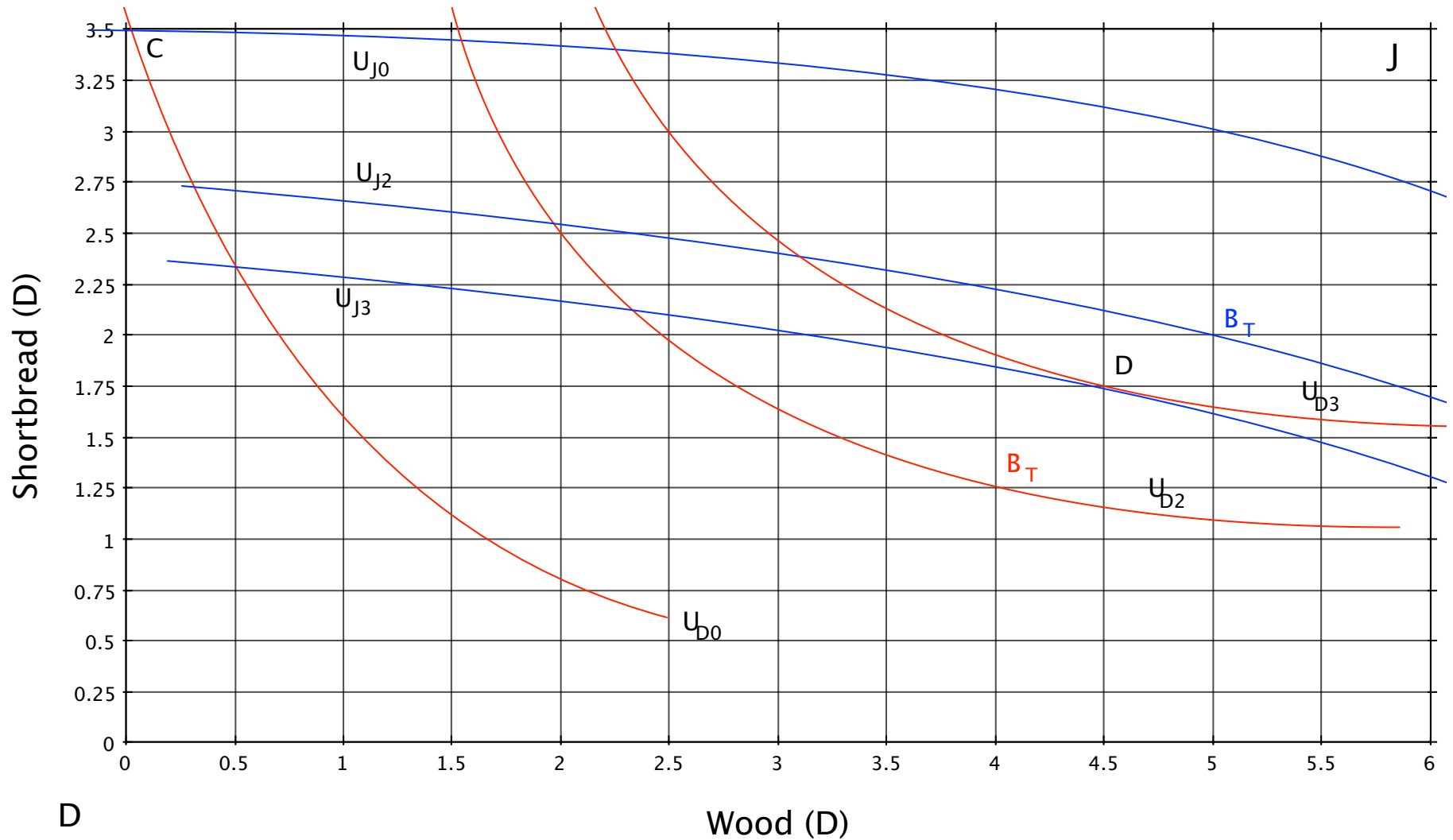
David at (4,1.25) and John at (1,1.5)



John could move to indifference curve  $U_{J3}$  by persuading David to trade more shortbread for wood.

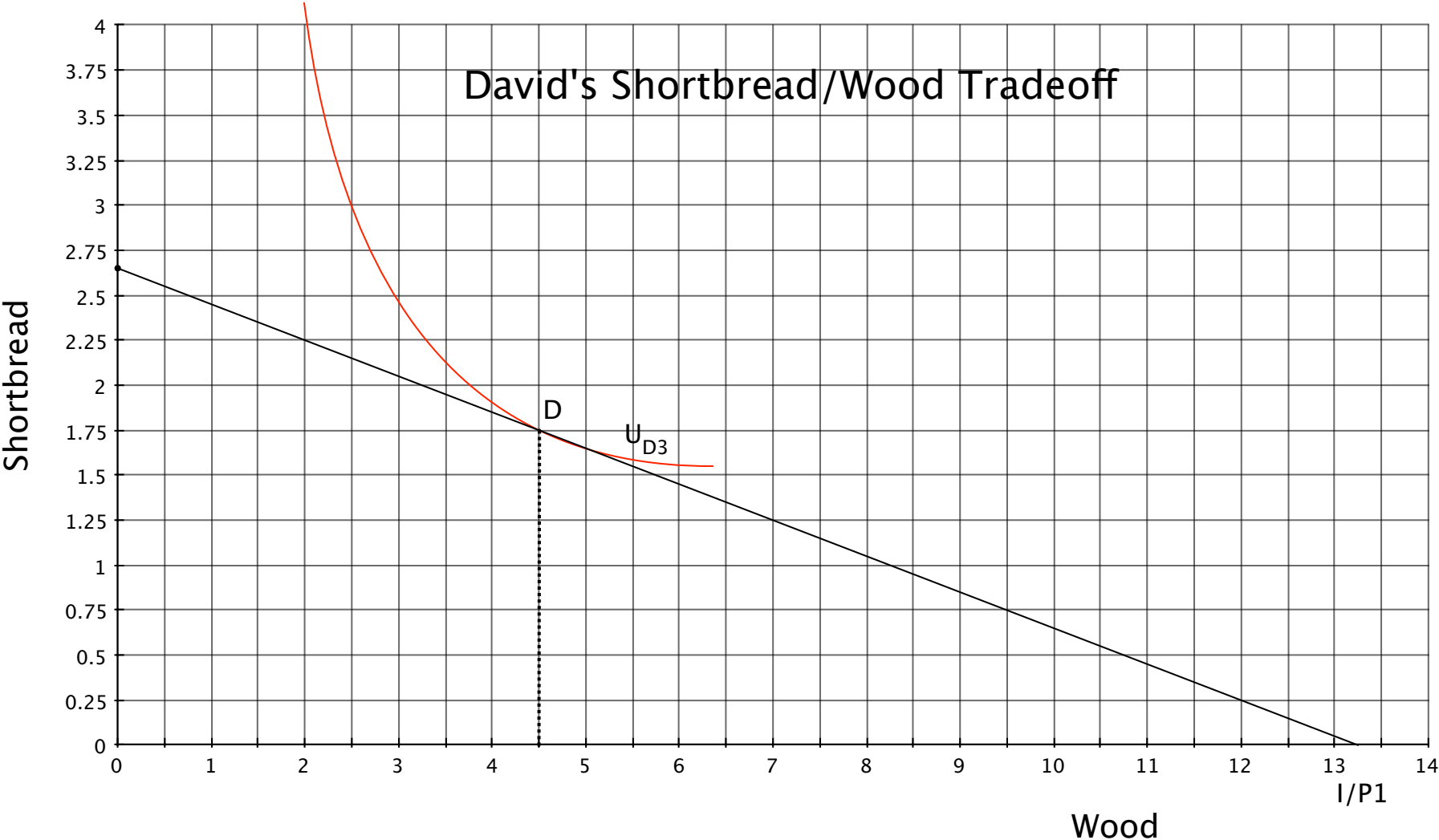


An exchange equilibrium for this economy has David producing 3.5 dozen shortbread cakes, John producing 6 cords of wood, David consuming 4.5 cords of wood and 20 shortbread cakes (1.75 dozen), and John consuming 1.5 cords of wood and 16 shortbread cakes (1.25 dozen)



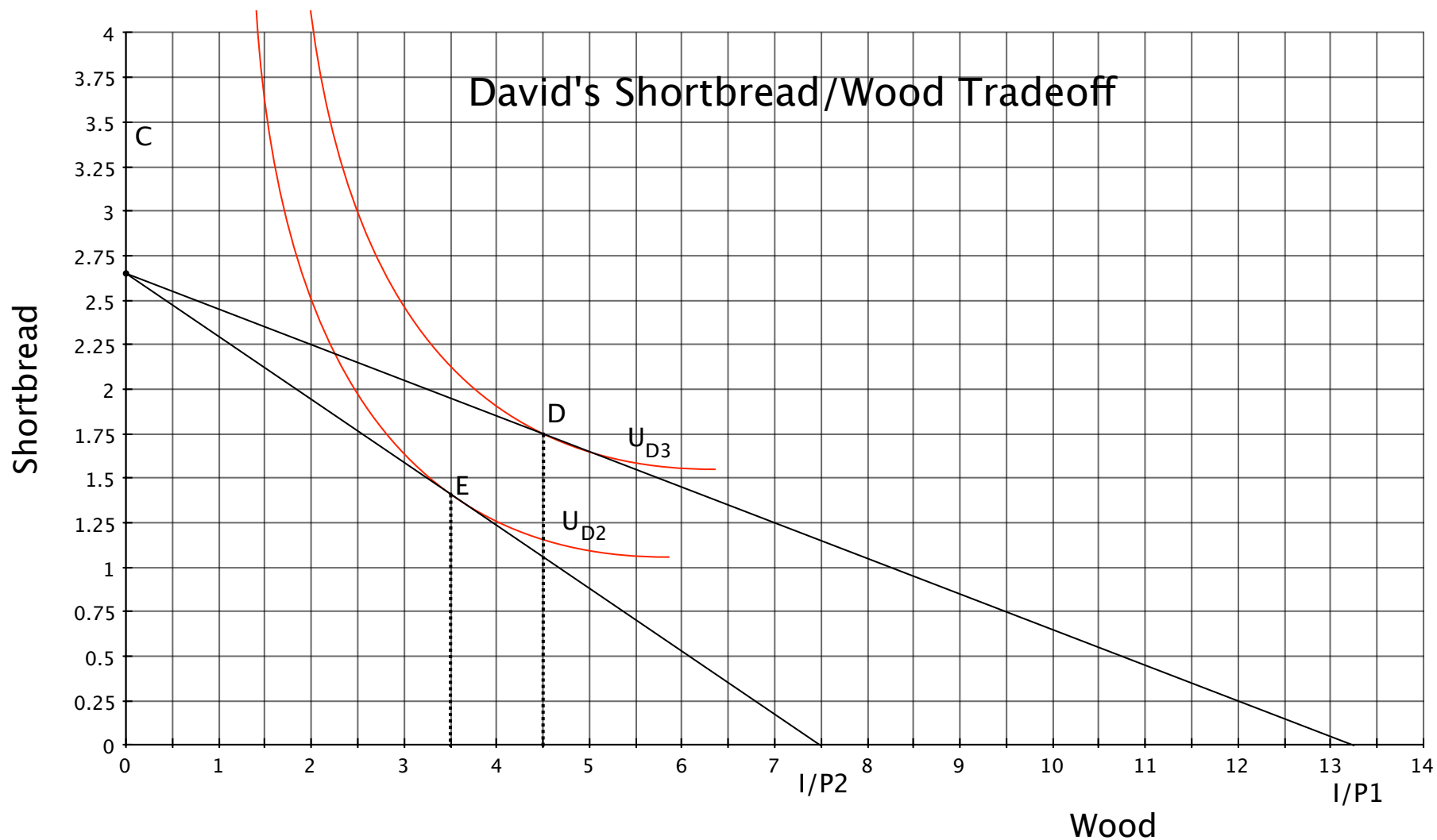


Suppose I'm facing not John, but a market:

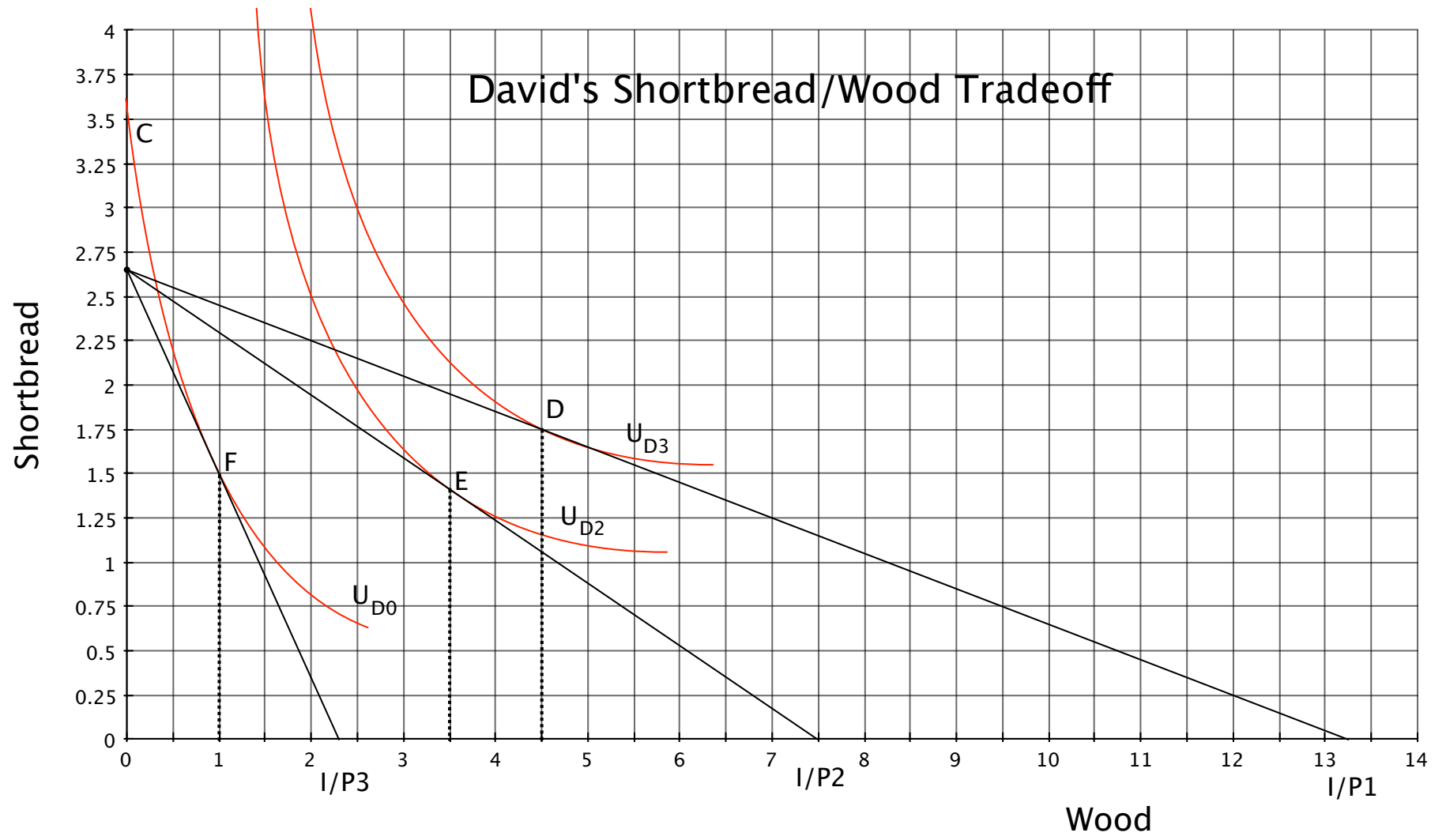


What happens if the price rises?  
From P1 to P2

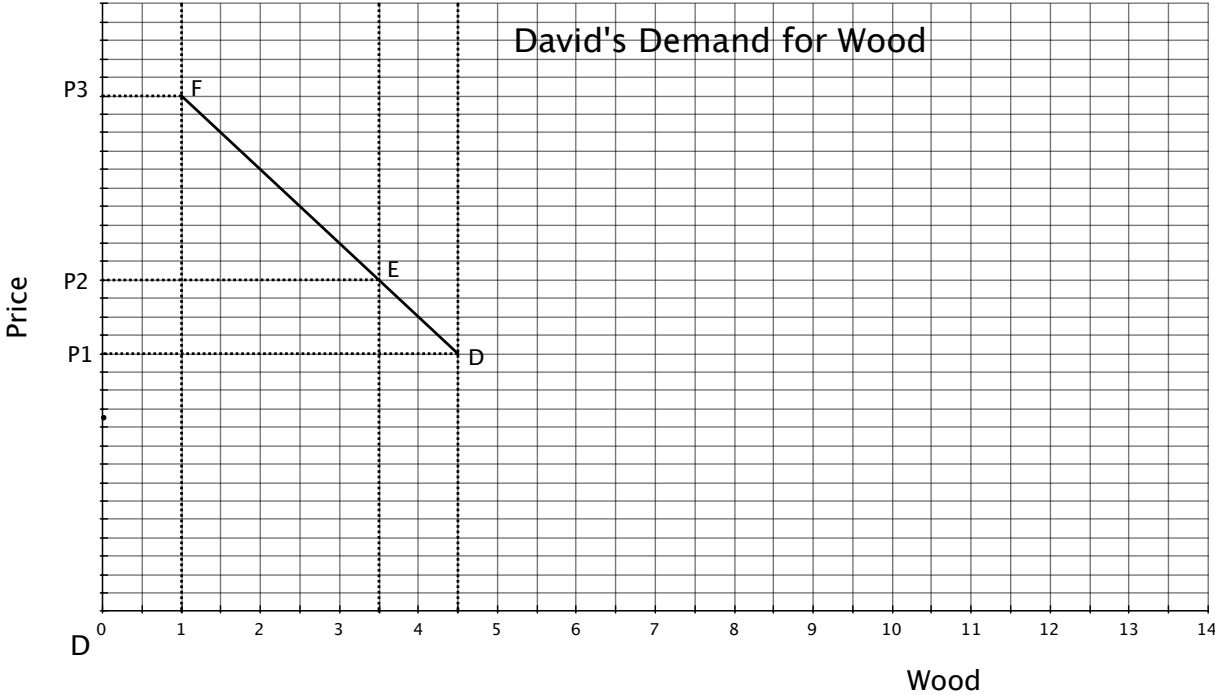
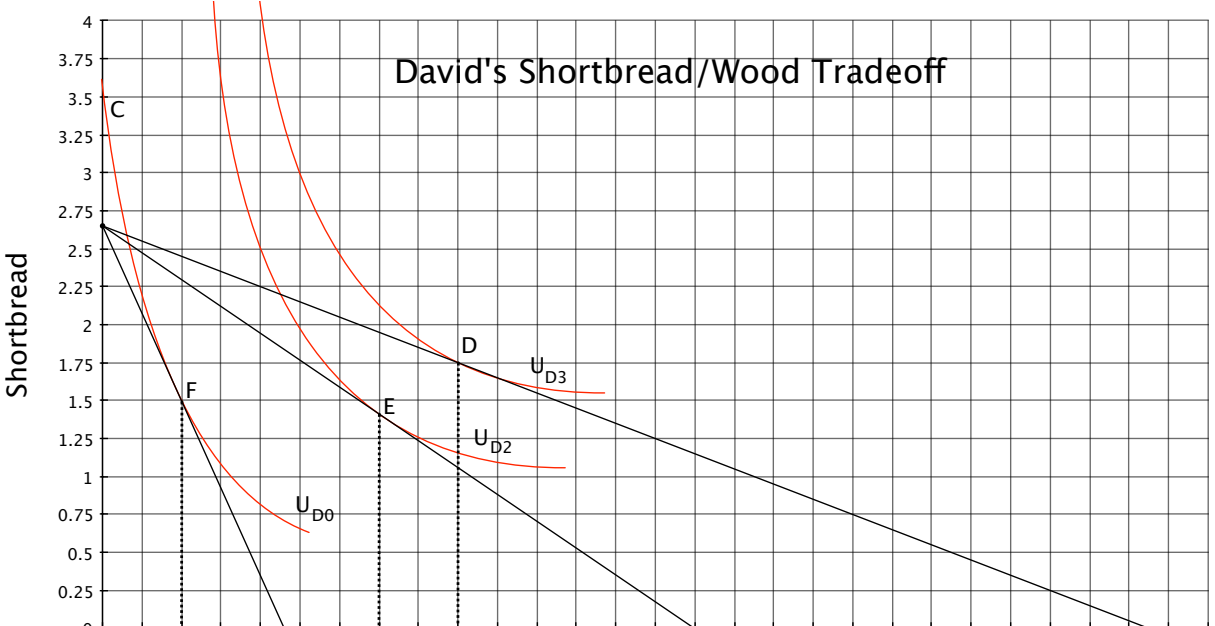
The horizontal intercept is  $I/P_w$



# From P2 to P3



From this relationship, we can derive the demand curve - the relationship between price and quantity demanded.



The Demand Curve tells us the maximum people would pay for an additional unit of the good.

The difference between that maximum and the market price is surplus value – the ability to meet other needs while consuming the quantity one wants.

