

Expanded abstract

Extra virgin olive oil value chain

Objectives

The improvement of the primary sector's position in agri-food value chains occupies a priority place on the public agenda of the European Union, with the promotion of cooperation and the cooperative movement being identified as key instruments to achieve this. However, in order to implement public policies that strengthen the position of farmers in the value chains, rigorous studies must be conducted to provide information on the exchange relationships that occur among chain operators and on the construction of costs, perceived prices, and margins at each of its links.

In this context, focusing on the analysis of the extra virgin olive oil (EVOO) value chain during the 2018/2019 and 2019/2020 campaigns in the Spanish market, we aim to achieve the following objectives in this work: a) to know and analyze the costs, prices, gross margins, and net margins of the operators involved in each phase of the value chain; b) to evaluate the different behavior of cooperative and non-cooperative companies in the industrial phase of EVOO extraction, where the cooperative movement is relevant; and c) to make a series of recommendations to demonstrate that value chain studies are useful for both the evaluation and design of public policies and for guiding and proposing private strategies.

Methodology

To this end, the methodology followed in the article combines secondary and primary research. The former has been used (a) to understand the state of the art regarding olive oil value chains in general and EVOO in particular; (b) to know the costs associated with the different phases of the value chain in previous studies; and (c) to use the premises and results of some works as starting hypotheses. The latter has been supported, in addition to the application of the software program GestOli for calculating operating costs in different types of olive groves, by three surveys conducted with the various agents that are part of the value chain in the industrial and distribution phase - oil mills, bottlers, and commercial distribution establishments.

Results

The results reveal not only that the primary sector is the weakest link in the EVOO chain and, therefore, the one that needs more public support and to implement more private strategies to be more profitable and competitive, but also that the industrial sector of first transformation - oil mills - where the cooperative movement plays a very relevant role, faces profitability issues.

In this sense, the utility of the value chain is twofold: first, to evaluate the merits of public policies, that is, to understand the extent to which they are improving the position of farmers

in the value chain and, if necessary, to design others that can achieve this; and second, and this issue is little addressed in the literature, for agents operating at the same link in the chain to adopt measures to be more efficient based on the signals emitted by the chain itself regarding costs, prices, and margins.

Original value, conclusions and practical implications

The originality of this work lies, on one hand, in the application of GestOli in the agricultural phase for calculating the operating costs of different types of olive groves. GestOli is a software program that allows for individualized calculation of the operating costs of an olive grove. To do this, it is necessary to define the productive structure of each farm -size, number of olive trees, etc.- as well as its management -machinery used, soil management, etc.- Subsequently, the program incorporates cultivation operations and the time required for each one, yielding specific costs. Secondly, this originality lies in comparing the results of cooperative and industrial industries in the industrial phase of AOVE (Extra Virgin Olive Oil) extraction. Finally, this work makes proposals in the industrial phase, both for extraction and bottling, to achieve greater profitability and competitiveness for the industries through a comparative analysis of costs.

In the conclusions section, it is noted that it is essential that within the framework of the current CAP 2023-2027 more attention is paid to achieving its third specific objective: improving farmers' position in the value chain, which has been criticized by the Commission due to insufficient support from member states. Furthermore, in the upcoming post-2027 CAP, support for traditional olive groves must be strengthened to prevent their abandonment and thus cease fulfilling their role as generators of public goods, including maintaining population in rural areas, caring for biodiversity, and mitigating climate change.

On another note, in the industrial phase where cooperativism plays a key role, national and regional policies should aim to incentivize two key measures to make cooperative movements more competitive: professionalization and a higher level of cooperation.

Lastly, regarding the Law on measures to improve food supply chain functioning, this work is useful on one hand for its application by providing effective production costs; but on the other hand it highlights the difficulty of applying this law because industrial operators and bottlers within the AOVE value chain would purchase from those producers with lower costs, leaving less productive olive groves at the end if there is demand, which would consequently harm these farms.

Limitations to the research

The limitations of this work are related to the need for more information from the commercial distribution sector -which has always been reluctant to provide information- and from more oil mills. Therefore, the authors are working on designing a model that similarly to GestOli allows estimating costs for both industries and commercial distribution without needing surveys but rather through simulation models.