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MANDATORY RULES IN CONTRACTS OF SALE OF FOOD AND AGRICULTURAL PRODUCTS IN ITALY: AN ASSESSMENT OF ARTICLE 62 OF LAW 27/2012

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Mandatory rules in contracts of sale of food and agricultural products in italy: an assessment of article 62 of law 27/2012

Abstract

In the last years European farmers have been facing two new phenomena: the asymmetric price transmission in agro-food sector and the decrease of agricultural value added. The European Commission denounced low transparency in trade relationships and frequent unfair commercial practices between firms and recognized the imperfect functioning of the agro-food supply chain.

Economic theories consider contracts as means coordinating entrepreneurs' decisions (e.g. times, quantity and quality of products, prices). Nevertheless, in some cases buyers may use them to improve and exercise their market power, for instance imposing vertical restraints. That is a typical situation in the European food supply chain, where highly concentrated sectors use their bargaining power against farmers.

During that time antitrust authorities and EU Member States have sought to solve the situation by appropriate competition policy measures. The law No. 27/2012 of 24 March 2012 introduced in Italy new mandatory rules regarding contracts of sale of agriculture and food products, aimed at increasing transparency in trade and shortening terms of payment.

Thanks to an holistic multiple-case study accomplished by interviews and direct observations, the article analyzes the effects that new rules caused in the Italian agro-food system.

Keywords: contracts, antitrust, agro-food chain, vertical restraints.

JEL classification Codes: Q13, Q18, L14

1. Introduction

The issue of trade relationships along the agro-food supply chain has assumed a great importance in the scientific and political debate, due to the recent exacerbation of two phenomena with strong social and economic impacts: the wide fluctuations of agricultural commodity prices during the period 2007 -2008, no doubt related to the gradual liberalization of the European agricultural market occurred in the last three decades (European Commission, 2008; Vasciaveo & Rose, 2010), and the asymmetric prices transmission along the agro-food supply chain, which has exacerbated the decrease of the agricultural value added (Ismea[1], 2012).

[1] Institution for agro-food market services. It is a public institute connected to the Italian Ministry of Agriculture and appointed to carry out studies, conduct researches and provide information on the production and marketing of food and agricultural products.

Faced with those challenges, European policy-makers have stressed the importance of contracts as agricultural policy measures aimed at ensuring a more equitable distribution of value along the agro-food supply chain. In that context, the Italian Parliament, according to the article 62 of Decree 1/2012, inaugurated a new season in contractual relationships between the agro-food supply chain actors.

The aim of the article is to provide an assessment of the first effects produced by the introduction of the mandatory contracts for the sale of agricultural and food products, empirically verifying the current theoretical framework by means of nine case studies.

The article is organized into four parts. The first contains a description of the measure under investigation and its legal framework. The second section analyzes under a theoretical point of view the issues of contracts, market power and anti-competitive practices in the agro-food system. The third describes materials and methods adopted to achieve the research objectives. Finally, the last part summarizes and analyzes the results of the empirical investigations.

2. Political framework

Article 62 of Law Decree No.1/2012, converted with amendments into the Law No.27/2012 of 24 March 2012, starts running from the 24th October 2012 It has introduced new rules in contracts of sale of food and agricultural products in Italy, successively better defined by the Italian Government thanks to the Implementing Regulation No.1/2012 of 24 January 2012.

That measure was strongly supported by Monti's Government and his Minister of Agriculture, Food and Forestry, Mario Catania, to face two serious problems well known to all players of the agro-food system: the decline of farmers' bargaining power and the spread of unfair trade practices.

2.1 The contents of the Article 62

The content of the article 62 may be briefly summarized in four obligatory rules, designed to regulate the contractual relationships between farmers, food processors and retailers:

i. use of written contracts;
ii. ban of unfair commercial practices;
iii. maximum terms of payment for perishable (30 days) and non-perishable goods (60 days);
iv. administrative sanctions for the violation of the above mentioned obligations.

The article 62 has therefore introduced the mandatory use of written contracts for the sale of food and agricultural products taking place in Italy, with the exceptions of those entered into with final customers or with other farmers and of the contributions made by shareholders farmers to agricultural cooperatives and PO. The written contracts should also contain the following elements:

- the duration (period of validity);
- the amount and the characteristics of the product;
- the price;
- the method of delivery;
- the form of payment.

The payments must be made within 30 days for perishable goods and 60 days for non-perishable goods, from the last day of the month in which the invoice is received. After that period the suppliers of agricultural and food products are entitled to interests on arrears, increased by 2%.

The article 62 offered for the first time, a thorough definition of unfair trade practices often adopted in the agro-food supply chain, as well as prohibited the use of some conditions of sale that are unduly burdensome. The Italian Antitrust Authority, with the support of the Italian financial guard[2], shall enforce these provisions and also impose the administrative sanctions[3].

2.2 Regulatory framework

The issue of trade relationships between agro-food firms has been already addressed by the Italian legislature. Article 62 must be considered as the natural culmination of a regulatory pathway started towards the end of the last century and should be therefore evaluated in light of the current regulatory framework.

In chronological order, the first measure aimed at introducing a protection for the weakest counterparties during contractual relationships was promulgated in 1990, when the law No.287/90 banned some anticompetitive circumstances that often had occurred in the markets, by establishing the Italian Antitrust Authority.

Some years later, in 1998, the legislature introduced a new rule to protect subcontractors activities, establishing form and content of that contract (payment terms, price) and defining the abuse of economic dependence (Jannarelli, 2008).

In 2000, the European Parliament and the European Council adopted Directive 2000/35/EC, which introduced the principle of maximum term of payment. Italy successively converted these provisions into Legislative Decree No.231/2002, establishing a term of sixty days for the payment of perishable foodstuffs.

Since 2008, the crisis of European agriculture has prompted the European Commission to promote a series of measures to improve the transparency of agro-food markets and boost the competitiveness of the primary sector, mainly spreading contracts and fighting against unfair trade practices (European Commission, 2008).

At the same time, the EU has updated the regulations against late payments through the Directive 2011/7/EU. That directive, pointed out the need for a decisive shift to a culture of prompt payment through appropriate instruments discouraging payments deferrals It has introduced a maximum term of payments of sixty days for contracts between businesses and has also made more advantageous the appeal to the judicial authority.

[2] The *Guardia di Finanza* is an Italian law enforcement agency under the authority of the Minister of Economy and Finance and part of the Italian armed forces. The Guard is essentially responsible for dealing with financial crime

[3] The law establishes penalties for the violation of the obligations mentioned above. In particular:
a) failure to comply with the obligations is punished with an administrative sanction between 516 and 20.000 Euros, commensurated with the value of the goods sold;
b) the implementation of prohibited practices is punished with an administrative sanction between 516 and 3.000 Euros, proportionated to the benefits received by the breaching party;
c) failure to comply with the terms of payment established is punished with an administrative sanction between 500 and 5.000 Euros, calculated in relation to the amount of frequency and the extent of the delay.

3. Literature review

3.1 Contracts

The contract is an organizational methodology of trade that allows the entrepreneurs of different and succeeding stages of production to coordinate their decisions (Galizzi, 1969).

The most important reasons to use contracts in agriculture are the incentives alignment, risk sharing, market power, efficiency gains and transparency improvement; these latter, in particular, seem to be the main engines of development of contracts (Vavra, 2009).

The contract theory spread in the late Sixties as reaction to the Walrasian archetype, according to which supply and demand determine the market equilibrium price (Brosseau & Glanchant, 2002). The literature detected a widespread need for a greater vertical coordination and considered contracts as a strategic mean to improve the competitiveness of the entire agro-food system and to contrast the unavoidable process of marginalization of the primary sector (Cesaretti et al., 1994; Sodano, 2004).

In the field of the neo-institutional theory, the transaction cost economics (TCE) has considered the contract as a hybrid form between the spot market and the vertical integration, i.e. a space of autonomy negotiations designed to create a sort of interdependence aimed at achieving a certain degree of coordination through formal or informal agreements that bind the parties to jointly manage some critical aspects of the production cycle (Cesaretti et al., 1994; Mariani & Viganò, 2002; Rama, 2010).

The fundamental contribution of Mighell and Jones (1963) offered an accurate classification of the contracts based on the business functions that they tend to coordinate and influence[4]. The authors identified as critical economic aspect of a contract not so much the price but rather the ability to impose a coordinative and organizational power, replacing other stringent forms of economic dominance.

3.2 Market power

Despite the economic literature recognized the well-known advantages linked to long-term contractual relationships, at the same time it clearly argued that the most vulnerable stages of the agro-food supply chain could have obtained superior economic results only if it had exercised market power (Rosa & Vasciaveo, 2013). The ability to acquire such a power is strongly influenced by the companies' market share and by the ability to differentiate their production (Saccomandi, 1999); last but not least, the exercise of market power is generally facilitated by the presence of dispersed and fragmented buyers or sellers.

That is the typical condition of the agro-food system in Europe, and in particular in Italy, where at the same time there are many farmers that are scarcely organised, few food processors and very few retailers (Sodano et al., 2010). That situation determines conditions for a continuous oligopsonistic exploitation, where purchasers tend to keep a wide range of suppliers so as to easily impose their economic and trade conditions, furthermore exacerbated by the decreasing importance of agricultural commodities in advanced post-industrial society where the demand for food products containing high levels of service has been increasing (Cesaretti et al., 1994; Malassis & Ghersi, 1996; Pecci, 2011).

Critics of TCE claimed that often the factor that induces the use of contracts is the market power, because dominant firms use contracts to exercise and extend such a power

[4] They identify five categories of contracts, taking into account the decisions that agro-food enterprises can transfer to the buyer (Saccomandi, 1991).

(Vavra, 2009). It follows that the contractual relationships for the provision of agricultural product (especially if fresh and perishable) are often relatively disadvantageous for farmers, as the industry, the wholesale and retail exploit their bargaining power to impose the purchase conditions, forcing the weakest parts to accept prejudicial conditions (Vettas , 2006; Pezzoli , 2011).

Looking at the inexorable process of concentration downstream in the agro-food chain, especially in the retail sector (Italian Antitrust Authority, 2007), the issue of protection of weakest parties is now more than ever serious and tangible. Currently, the Antitrust Authorities are trying to control the exercise of market power all over the world, as it creates losses in terms of efficiency and equity, although their work is not appreciated by ultra-liberals analysts who powerfully criticize any kind of intervention in the market (Sodano, 2004).

3.3 Anti-competitive practices

Some years ago, the European Commission denounced the main causes of the malfunctioning of the agro-food supply chain: the unfair trade practices. Those behaviours, well known in the economic theory as vertical restraints, are essentially referred to the agreements aimed at subordinating a trade relationship to certain commitments, whose anti-competitive effects (creation of entry barriers, abuse of dominant position) are difficult to be demonstrated (Motta, 2004). Despite the literature has traditionally considered vertical restrictions only in downward direction (Carlton & Perloff, 1997), i.e. imposed by the seller to the buyer, some economists recently observed that buyers (processors or retailers in the agro-food supply chain) often require special contractual clauses and payments with potential non-competitive effects, taking advantage of their market and bargaining power (Sodano et al. , 2010).

The evolution of that concept currently reflects the background of Antitrust policies in some European countries, including Italy, where for a long time have been stigmatized almost exclusively the anticompetitive practices dangerous for the final consumer (Jannarelli, 2008). Only recently attention has been paid to the potential anticompetitive effects caused by the exercise of buyer power, as effectively investigated by Clarke (Sodano, 2004).

The identification of unfair acts and practices in the relationships between buyers and sellers along the agro-food supply chain is only the most evident component of a tangled thicket of customs and habits that have determined an excessive imbalance of rights and obligations between the parties (MacDonald, 2006; Giangiulio & Mazzantini, 2010). Those practises have penalized the weakest parts of the agro-food system and, in time of economic crisis, have created high risk of failures and bankruptcies with serious anti-competitive effects.

4. Objectives, materials and method

4.1 Objectives

The analysis of the article 62 content, as well as theoretical statements found in the economic literature, allowed to develop the research hypotheses that the present work will have to verify and validate.

First of all, now are evident the reasons that prompted the legislature to promote with renewed force the use of contracts in agro-food supply chain. These reasons were related to the need to reaffirm the principles of transparency, competition, efficiency and competitiveness that earlier legislative measures had tried to introduce in trade relationships without any result. The

agricultural world has championed article 62 as a positive tool for farmers, aimed at imposing fair contracts to the counterparts (food processors and retailers).

On the contrary, the Government intention was not to use the contract as a means to strengthen the coordination decisions into Italian agro-food system – e.g. article 62 has not considered both typical cultivation contracts and other agreements such as the quasi-market agistment[5] contract. The article 62 did not act on the causes associated with the exercise of market power along the agro-food supply chain, but only discouraged the use of dilatory practices with potential distortive effects.

Such a premise permits to advance the research hypotheses. In fact, as the article 62 aims to promote the pro-competitive function of contracts rather than the coordinating and organizational ones, typically recognized by the economics literature, the following hypotheses are enunciated:

- the article 62 has not been producing appreciable changes in the exercise of market power by the most concentrated stages of the agro-food supply chain, so that buyers has been continuing to take advantage from these evident contractual imbalances to impose the prices of purchased products and also unfair practices potentially configurable as anti-competitive (hypothesis 1);
- the article 62 instead has been producing some tangible improvements in the financial condition of the weakest firms along the agro-food supply chain, due to the enforcement provisions on transparency and terms of payment (hypothesis 2).

4.2 Materials and methods

The most suitable method to verify the assumptions is the case study. This technique is particularly suited to the comprehension of real phenomena strongly influenced by contextual conditions. The use of the case study cannot provide any quantitative indication on the phenomenon analyzed nor may arrive at any statistical generalizations, which is why it should not be considered as an interview conducted in a classical survey and the dimensioning of the sample should be considered as irrelevant (Yin, 2009).

The research protocol mainly involves elaborating appropriate questions and making concrete and testable hypotheses. In light of the regulatory and theoretical framework, following research questions were formulated:

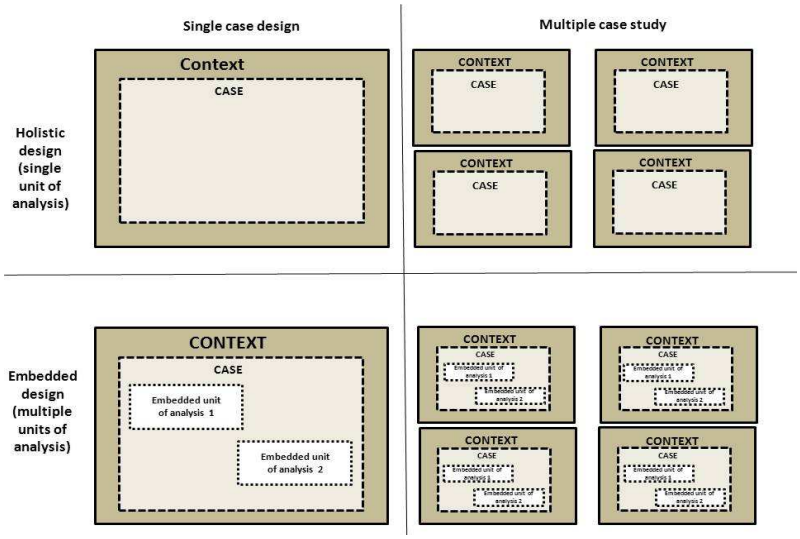
1) has the article 62 been increasing transparency in trade relationship of the agro-food supply chains?
2) has the article 62 been producing improvements in the financial management of firms supplying agricultural and food products?
3) how has the market power been continuing to manifest itself in the relationship between agro-food firms after the entry into force of the article 62?

At a later stage, the agro-food firm was identified as unit of analysis functional to carry out the empirical research. It resulted particularly suitable to this aim, since strongly involved in the changes introduced by article 62.

In the end, was chosen the most appropriate typology of case study to test research hypotheses: the holistic multiple case study (figure 1).

[5] In Italy called “soccida”.

Figure 1- Different case study research designs



Source: Yin (2009)

That choice requires to observe the performances of multiple units of analysis (agro-food firms) working in different contexts (agriculture, agro-food industry, agro-food retail) in order to ask the research questions and to test the validity of the assumptions.

The multiple case study follows a replication logic, with a research protocol completely similar to that used in a lab. The "pattern matching" is the most widely used analytical technique to achieve the final aim. Given *n* cases, the experimental design needs a literal replication, that consists of *x* cases where there is an absolute similarity of results, as well as a theoretical replication with *n-x* cases where different results are explained and justified by foreseeable circumstances. In conclusion, if the empirical evidences coincide, the results will reinforce the validity of the assumptions made and will confirm the theoretical assertions mined from literature.

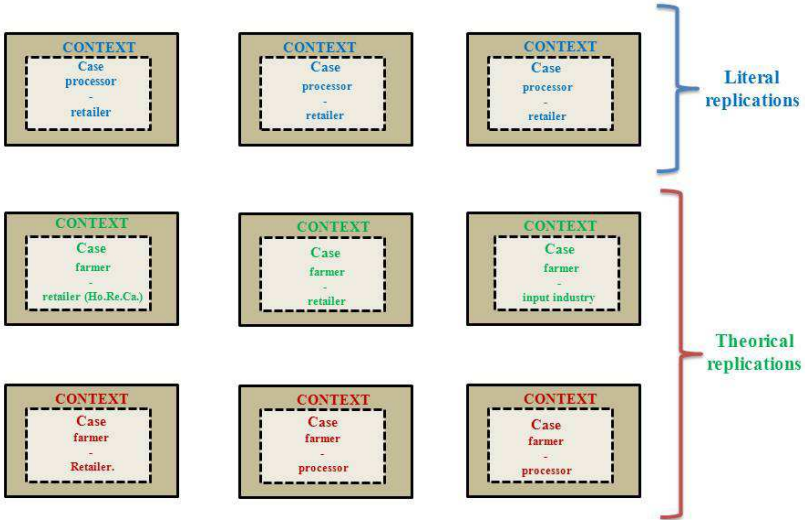
The paper presents nine case studies of firms operating in the Italian agro-food system, in order to describe the changes occurred after the entry into force of article 62 (figure 2). The literal replication deals with three cases and analyzes trade relationships between retailers and food processors, in particular:

i. a dairy processing consortium of cooperatives;
ii. an olive oil processor;
iii. a cooperative conditioning fruit and vegetables products.

The theoretical replication deals with the following six cases, that describe the changes occurred in trade relationships between farmers and retailers, between farmers and the agro-food industry, as well as between farmers and the agricultural inputs suppliers:

iv. a farm that produces wine and sells its products to the Ho.Re.Ca;
v. a farm that produces fruit and vegetables and sells its products to large-scale retailers and wholesalers;
vi. a farm with dairy cattle that sells its products to a dairy cooperative;
vii. a farm with beef cattle that sells alive cattle to a consortium of marketing;
viii. a farm producing rice (rice for processing, rice for seed industry and rice for direct sale);
ix. a farm that produces wheat seeds and sells them to a seed company.

Figure 2 – Holistic multiple case study: literal and theoretical replication

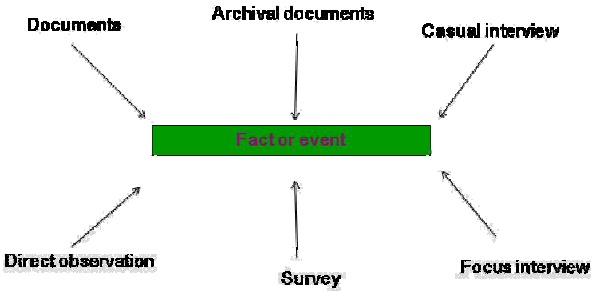


Source: Yin (2009)

The strength of the case study approach derives from the capability to obtain empirical evidences from multiple information sources. If these latter converge in the same direction, they will strengthen the hypotheses and realize the so-called "triangulation of data" (Yin, 2009). That triangulation (figure 3) occurs when all the evidences support the event or fact constituting the case studies. It's obvious, in fact, that multiple measurements of the same phenomena lead to a high quality final result.

The information gathering were carried out using two sources of evidence: interviews and direct observations. Both were conducted during the period January-March 2013, the first by means of focused interviews with owners and/or managers of agro-food firms and the second taking part in focused meetings with personalities and actors of the Italian agro-food sector.

Figure 3- Convergence of multiple source of evidence



Source: Yin (2009)

5. Findings

The section illustrates main results of the conducted case studies. Although in anonymous form, those descriptions allow to thoroughly answer the research questions, and to qualitatively test the enunciated hypotheses.

5.1 Literal replication

The first three case studies represent the literal replications, planned by the experimental design, which describe main changes occurred in trade relationships between agro-food industry and retailers after the entry into force of article 62.

The case A deals with a consortium of 70 dairy factories in the Po valley that has a turnover of more than 470 million Euros. It plays second processing and marketing of members' products (milk, butter, *Grana Padano*, *Parmigiano Reggiano*). With regard to trade relationships with the retailers (mainly Large scale retailers) the director of the consortium observed some positive effects generated by article 62 but also expressed doubts about its real influence on bargaining power. Moreover, the new administrative sanctions have determined a deterrent effect on delaying tactics often performed by retailers, improving the financial management of the consortium and increasing its cash flow. As a result, Large scale retailers reacted to the shortening of terms of payment by demanding to stop the payments of all debts to the consortium as well as to obtain better economic conditions in the supply contracts, which involved a price reduction of products purchased. In addition, the director expressed concerns about less organized retailers. In fact, he stated that new obligations on terms of payments could lead in a short while these activities (neighbourhood stores, small retailers), usually devoid of an effective system of cash management control, to closures or bankruptcies causing foreseeable negative impacts on trade relationships of consortium.

The case B is an agro-food firm of Central Italy with a turnover of 115 million Euros, that processes and packages olive oil and sells its production almost exclusively to the Large scale retail. The CEO expressed enthusiasm for the first effects of the article 62 in trade relationships with retailers, highlighting the main positive impacts on his firm. In fact, although large scale retailers continued to exercise their market power, the article 62 introduced essential elements of transparency in trade relationships and produced a greater respect of payment terms as well as their gradual shortening. The firm has been able to quickly benefit of the concrete improvement of cash flow management and successively the enhancement of liquidity allowed to strengthen its relationship with banks, in spite of the overall credit crunch. In fact, banks usually well evaluate the reduced uncertainty of payments terms to grant lines of credit and loans, notoriously necessary to permit firms' investments.

The case C, the third and last literal replication, deals with a cooperative firm in Emilia Romagna that packages and sells fruit and vegetables produced by associated members. In the Director's opinion the introduction of article 62 changed the behaviour of many retailers. In fact, before the entry into force of new mandatory rules, while some large scale retailers already made payments of supplies after no more than 60 days, there were other ones that frequently practised late payments. Overall, a moderate improvement of cash flow was observed thanks to the introduction of mandatory terms of payment for perishable products (30 days). On the other side, large-scale retailers reacted to the new mandatory rules trying to minimize the negative effects. For that reason, they started adopting conducts of doubtful legitimacy: requests for deferring the issuance of invoices in order to delay the payments and, at the same time, requests to obtain discounts and rebates on the supply contracts already stipulated. The Director denounced also some organizational difficulties to change the cooperative's administrative system, in order to ensure compliance with the new mandatory rules introduced by the article 62. The three literal replications described and explained what changes occurred in trade relationships between firms of two stages of the agro-food supply chain (industry and retail).

Table 1 summarizes the most important results obtained and synthetic answers to the research questions.

Table 1 – Empirical evidence from literal replication

	Case A	Case B	Case C
Research questions	**Dairy processing consortium of cooperatives**	**Olive oil processor**	**Cooperative conditioning fruit and vegetables products**
Question 1 – ***Did the article 62 improve transparency in trade relationships along the agro-food supply chain?***	Yes, in particular introducing greater certainty on terms of payment for my own products	Yes, making sure the terms of payment for my own products	Yes, to the detriment of some buyers who previously used to extremely defer terms of payment
Question 2 – ***Did the article 62 produce any real improvement in financial management of firms providing agricultural products and foodstuffs?***	Yes, thanks to the reduction of payments terms	Yes, there was an improvement in the cash flow greatly appreciated by banks	Yes, there was a moderate increase in short-term liquidity
Question 3 – ***How has market power been exercising in the relationships between agro-food firms after the entry into force of this rule?***	LSR has been reacting to art.62 both deleting all debts before 24/10/2012 and demanding better economical conditions in contracts (lower prices)	LSR has been continuing to exercise its power in the same way as before (deciding price and applying some unfair practices)	Yes, the LSR has been requiring the application of discounts on supplies, as well as it has been delaying the issue of invoices

In conclusion, each of the analyzed cases confirmed that article 62 on the one hand has improved the transparency of the relationships between the food industry and the Large scale retail, enhancing the suppliers' cash flows, but on the other hand it has not prevented the large scale retailers from exercising their market power by suspending all past debts and demanding lower prices to the suppliers as well as advancing illegitimate requests in order to delay times of payments.

5.2 Theoretical replication

Here below are described six case studies representing the theoretical replication of the experimental research design.

The case D concerns a farm that produces wine in Emilia-Romagna. It owns fifty hectares of vineyards and after the harvest all the product is directly processed. The wine is then sold to the Ho.Re.Ca channel (hotels, restaurants and catering). Before the entry into law of the article 62 many customers, due to the difficulties of the nationwide economic situation, used to remarkably delay the terms of payments: in some cases, products were paid even after 180 days. The entry into force of the rule produced a marked enhancement of payment times (and thus an improvement in cash flow), but at the same time caused a reduction in the average volume of orders. The reaction of the Ho.Re.Ca. operators appeared even more evident, because they previously bought quantities of wine exceeding the real needs in order to ensure regular stocks of product. In conclusion, the farmer observed a clear reorganization of the purchasing habits of the customers, whose orders are now more frequent but smaller in volume as well as a consequent reduction of wine sales.

The case E is about a group of medium and large size farms that produce fruits and vegetables and sell their products to Large scale retailers and the wholesalers at the Rimini's agro-food Centre. The Centre's director said that the new mandatory rules on contracts for the sale of agricultural and food products, thanks to the introduction of shorter payment terms, improved the financial condition of many farmers. Nonetheless, firms received at the same time requests of discounts from large scale retailers and wholesalers. In particular, large scale retailers tried to obtain the elimination of all debts preceding the date of entry into force of article 62 and also demanded a consistent reduction of fruits and vegetables prices.

The case F deals with a dairy farm that owns more than 450 hectares of utilized agricultural area near the Tiber river and provided the milk produced by 360 cows to a cooperative of dairy processor. Since article 62 does not apply to members' conferrals to the cooperatives, in that case the farmer did not observe any improvement in his trade relationships with the processor. On the contrary, the farm worsened the financial condition, as it was forced to shorten the payments of raw materials (i.e. feed) that were previously made after more than 90 days. In conclusion, in that particular case article 62 penalized the farm, because the cash flow was negatively affected by the changes determined in the relationships with suppliers of raw materials.

The case G is about a livestock farm of Ravenna which owns 350 hectares and keeps a herd of beef cattle with 200 suckler cows. It confers live cattle to the marketing consortium "*Vitellone bianco dell'Italia Centrale*", that commercializes only PGI beefs. Since the farm is member of the consortium, the article 62 did not applied to trade relationships between the two actors. Anyway, in that case the farm produces all animal feeds and raw materials, so there was not a worsening of the financial situation caused by the article 62 in the relationships with suppliers. For its part, the marketing consortium was able to shorten the recovery of debts, so improving the liquidity and shortening in turn the terms of payment towards shareholders. Consequently, the farm could benefited, even if indirectly, of greater transparency of trade relationships that article 62 introduced in the Italian agro-food supply chain.

The case H refers to a farm that harvests 160 hectares of rice in Lomellina (Northern Italy). It has three different marketing channels: agro-food industry, seed industry and short agro-food supply chain. Without dealing with the latter case, exempted from the application of article 62, the farmers anyway noted some tangible effects caused by the just mentioned rule. The farmers pointed out that his firm used to adopt sale contracts even before the entry into force of article 62, therefore since 24 October 2012 contracts have been incorporated in the transport documents or in the commercial invoices. The main effects was a positive impact on cash flows caused by the decreasing of the average time of payments received from purchasers, while no improvements has occurred in the relationships with the food industry. In fact, rice processors, using an expedient (e.g. subordinating the invoicing to the publication of a certain price list), postponed the issue of the invoices to maintain the same times of payment decided before the entry into force of article 62. The farmer, moreover, highlighted that the new mandatory rules increased the amount of the invoices issued, creating new management difficulties and a significant increase of administrative costs.

The case I, the sixth and last theoretical replication, is a farm of 120 hectares in Umbria, that produces and sells wheat seeds. The company uses a contract farming with a company operating in Italy, which provides certified seed of first generation and then purchases certified seed of second generation. The contract farming specifies a price related to the average quotation of the Commodity Exchange of Bologna for the period July-September, with

invoicing on September 30 and payment after 60 days from the issue of the invoice. Article 62 has slightly improved the terms of payments with purchasers, since the company did not fully comply with the terms before the entry into force of the rule. Nevertheless, the most significant effect caused by article 62 concerned the payments of the certified seeds of first generation. Before the introduction of the new mandatory rules, those payments were made after the production of the second generation seed, but the entry into force of the article 62 forced the farmer to anticipate the payments, worsening the farm cash flow and increasing its anticipated costs of production.

The theoretical replications described the effects that article 62 caused in agro-food trade relationships both downstream (agro-food industry and retailers) and upstream (agricultural input industry) and showed different results (table 2), well explained by the heterogeneity of analyzed contexts and therefore entirely predictable.

Overall, the second part of the experimental design confirmed that the article 62 has introduced relevant elements of transparency in the Italian agro-food system. In fact, except some administrative problems occurred, the article 62 have materially improved the financial situation of the agro-food firms that supply agricultural inputs, agricultural commodities and processed food, in many cases penalizing the retailers. At the same time, since the Large scale retailers are more organized and therefore able to exert a strong bargaining power towards suppliers, they had a defensive reaction aimed at reducing negative effects caused by new mandatory rules. On the contrary, weakest purchasers (small retailers and Ho.Re.Ca. operators), that earlier were used to defer payments, experienced financial difficulties that forced them to drastically reduce the orders.

Table 2- Empirical evidences from theoretical replication

	Case D	**Case E**	**Case F**	**Case G**	**Case H**	**Case I**
Observed cases	**Wine farm**	**Fruits and vegetables farm**	**Dairy farm (member of a cooperative)**	**Livestock farm (member of a consortium)**	**Rice farm**	**Seed production farm (contract farming)**
Question 1 – *Did the article 62 improve transparency in trade relationhipss along the agro-food supply chain?*	Yes, strongly shortening the customers payment terms	Yes, positively impacting on debts recovery	Yes, at the same time forcing the farm to comply with the payment terms of suppliers	Yes, but indirectly because it improved the terms of payment of the consortium	Yes, but only in one of the two marketing channels practiced	Yes, forcing the farm to comply with the payment terms towards suppliers
Question 2 – *Did the article 62 produce any real improvement in financial management of firms providing agricultural products and foodstuffs?*	Yes, because the crisis had led customers to extremely defer the terms of payment	Yes, there was a clear improvement of farm liquidity	No, since it only forced to anticipate terms of payment towards suppliers without creating any advantage in trade relationships with customers	Yes, but the farm improved its cash flow indirectly, since it is member of a consortium	Yes, but only towards the rice seed buyers	No, because it forced the farmer to anticipate some payments without creating advantages in trade relationships with suppliers

Question 3 – *How has market power been exercising in the relationship between agro-food firms after the entry into force of this rule?*	Ho.Re.Ca. operators have reduced their terms of payment	LSR removed all debts preceding the date of entry into force of article 62 and demanded discounts and price reductions	NTR[6], because the products are delivered to a cooperative	NTR, because the farm delivers products to a consortium	Rice processors firms found an expedient to maintain unaltered the terms of payment	Seed company has not modified the contractual conditions

6. Conclusions

The present work provided an evaluation of the first effects generated by the article 62 in Italy. The case studies allowed to verify the research hypotheses, formulated in the light of the theoretical framework. Literal and theoretical replications demonstrated that article 62 has introduced a greater transparency in trade relationships between agro-food firms with positive impacts on the financial management of agricultural and food products suppliers (farmers, food processors, agricultural input industry).

At the same time, the article 62 did not contrast in any way the exercise of market power by the most organized retailers, recognized as one of the main causes of the malfunctioning of the agro-food supply chain, that continued to take place in the majority of cases studied even after the entry into force of new obligatory rules. Indeed, these latter merely described a blacklist of unfair trade practices, without the aim to tackle the root causes of that problem, namely the scarce vertical integration and an inadequate coordination along the Italian agro-food supply chain.

In conclusion, the paper demonstrated that article 62 is mainly a purely pro-competitive intervention, aimed only at safeguarding the markets efficiency and the social welfare of the current European neo-liberal agricultural policies (Buccirossi et al., 2002 Russian, 2007). In the coming years, the improvement of trade relationships along the agro-food supply chain must be the main objective of the Common agricultural policy. It should provide new tools and resources to promote horizontal and vertical integration and rebalance the bargaining power along the agro-food system, so allowing the less concentrated sectors to take advantage of contracts (Cesaretti et al., 1994; Vavra, 2009; Giacomini, 2012).

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