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(Mínim 1 i màxim 4, podeu veure els codis a http://doctorat.upc.edu/gestio-academica/impresos/tesi-matricula-i-dipositcodis-unesco)

Resum de la tesi de 4000 caràcters màxim (si supera els 4000 es tallarà automàticament)

Abstract

Firm-level productivity and efficiency analyses have important implications for the evaluation of their economic viability and sustainability. The assessment of a firm's performance requires the use of an adequate methodological approach to derive sound efficiency estimates. By targeting economic sectors not previously investigated and using new methodological approaches, this thesis contributes to the literature both from a methodological and empirical point of view.

Three specific objectives have been pursued in three papers that constitute the main body of the present thesis. The main purpose of the first paper is to compare the efficiency ratings of organic and conventional grape farms in Catalonia. To do so, we fit a stochastic production frontier to cross sectional, farm-level data collected from a sample of 141 Catalan farms that specialize in grape growing. Results show that organic farmers, on average, are more efficient than their conventional counterparts (efficiency ratings are on the order of 0.80 and 0.64, respectively). Apart from adoption of organic practices, experience is also found to improve technical efficiency. Conversely, technical efficiency tends to decrease with the relevance of unpaid family labor, farm location in less favored areas, and farmers' concerns for environmental preservation.

In the second paper, local maximum likelihood (LML) methods, recently proposed by Kumbhakar et al. (2007), are applied to assess the technical efficiency of a sample of arable crop Kansas farms. LML techniques overcome the most relevant limitations associated to mainstream parametric and nonparametric frontier models. Results suggest that Kansas farms reach technical efficiency levels on the order of 91%. These results are compared with data envelopment analysis and stochastic frontier analysis efficiency estimates.

The last paper focuses on the assessment of technical and environmental efficiency of Catalan arable crop farms. Specifically, we apply the methodology recently developed by Coelli et al. (2007) and extend it to a consideration of the stochastic conditions under which production takes place, as proposed by Chambers and Quiggin (1998 and 2000). Results suggest that sample farms reach technical and environmental efficiency levels on the order of 93% and 74%, respectively.

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