

PRODUCTIVITY AND EFFICIENCY IN THE DAIRY SHEEP INDUSTRY: A COMPARISON ANALYSIS BETWEEN ITALIAN COOPERATIVE AND PRIVATE FARMS

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Abstract

A common opinion is that cooperatives are resilient and contribute positively to employment during difficult times. However, it is still uncertain whether this organizational form has better overall economic performance and can govern the fundamental drivers of productivity as effectively as private firms. The ambivalence deserves particular interest when private versus cooperative firms within the same industry are compared.

In this respect, the dairy sheep sector in Sardinia represents an interesting case study. This sector plays a significant economic and social role in this Italian Region, and a great part of firms is composed of cooperatives. However, this industry is experiencing a dramatic crisis and improving firms' productivity by more efficient use of their available technical resources is one of the leverages for increasing profitability. On the other hand, differences between cooperatives and private firms exist in terms of statutory objectives, management, level of investments, and sharing of responsibilities among members. Comparing productivity and efficiency in these two types of dairy sheep farms can highlight any differences in the technology adopted, the role of efficiency in influencing productivity, the main sources of efficiency, and the technical inputs elasticities.

Therefore, this paper aims to estimate technical efficiency and related measures on a panel of cooperative (25) and private (26) firms in the Sardinian sheep dairy industry. A Stochastic Frontier Analysis approach was used on the panel data in the period 2011–2020 to determine possible differences in productivity and efficiency between cooperative and private firms.

The study represents a further step of the results found by Furesi et al. (2013) in the light of evolutions that have characterized the sector in the last decade. Some implications for what policies should be implemented to improve efficiency in the sector and the orientation of decision-makers' strategies derive from this paper.

Keywords: *Stochastic Frontier Analysis (SFA); Economic performances, Inefficiency sources; Dairy technology; Sardinia.*