



The impact of CAP policy in farmer's behavior – A modeling approach using the Cumulative Prospect Theory

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Abstract

This paper proposes a modeling approach to evaluate the impact of economic policies on the decision maker's behavior. This modeling approach incorporates the agent's preferences, estimated through utility elicitation methods, into the objective function of a discrete sequential stochastic programming model that describes the uncertainties and the constraints faced by the decision maker. Our approach was applied to nine farmers of Portugal. The elicitation of the farmers' preferences reveals that the Cumulative Prospect Theory is relevant to describe the farmers' behavior under risk. Our programming model was used to evaluate the impact of the Common Agricultural Policy with partial and full decoupling of subsidies.

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1. Introduction

The prediction of the impact of economic policies is a difficult task. One way of dealing with this task is to construct a model that describes well the way in which the economic agents act and

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