

## SOLUTIONS CHAP 2

1. A low quantity of capital per worker.
2. Economic policies that lower incentives to work, such as high taxes on wages. Or being located far from the main world markets. Or a monarch that expropriates the wealth of his subjects.
3. See graph **solutions-graph-chap2.pdf**. Workers in country A have less production factors than those of country B. But they can produce just as much. This means that overall factor productivity is lower in country B.
4. Country B should grow faster initially in order to catch up with country A. In the long run, both countries should converge to a similar growth rate.
5. Leisure. The higher the income per capita, the more leisure people will probably consume. But it would be surprising that increasing leisure time leads to a higher GDP per capita.
- 7.a) Those who tend to vote right may be richer on average. Being richer, they also tend to live longer. But they don't live longer just because they vote right. This is an instance of an *omitted variable*. Wealth simultaneously causes people to vote right and live longer.
- 7.b) To be in the hospital does not cause one to be sick (at least I hope so). This is an instance of *selection bias*. The population under study is not representative of the general population.
- 8.a) Positive correlation and two-way causation. Richer people tend to buy more books for various reasons: they can better afford it; they have more leisure time to read; their education level is higher; they tend to invest more in their education. But the causation may go the other way also: those who read more are likely to be more productive because they know more.
- 8.b) Negative correlation and two-way causation. Wealthier people eat better because they can afford better quality food. Those who eat better are more productive because they are healthier and less sick as a result.
- 8.c) Positive correlation but probably not very significant in magnitude. This effect is likely to be significant only for very poor individuals, i.e. at the limit of subsistence. Those people cannot afford glasses. But the effect should go the other way also, i.e. those who don't have glasses while needing them stay very poor because they can't function properly.
- 7.d) No correlation.