

ECON 1210: Løsning på oppgaver til forelesningen 08.09.06 – del 2

Tema: Internasjonal handel. Absolutte og komparative fortrinn

- (a) Yes, Argentina has an absolute advantage in both goods, because it uses fewer workers hours than Brazil to make 1 ton of candy and to make 1 ton of beef.
- (b) A ton of beef costs 2 worker hours. If these two worker hours come from candy production, Argentina will lose 1/2 ton of candy.
- (c) A ton of beef costs 3 worker hours in Brazil. If these three worker hours come from candy production, Brazil will lose 3/5, or 60%, of a ton of candy.
- (d) As we have seen in parts b and c the opportunity cost of a ton of beef in Argentina is 0.5 ton of candy; compare this to the opportunity cost of 1 ton of beef in Brazil which was 0.6 ton. The opportunity cost of beef production in Argentina is lower than in Brazil, so Argentina has a comparative advantage in beef. This is the basis for the comparative advantage in beef production in Argentina.
- (e) Brazil must have a comparative advantage in the other good—candy; however, this is no explanation. Compare the opportunity costs of candy production: in Argentina 1 ton of candy requires 4 person-hours. If workers are diverted from beef production, Argentina will lose 2 tons of beef. In Brazil 1 ton of candy requires 5 person-hours, which costs $5/3 = 1.67$ tons of beef. Since the opportunity cost of producing candy in Brazil is lower than the opportunity cost in Argentina, Brazil has a comparative advantage in candy production.
- (f) With no trade, Argentina puts 60,000 person-hours in candy production, yielding 15,000 tons of candy and 60,000 person-hours in beef production, yielding 30,000 tons of beef, while Brazil puts 60,000 person-hours in candy production, yielding 12,000 tons of candy and 60,000 person-hours in beef production, yielding 20,000

tons of beef. Total production without trade is 27,000 tons of candy and 50,000 tons of beef.

- (g) For Argentina: 104,000 person-hours in beef production yields 52,000 tons of beef which is more beef than the total produced if they do no trade. Argentina uses 16,000 person-hours in candy production which yields 4,000 tons of candy. Brazil specializes in candy production; this means it puts all of its workers in candy production, yielding 24,000 tons of candy. Total beef production is 52,000 which is more beef than the total produced if they do no trade. Total candy production is 28,000 ($4,000 + 24,000$) which is more candy than the total produced if they do no trade. Of course Argentina exports beef to Brazil for candy. Trade permits both countries to specialize in the good they have a comparative advantage in and results in greater production of both beef and candy; they then share this extra via trade.