

A Cellular Automata Model of the General Rate of Profit

Claudio Castelo Branco Puty

Department of Economics, Universidade Federal do Pará (UFPA), Centro Sócio-Econômico Campus Universitário do Guamá Rua Augusto Corrêa, nº 1 66.075-110 Belém – Pará, Brazil

Corresponding author e-mail: cputy@ufpa.br

We present a simulation exercise of classical free competition in which individual capitals attracted by prospective rates of profit move across industries in their Moore neighborhoods. Capitals, in general, never settle down to a fully equalized general rate of profit position and the most common characteristic of the series of cross sectional average rate of profit is the never ending gravitation around the average rate of profit determined by the number of capitals in the lattice-economy. The statistical properties that emerge from the interaction of our agents resembles stable distributions characterized by skewness and heavy tails.