Seminar 6: Institutions

November 24, 2011

Article

Mehlum, H.; Moene, K. O. & Torvik, R. (2006): Institutions and the Resource Curse, *Economic Journal*, 116, 1-20.

Link to journal article: `http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0297.2006.01045.x/pdf`

Link to working paper: `http://www.sv.uio.no/econ/forskning/publikasjoner/memorandum/pdf-filer/2002/Memo-29-2002.pdf`

Exercise

First, we go through sub-problems 2-5 to 2-7 from the last seminar: Production with resource-augmenting technological progress was given by $Y_t = f(K_t, R_t) = K_t^{\alpha}(M_t R_t)^{1-\alpha}$. *The growth path of the economy was found to be*

$$g = \frac{\dot{R}_t}{R_t} + m \qquad (*)$$

- *Question 2-5 asked for the level of the (constant) interest rate along the intertemporally efficient growth path, when output and capital grow at rate g and* $M_t = M_0 e^{mt}$. *Recall that the Hotelling rule was given by* $\frac{(\partial Y_t / \partial R_t)^{\cdot}}{\partial Y_t / \partial R_t} = r$ *and* $\frac{M_t R_t}{K_t}$ *was known to be constant.*
- *Question 2-6: What is the relationship between the growth rate g and the saving rate* $s = \frac{\dot{K}}{Y}$ *along the path described by (*) above?*
- *In question 2-7 one should first derive the conditions for the optimal outcome. Then, one should show under what conditions a growth path of the type described in (*) is optimal (assume that* $\eta = \frac{-u''C}{u'}$ *is constant). When such a growth path exists, how does the growth rate depend on the parameters in the welfare function?*

Secondly, I can try to answer your questions. If you have some, please write them to me (f.k.diekert bio.uio.no) prior to Wednesday, 23.11., say 9am.