Comment construire des séries de capital seriecap.doc

Healthy, educated and wealthy: is the welfare state really harmful for growth? S.Beraldo, D.Montolio, G. Turati, 2005

We have constructed a measure of private capital stock for each country using a perpetual inventory method. We initialise the capital stock series setting the capital stock in 1971 equal to the average investment/GDP ratio in the first five years of data, multiplied by the level of GDP in the initialising period, and divided by 0.07, our assumed depreciation rate (Bloom *et al.*, 2001). The capital stock of each subsequent period is calculated using current capital plus the level of current investment, minus the 7% depreciation rate of the current stock.

The Effect of Health on Economic Growth: Theory and Evidence
David E. Bloom, David Canning, Jaypee Sevilla NBER 8587, 2001

As data on capital stocks for the time period we are interested in are meager for most countries, we generate a capital stock series for each country using a perpetual inventory method. We initialize the capital stock series in the first year for the Penn World Tables provide investment data, setting the capital stock equal to the average investment/GDP ratio in the first five years of data, multiplied by the level of GDP in the initializing period, and divided by 0.07, our assumed depreciation rate. This is the capital stock we would expect in the initial year if the investment/GDP ratio we use is representative of previous rates. Each succeeding period's capital is given by current capital minus depreciation at 7 percent, plus the level of current investment.

Our capital stock series has wider coverage than the Heston and Summers (1994) variable for capital stock per worker, which is only available for 62 countries from 1965 onward. Where the two overlap, the correlation coefficient between the log levels of our series and theirs is 0.97, indicating that the two series are similar. For many countries investment series do not start until 1960, suggesting that our capital stock data for the 1960s may be suspect, because of the way we construct the initial stock of capital. Because of depreciation, by 1970 the capital stock estimates become fairly independent of the initializing assumption used. We therefore limit our estimation to 1970-90, though we use data from 1960-70 as instruments.