

Concepts of Efficiency in a Class of Linear Models

Stephen M. Robinson
Department of Industrial Engineering
University of Wisconsin-Madison
1513 University Ave Rm 386
Madison, WI 53706-1572
Email: smrobins@wisc.edu

One of the many contributions of the late Jerzy Łoś was the clarification and extension of several properties of a class of dynamic linear economic models closely related to the well known model of von Neumann. In this lecture we examine a class of linear models that share several aspects of the structure of the von Neumann model, but that extend the context of that model to areas other than economics. We describe some properties of these models with respect to the existence and computation of solutions. The models employ certain concepts of efficiency applicable to the case of multiple performance criteria, and we explore how these relate to other methods of measuring efficiency in such situations.