

### BOX 8.4 Trade indifference curves

A country engaged in trade with the rest of the world is able to achieve a higher welfare level, as we have seen many times in previous chapters. There is, thus, a connection between the export-import combination of a nation and the welfare level this country is able to achieve. James Meade (1952) made this connection explicit by deriving trade indifference curves.

Point D<sub>4</sub> in the first quadrant of Figure 8.11 gives a specific combination of exports of manufactures in exchange for imports of food. To derive the maximum utility level the country can achieve with the export-import combination D<sub>4</sub>, we take this point as the origin of the production possibility set, measured from right to left, rather than from left to right. In the second quadrant of Figure 8.11 we measure the consumption levels of manufactures and food. Given the export-import combination D<sub>4</sub>, the country reaches its maximum utility level at point C<sub>4</sub>, the point of tangency of the production possibility frontier and iso-utility curve<sub>4</sub> drawn in the second quadrant of Figure 8.11.

We can now ask ourselves which other export-import combinations allow the country to reach the same utility level. The procedure is similar to above, only in reverse order. First, we slide the production possibility frontier along iso-utility curve<sub>4</sub> in the second quadrant of Figure 8.11, preserving tangency. Second, the origin of the production possibility set depicts another export-import combination giving the same utility level as before. Three examples of this procedure, the consumption levels C<sub>3</sub>, C<sub>2</sub>, and C<sub>1</sub> and the concomitant export-import combinations D<sub>3</sub>, D<sub>2</sub>, and D<sub>1</sub>, are given in Figure 8.11. The curve connecting the points D<sub>4</sub>, D<sub>3</sub>, D<sub>2</sub>, and D<sub>1</sub> depicts a large range of other export-import combinations, which allow the country to reach the same utility level. It is labelled trade indifference curve<sub>4</sub>.

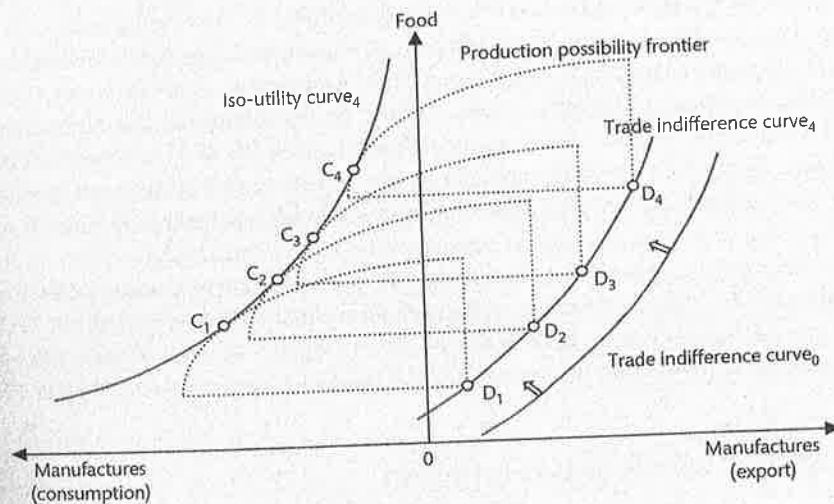


Figure 8.11 Derivation of trade indifference curves.

the first quadrant of Figure 8.11. In particular, trade indifference curve<sub>0</sub> depicts a lower welfare level than trade indifference curve<sub>4</sub>.

Figure 8.12 depicts two trade indifference curves. One curve is tangent at point C to the price line from the origin to point C, which depicts the free trade equilibrium. Tangency at that point is ensured by the perfectly competitive behaviour of the economic agents and the absence of distortions. The other trade indifference curve is tangent at point D to the offer