

Transitional Dynamics in Funke and Strulik (2000): A Qualification

In the computation of adjustment dynamics in Funke and Strulik (2000) we have argued that state variables cannot jump. We have, however, ignored the fact that co-state variables are also continuous in standard problems of optimal control (see e.g. Kamien and Schwartz, 1981). Continuity of the costate of capital implies continuity of consumption (C), and – from continuity of state K – continuity of $\chi = C/K$. Similarly, the sectoral shares of human capital must be continuous. In other words, there is no jump at the transition from the developing economy to the innovative one. Figure 1 and 2 show the corrected adjustment dynamics.

References

Funke, M. and H. Strulik, 2000, On Endogenous Growth with Physical Capital, Human Capital and Product Variety, *European Economic Review* 44, 491-515.

Kamien, M.I. and N.L. Schwartz, 1981, *Dynamic Optimization*, North-Holland, New York.

FIGURE 1. Adjustment Dynamics in Funke and Strulik (2000) Part I

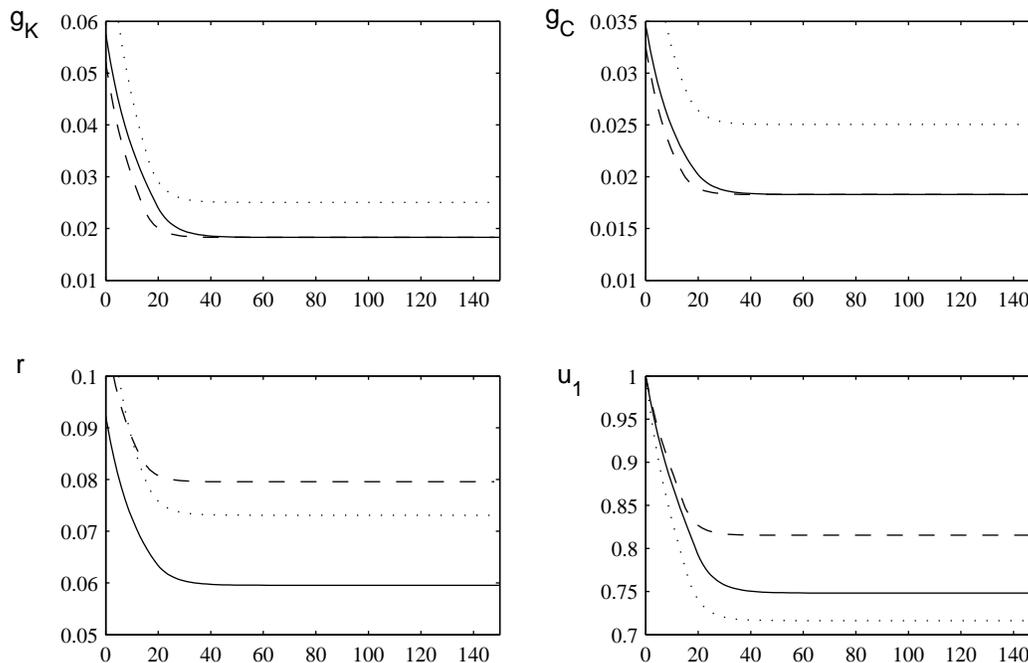


FIGURE 2. Adjustment Dynamics in Funke and Strulik (2000) Part II

