Session 2: DATA AVAILABILITY AND MEASUREMENT OF FACTORS OF PRODUCTION (CAPITAL, LAND AND LABOUR)


This paper provides a farm sector comparison of relative levels of capital input for 17 OECD countries for the period 1973-2011, with an explicit distinction between land and depreciable assets. The starting point for construction of a measure of capital input is the measurement of capital stock. Estimates of depreciable capital are derived by representing capital stock at each point of time as a weighted sum of past investments. The weights correspond to the relative efficiencies of capital goods of different ages, so that the weighted components of capital stock have the same efficiency. The capital stocks of land are measured as implicit quantities derived from balance sheet data. We convert estimates of capital stock into estimates of capital service flows by means of capital rental prices. Implicit rental prices for each asset are based on the correspondence between the purchase price of the asset and the discounted value of future service flows derived from that asset. Finally, comparisons of levels of capital input among countries require data on relative prices of capital input. We obtain relative price levels for capital input via relative investment goods prices, taking into account the flow of capital input per unit of capital stock in each country.