



Sustainable Development



Sustainable Development

Chapter 2

Malthusian growth

Study questions

1. Does it make sense to set $\phi = 0.2$ (slide 4)? Shouldn't it be equal to 1?
2. What is the maximum sustainable human population in the Malthusian model? Why don't we get there in the simulation?
3. What would happen if we added agriculture to the megafaunal extinction model, instead of small animals? So $L = L_N + L_R$ (hunting and farming) and

$$\begin{aligned} Y &= \phi_N N L_N + (A_R L_R)^{1-\alpha} (A_R R)^\alpha \\ &= \phi_N N L_N + \phi_R L_R^{1-\alpha} (R/L_R)^\alpha, \end{aligned}$$

where $\phi_R = A_L^{1-\alpha} A_R^\alpha$.

4. What can we learn about the modern global economy from the models of this chapter?