

Abstract

This research presents an application of the Generalized Maximum Entropy (GME) and Dynamic Positive Equilibrium Problem (DPEP) methodology. A set of dynamic supply functions was estimated for selected annual crops in Mashhad plain using these methods and eight farming years data, since 1382-1383. In addition, the substitution elasticity for the Derived demand of inputs, Allen and Morishima elasticities were elicited. The effects of some inputs and output price policies on cropping pattern and agricultural products were also analyzed. Based on the results, the estimated dynamic supply functions are able to exactly predict the same amount of the observed supply data. Moreover, the results also confirm a low price elasticity of inputs and outputs. The results also show that the outputs price policies considerably affect on cropping area compared with input price policies.

Keywords: Generalized Maximum Entropy, Supply Function, Dynamic Positive Equilibrium Problem, Mashhad Plain.



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