

New dimensions of market power and bargaining in the agri-food sector: organizations, policies and models

This special issue collects selected papers presented at the seminar of the European Association of Agricultural Economics “New dimensions of market power and bargaining in the agri-food sector: organisations, policies and models” which was held in June 2016 in Italy (Gaeta). The seminar gathered 103 scholars from 23 countries worldwide and it was the result of the joint effort of the University of Cassino and Southern Lazio, the Technical University of Munich, Colorado State University, Scotland’s Rural College, and the University College of Dublin. The papers in this special issue provide an effective summary of the scientific debate.

Market power, defined as the ability of a firm to set and maintain price above the level that would prevail under competition, has been a key concept in supply chain analysis and market organization studies for decades. Yet, recent studies questioned the ability of the market power framework to predict economic behaviour in the agri-food system, and new theories and extended models are being developed to explain empirical evidence. The increasing complexity of food systems have led researchers to question the ability of market power models to interpret and fully explain the economic interactions along the supply chain. Food price rigidity, asymmetric price transmission, agricultural price volatility are examples of the many empirical characteristics that are not explained by the most commonly used pricing models, such as perfect competition or market power. Furthermore, the standard market power models – focussing on price and quantity setting – may be unable to capture key elements of today’s agri-food supply chains, such as the increasing importance of non-price competition, product differentiation, complex business practices, contracts, long-run incentives or sustainability and social responsibility. Industrial organization literature has developed significant innovation in this field, but much work is needed to adapt it to the new dimensions of competition in the agri-food supply chains. Therefore, the implications for the overall market performance or social welfare are often unclear and it is difficult to infer general conclusions or policy recommendation.

Several contributions applied the notion of power, and the consequent theoretical tools, to the transactions involving consumers, expanding the scope of the discussion even further. Bargaining power with respect to B-to-C trade is a complex issue and it refers to two topics: the pressure consumers can exert on businesses to get them to provide higher quality products, better customer services and lower prices; and the actions that retailers can exert on consumers to shape their choice sets and/or impose terms of trade. The two topics present opposite views: the former considers consumers as powerful agents that are aware of their role in value creation, the latter considers them as weak agents needing protection. Both points of view are representative of the diversity of modern agri-food system, yet are not incompatible. Consumers are increasingly playing a role in making food chains more sustainable in terms of the environmental impact of production and to allay health concerns related to food consumption attributes. This research topic will focus on the transactions between retailers and consumers and addresses the multiple implications of their bargaining.



There are 18 papers in this special issue of the *British Food Journal*, covering the variety of issues debated in the seminar. Ideally, the contributions can be broken down into four main topics: empirical studies on market power; effects of governance and institutions on power, competition and performance; sellers' power in B2C trade; and buyers' power in B2C trade.

The first topic covers empirical analysis measuring relative bargaining/market power and its effects on prices and market equilibrium. We selected two papers for this topic.

The first paper "Welfare implications of intertemporal marketing margin manipulation" by Thomas Kopp, Bernhard Brummer, Zulkli Alamsyha and Raja Sharah Patricia, investigates the price transmission between international prices and the factories purchasing price on a daily basis in Indonesia. The results suggest that factories do indeed transmit price asymmetrically which has welfare implications: around three million US dollars are annually redistributed from farmers to factories.

The second paper "Farmers' self-reported bargaining power and price heterogeneity: evidence from the dairy supply chain" is by Jan Falkowski, Malak-Rawlikowska Agata and Milczarek-Andrzejewska Dominika. This paper uses unique micro-survey data from Poland to provide quantitative evidence documenting the position of farmers and to explain variation in farm gate prices in the dairy supply chain. Using econometric modelling, it is shown that farmers who perceive themselves as having a relatively "strong position" in the food chain receive a higher milk price from dairy companies. The paper goes beyond the standard measures which focus on farm size or its location and it investigates farmers' relationships *vis-à-vis* both processing industry and input suppliers.

Institutions, regulations, standards and, more in general, models of governance can affect the distribution of power, the way it is exerted and market equilibrium and performance. Scholars in the seminar debated this topic intensely. We selected five representative contributions, focussing on the issue of safety regulations, innovation and the role of Producer Organizations.

The first paper in this topic is "How do food safety regulations influence market price? A theoretical analysis" by Nacim Nait Mohand, Abdelhakim Hammoudi, Oualid Hamza and Maria Angela Perito. The purpose of this study is to identify the causal relationship between public food safety regulation and the expected price in the spot markets. We propose a theoretical industrial economic model that identifies the causal link which may exist between public food safety regulations, the expected price in domestic market and the rate of exclusion of local producers. They show how strengthening official controls does not impact negatively on producers participation and does not always decrease supply.

Food safety attitudes is analysed in the paper "How can food companies attract the consumer concerned about food safety? A logit model analysis in Spain" by Debora Scarpato, Giacomo Rotondo, Mariarosaria Simeone, Andrés Gómez and Pilar Gutiérrez. The aim of this research is to explore food safety attitudes among a sample of Spanish consumers and determine which variables, among those studied, most affect the probability of the consumer being attentive to food safety. Results showed that the probability of the consumer being particularly attentive to food healthiness and safety, for the sample in question, is higher in consumers who stated they were familiar with organic products, those who are attentive to fat contents in foods and those who value the presence of quality certification positively. This paper investigates not only consumer attitudes to food safety, but also how other variables can influence the probability of the consumer being concerned about food safety. This approach may be very useful for food companies to determine what strategies to adopt to attract the category of consumers who lend special importance to the food safety variable in their purchases.

The study of Chiara Riganelli and Andrea Marchini "Governance and quality disclosure: the palm oil issue" considers a current problem statement: mandatory indication of palm oil

among the list of ingredients (Regulation No 1169/2011). The goal is to analyse the effects of company choices about palm oil on consumer demand and company performance. It considers the market effects of the labelling programme through a new empirical application related to the palm oil issue. Starting from palm oil concerns a new way through which an increase in the provision of information to consumers is likely to impact the behaviour of companies is pointed out.

The research conducted by Adele Coppola and Sara Ianuario “Environmental and social sustainability in Producer Organizations’ strategies”. This paper aimed at analysing the role Italian Producer Organizations play in implementing sustainability actions in the fruit and vegetable sector. In particular, it aimed at verifying whether environmental actions reveal different models with respect to implementation of sustainability and at analysing the relationship between environmental strategies and specific Producer Organizations’ characteristics. Results show that Producer Organizations’ strategies often include interlinked economic and environmental objectives. In particular, product quality improvement often goes with the promotion of environmentally friendly techniques, while other environmental actions respond to a reduction costs rather than to a sustainability strategy.

The manuscript “Process innovation in milling stage in the olive oil sector: evidence from an empirical analysis in Umbria (Italy)” written by Gaetano Martino, Enrica Rossetti, Andrea Marchini and Angelo Frascarelli looks at the modes of organizing the technological knowledge on the decision to innovate the production process. The paper aims at investigating the role of the modes of organizing the technological knowledge on the decision to innovate the production process. The study develops a conceptual framework drawing the concept of mode organization from the transaction costs economics. The main results of the study are provides evidence for the role of modes of organization in the knowledge acquisition finalized the process innovation. The role of the buy option is important impact while the collaboration- the hybrid organization- seems able to influence strongly the innovation and the related investment decision.

Then we enter in the debate about power in business to consumer trade. A section of the seminar was devoted to the analysis of sellers’ power in B2C transaction. Firms can impose terms of transaction by exploiting specific advantages in terms of information or dominant positions. We selected two papers about this topic, one showing the effect of the strategic use of social media to influence consumer choices and the other focussing on consumer protection by Anti-Trust Authorities.

The manuscript, “The growing influence of social and digital media. Impact on consumer choice and market equilibrium” by Carlo Russo and Mariarosaria Simeone developed a simple theoretical model to illustrate the effects of social media on consumer behaviour and market equilibrium. They assess the consequences of the increasing importance of social media on inter-firm competition in differentiated food markets. The model predicts that, as social media become more and more influential, consumers using the new media become more informed, and their concern about food quality attributes increases. The prediction of the theoretical model is tested empirically. The data supported the theoretical model.

The manuscript presented by Paolo Passarini, Alessio Cavicchi, Cristina Santini and Gabriele Mazzantini analysed the increasingly prominent role for the consumer protection conferred to the Italian Competition Authority giving the possibility to impose fines against companies. This research focusses on the Italian system of consumer protection, studying the impact of these fines on the Italian agri-food companies till 2012. From the analysis it emerges that there is an accurate system planned for avoiding and limiting misleading practices. Firms in fact have been capable to adapt to the set of imposed rules and to reduce the efficacy of the proposed dissuasive system.

The issue of consumer power was widely discussed in the seminar. Active consumers can promote sustainable production, with a direct benefit for the environment and society, and a fairer surplus distribution along the supply chain. The large number of selected papers in this section of the special issue reflects the variety of the variety and the intensity of the debate

The article of Katerina Maria Theresia Bissinger and Daniel Leufkens, "Ethical food labels in consumer preferences" estimates consumers' willingness to pay for fair trade coffee products and tea. Thereby, this article contributes to the discussion in favour of a non-private regulation of ethical food labels. The hedonic technique is used to model coffee and tea prices as a function of time, store, and product characteristics. The analysis leads to the results that the German buying public is willing to pay a premium of 43 per cent for fairly traded and certified products.

Consumers are increasingly concerned about the environmental and social consequences of their purchases and therefore companies are involved in corporate social responsibility (CSR) strategies for their supply chain to support sustainability managing the consumption of the environmental resources. This is the theme of the research paper presented by Federico Nassivera, Stefania Troiano, Francesco Marangon, Sandro Sillani and Iskra Markova Nencheva, "Willingness to pay for organic cotton: consumer responsiveness to a corporate social responsibility initiative". The aim of this study is to contribute to a better understanding of the Italian organic apparel consumer by investigating the importance of consumers' attitudes towards CSR in agricultural products processing industries and their willingness to pay for organic cotton clothing. One of the direct implications for new marketing strategy is that companies should try to improve their social and environmental performance to elicit the desired consumer responses.

On the same theme is the manuscript by Gennaro Civero, Vincenzo Rusciano and Debora Scarpato which presents an empirical study conducted on visitors to the event Milan Expo 2015 to ascertain their attitudes towards issues of food safety, food security and sustainability. Different groups of visiting consumers were identified through cluster analysis in order to segment and divide visitors into groups based on their approach towards these issues. The findings are particularly useful for the future development of the reputation and profitability of food companies, for the enrichment of knowledge concerning CSR-oriented food companies and to increase the price of products from socially responsible agri-food companies.

The topic of sustainability is central also in the manuscript "Which are the sustainable attributes affecting the real consumption behaviour? Consumer understanding and choices" written by Paola Mancini, Andrea Marchini and Mariarosaria Simeone. The goal of this work is to focus on a dual purpose: on the one hand, to identify and define "sustainable consumption" behaviours in a broad sense; and on the other hand, to investigate empirically the factors affecting the real consumption behaviours. Results allow to shed light on consumers' understanding, motivation, and use of sustainable food products in order to comprehend the role that sustainability information plays in the food products market. More specifically, the definition of "virtuous consumer" will be proposed and used to analyse consumer information and behaviour towards green, health, local, social and environmental credentials on the label.

Going through the paper "Why do you drink? A means-end approach to the motivations of young alcohol consumers" by Nicola Marinelli, Sara Fabbrizzi, Silvio Menghini and Leonardo Casini. The paper aims at analysing the motivations of young consumers of alcoholic beverages in order to supply information for the definition of corporate and social marketing strategies. A means-end approach was used on a sample of young consumers from Tuscany via face-to-face interviews to identify the main elements in the cognitive structure that, if used to define a communication strategy, may guarantee a high degree of efficacy.

The findings of the study constitute valuable information that can be used to prepare stages of communication plans within larger corporate and social marketing strategies and on the other hand, public institutions, may benefit from understanding the motivations that lead young people towards dangerous drinking behaviours.

The aim of the paper by Gabriele Scozzafava, Caterina Contini, Caterina Romano and Leonardo Casini is to answer the following research questions:

RQ1. Which are the main drivers in the choice of a restaurant for Italian consumers?

RQ2. Are local, organic and GMO-free foods important attributes in the choice of a restaurant?

This paper considers and evaluate the impact of local foods, organic foods and GMO-free foods in the choice of a restaurant applying a discrete choice experiment. Findings demonstrate how the probability of choosing restaurants that offer local products, compared to the other conditions, is always higher than those focussing on organic or GMO-free products. The choice probability of the restaurant with local products is three times greater than that of a restaurant without local products, all other variables being equal. The development of a segment of restaurants that support local foods and organic products would have positive impacts both from the social and territorial point of view.

Following on from the above there is the manuscript “The impact of consumer – brand engagement on brand experience and behavioural intentions: an Italian empirical study” by Marcello Risitano, Rosaria Romano, Annarita Sorrentino and Michele Quintano. The study provides empirical support for the effect of consumer-brand engagement and brand experience on consumers’ behavioural intentions in the food industry. The paper investigates the impact of consumer-brand engagement and brand experience on behavioural intentions in relation to food brands. A questionnaire with questions relating to pasta and coffee was given to an Italian consumer sample and the model was tested using structural equation modelling of the resulting data to examine the research hypotheses. The results have an important implication for marketing managers: they should develop long-term and strong brand relationships. Such consumer engagement and/or experiential actions can be key competitive advantages for food companies.

The manuscript “Willingness to pay for ‘Taste of Europe’: geographical origin labelling controversy in China” by Li Chenguang, Bai Junfei, Gao Zhifeng and Fu Jiangyuan. The authors compare consumers’ perception and willingness to pay for different levels of geographic origin labels to provide insight to the strategic use of origin labels in emerging markets. They found that consumers’ willingness to pay premium prices for the EU label rather than for a country-specific origin label. Therefore, for a premium products with above average quality, using generic EU labelling has a potential drawback to the establishment of product differentiation.

Following on from the above there is the paper “Place branding-exploring knowledge and positioning choices across national boundaries: the case of an Italian superbrand wine” by Tommaso Pucci, Elena Casprini, Rabino Samuel and Lorenzo Zanni. The authors examine the joint effects of product-specific region-of-origin (ROO) and product-specific country-of-origin (COO) on willingness to pay a premium price for a wine label designated as a Superbrand by the Italian government: Chianti Classico. The paper introduces the concept of “ROO-COO distance”, defined as the importance attributed to a product-specific ROO as compared to its COO. They employed a sample of 4,156 consumers originating from new world countries (Australia, USA and Canada) and old world countries (Germany, UK, Sweden and Belgium). The findings confirm that a place-of-origin influence on price-related

product evaluations is country specific. Furthermore, the moderating role of consumers' subjective product knowledge and consumers' region-related product experiences differ across countries. The ROO-COO distance was found to positively affect only old world consumers.

Guest editorial

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1655