

**SIXTH JOINT CONFERENCE ON
Food, Agriculture and the Environment
(in honor of Professor Emeritus Philip M. Raup)
Minneapolis, Minnesota
August 31 - September 2, 1998**

Hosted by the

**Center for International Food and Agricultural Policy
University of Minnesota
Department of Applied Economics
1994 Buford Avenue\332 ClaOff Building
St. Paul, Minnesota 55108-6040 U.S.A.**

***THE ANTITRUST POLICY IN ITALY: LEARNING FROM SOME FOOD
CASES***

Gabriele Canali and Stefano Boccaletti

University of Minnesota

University of Bologna

University of Padova

University of Perugia

University of Firenze

University of Piacenza

University of Wisconsin

University of Siena

University of Alberta

Copyright (c) 1998 by Gabriele Canali and Stefano Boccaletti. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

**6TH JOINT CONFERENCE ON
FOOD, AGRICULTURE AND THE ENVIRONMENT**

**Minneapolis, Minnesota
August 31 – September 2, 1998**

THE ANTITRUST POLICY IN ITALY: LEARNING FROM SOME FOOD CASES

Gabriele Canali and Stefano Boccaletti

Istituto di Economia Agro-alimentare
Università Cattolica del S. Cuore
Piacenza - Italy

Abstract

After a short presentation of EU and Italian antitrust legislation, this paper examines two recent cases of intervention by the Italian Antitrust Authority (IAA) in the agricultural sector, both dealing with high quality food products requiring a long aging process: two similar kinds of cheese in the first case, 'Parmigiano-Reggiano' and 'Grana Padano', and two hams in the second one, 'Prosciutto di Parma' and 'Prosciutto di S. Daniele'. Recently, all these products have obtained the 'Protected Designation of Origin' according to EU Regulation n. 2081/1992.

In both cases, the IAA argued that the existing agreements aimed at programming total supply for each product by means of quotas applied to each individual producer were illegal as well as other collusive behaviors such as price fixing for buying price of fresh meat.

The paper also analyzes the key characteristics of these very specific food chains in order to better understand these markets and to discuss both decisions. It is argued that the IAA has taken its decisions more on a 'per se' approach, which in these cases seems to be inappropriate. A more detailed economic analysis, together with the adoption of a 'rule of reason' approach would have suggested different and to some extent opposite decisions.

Moreover, the analysis shows that the actual functioning of these markets is not able to stimulate economic agents of these food chains to properly coordinate their production activities in order to reduce or eliminate the cyclical trends of quantity and wholesale prices, which have negative effects both on agricultural and industrial producers and on consumers.

1. Introduction

Two recent cases of intervention by the Italian Antitrust Authority¹ (hereafter IAA) on the agricultural sector, both dealing with high quality and well known food products, received a great attention: these decision referred to two famous kinds of cheese, ‘Parmigiano-Reggiano’ - the ‘true’ parmesan cheese - and ‘Grana Padano’, and two aged hams, ‘Prosciutto di Parma’ and ‘Prosciutto di S. Daniele’. All these products have been assigned the ‘Protected Designation of Origin’ (PDO) according to Regulation n. 2081/1992 of the European Union (EU) and the problems under investigation were very much the same: basically the total supply programming and the application of a production quota system at the individual firm level by the ‘Consorzi di tutela’ (hereafter CDT), organizations established by national law in order to protect these quality products from imitation, to promote their consumption, and to facilitate the market equilibrium between demand and supply.

In both cases it has been argued by the IAA that the existing agreements aimed at programming total supply for each product by means of quotas applied to each individual producer, as well as other collusive behaviors, namely price fixing for buying price of fresh pork meat and an agreement for market sharing between the two ‘grana-type’ cheeses, should be considered illegal.

While previous intervention of IAA in the agricultural and food sectors did not generate much discussion, in this case there has been a strong confrontation between farmers, farmers’ organizations, food firms associated into these CDT and, of course, the IAA.

In this paper we will introduce, first, EU and national competition policies trying to explain the specific application to the agricultural sector. Next we will analyze the two cases mentioned above followed by a detailed description of some interesting and peculiar characteristics of these food chains. Based on these analysis we finally try to derive few ‘lessons’ for the future.

2. Competition policy in the EU and in Italy

The general objectives of EU competition policy are not defined too precisely: in particular, the objective stated in article 3 of the Treaty is that of “ensuring that competition in the

Common Market is not distorted”. The EU approach tends primarily to contrast the abuse of market power and is relatively unconcerned with monopolization as such; EU competition policy acts both against the restriction of competition and the abuse of market power.

In particular article 85 of the Treaty of Rome prohibits restraints which fix prices, limit or control production, markets, technical development or investments, share markets or sources of supply, apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage, make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts. It has been implemented not so much on a case by case basis, but rather on a per se approach to enforcement.

The Commission can initiate investigations when a complaint has been made by an interested party or where the performance of an industry gives reasons to suspect an unlawful practice. Since 1970 it has been established that an agreement between firms is not prohibited by article 85 if its effects on competition and trade between member states is insignificant in terms of combined market share of participating firms in the product concerned or in terms of aggregate turnover.

Article 86 concerns the abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it in so far as it may affect trade between member states. Such abuse may in particular consist in directly or indirectly imposing unfair purchase or selling prices or unfair trading conditions; limiting production, markets or technical development to the prejudice of consumers; applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature, or according to commercial usage, have no connection with the subject of such contracts.

In Italy the antitrust legislation is very recent: only in 1990 the law n. 287 introduced these issues at the national level and created the IAA. The Italian competition law closely refers to the contents of articles 85 and 86 of the Treaty, with regards both to concerted restrictive practices (art. 2) and abuse of a dominant position (art.3). The law also regulates mergers, takeovers, public undertakings and monopolies. The Italian law applies to those cases that are

¹ ‘Autorità Garante della Concorrenza e del Mercato’.

not within the limits of the EU law: in other words, national laws are subordinated to the common law.

In many cases, the necessity of a reduction in the costs that a complete “case by case” scrutiny would involve, led national authorities to grant certain industries and business activities exemptions from antitrust intervention; this procedure creates codes of conduct that can increase the credibility of the policy and limit the discretionary power involved in the Articles (George and Jaquemin, 1990).

For example in the US, probably the country with the oldest antitrust legislation, the Congress granted exemption to labor unions, export cartels, agricultural cooperatives, regulated industries and some joint research and development ventures. With particular reference to agriculture, the Capper-Volstead Act of 1922 authorized agricultural cooperatives to market their commodities collectively, and the motivation was to permit the cooperatives to offset the bargaining power on the demand side of the market, where large buyers were grouped in concentrated food industries.

In the EU, the application of competition policy partly rely on “rule of reason” criteria, mainly for the high cost of individual cases assessment. Therefore, the instrument used to recognize the benefits of some restraints to competition in particular industries and businesses is their exemption from the general application of articles 85-90 of the Treaty. These can take the form of block exemptions, applied to all the cases regarding subjects of a particular business or industry², or case by case exemptions, when single cases are assessed. Concerning exemptions under Art. 85, these imply a trade-off between an increase in market power on one hand and efficiency gains on the other. Given the difficulties in assessing efficiency gains, if the agreements under inquiry eliminate competition substantially they will be condemned.

Since the Italian law is basically subordinated to EU legislation, also the decisions of the IAA should rely quite strictly on the past experience at the EU level; this should be true also for the very limited national experience.

Article 4 of the Italian law entails the possibility of limited time exemptions for those practices prohibited in article 2, but determining improvements in supply conditions with a substantial benefit to consumers, taking into account also the need to assure firms the necessary

² Some examples of block exemptions under specified conditions are: bilateral exclusive distribution agreements, bilateral exclusive purchasing agreements, bilateral patent licensing agreements, bilateral know-how licensing agreements, selective distribution, specialization agreements, research and development agreements, bilateral franchise agreements.

competitiveness in foreign markets and connected with an increase in production or with a quality improvement in production itself or in distribution or with technological progress. From this article is not really clear if should be allowed only practices which determine one or more of the above effects, or only those practices which cause an overall improvement in economic efficiency.

The problem of exemption becomes particularly relevant for those industries traditionally protected from antitrust considerations where most of the times presumed anticompetitive practices are necessary to counterbalance the market power weaknesses of producers, such as for farmers associations or other forms of cartelization in agriculture.

3. Competition policy and agriculture in the EU

With particular reference to agriculture, competition policy is applicable to agriculture taking into account the objectives of the Common Agricultural Policy (CAP) set out in art. 39 of the Treaty: in fact most of the instruments of the CAP would not be applicable if the common rules on competition were applied.

Moreover, in the light of the structural weakness of agriculture in terms of market power with respect to its counterparts, both upstream and downstream, Council Regulation n. 26/62 goes beyond the exemptions granted for the application of the CAP, specifying that "...the rules on competition relating to the agreements, decisions and practices referred to in Article 85 of the Treaty and to the abuse of dominant positions must be applied to production and trade in agricultural products, insofar as their application does not impede the functioning of national organizations of agricultural markets or jeopardize the attainment of the objectives of Article 39 of the Treaty...", but also granting explicitly two exemptions (Art. 2). The first to "...agreements, decisions and practices...as form an integral part of a national market organization or are necessary for attainment of the objectives set out in Art. 39 of the Treaty...". The second to "...agreements, decisions and practices of farmers, farmers' associations, or associations of such associations belonging to a single Member State which concern the production or sale of agricultural products or the use of joint facilities for the storage, treatment or processing of agricultural products, and under which there is no obligation to charge identical prices, unless the Commission finds that competition is thereby

excluded or that the objectives of Article 39 of the Treaty are jeopardized.”

The regulation also specifies that “the Commission shall have the sole power, subject to review by the Court of Justice, to determine...which agreements, decisions and practices fulfill the conditions...”

Therefore, it is obvious that the Commission considers the gain in market power which farmers’ associations imply non detrimental to market efficiency, but rather a partial solution to the loss of efficiency that asymmetries in bargaining power, such as an oligopsonistic market, entail.

The activity of an antitrust authority in advanced market economies is usually justified as a remedy for market failure. In particular, antitrust enforcement activities are classified by the types of market failures considered: barriers to entry refer to collusive practices, for example to monopolies or the attempt to monopolize with significant sunk costs; exclusionary practices, such as tying and predatory prices, are often described in terms of externalities; vertical restraints and unfair practices represent contractual responses of firms to the problem of internalities in inter-firm transactions.

All these practices affect the degree of market competition and in many cases reduce the degree of economic efficiency, but is also true that in some cases there may be efficiency benefits from practices like vertical contracts or even cartelization of individual firms.

Therefore, the administration of antitrust appears to be extremely difficult: only few anticompetitive practices can be judged illegal “per se”, while in most cases the authority should act following a “rule of reason”, trying to assess costs and benefits of the practices adopted. Economic efficiency, i.e. an efficient allocation of resources, should be the main objective in antitrust decisions.

Generally farmers benefit from a sort of immunity from antitrust law, and therefore can improve their supply conditions on the market with respect to the competitive marginal condition, relying on some sort of collusive behavior which allows them to acquire some monopolistic power. This behavior can be simply a concentration of individual productions with the objective of negotiating collectively the production of all participants, but sometimes may include extra commitments such as minimum quality standards and individual production limitations. However, whenever farmers’ associations involve the majority of producers of a particular agricultural product, there could be a tendency to monopoly pricing, with effects on welfare distribution and efficiency.

One problem for antitrust authorities is therefore to decide how far the exemption for “weak” industries should go, taking into account the negative effects on consumers and on those producers voluntarily acting independently from the association.

But another problem seems to emerge from recent experience: which sectors should be partially or totally exempted from antitrust regulations?

Initially the idea was to protect undifferentiated agricultural commodities from adverse market conditions, but many other related sectors, usually downstream, experience the same weaknesses. Global competition on one side and structural surpluses of agricultural products seem to be the main reasons for the recent de-regulation of agriculture: distortions of competition in a protected agriculture have allowed inefficiencies at the farm level and along marketing chains, for example impairing an adequate degree of scale economies and consequently cost reduction.

But is also true that the agrifood sector as a whole is not unaffected by competition laws: in most cases exemptions are limited to agricultural productions or sometimes extended to primary processing, and do not affect upstream and downstream agrifood industries.

Moreover, in order to be exempted from the application of antitrust regulation, in most cases farmers’ associations must be cooperatives: private companies are therefore excluded.

Nevertheless, strong restraints such as cartels and market sharing are usually prohibited even in agricultural sectors.

The general rule the European countries seem to adopt towards the treatment of anti-competitive practices in agriculture is to closely monitor the behavior of large cooperatives and associations, limiting for example price fixing and market segmentation, generally preventing explicit cases of abuses of market power.

A recent OECD consultant’s report examined the sectoral coverage, scope and enforcement of competition policy in twelve countries, giving evidence of a number of country-specific examples of exclusions, partial exclusions and special rules within the agrifood sector, especially addressed to horizontal marketing arrangements by agricultural associations and cooperatives (OECD, 1996).

For example, Germany exempts coordination in production and sale (price fixing is excluded) and retail price maintenance is permitted only in particular circumstances; in Sweden competition law does not apply to agriculture and horticultural producer cooperatives, although some forms of price collusion and abuse of dominant position are prohibited. Special

competition legislation for the food sector was introduced as part of a comprehensive reform of agricultural policy, with restrictions regarding vertical price collusion, market segmentation and unregulated marketing boards, but cooperatives with a market share lower than 60% were exempted; in the UK several marketing agreements between members of agricultural associations are allowed, but are constantly monitored by antitrust authorities.

We believe that this approach, which entails general exemptions for agricultural associations and the prohibition of excessive monopolistic power, is basically correct: it guarantees an adequate degree of competitive efficiency on one hand and the benefits from collective bargaining on the other hand.

The Italian case seems to be somehow confused: as mentioned before, the Italian law refers to the EU legislation, but the national law does not consider any specific provision or exclusion for the agricultural and agrifood sector. Moreover recent cases seem to demonstrate that the IAA follows quite strictly a “per se” approach, without explicitly accounting for the structural weaknesses of agricultural sectors.

4. Some key characteristics of the two marketing chains under inquiry

4.1. Market structure and bargaining power

Both chains considered here, “grana-type” cheese and aged hams, present a number of similarities which need to be identified and described first, in order to understand how the chains work and how economic agents at different stages interact.

First of all it is important to note that at the stage of production of the agricultural raw material, respectively milk and heavy pigs, the realization of a desired adjustment of the quantity produced cannot be instantaneous but is strictly determined by the biological features of production: in the case of milk it is required to increase the number of milking cows and this requires 9 months at minimum; also the production of the “heavy” pig (160 kilograms of live weight) required for production of quality hams takes at least 9 months, if the proper (in terms of quantity and quality) piglets are available, at the beginning of the production process. The first industrial processing of the agricultural raw materials takes place in a very short time: the cheese making activity and the slaughtering activity last, technically speaking, only few hours. After this very short stage there is a phase of preparation of the fresh products for the

long aging period: using different and specific technologies salt is added both to the fresh cheese and to the fresh ham. For both products the aging period lasts from a minimum of one year up to two years and more.

For both chains market structure at the level of agricultural raw material is typically highly competitive: a high number of relatively small producers produce a relatively homogeneous product, and all producers are clearly price-takers.

In both cases the primal agricultural product represents a very specific input: other uses do not allow to obtain a price high enough to cover the higher production costs due to the specific quality requirements for these PDO food products.

The market structure of the first stage of the industrial processing, with dairy plants and slaughterhouses, is quite different in the two cases. With reference to cheese production there are many firms (few hundreds) both for 'Grana Padano' and for 'Parmigiano-Reggiano', even if production plants are bigger in the first case, most of which are privately owned, and smaller in the second one, where they are mostly cooperative.

Pig slaughtering activity is already more concentrated and this phenomenon is still growing. Of the about 2,000 plants, only 25 slaughter more than 100,000 heads/year; the concentration ratio of the first 8 firms (CR8), measured as value share on total sales, grew from 24.3% in 1993 to 26.5% in 1995. Notwithstanding this increase in concentration, there is not any clear and strong leadership among these 8 firms: the market share is only 6.5% for the national leader (Europork, of the Cremonini Group); the follower's share is only 3.4%.

The following stage of these two chains is made, respectively, by cheese seasoners ('stagionatori') - they buy fresh cheese, age it for few months and finally sell it to retailers -, and by ham seasoners ('prosciuttifici'), producers of aged hams.

In the case of cheese this has been generally considered, by economic agents along the chain as well as by economists, the strongest point of the chain, in terms of market power, for many reasons. First of all the number of buyers (seasoners) is much smaller than the one of suppliers; secondly they have more information on downstream prices and on the evolution of final demand than suppliers; the third reason is due to the fact that these buyers generally have a stronger contractual and economic competence compared to cheese makers, and this allow them to obtain better contractual condition.

In the case of PDO hams, this stage of the chain is the most important: a great part of the final quality of the ham depends on knowledge and skills of seasoners, together with the quality of

the environment where the aging process takes place. Historically they began buying fresh meat and selling, after more than one year, the final product; besides workers' skills, a large amount of capital is required. Today an increasing share of hams are not owned by uphill producers: other economic agents, basically speculators, buy fresh hams and simply pay seasoners for they work; this is a way of reducing financial exposure and risk.

4.2. Price cycles: causes and effects

Besides many other characteristics, these products, PDO 'grana-type' cheeses and PDO hams, traditionally present cyclical behavior of prices (especially at the wholesale level), production and supply. This behavior has been with reference to the market of 'Parmigiano-Reggiano' (Rizzi, 1980) and 'Grana Padano'; a cyclical behavior is well known also in the other case, i.e. with reference to production of certified hams. As already mentioned, the market of grana has been characterized by production cycles about 6 years long since 1950.

In both markets price and production cycles have relevant and generally negative effects on production activities. There a few explanation of these cycles: in the case of 'Parmigiano-Reggiano' cheese, for example, Rizzi (1980) showed how middlemen could benefit from a collusive behavior by keeping prices of fresh cheese lower using their market power; another explanation is simply based on a modified cobweb model. Few characteristics of these markets, particularly of the grana cheese market, have been already empirically tested. First of all there is strong empirical evidence that the supply function of grana cheese presents a very low elasticity and is asymmetric (Rizzi 1980). This condition, on one side makes it difficult to realize a quick adjustment of supply in order to reduce the excess supply in the short run. On the other side, final demand tends to be much smoother than supply. Another characteristic is that mark up at the retail level is negatively related to changes in wholesale prices and is asymmetric: i.e. when wholesale prices increase, margins tend to decrease but the opposite is not true to the same extent; this asymmetric response seems due to characteristics of final demand but also to an inefficient behavior of the retail distribution system. In presence of lower wholesale prices due to excess supply, this asymmetry does not give to consumers any incentive to increase their consumption level, since retail prices do not decrease (or decrease only slightly). This lower level of consumption determines an increase of the time required for recovering from the excess supply.

Therefore not only the traditional cobweb model would be at work in this case but, according

to this hypothesis, also this double asymmetry, together with the lag in production response to price changes, would be responsible of generating and maintaining these cycles.

As shown, these cycles may cause the economic sub-systems of these products to be economically inefficient both from the producers' and consumers' point of view, as well as in terms of social welfare.

The effects on farmers are clearly negative: in both chains they represent the weakest ring given their high number and small size, the relative homogeneity of their agricultural products, and given the much smaller number of buyers they deal with. Therefore they must accept the price and, since their products are either highly perishable (fresh milk) or without other economically profitable uses (heavy pigs), if an excess supply occurs they also bear heavy losses as a consequence of the higher bargaining power of buyers. When crisis due to excess supply occur in these markets, farmers, as well as dairy firms and ham producers, often risk bankruptcy and sometimes they experience it.

From a consumer's point of view, when wholesale prices go down there is no way of obtaining better retail prices: retail prices tends to move only upward or to remain stable. Retailers in both chains, and middlemen especially in the case of grana cheese, may benefit from their economic activity obtaining extra-profits.

The high risk characterizing middlemen's activity, together with the high capital intensity required, partly explain higher profits. This is not true, however, in the case of retailers: traditional retailers used to gain from their relative (and local) market power and from generalized inefficiencies partly granted also by a legislation against large distribution chains and large retail outlets.

In the last few years, however, many changes have occurred to the Italian distribution industry, and mostly to food distribution: a dramatic change in this system has created and is still creating a great increase in competition between traditional retailers and modern large retailers, as well as among large distribution chains. This fact is changing the competitive environment for all economic agents of these food chains but no specific analysis has been undertaken yet.

A relevant aspect of this change could be the increased competitive pressure exerted by larger retailers on their suppliers of grana cheese and PDO hams. This would reduce any possibility of extra profits for these suppliers while requiring them to supply new services as, for example, new packaging, new logistic services, in-store promotion activities, etc..

But the most relevant change could be, according to what has been previously discussed, the one regarding the new competition among retailers: the Italian food distribution is evolving to a more competitive market structure, where localization becomes less and less important, and where prices, quality and services become, instead, more and more important. In this new competitive environment price competition among retailers has greatly increased for all products, and most of all for high quality products which may have a positive effect on the image of the whole store or chain.

Another aspect of crucial importance for these markets is the growing importance of products of the same type (grana-type cheese and hams), but characterized by lower quality and much lower price at the retail level than the original ones; while these substitutes have been present on these market since a long time, in recent years they have gained a new relevance for several reasons. In the case of grana cheese, for example, the very high competitive pressure already present in almost all other market segments for dairy products, together with the slow but increasing diffusion among consumers of information on these products (Parmigiano-Reggiano and Grana Padano) also outside Italy, are creating new economic condition and opportunities for imitation (and even bad imitation).

In the case of PDO hams, instead, there are problems due to substitute products: besides competition among national PDO hams (Parma, S. Daniele, Berico Euganeo, Modena), at the domestic level there is also an increasing competition from other non-PDO hams often produced by the same producers of PDO hams; this is true mostly in the area of “Prosciutto di Parma”. In many cases, in fact, the same ham producers produce both PDO hams and non-PDO hams in order to better exploit economies of scale in production and distribution, especially in the last few years, when the new technologies in terms of control of the aging process and movement of hams inside the store houses require new investments, larger than in past years. Producers are in fact transforming this activity in a more capital-intensive one. Moreover, the lower costs for the non-PDO fresh ham due to lower quality requirements, and a faster aging process, allow producers to reduce both risk and capital requirements, by means of a faster product turnover.

4.3. The issue of quality control and quantity management

One of the most important reasons for developing forms of vertical and horizontal coordination, is quality control (Streeter et al., 1991). One characteristic of PDO products

deriving explicitly from the EU regulation is the requirement of strict regulations for quality control from the agricultural raw material to the production of final food products.

It is clear that without a quality control system involving the entire chain, there is not the possibility of assuring the desired quality to final consumers, therefore extracting consumer's higher willingness to pay for these "quality" products.

On the other side, this under-specification of quality parameters at all stages of the distribution chain does not allow to reduce the inefficiencies characterizing these chains: when a food product require such a long aging period and when the aging activity is so delicate because of the biological maturation activity, the reduction of the 'low quality' risks can be obtained through a better definition of quality, keeping it constant and possibly improving it over time, improving the profitability in these chains by significantly reducing losses, gaining and maintaining a better reputation, and reducing overall production costs therefore improving the competitive position towards cheaper substitutes. This quality control activity requires a clear definition of proper parameters at all stages and therefore a strong coordination activity along the whole chain.

If the quality control issue is already under the attention of agents of these chains, the same is not as true, from an operative point of view, for the issue of quantity control.

Producers' organizations in both cases (cheese and ham) tried to control the quantity of product produced each year through form of "self regulation" but without much success. The persistence of cyclical behavior of production and prices in both markets shows that this regulation has not worked well enough. One of the reasons is certainly due, at least in the case of grana cheese, to the impossibility of formally limit and control the total quantity produced by all producers, giving the (insufficient) power formally pertaining to producers' organization. In both chains producers tend to consider only a short-term view of market opportunities: this implies that when market prices are high the supply response is too high. As already shown, due to these differences in time length of the different production phases, producers and other economic agents tend to react to price signals in different ways and intensities; this fact contributes to the generation of cyclical behavior of prices and quantities through the whole chains.

Even if these behaviors could have benefited, in the past, some agents of the chains (e.g. middlemen in the case of cheese), this does not seem to be true anymore: the increasing market power of large retail distribution chain is already putting a strong pressure on these

middlemen leaving them no more room for speculative behaviors. This change in the retail distribution could also reduce asymmetric price response at the retail level; this new behavior, and/or the reduction of the speculative component in the previous stage, could generate new incentive and the necessity of quantity control all over the chain. Supply and price instability, in fact, could become even more dangerous now for the whole chains than in the past, given the increasing pressure by substitute products: more industrialized production of basically standardized substitutes do not present any of these problems.

The implementation of possible solutions requires also the solution of another issue: the collection and diffusion of market information.

This seems to be one of the most important and neglected institutional aspects with respect to these markets. Missing or inefficient information refer to several aspect of the market: price formation at different levels along the chain (excluded, perhaps, the final consumption level), overall production of PDO products and their more direct substitutes with a frequency higher than the yearly one, information about stocks of aging products, detailed information about consumption in domestic as well as international markets.

If this information is relevant for all markets, they are even more important for these products with a very long aging period

5. The anticompetitive behaviors under assessment.

The two recent cases refer to grana-type cheese, 'Parmigiano- Reggiano' and 'Grana Padano', and to two aged hams, 'Prosciutto di Parma' and 'Prosciutto di S. Daniele'.

In both cases (cheese and ham) two were the PDO products under investigation and two the anti-competitive behaviors under inquire. In the case of ham, the older one, the two behaviors under investigation were: the decision of producers of the S. Daniele ham to dramatically decrease their buying activity of fresh pig legs when their price exceeded by more than 5% a predetermined price ceiling; the second one, applicable to both Prosciutto di Parma and Prosciutto di S. Daniele CDT, was the limitation of output by means of production quotas for individual producers.

In the case of 'grana-type' cheese the investigation started later on, also because the one about hams was still proceeding, and the two behaviors under investigation were again the limitation

of output with the definition of production quotas for individual producers, and a market sharing agreement among the two CDT.

The common practice is a typical case of quantity setting among cartel members. Several are the questions that should be addressed in order to assess the possibility to prohibit this behavior, unless the authority decides to judge it illegal 'per se'.

For what reason is a total quantity ceiling set?

Are individual decisions affected? Is the degree of market competition effectively impaired? In other words, is the new market price a monopoly price? What consequences this behavior has on welfare?

The Italian antitrust authority, according to art.2 of the law n.287/90, declared illegal all practices under investigation for restricting competition among Consortia members and/or for producing negative effects on suppliers of agricultural raw material (heavy pigs and fresh pig legs) or on consumers (through high prices).

While there has not been any strong defense of the market sharing agreement by the two Consortia operating in the cheese market, as well as of the buying price agreement among producers of S. Daniele ham, all Consortia, both in the cheese and in the ham market, asked for exemption from legislation n.287/90 for the quantity limitation measure, which, in their opinion, was due to the necessity of preserving an adequate quality level: in any case, producers have the possibility of producing more than the quota, simply marketing their product as undifferentiated, without the PDO designation of origin seal.

What is the optimal producer's choice without quotas? Generally cartels are not stable if the market has many small firms, like in parmesan cheese production. Individual firms have incentives to cheat by increasing output until the optimal condition for perfect competition is respected, since no firm individually affects price (Spulber, 1989, p. 470). In this case market efficiency is maximum and cartelization is not binding. In the case of the consortia, penalties were provided in order to enforce the quotas: in principle this should lead to a monopoly situation with a stable cartel, and therefore it should not be allowed. Nevertheless, in the specific case price observation seems to indicate the usual cyclical movements typical of the parmesan cheese markets without any increasing trends towards a monopoly price. This may indicate either a planned total quality higher than the monopoly optimal one or the fact that this production planning system did not work properly: in fact looking at the effective and planned production data, this two factors are clearly both at work, with a slight attempt to

reduce production with decreasing prices, probably well below the desire of the Consortia, but with an effective production different from the Consortia production plans.

This indicates that the objective of the consortia was not to gain monopoly rents but rather to stabilize the market avoiding periods of surpluses or shortages in supply and also that the implementation of the production planning has been quite poor.

The key factors for a correct evaluation by the antitrust authority are the assessment of the effective degree of monopoly power, where several measures are presented in the literature (Bain, 1941; Schmalensee, 1982) and the benefits to producers and consumers. The main reason against market power is that a restriction of output, below the point where marginal social willingness to pay equals marginal production cost, yields avoidable welfare losses. If a significant degree of monopoly power is not detected, most of these losses are avoided. Even if some degree of market power is present, this may create positive effects in terms of efficiency and welfare, such as a better quality control system, higher investments in technology and reputation, and so on.

Quality control may represent a good reason for limiting production: the strict milk quality standards which the cheese production prescribes may be found only in a limited quantity of the milk available, and high costs of quality monitoring on final products may justify restrictions at the production level; the same is true for fresh pig legs. Moreover, free riders may try to increase profits lowering quality and reducing costs: this behavior also presents a secondary negative effect: lower marginal costs imply higher individual quantities, with a consequent worsening of market cycles.

Therefore, if both Consortia had applied a clearer production planning system motivating exactly to the members the reasons why the planning was necessary, the defense of their position would have been easier. Unfortunately in the letters denying quota increases to the members, milk quality preservation was never mentioned. Moreover, the definition of quotas should take into account both demand trend and individual production condition, the first in order to plan the total supply level, the second to avoid a decline in quality standards and adverse selection problems.

It should also be emphasized that a stabilization of market conditions has positive consequences on economic efficiency, and that the respect of quality standards improves consumers' welfare in several ways and avoids free riding phenomena.

With reference to the market sharing agreement between the two consortia, it is clear that this

practice is illegal per se: the two consortia have the almost complete control of the relevant market, and therefore it would imply an effective monopolization of the industry.

However, it is also clear that usual contracts do not seem to be able to stimulate economic agents of the production chain to properly coordinate their production activities in order to reduce or eliminate a cyclical behaviors which typically affects production and prices of these products. This failure seems particularly dangerous for products characterized by an unusual length of production processes. In these cases there is a strong risk for many firms of loosing too much during the “lows” of the cycle and to disappear from the market; during the “highs”, in fact, a strong competition exists between high quality products (with high prices) and low-quality imitations.

6. Conclusions

In this paper, after a presentation of EU and Italian antitrust legislation with specific emphasis on its application to the agricultural sector, we have discussed two recent cases, both dealing with high quality food products identified with the Protected Designation of Origin label, i.e. the status granted by EU regulation n. 2081/1992.

These two very similar cases suggest the following considerations.

- (1) In our opinion, in these two cases, the Italian Antitrust Authority showed both its scarce experience and its insufficient ability in the elaboration of a complete and sound economic analysis with reference to specific and somehow unusual markets such as those under investigation.
- (2) Moreover, it seems that the IAA was more interested in trying to demonstrate that the behaviors under investigation were illegal ‘per se’ than in analyzing if they were useful in order to achieve an higher level of economic efficiency and social welfare; in other words, the IAA has been more interested in the juridical aspects than in the economic ones.
- (3) Both IAA and producers’ organizations (CDT) have been unable to distinguish between clearly unacceptable practices, for example the agreement between producers of ‘S. Daniele’ ham for controlling buying price of fresh pig meat, and other acceptable and possibly useful practices, such as the control of total supply.
- (4) Both cases show that there is a deep lack of information with reference to production of

agricultural raw material (milk and heavy pigs), production of fresh cheese and ham, storage, availability of aged products, consumption, as well as prices at different market levels for different qualities. This lack of information has negative effects on cyclical behaviors of quantities and on prices, with negative effects both on consumers and on agricultural and industrial producers.

- (5) All four product marketing chains considered here show an insufficient degree of vertical, as well as horizontal, coordination. Farmers and many food firms still seem to operate in an old fashioned and excessively competitive way based on prices, not recognizing that the control and coordination of quantity and quality of high quality products require more cooperation than competition. In our opinion it is clear that both farmers and industrial producers, as well as consumers, suffer more than benefit from quantity and price cycles.

References

- Bain J.S. (1941), The profit rate as a measure of monopoly power, *Quarterly Journal of Economics*, February.
- Canali G. (1996). Markup Pricing Asymmetry and Welfare Implications. Empirical Evidence for the Italian Hard Cheese Market. VIII^o International Conference of the EAAE, Edinburgh (UK), September.
- George K., Jaquemin A. (1990), Competition policy in the European Community, in: *Competition Policy in Europe and North America: Economic Issues and Institutions*, Harwood Academic Publishers.
- Gobbo F., Cazzola, C. (1996), La politica della concorrenza nell'industria agro-alimentare, *Rivista di Economia Agraria*, 51(3).
- OECD (1996), Competition policy and the agro-food industry, mimeo.
- Rizzi P. (1980). Il mercato del Parmigiano-Reggiano: una analisi di breve periodo. *Rivista di Economia Agraria*, (35), n.2.
- Rogora C. and Piedone P. (1995). Supply chain integration: strategie per affrontare gli anni 2000. *Economia & Management*, n.2.
- Sauvé L. (1995). Towards an Institutional Analysis of Vertical Coordination in Agribusiness. Paper prepared for NE-165 Conference "Vertical Coordination in the Food System",

Washington, June 5-6.

Schmalensee R. (1982), Another look at market power, *Harvard Law Review*, June.

Spulber D. F. (1989), *Regulation and markets*, The MIT Press, London.

Streeter D. H., Sonka S. T. and Hudson M. A. (1991), Information Technology, Coordination and Competitiveness in the Food and Agribusiness Sector, *American Journal of Agricultural Economics*, 73 (5).