

# Agricultural policy modelling under imperfect competition

Claudio Soregaroli\*, Paolo Sckokai, Daniele Moro

*Istituto di Economia Agro-alimentare, Università Cattolica del Sacro Cuore, Via Emilia Parmense,  
84, 29122, Piacenza, Italy*

Received 1 May 2010; received in revised form 1 October 2010; accepted 1 November 2010  
Available online 13 December 2010

---

## Abstract

This study evaluates the role of imperfect competition in determining the agri-food policies impact assessment outcomes. In most impact studies, the supply chain between agricultural production and final consumption is modelled in a perfectly competitive framework. However, there is a growing attention of stakeholders for the presence of imperfectly competitive markets, with the retail sector often being under investigation. This issue is empirically analysed with an application to the dairy industry. First, the degree of market power is estimated using a multi-output demand and price transmission equation system. Then, this model is used for policy simulation with the perfect competition outcome taken as a benchmark to evaluate the impact of imperfect competition. Results show a significant degree of market power in the dairy industry with implications on the projected policy scenarios. Moreover, the imperfect competition model alters the price transmission mechanisms, generating more flexible price trends.

© 2010 Society for Policy Modeling. Published by Elsevier Inc. All rights reserved.

*JEL classification:* D4; L1; Q11; Q13; Q18

*Keywords:* Policy evaluation; Imperfect competition; Common agricultural policy; Dairy sector

---

\* Corresponding author. Tel.: +39 0372 499160; fax: +39 0372 499191.

*E-mail address:* [claudio.soregaroli@unicatt.it](mailto:claudio.soregaroli@unicatt.it) (C. Soregaroli).

## 1. Introduction

Agricultural policy evaluation is a central issue<sup>1</sup> in the decision-making process. Thus, quantitative policy models have become a common tool for policy makers to understand the functioning of agricultural and food policy instruments and to simulate the impact of policy reforms. As a result, the institutional demand for agricultural policy modelling has been increasing for the last years, in order to allow for a ‘well-informed political decision making’ (Sieber & Dominguez, *in press*); as an example, within the European Union (EU) there has been a growing use of modelling tools at the institutional level as a support for the Common Agricultural Policy (CAP) reform process.<sup>2</sup>

Agricultural policy models have been mainly targeted to assess the impact of policy instruments at the farm level, thus the larger effort has been devoted to model the agricultural sector and to detail instruments. However, in a market-oriented environment, any intervention at the producer level will be transmitted to final consumers along an increasingly integrated supply chain, and thus a complete (welfare) evaluation of a policy change would require to model the transmission between agricultural production and final consumption markets. On the other side, agricultural policy instruments are just one component of agri-food policies: institutional interventions along the supply chain will be transmitted with non-neutral impacts to farmers and agricultural markets.

In most cases, the transmission between agricultural production and final consumption has been modelled in a perfectly competitive framework, thus taking a very simple mechanism where price differentials along the supply can be explained by marketing costs. As stated by [McCorrison \(2002\)](#), market power in the food supply chain should not be neglected: there is a strong evidence that food markets in Europe are not perfectly competitive, with a growing market power of retailers, upstream to producers and downstream to consumers. Recently, a growing attention has been devoted to the functioning of the food supply chain in the EU; at the end of 2009 the Commission of the European Communities has produced a communication ([Commission of the European Communities, 2009](#)), following the concern for a period in which ‘prices along the supply chain have fluctuated widely’, at first as a consequence of the boost in prices in 2007–2008. Given that a different pattern between commodity and food prices has been experienced, the Commission has expressed its concern about the possibility that ‘imbalances in bargaining power between contracting parties’ may characterise the European food supply chain, that accounts for 5% of value-added and 7% of employment in the EU. The national Competition Authorities are often investigating food markets for finding possible unfair practices, recognising that food supply chains are characterised by the presence of imperfectly competitive markets and/or relations among agents, and that market power can be exerted along the supply chain. This statement is supported by two successive studies of the [UK Competition Commission \(2000, 2008\)](#) that identified a number of practices carried out by UK supermarkets as being against the public interest.

---

<sup>1</sup> Sieber and Dominguez (*in press*) underline the growing importance of impact assessment of agri-food policies in the EU, discussing recent literature developments and the requirements of impact assessment tools. They introduce a special issue of this Journal on this subject.

<sup>2</sup> Some recent projects financed by the various Framework Programmes of the European Commission have developed quantitative tools for policy evaluation purposes (see [Pérez Domínguez, Gay, & M'Barek, 2008](#), for a survey). Some of the results of these modeling efforts have been used by the European Commission for its impact assessment documents (see, among others, [Requillart et al., 2008](#)) and some others are available in the scientific literature (see, among others, [Bouamra-Mechemache, Jongeneel, & Réquillart, 2008](#); [Sckokai & Moro, 2009](#)).

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات