Some 70 stakeholders from government, international organisations, the private sector, non-governmental organisations and academia attended the fifth OECD Food Chain Analysis Network meeting on ‘Competition along the Food Chain’. The meeting was organised back to back with the OECD Competition Committee roundtable on Competition Issues in the Food Chain Industry, which took place in the afternoon of 31st October.

The meeting sought to provide an overview of key elements determining the creation and the distribution of value along the modern food chain, including price formation and their relationship to classic competition issues. It focused on topics identified at the inaugural Food Chain Analysis Network meeting in December 2010: promoting food chain efficiency and transparency and ensuring that agents capture their fair share of value.

The agenda of the meeting, the list of participants as well as the presentations can be found at: www.oecd.org/site/agrfcn. Some general observations and a summary of the main presentations/discussions are provided in this note.

General observations

Several speakers noted that competition issues needed to be seen in the context of the major challenges facing the agri-food sector today-food security (availability and affordability) and sustainability (in the economic, environmental and social dimensions). Fair competition has always been seen as a positive element as it generally enhances competitiveness, value creation, economic growth and social welfare. Competition policy has tended to focus on consumer welfare with little regard for the impacts on upstream links in the chain. Today’s agri-food sector is much more market oriented and trade is growing. Global value chains are more complex with an international cross-border structure difficult to regulate by domestic competition agencies. The approach to assessing the nature and impact of competition has similarly become increasingly complex with more variables being taken into consideration.

It is clear that competition within the agri-food sector and its regulation is still an important issue in many countries, with growing concerns by some stakeholders. Much of the empirical evidence of potential problems is inconclusive and few studies look at the international implications. Most observers agreed that concentration by itself does not imply excessive market power; that business practices and performance (fair trading, transparency, risk sharing, and access to a wide range of products) also matter. Certainly food prices were seen as a relative poor indicator of effective markets on their own, with consumer choice,
innovation, value creation, stability and investment also relevant indicators of a healthy competitive environment.

The industry has been proactive in the area of self-regulation in recent years just as it has been in other topical areas such as sustainability, diet/health/nutrition and reducing food waste. There is an increasing dialogue among the stakeholders such as that between retailers, the manufacturing and processing industries and traders, which has led to agreed Principles of Good Practice for business-to-business relations in the food supply chain. Still, some participants expressed concerns that voluntary actions were probably insufficient and that “watchdog” agencies and some mechanisms for adjudication were necessary.

The discussion of private standards stressed that such standards were increasing but that in general they were good for producers, processors, retail firms and consumers as the main objective was to improve food quality, choice and information (as opposed to food safety). Concerns were expressed about compliance costs, the implications for market access and exclusion, impacts on bargaining power and the growing confusion (grey areas) between public and private standards. Assessing the consequences of increasing private standards is complicated with studies showing both positive (increased consumer surplus, greater profits) and negative (higher prices, increased risks) elements.

The discussion on marketing boards was relatively short. It was pointed out that the role of marketing boards was changing. In the past, such boards reflected anti-competitive behaviour in the carrying out of government-mandated market distortions. Today, the role of marketing boards was more one of orderly marketing, promotion, value creation and, by acting as a broker within the agri-food chain, aiding the sharing of this value creation. It was noted that in the new world of global value chains the effectiveness of marketing boards was limited by their mandate within national borders.

With regard to Co-operatives, a common objective is to increase the share of downstream value to producers and primary processors. It was noted that their ability to improve the bargaining power for their members was limited by their relatively small market share in many cases. They were seen as effectively improving marketing efficiency and market access while having some positive impact on producer prices. In some cases, the most important benefit of Co-operatives was to moderate price volatility and transaction costs for members (particularly in developing countries) while providing risk management services. Two emerging issues were raised. The first was the conflict between the international interests of the largest Co-operatives and those of the country-based members, and how these interests were addressed by national regulations. The second was a concern about the diminished voice of the producers to the extent that in some cases producer groups were being established within some of the largest Co-operatives.

Finally, on food price formation, it was clear that this process remains of considerable interest to governments. Some countries noted the establishment of new food price monitoring legislation and “watchdog” agencies. These developments were to be further discussed in the OECD Competition Committee special session on competition issues along the food chain which immediately followed the this Food Chain Analysis Network meeting.

The discussion reviewed on-going work which stressed the massive complexity of food price monitoring. Empirical evidence clearly showed that there was no one reference food price; that research results were heavily influenced by the methodology used and that there was no simple story emerging (even for specific products in individual countries). There was some evidence of symmetric price formation although “sticky” upward food prices were observed. The retail sector in some cases had experienced declining margins. There was not a strong correlation between concentration and retail food

1 www.supplychaininitiative.eu
prices in the studies referenced although some super centres appear to have had an upward effect on prices. As an aside it was noted that food prices have been outpacing general inflation in many countries for several years.

**Session I: Introduction: setting the scene**

Agri-food systems have undergone major changes in behaviour and structure over the past several decades. World trade of food products has increased dramatically and the nature of trade has changed. Agricultural production must now meet more stringent quality and safety norms with standards often imposed by downstream players. Recent demonstrations in several countries against either low price paid to producers or, on the contrary, against the high prices paid by consumers, illustrate the complexity of competition issues in agro-food systems.

Consolidation in the agro-food industry is continuing to grow, mostly through mergers and acquisitions. The retail industry is highly concentrated. This phenomenon is relatively recent and thus market power has emerged as an important economic issue and a sensitive item on the policy agenda. It is commonly suggested that retailers have the market power to dictate prices to suppliers and consumers. However, looking at the effects of modern retail structures on prices paid to producers and by consumers, there seems to be so far no clear empirical evidence of abusive market power.

Asymmetries in size or strategies can impede collusion. The structure of vertical relationships along the chain can also have an impact. In some cases, high concentration might enhance welfare as scale economies increase, transaction costs are reduced, R&D is promoted and some other agents along the chain can have countervailing power. In developing countries, many studies even show that the emergence of modern western-style retailers can push consumer prices down.

It was argued that agricultural markets are not true competitive markets. The importance of concentration, quality and diversity, as well as contracting and long-term vertical relationships, is crucial for “modern” agro-food value chains: A producer is linked to a food processor to provide a specific good with certain quality requirements. The good is produced using inputs provided by the processor. The problems of contract enforcement and possible contract breach are rising. Hold-up opportunities might arise. The issue of fairness in the post-contract phase is thus particularly important.

Overall, welfare effects are difficult to quantify because of a limited access to price data and contract information and because of endogeneity problems that make it difficult to carry out comparative analyses between commodities and countries. The welfare effects of the growth in global supply chains depend on a variety of factors. Developing country farmers might, in that context, have increased opportunities but contract enforcement procedures can cause problems.

**Different perspectives on the relationships between food chain participants**

Three speakers coming from farming, food industry and the competition area participated in a panel session on competition between food chain participants. They all stressed the need for dialogue between food chain participants as a means to prevent or reduce disputes. However, they argued that there may be a need for regulation in the sector, as excessive market power and unfair practices may exist. Regulation can take the form of voluntary guidelines such as the Supply Chain Initiative launched in September 2013 in the EU. It could also take the form of laws and a public code of conduct like that recently put into place in the UK.

**Farmer perspectives**

Four challenges posed by the evolution of agro-food chains were identified:
• Agricultural commodity price volatility: The recent rise in agricultural commodity price volatility is seen as a major issue for farmers who need to manage cash flow. Farmers would like to share the risks with other agents in the food chain.

• The increasing use of contracts: It appears that farmers in developed countries are becoming more and more subcontractors.

• Traceability: The “horse meat” issue in 2013 underlined how bad business practices can break the trust established between agents in the food chain.

• Achieving fairness and transparency in the global supply chain: There was a call for stronger partnerships between suppliers, farmers and retailers to prevent unfair trading practices. In this context, a Grocery Supply Code of Practice was set up in the UK. A Grocery Code Adjudicator was nominated in June 2013 to oversee the relationship between supermarkets and their suppliers with the support of UK producers. Its role is to ensure that large supermarkets treat their direct suppliers lawfully and fairly.

**Private sector perspectives**

On 16 September 2013, the European Voluntary Supply Chain Initiative\(^2\) was officially launched jointly by seven EU level associations representing the food industry, branded good manufacturers and the retail sector with the aim to increase fairness in commercial relationships along the food supply chain. Companies along the food supply chain that join the initiative are required to respect the principles of good practice in trading relations and comply with the principles of good practice and provide dispute resolution options.

This initiative is one of the results of the High Level Forum for a better functioning food supply chain that was launched in November 2010 by the European Commission. One of the objectives of this Forum is to be a platform for dialogue between food chain partners in order to promote sustainable and market-based relationships between stakeholders in the food supply chain. It identified in March 2011 a list of trading practices in vertical relationships in the food supply chain. Major European business organisations, representing a large part of the European agri-food sector, agreed in November 2011 on a set of fair consensual trading principles to be respected; those trading practices are at the centre of the voluntary initiative.

**Another point of view on competition issues**

A different perspective on modern competition analysis of the food chain was provided. Retailers can be seen as two-sided platforms with two distinct groups of clients (consumers and suppliers) who need each other in some way and who rely on the platform to intermediate transactions between them. In addition to selling products to retailers, suppliers can be seen as buyers of services from retailers. The model of competitive bottlenecks was proposed to consider alternative outcomes at the end of the food chain. In this framework, consumers are assumed to be loyal to their stores as they are generally well treated by retailers who compete for these customers. Conversely, retailers may deal more aggressively with their suppliers, which could result for example in less shelf choice for customers and act as a disincentive for innovation and quality along the food chain. This type of outcome could lower consumer welfare. It was suggested that both competition rules and economic regulation be used/revised to prevent those types of outcomes.

\(^2\) [http://www.supplychaininitiative.eu/](http://www.supplychaininitiative.eu/)
Session II: Competition and value creation along the food chain

Interactions between participants along the food chain have become more complex with globalised and concentrated markets. New avenues of value creation along the chain arise from rising norms and standards as well as new mechanisms for determining the sharing of value among players in the chain.

Different kinds of private standards have been developed in recent decades that have a direct impact on competition. Large agro-food companies have set up their own food safety and environmental standards to assure their long-term reputation. Premium private labels have been set-up by large retailers to signal higher standards to consumers. Joint private standards are rising. GlobalGAP (The Global Partnership for Good Agricultural Practice) or the GFSI (Global Food Safety Initiative) are important examples.

There has been intensive research reported in the literature looking at the incentives to implement private standards and the cost of compliance for farmers as well as the effects on market access. Standards with pure selection strategies will only select producers that already comply with the minimum quality standards. This approach means that upstream producers can be excluded and that consumer prices might increase given the reduction in supply. Standards with proactive selection strategy will select producers that already comply with minimum quality standards but also producers that are willing to invest in order to meet the private standards. In such cases, the effect of the standard might be more efficient in the sense that it could benefit different stakeholders along the chain and reduce the risk of exclusion.

Confusion is growing between public and private standards as they are becoming bigger. Concerns were expressed about their impacts on bargaining power. The consequences of increasing private standards are difficult to evaluate as studies are showing both positive and negative elements.

The example of marketing boards in Canada was presented to underline how value creation along the chain might be influenced by vertical relationships. Marketing boards in Canada are organised at the federal or provincial levels. They are compulsory marketing organisations for certain agricultural products such as hogs or chicken. They are confronted more and more with the “small numbers” problem given concentration in food processing and the decline in the number of farms. Sellers and buyers at marketing boards can be in a low-price low-capacity trap: buyers know that they do not have to offer higher prices as sellers need to market their products. Government intervention is often used to compensate for low prices received by producers. Marketing boards have difficulties dealing with the heterogeneity of producers. They are also limited by their provincial borders. At the end of the agro-food chain, retailers have more sourcing options as they do not necessarily need to buy from domestic suppliers. This can lead to unfair competitive conditions.

Panel discussion on farmers’ co-operatives

A panel discussion was organised on farmers’ cooperatives. A co-operative has three key characteristics: it is user-owned, user-controlled and user-benefitting. Co-operatives seek to help farmers gaining countervailing power in the supply chain and to help them add value that can be directly captured by producers.

A report on Support for Farmers’ Co-operatives, published in March 2013 and commissioned by the European Commission, provides a comprehensive description of the current level of development of cooperatives in the EU. It identifies regulation/support measures that promote cooperative development. Co-operatives in Europe have changed becoming more product-based than region-based and tending to take the form of hybrid organisational structures with more room for managerial entrepreneurship. Most EU national laws/regulations provide ample flexibility to choose the best internal governance model that fits the strategy of individual cooperatives.
More than 40% of agricultural production in the EU is marketed through co-operatives. In Northern Europe, market share exceeds 60%. There are 46 transnational co-operatives in the EU. Those co-operatives internationalise by acquiring foreign Investor Owned Firms (IOFs) to prevent dilution of ownership. The difficulty in very large co-operatives is to continue to involve members.

Given the complex relationships within agro-food chain, farmers’ co-operatives play an important role in maximizing their members’ share of value added. Looking at dairy co-operatives, the report shows that a large market share for co-operatives in a region can increase the price paid to farmers and reduce price volatility. However, the countervailing power of co-operatives is limited to the extent that co-operatives lack market power in global value chains.

Co-operatives help farmers to add value in different ways through efficiency of scale, transaction costs reduction, easier market access, risk management and innovation. Co-operatives tend to think strategically and thus help farmers to be better positioned on the market. The report did not reach clear conclusions on which support measures do actually efficiently promote co-operatives. However, it was noted that there is a need to support capacity building and organisational assistance to help small and emerging co-operatives.

A more specific look at the functioning of co-operatives in Italy was provided. Italian agricultural co-operatives produce 50% of agro-food labelled as “made in Italy”. They count over 700 000 shareholders and represent 24% of total turnover of Italian agro-food. Agricultural co-operatives are seconded by service support co-operatives that add value to shareholders’ products. Italian co-operatives are very regulated. According to the Italian Civil Code, trading profits earned by the co-operatives must be allocated at 30% to legal reserve fund and at 3% to mutual funds that promote the development of co-operation. The rest can be allocated to shareholders.

The large New Zealand dairy co-operative, Fonterra, provided a non-European point of view. Fonterra is owned by 10 500 farmer shareholders. It collected 17 billion litres of milk in New Zealand in 2012. Fonterra is very export oriented; it has processing facilities in many countries in Middle East, Asia and America. One of the objectives is to optimize the value it gets for its milk and finished goods given the high dairy price volatility, the seasonality of the production and the impacts of support policies. Fonterra is running a Guaranteed Milk Price Pilot Program which offers farmers the opportunity to lock in a fixed milk price for up to 75% of their milk supply for the season using market based risk management tools. The example of Fonterra shows that value creation along the food chain can also be related to the efficiency of markets and to trade openness.

**Session III: Competition and value distribution along the food chain**

This session focused on the interactions between actors along the chain from producers to consumers and how those interactions influence prices.

Retail food prices are analysed within the Economic Research Service of USDA by the Food Markets Branch of the Food Economics Division. US food prices have been modelled for decades. Most recent research used global demand, biofuel production, speculation, past stocks and weather as determinants of commodity prices. The ERS work on retail food prices shows that commodity prices are only a small part of the story. Many other industries also shape retail food prices. It was estimated by ERS that from one consumer dollar spent on food, 33.7% goes to food services (including food away from home), almost 19% to food processing and only about 12% to farm and agri-business. This means that a doubling of agricultural commodity prices would lead to a net increase of about 12% in retail food prices.
In fact, despite the high volatility experienced recently in agricultural commodity markets, retail food prices in the US have been relatively stable compared to those of other countries around the world and compared to prices for other goods and services in the US. However, it seems that a plateau may have been reached in the share of disposable income spent on food.

**How do food retailers influence consumer prices?**

The retail sector in the US has become more heterogeneous with the rise of super centres like Walmart which are found to increase concentration in given areas but also are said to offer lower prices than smaller size retailers. Using Nielsen TDLinx detailed data on store location, characteristics, annual sales, entry and exit, ERS has calculated the percentage change in the Food Herfindahl–Hirschman Index\(^3\) (HHI) for 27 Metropolitan Statistical Areas (MSAs) over the period 2004-12 and compared it to the percentage change in the food at home CPI. This comparison shows that areas with higher food price increases also experienced higher increases in retail concentration. This finding supports the idea that seller power is higher than buyer power. Further research is necessary to understand how retail prices are formed and how they are influenced by the market structure.

In the European Union, a project on transparency of food prices (TRANSFOP: [www.transfop.eu](http://www.transfop.eu)) was launched in 2010. It is funded by the European Commission and brings together 13 partner institutions. The objective of this programme is to achieve a greater understanding of the food chain and to look at pricing issues in food supply chains throughout the EU. TRANSFOP uses theoretical and empirical approaches (with the use of different types of price data) to look at price behaviour across the EU.

Analysis of price transmission along different food chains within the EU shows that most price adjustments take place at the producer end rather than the retail end. In fact, retail prices look relatively sticky and raw commodity price volatility does not affect them that much. When looking at bread markets, retail food price inflation was shown to be very different over the same period depending on the countries.

High frequency weekly scanner data in the UK were used to identify what consumers actually buy and the dynamics of prices for different types of products. Sales and promotion periods and strategies are different among retail chains. It is difficult is to identify an underlying reference price for the products for a given retailer. The data underline the heterogeneity among retailers in terms of pricing and duration of prices. This is another difficulty when trying to address the functioning of price formation along the food supply chain.

**Stakeholders views on price formation.**

The Spanish Food and Drink Federation (FIAB) provided an overview of the interactions between actors in the food supply chain in Spain. More than EUR 100 000 million have been spent on food in Spain in 2012 by about 47 million consumers with 67% of expenditures for food consumed at home. The top four retailers account for 60% of all retail sales. Private labels represent 34% of consumer spending and 53% of product volume. Private labels have expanded rapidly over the last 10 years. For certain products, they represent more than 60% of market share (e.g. oils, canned fish, and canned vegetables).

With the expansion of private labels, the role of retailers has changed. They are directly competing with processors. This raises the question of market access to retail shelf space; the extent to which these conditions could affect innovation and investment by big brands; and the impacts on consumer welfare. This is an issue that has been much debated recently in Spain. Other topics on the domestic agenda were

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\(^3\) HHI is a measure of the size of firms in relation to the industry and an indicator of the amount of competition among them.
unfair competition practices by retailers and sales below cost. To prevent power imbalances within the food chain, a law on measures to improve the functioning of the food chain was passed very recently and will come into force in January 2014.

The law will require that the basic terms of the commercial relationships are put on a contract and that specific unfair practices are forbidden. An Agency for Food Information and Control will be created. This agency will have the power to impose fines and request investigation by competition authorities. Problems were foreseen with respect to enforcement of the law (i.e. How will it be determined whether a given shelf space attributed by a retailer to a supplier is fair or not?)

Retailers stated that the food supply chain is consumer driven. Competition along the chain is strong as each actor competes to supply the next consumer along the chain. This competition provides strong incentive for innovation. Consumers want to have choices and be able to find all the products they like, often including national brands and private labels in the same retail store. Consumer expectations and tastes are constantly changing and retailers need to adapt to these changing demands, trends and preferences.

Food prices matter for consumers. Price comparators on the Internet are reinforcing price competition. Most retailers are heavily dependent on stocking many national brands ('must have' products) as consumers expect to be able to buy them everywhere and are certain to switch retailers if such a product is not available. In many such food product categories, retailers typically face fewer suppliers than they have retail competitors. Any analysis of market structures involving retail must therefore consider the specific situations in individual product categories.

Prices paid to suppliers by retailers tend to reveal market equilibriums. In this context, retailers stand in favour of a price and margin observatory for retailers as well as the food industry and producers. Retailers buy very little directly from producers. The only direct contracts they have with farmers are through high quality labels for which farmers receive premium prices.

Roundtable on Competition Issues in the Food Chain Industry – 119th Meeting of the OECD Competition Committee

The OECD Competition Committee held on 31 October 2013 a Roundtable on Competition Issues in Food Chain Industry\(^4\), based on a Secretariat background paper and country contributions. Recent developments on world commodity markets coupled with high levels of food inflation across many countries have raised concerns about the functioning of the food chain from upstream segments through to consumers. While there are many factors that can influence this functioning, there has been increasing concern about competition in particular about horizontal and vertical market power.

Competition delegates started with a discussion on the political economy of the food sector where political interferences are more important than in any other sector, which in turn has implications for antitrust law enforcement. A clear dividing line emerged between the countries that believe that the traditional instruments of competition law are quite sufficient and adding any other instrument would be probably counterproductive, and those who believe on the merits to have specific instruments added to the competition law or sometimes integrated into the competition law to deal with some of the problems raised in the vertical chain. This tension was apparent in particular when delegates discussed how to control abuse of buying power or how to deal with mergers at the retail level and to overcome the difficulty of defining markets, notably geographical market.

For a number of delegates, rather than an extension of the power of Competition Authorities, self-regulation or codes of conduct appear as a solution, although their nature (voluntary or mandatory) remains a debated question. Delegates also heard from expert speakers Steve McCorriston (Exeter School of Business and Economics), J.A. Van Driel (Ministry of Economic Affairs from the Netherlands), Fabian Berges (Toulouse School of Economics) and Johann Swinnen (Leuven University). A detailed Summary record of the roundtable discussion will be circulated under [DAF/COMP/M(2013)3/ANN2]. The results of the roundtable, accompanied by country contributions, expert papers and background notes are scheduled for release in 2014 as part of the Best Practice Roundtables on Competition Policy series.

Concluding remarks

Five major issues were discussed during the 5th OECD Food Chain Analysis Network Meeting on Competition along the Food Chain. They are all interrelated:

- Concentration along the food supply chain and the possible existence of market power at various stages of the supply chain.

- Private standards and their consequences on vertical relationships along the chain.

- Co-operatives and how they represent a possibility for producers to ensure they get their fair share of value.

- Possible roles for regulation.

- Food price formation and retail margins.

Many of these subjects have already received close scrutiny. The issues are complex, data problems remain and much of the empirical evidence is not conclusive or to specific cases, and not conducive to broad conclusions.