## Macroeconomics II

Leopold von Thadden Summer Term 2013 Problem Set 7: Convergence in the Solow model

## Problem 1: Convergence in the Solow model

a) Consider two 'catching-up' economies A and B which are initially not in steady state and which have in t = 0 initial values  $k_{0A}^{\#} > k_{0B}^{\#}$ . Moreover, the constant population growth rates are different ( $\mu_{N_A} > \mu_{N_B}$ ). Otherwise the two economies are identical and they satisfy the law of motions of the Solow model, as discussed in the Lecture Notes. Compare how the per capita income levels in the two economies will develop in the long run.

b) On top of the assumptions made in part a) now assume that also the savings rates are different  $(s_A > s_B)$ . Does this affect your answer to part a) ?