Electronic Journal: Southwest Journal of Pure and Applied Mathematics
Internet: http://rattler.cameron.edu/swjpam.html
ISBN 1083-0464
Issue 1 July 1999, pp. 1 – 12
Submitted: April 4, 1998. Published: July 1, 1999

THE STABILITY OF NASH-COURNOT EQUILIBRIA IN LABOR MANAGED OLIGOPOLIES

Weiye Li
Ferenc Szidarovszky

Abstract. This paper examines the asymptotical stability of equilibria in discrete dynamic labor-managed oligopolies. First the equivalence of the equilibrium problem of a large class of nonlinear games and the equilibrium problem of a class of discrete dynamic systems is verified. Stability conditions are then derived for a certain class of dynamic models, and these results are finally applied to labor-managed oligopolies. The economic interpretation of the stability conditions are also presented.

1991 A.M.S. Subject Classification Codes.. 90,93

Key Words and Phrases. oligopoly, asymptotic stability, stability theory, labor managed oligopoly.

Weiye Li, Department of Mathematics, University of Arizona
Tucson, Arizona, 85721
Ferenc Szidarovszky, Systems and Industrial Engineering Department
University of Arizona, Tucson, Arizona, 85721
E-mail: szidar@sie.arizona.edu