Figure 1: Barro and Sala-i-Martin (2003), chapter 2

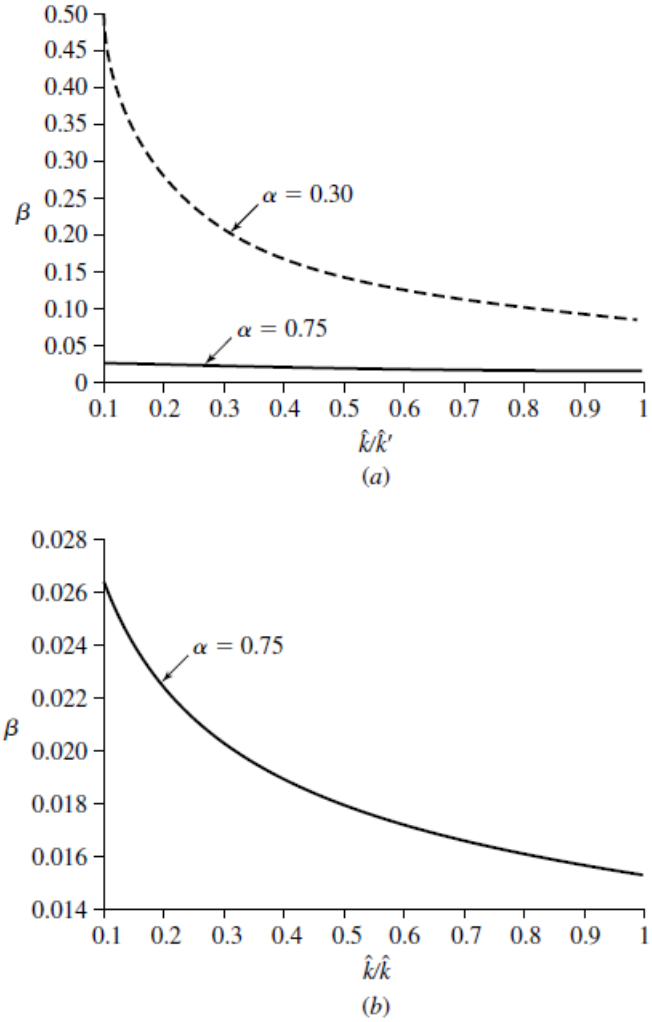

Figure 2.4
Numerical estimates of the speed of convergence in the Ramsey model. The exact speed of convergence (displayed on the vertical axis) is a decreasing function of the distance from the steady state, $\hat{k}/\hat{k}^*$ (shown on the horizontal axis). The analysis assumes a Cobb–Douglas production function, with results reported for two values of the capital share, $\alpha = 0.30$ and $\alpha = 0.75$. The change in the convergence speed during the transition is more pronounced for the smaller capital share. The value of the convergence speed, β, at the steady state ($\hat{k}/\hat{k}^* = 1$) is the value that we found analytically with a log-linear approximation around the steady state (equation [2.41]).

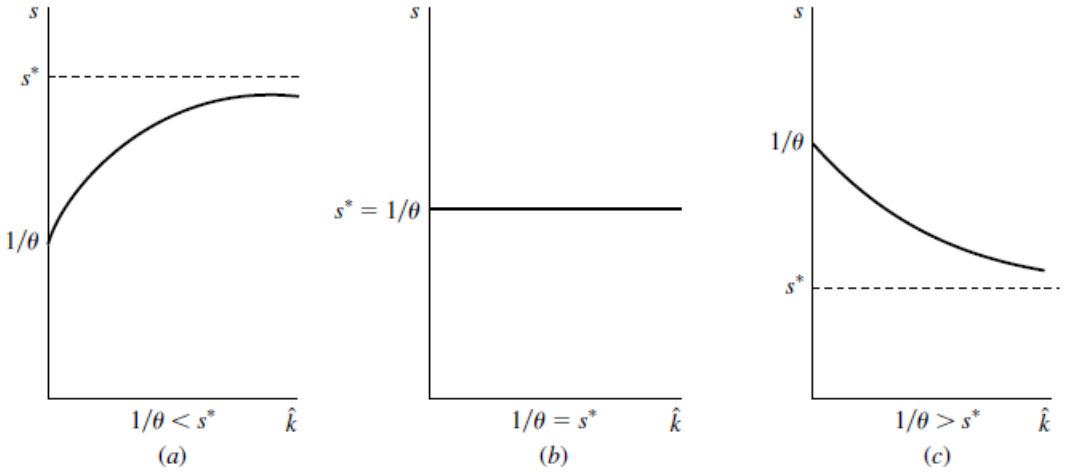

Figure 2.3
Phase diagram for the behavior of the saving rate (in the Cobb–Douglas case). In the Cobb–Douglas case, the savings rate behaves monotonically. Panel *a* shows the phase diagram for $\hat{c}/\hat{y}$ and $\hat{k}$ when the parameters are such that $(\delta + \rho + \theta x)/\theta > \alpha \cdot (x + n + \delta)$. Since the stable arm is upward sloping, the consumption ratio increases as the economy grows toward the steady state. Hence, in this case, the saving rate (one minus the consumption rate) declines monotonically during the transition. Panel *b* considers the case in which $(\delta + \rho + \theta x)/\theta < \alpha \cdot (x + n + \delta)$. The stable arm is now downward sloping and, therefore, the saving rate increases monotonically during the transition. Panel *c* considers the case $(\delta + \rho + \theta x)/\theta + \alpha \cdot (x + n + \delta)$. The stable arm is now horizonal, which means that the saving rate is constant during the transition.

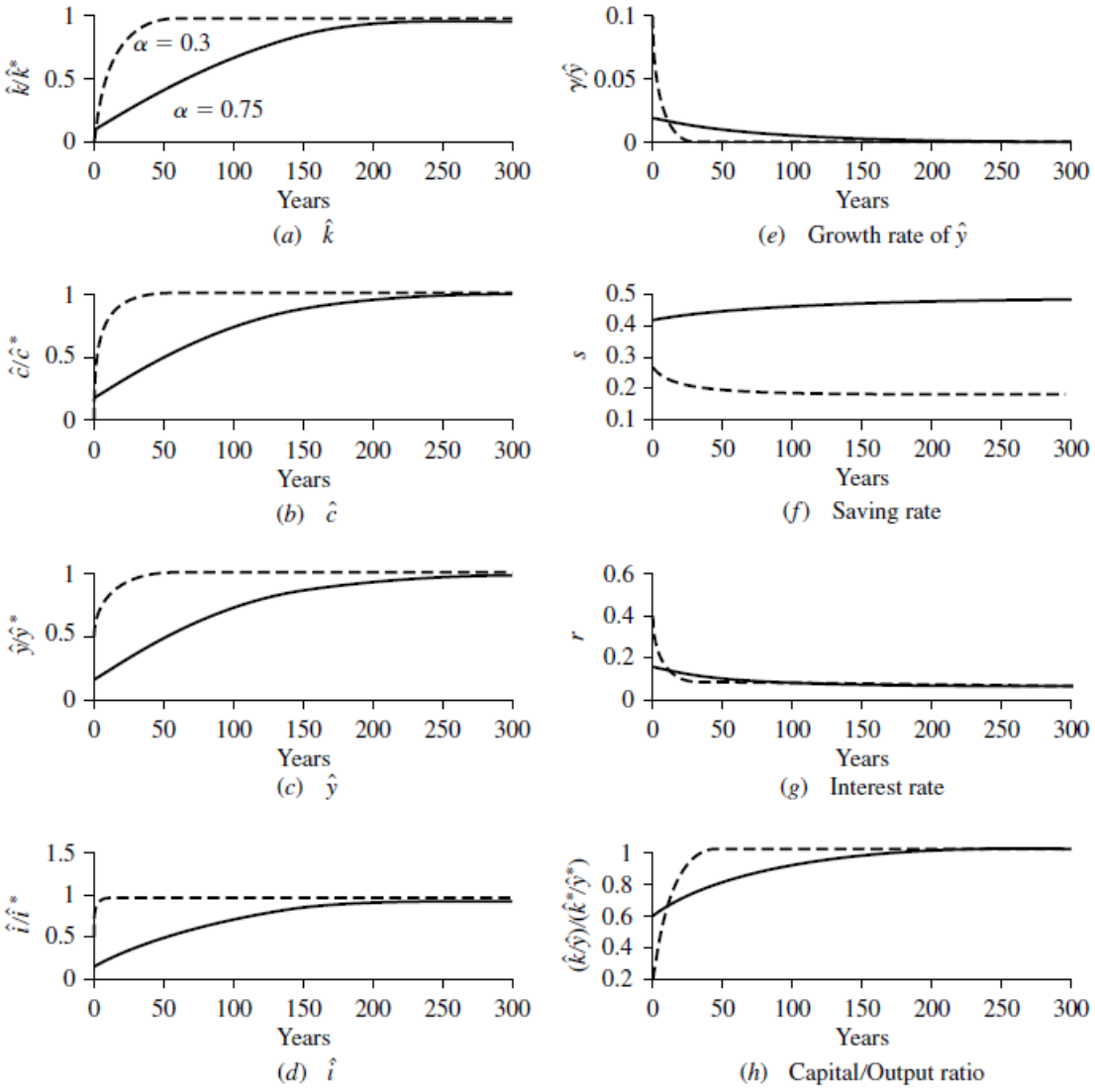

Figure 2.5
Numerical estimates of the dynamic paths in the Ramsey model. The eight panels display the exact dynamic paths of eight key variables: the values per unit of effective labor of the capital stock, consumption, output, and investment, the growth rate of output per effective worker, the saving rate, the interest rate, and the capital-output ratio. The first four variables and the last one are expressed as ratios to their steady-state values; hence, each variable approaches 1 asymptotically. The analysis assumes a Cobb–Douglas production technology, where the dotted line in each panel corresponds to $\alpha = 0.30$ and the solid line to $\alpha = 0.75$. The other parameters are reported in the text. The initial capital per effective worker is assumed in each case to be one-tenth of its steady-state value.