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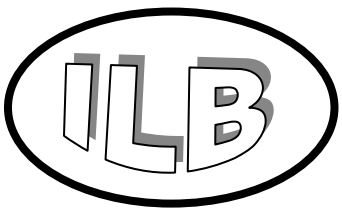

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Expectations, Experiences, Trust in the Case of Short Circuit Food Supply Networks

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Summary

Farmers Markets are receiving an increasing attention by both food chains actors and social scientists. Economic and sociological studies are contributing to the comprehension of these forms of exchange. Both consumers and producers are fostering their expectations about the renewal of a mode of exchange which sustained local production-consumptions linkages. The main economic function of these organizational structures seems to be the reduction of the price paid by the consumers and the enhancements of allocation of farm products. The basic interpretation of these forms of exchange focuses on market structure, nonetheless the exchange relationships seems to emphasize several dimensions, including economic and cultural aspects. The objective of the paper is of investigating the role of networks among producers and consumers in structuring and making viable the Farmer Markets as structures of short food supply chains. The basic idea is that the strength of Farmer Markets is the ability of satisfying the consumers expectations about a few characteristics of the products, entailing given cultural and economic aspects. The study argues that under this view the Farmer Markets may be thought of as a emerging form of production-consumption interaction. According to existing evidences it is suggested that the network is also the emerging forms of horizontal relationships among the producers participants to the markets. The paper aims at suggesting that basic types of trust act as key factor in structuring the networks and in promoting the stability of the market.

Keywords: *Farmers Markets, networks, trust, food chains sustainability*
JEL: *D4*

1 Introduction

The paper focuses network environments with dynamically evolving trade relationships (Fritz, Schiefer, 2008a) and recognizes that new forms of exchange are emerging which increase the variety of the relationships among the supply chain agents and which could contribute to enhance the degree of the sustainability of the Food Chains. Rural Sociologists argue that the emerging of new forms of exchange in Food Chains sustain a process on new institutionalization, mainly characterized by the shortening of the chains (Marsden , 2000; Renting, Marsdne, Bank, 2003). In this study we distinguish between network and chain according to Omta et Al. (2001): networks are intended as the total actors within an industry and/or between related industries, which can potentially work together to add value to the customers; chains are composed by the actors in these networks which vertically work together to add value to the customers. Notably, recent outcomes from the Sociology of Markets (Beckert, 2007) allow to bridge the sociological framework to the Organization Economics and to address the process of institutionalization by through the network principles of organization. The Farmer Markets are forms of exchange emerging within the context of the "short-circuit" organization of the food supply. Scholars have so far addressed several issues concerning the emerging and the coordinating activities of these forms. Within the richness of the various approaches, it seems to be recognized that a convergence exist about the idea that the Farm-

ers Markets are organizations of the exchanges whose emerging contributes to innovate the food supply systems. This innovation is variously conceptualised depending upon the stream of analysis, with emphasis on the factor determining the innovation of the outcomes of the process. Under a different perspective, the Farmers' Markets could be thought of as forms characterizing the local exchange space as a part of a more complex process of restructuring of the governance of the supply chains (Gibbon et al, 2008; Bair, 2008). Farmers Markets appear to be distinctive forms, among other, which contribute to the profound change of the food supply chains in Europe and North America. As fr the local exchange process, the change can be characterised by two aspects. Firstly a role is recognised the structured social context from where the markets emerge, and often this context is conceptualised in terms of local community. Secondly, the change is interpreted in terms of consequences upon the functional distance between the site of production and of consumption: the "shortening" of food circuits (Renting, Marsden, Banks, 2003) appears thus a common trait of several forms produced by the change process at stake. Without questioning this perspective, it seems necessary to look for an answer to the following question: why do farmers choice to associate themselves instead of individually exploit the opportunities of the spot market? In searching for answers to the previous question, the objective of the paper is to explore the impact of the network organization principles in the comprehension of the emerging of Farmers Markets. Although the network organizational form has been largely addressed in the analysis of the relationship between farmers and consumers, a small attention has been dedicated to the role of the network relationships on the supply side. This point seems of particular interest as the existence of relationships among farmers should affect the cost of organizing and carrying out he exchange, therefore a focus on the system of relationships among the farmers contributes to the comprehension of the economic opportunities provided by the markets organized by the farmers.

The paper is organized as follows. Firstly the distinctive characteristics of Farmers Markets are presented drawing from sociological and economic literature (par.2). It is contended that this form of exchange emerges as organizational innovation of the exchange within a more complex process of transformation of parts of food chains. Furthermore it is argued that the Farmers Markets exhibit an enhanced degree of sustainability. The paragraph 3 propose the necessity of enhancing the comprehension of the Farmers Markets as an institution of the food economy. The role of the markets is considered in the light of the coordination problems highlighted by the Sociology of the Markets (Beckert, 2007): this allows a more clear perspective in order to disentangle the economic factors at stake. The paragraph 4 deal with the organizational foundations of the markets: it is then conjectured that the emerging of Farmers Markets can be thought of as an outcome of two network orderings. The role of trust is presented as a keystone of the networks. The paragraph 5 propose a some empirical evidence, also from literature, aimed at corroborating the conjecture introduced. Brief conclusions are proposed in the last paragraph.

2 Characterizing the Farmers' Markets: sustainable organizational innovation

2.1 Farmers' Markets as organizational innovation in the new institutionalization of Food Chains

A Farmers' Market can be thought of as a coordination mechanism which is specific to the Food Chains, due to the types of goods exchanged and often to historically rooted habits on the supply and demand side. The Farmers Markets present two general characteristics: they contribute to the institutionalization (Sonnino, Marsden, 2006; Higgins et Al., 2008) and to

the enhancement of the degree of sustainability of the Food Chains.

The Farmers Markets have been conceptualized as specific forms of food exchange whose importance is generally linked to the local dimensions of an economy and to the relevance of the relationship between producers and consumers (Brown, Miller, 2008; Hinrichset *et Al.*, 2004). They are also thought of as distinctive elements of the complex process of redefinition of the "space" of production and consumption (Gillespie *et Al.*, 2007; Marsden, 2000) and could be held a specific for of exchange complementary to the global chains in the context of the restructuring of the governance of the exchange relationships. In that sense they are often considered as forms of exchange characterizing the contemporary rural economies. Namely, sociological streams of analysis identify differences within the Agri-Food systems and emphasize the emerging of food circuits which cannot be classified within the global food chains, recognizing the role of embeddedness (Granovetter, 1983) in structuring the relations between agents along local food chains (Sonnino, Marsden, 2006; Higgins et Al., 2008). It is recognized that these circuits determine relationships between consumers and producers closer that the global food chain and that this relationship acts as a constituent of the new food space. In the analysis of the relations governing attention is paid to the process of "re-localization" of food chains concerned with the search for a more direct relationship between consumers and producers. A closer connection appears to be able to associate the food quality improvements with the restoring of public confidence and trust in food production (Higgins et Al., 200, p. 16).The whole process of transformation of part f the food systems is often labelled as "shortening" of the food chains (Renting, Marsden, Banks, 2003; Marsden, 2000) integrating the constitutive role of the closer and direct relationship between consumers and producers (Goodman, 2002) and the localization of the related activities. Sociologists also point out that personal interaction mediate authenticity and trust in the context of the demand for new connection between production and consumption (Marsden, 2000; Kirwan, 2006). It is also suggested that human-level judgements may locally create new production-consumption spaces (Kirwan, 2006). The shortening of the food circuits, taking place along several directions, seems to be the common characteristics of this new institutionalization of food chains (Renting, Marsden, Banks, 2003; Marsden, 2000).

Conventional chains influence the structuring of "short-circuiting" and *viceversa* (Higgins, et Al., 2008) and it is recognized that these two way of organizing the food supply are complementary under several perspectives (Sonnino, Marsden, 2006). The conceptualization of three basic form of Short Food Supply Chains is proposed which are based upon the organizational structure and the quality definition and construction (Renting, Marsden, Banks, 2003, pp. 399 ff.). The forms identified are (Higgins *et Al.,* 2008; Renting, Marsden, Banks, 2003):

a) *Face-to-face* chains, where consumers purchase directly the products from the producers, authenticity and trust are mediated through personal interaction with the producer. The fostering of consumer trust in the 'authenticity' and the 'quality' of the product is crucial in building a reliable customer base.
b) *Proximate* chains, extended beyond direct interaction and are based upon relations of proximity in which the product is sold in the regions of its production.
Extended chain involve the selling of the products to consumers outside of te region of production who may have no personal experience of that locality.

The Farmers Markets are thought of elements of the *Face-to-face* form, namely as economic institutions acting as keystones in building more localised food systems based upon: local resources bases, skills of producers, needs and preferences of local household and develop-

ment goals of producers (Gillespie *et Al.*, 2007). A distinctive characteristic of this analytical perspective is that they point out the specificity of the Farmers Markets as opposed to global food chains, strongly connected to local communities (Brown, Miller, 2008) and part of a more complex process of re-definition of the organization of supply chains with both behavioural and organizational principles being drawn from civic agriculture (Hinrich *et Al.*, 204).
Analytically, Sociologists move from the concept of embeddedness and underpin the nature of Farmers Markets as an organizational outcome of a basic social interaction among producers and consumers. Namely, the relationship between the producers and the consumers is recognized at the basis of a wide class of forms of exchange renewing the space of the rural economy and the food supply (Renting, Marsden, Banks, 2003, Gillespie *et Al.,* 2007). Nonetheless, even though many characteristics of the markets appear well explained by this standpoint, it does not fully highlight why the social interaction give raise to this form of exchange. As noted above, it is actually contended that several forms of exchange relationships and forms compete along the food circuits (Renting, Marsden, Banks, 2003; Higgins *et Al.*, 2008). Albeit complementary or competing explanations are being provided by scholars, an effort seems to be made in order to identify which economic factors and antecedents activate this competition. The social process is invoked as the basic *explanans* of the phenomena at stake and as outcomes of the institutionalization of the relationships producers-consumers, while other elements - which cannot be fully accounted for in a Sociological perspective - appear to be neglected or playing a minor role.

2.2 Sustainability in food supply networks

Farmers' Markets are characterized by positive impacts in terms of sustainability (Marsden, 2000; Renting, Marsden, Banks, 2003; Follet, 2009). As a coordinating mechanism the impact of the markets of the produced upon the performance of the chain depends on the whole of the activities they stimulate and on which rely in order to channel the agricultural product to the consumer through the network of the relationships among the agents. Sustainability has the objective to use natural resources without compromising future generations and builds on three pillars, the social, the economic and the environmental dimension (WCED, 1987). General supply chain management studies on sustainability mainly focus on environmental aspects of sustainability whereas social aspects of sustainability in supply networks have not been much researched so far (Seuring et al., 2008). This is also true for food supply networks where the primary focus of studies has been on environmental impacts of operations. Available knowledge on the sustainability status of food supply networks is scattered and mainly considers the environmental dimension of sustainability. With regard to the environmental indicator greenhouse gas emissions, it is known for UK that the food supply network contributes to 17% to the total carbon dioxide emissions of total UK emissions; with regard to emissions by different chain levels of the food supply network, agricultural production accounts for 49% of greenhouse gas emissions, food manufacturing for 11%, retailing for 8%, and con-

sumers – food shopping, cooking, cooling, cleaning included – for 18% (see figure 1; DEFRA, 2007).

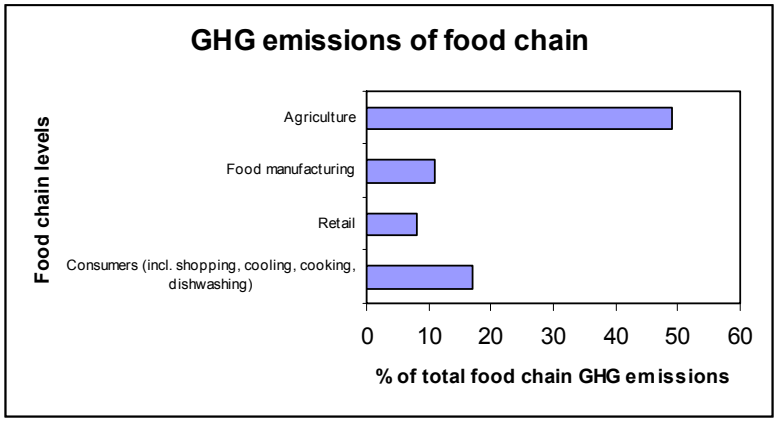

Figure 1. Greenhouse gas emission of food chain levels
Source: DEFRA, 2007

The total energy use of an end product along the life cycle of the supply chain levels (Mattson, Sonesson, 2003, Eide, 2002, Berlin, 2002, Andersson, Ohlsson, 1999), shows how it varies along the stpes of the chain, for examplethe energy use along the supply network for the production of bread buns and pork meat with peaks at the supply chain level of agricultural production. Furthermore, the term "food miles" has been coined as a concept to show the impact of food transportation on the environment, but also the more hidden social and economic impact of transport (Pretty et al., 2005). Figure 2 shows the average food miles of fresh produce of domestic US production to Des Moines, Iowa as destination for consumption.

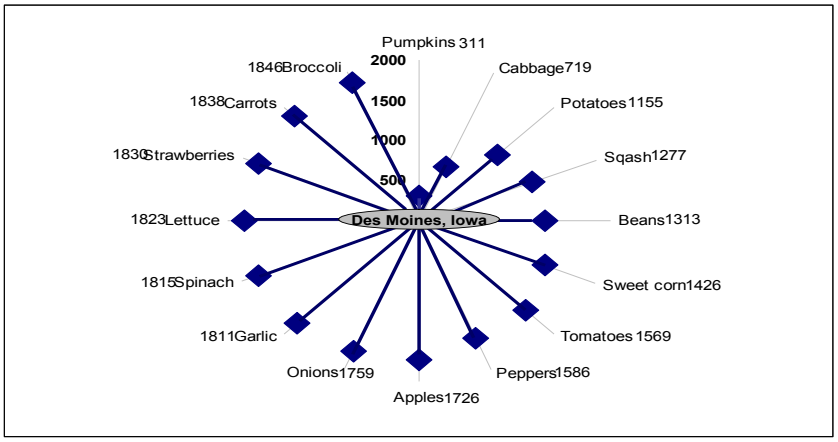

Figure 2. Food miles of fresh produce from US-domestic production for consumption in Iowa
Source: Leopold Center for Sustainable Agriculture

Combining aspects of the environmental impact with production and transportation costs along production chain, eco-efficiency studies (Kicherer et al., 2007) were performed for an environmental and economical performance assessment of apples from different origins, all with end destination Germany. The results put into perspective the mere consideration of the distance food has travelled to end consumption for an assessment of the sustainability impact (see also Blanke, Burdick, 2005). Figure 3 shows the environmental impact expressed

in land use, energy consumption, emissions, toxicity potential, risk potential, and use of resources as well as costs of apples produced in New Zealand, Chile, Italy or Germany, all to be transported to and consumed in Germany. It shows that for the month of November, apples from Germany and Italy are most eco-efficient due to the need for long transportation and cold storage of apples from the Southern hemisphere. However, the situation changes in April when the environmental performance of apples from the Southern hemisphere is superior as opposed to those from the Northern hemisphere due to long cold storage of German and Italian apples harvested in autumn (BASF, 2009).

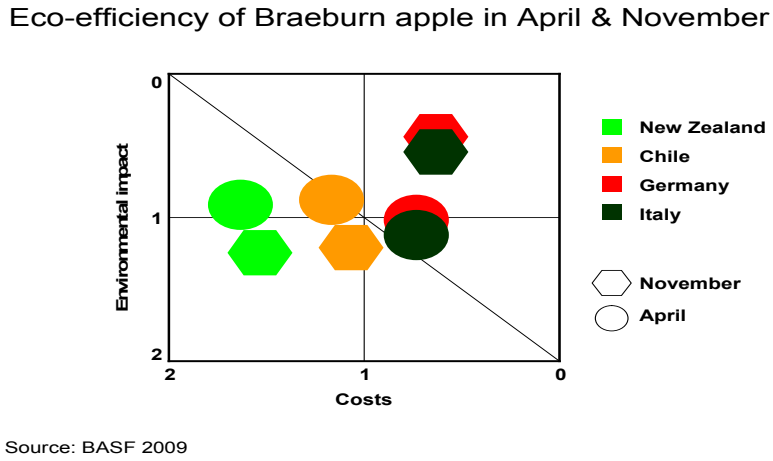

Figure 3. Eco-efficiency of Braeburn apples in April and November
Source: BASF (2009)

To improve the sustainability status of any supply network, activities and operations along the entire supply network need to be aligned (Matos, Hall, 2007, Hagelaar, van der Vorst, 2002). As a consequence, effective supply network management is a precondition for improvement of sustainability performance (Linton et al., 2007) and requires collaboration and relations between the actors (Vachon, Klassen, 2008). This is particularly necessary to achieve the ability to respond flexibly to dynamic and unpredicted changes (Wycherley, 1999). It has been shown that dialogue and communication between companies along food supply networks has a large potential to improve environmental sustainability (Henningsson et al., 2004). Hence, inter-company relations along a supply network can be considered as stimulation for sustainability innovations (Hall, 2000) and critical factor for "green" supply networks where trust between companies is an essential element to ensure sustainability of food supply networks (Millard, 2007). Considering the environmental dimension of sustainability, trust is an antecedent to pro-active environmental supply chain management (Sharfman et al., 2008). As a consequence, it can be said that an important prerequisite for sustainability improvements in supply networks is collaboration between companies and that trust plays a fundamental role as it enables these collaborations and relations.
The idea that the coordinating mechanism could have an impact upon the degree of sustainability of the whole supply chain implies that the working and the performance of the market affect the dimensions of the sustainability. Table 1 provides an overview of sustainability objectives, measurement criteria and indicators for food supply networks for all three dimensions based on literature on sustainability in food supply networks (see Fritz, Matopoulos, 2008). In brackets are indicated the potential sign of the Farmers Markets impact on the sustainability dimensions.

Table 1. Selection of sustainability indicators for the food chain

Sust. dimension	Sustainability objectives	Measurement criteria	Sustainability indicator
Economic dimension	Economic growth	Productivity	GV Added per workforce, €
	Work skill investment	Training	Training hours offered to employees
	Open & competitive economy	Industry's diversity & structure	Share of large enterprises, %
	Changing pattern of consumption	Transportation reduction of imports	Import dependency, %
Environmental dimension	Waste	Packaging	▪ Total waste per basket **(-)** ▪ Recyclable waste per basket **(+)** ▪
	Emissions to air	Emissions produced	▪ Carbon dioxide emissions ▪ Steam emissions **(-)**
	Water	Water used	Purchase of water for own consumption per enterprise, €
	Energy	Energy used	▪ Purchase of energy for own consumption per enterprise, € ▪ Primary energy requirements (MJ/kg of product)
	Biodiversity	Contributions to biodiversity	▪ % local vs. non local product varieties offered **(+)** ▪ % local vs. non local product varieties cultivated **(+)**
	Food transportation	Transportation mode-tactic used	▪ % local sourcing **(+)** ▪ % of air transport products **(-)** ▪ % direct to store deliveries **(+)**
		Vehicle fill	▪ % of available capacity actually used – in weight & volume terms ▪ % vehicle kms run empty **(-)** ▪ Proportion of products moved in vehicles of differing size, weight and refrigeration use **(-)**
		Time utilization	▪ Deviations from schedule ▪ Driver performance management ▪ Vehicle telematics
		Engine performance	▪ Alternative vs. normal fuels % ▪ Fuel consumption ▪ CO2 emissions
Social dimension	Urban distribution	Vehicle kms (congestion, noise and accidents)	▪ Vehicle kms used to supply all stores **(-)**
		Total driving time	▪ Vehicles' driving time on the road **(-)** ▪ % of "Out of hours" delivery **(-)**
	Nutrition & health	Signposting	Number of products signposted
	Food safety	Contamination	Number of incidents
	Workplace improvements	Equality	▪ Female vs. male employment, % ▪ Ethnic vs. national employment, % ▪ Disabled employment, %
		Health & Safety	Accident rate **(-)**
		Employment volumes	Number of employees per enterprise
		Employment quality	Average wages per person, €
	Community	Contribution to community	Donations (e.g. school building)
		Economic linkages with communities	▪ Local vs. non local purchasing and transactions, % of value **(+)** ▪ % increase of local product sales **(+)**
	Ethical trading	Ethical trading schemes	Ethical vs. total products, % **(+)**

Source: adapted from Fritz, Matopoulos (2008)

The conclusion of this section is that the shortening of the food circuits entail both a new institutionalization of food chains and organizational innovations which can be examined with some details in the light of the organization economics point of view. In the following the Farmers Markets are conceptualized as an outcome of two distinctive processes. The emerging of a Farmers Networks and the emerging of the constituent role of the relationship producers-consumers. The processes share the same organizational principles, the networks, and embed a role for trust. On the other hand, the Farmers' Markets are thought to be able to enhance the degree of sustainability of the whole short chain they sustain.

3 The institutional nature of the Farmers' markets

Despite with the recognized importance of the network environments in food chains and rural economy (Fritz, Schiefer, 2008; Murdoch, 1996), the previous perspective does not emphasize the relationships among the producers. The method chosen here assumes that the nexus between the social networks and the Farmers Markets can be disentangled firstly by addressing the question on how he Farmers Markets allow the coordination of the agents.
It is contended that the social macrostructures – the networks, among them – promote the formation of stable expectations and the social legitimacy of market outcomes, these in turn provides the resolution of the basic coordination problems and lead to the order of the market (Beckert, 2007). The order of the market is coherent with both Information Economics and with New Institutional Economics and it is concerned with the fact that the coordination of economic production and distribution through the mechanism of market exchange brings about a system of continuous high level coordinate economic activity despite the heterogeneous motives and interests of the participant actors (Beckert, 2007, p.6). In this context the coordination problems is conceptualized in terms of:

a) the *value problem*, concerning with the assignment of different values to heterogeneous goods and with the assignment of values to goods of a certain class.
b) the *competition problem*, which deal with the possibilities of the actors of turning their preferences into preferred market outcomes.
c) the *cooperation problem*, it arise form the social risks that market actors incur because of their incomplete knowledge of the intentions of their exchange partners and the quality of the product they wish to purchase (Beckert, 2007, p. 20).

It is argued that processes of standardization, cognitive anchoring, normative legitimation and social positioning that the subjective value attributions arise with which market actors assign value to goods (Beckert, 2007). On the other hand, all these aspects have been widely investigated by the sociological literature (Marsden, 2000: Kirwan, 2006; Gillespie *et Al.,* 2007) and it is recognized that the networks support knowledge formation (Ancori *et al*, 2000) and cognitive anchoring (Grandori, Soda, 1995). The trade-off between human judgements and the adoption of standards have been implicitly proposed by literature on Farmers Markets, while the role of communities in legitimating the farmers actions has been widely recognized (Brown, Mitchell, 2008). This suggests that Farmers Markets address the value problem.ì basiclly relying on the relational frameworks (Lockie, 2002).
According to Beckert, actors address the problem of competition by attempting to shape the terms of competition, changing the market structures affecting their markets positions and profit opportunities. The Farmers Markets have been conceptualized as an outcome of complex processes activate to construct alternative to "long" exchange circuits. In this sense, they

represent a solution to the problem of competition. Furthermore, the network producers-consumers favour the creation of confidence among the exchange partners promoting communication and the development of shared experience. On the other hand, this network represent a governance form structuring the market and facilitating the emerging of trust (Fritz, Martino, Surci, 2008).

The three problems illustrate how the Farmers Markets operate as coordinating institutions. The point is that the disciplinary perspective mentioned, does not fully make clear how and to what extent society matters. In emphasizing the fact that institutions are historically and cognitively constrained (Beckert, 2007, p. 11) it is simply contended that a boundary exist between the society sphere and the individual action. For instance, the actors' interests for the food - i.e., the product - is usually taken for granted within an existing interaction process, but this also deals with the need for regulatory institutions of the agents relationships, as highlighted by the New Institutional Economics (Furubotn, Richter, 2001) and the Sociology of the Markets (Beckert, 2007). The social interaction has to be explored more in detail in order to enhance the comprehension of the emerging of Farmers Markets. Even though many characteristics of the phenomena investigated appear well explained by the standpoint mentioned, it does not fully highlight the way according to which the social interaction give raise to the forms of exchange observed. It seems reasonable to maintain that this relationship does not disappear within the social process, rather the latter influences the former by setting incentives for organizational choices (North, 1990, 2003). There are three elements to support this idea. Firstly, the incentives are the basic motivation of economic coordination through the market, therefore the adoption of a specific form of market has to be related to specific incentives it is expected to activate. Under this view the "shortening" process is thought of as able to determine specific incentives provided the close relationship between producers and consumers. In the remaining of the paper, we suggest that these incentives should have various nature. Secondly, the attention paid by Sociologists to the quality issues corresponds to the focus of the relationship between characteristics of the product and the organizational choices which appear to be really influential in shaping the organization of European food chains (for example see Raynaud, Sauveé, Valceschini, 2005). Thirdly, the analytical frameworks at stake identifies a sort of trade-off between standards and human-judgements (Kirwan, 2006; Higgins *et Al.*, 2008) which appears to be a matter of efficiency: human-level judgements are influential in assessing the quality of the product as well as standards are required as the extent of the market increases. In other words, bounded rationality matters and the scarcity of cognitive resources determines costs faced by the agents.

4 The Farmers Markets and the network organization principle

A question which should be addressed concerns what is the organizing principles adopted in Farmers Markets. This turns to our original question: why do farmers choice to associate themselves instead of individually exploit the opportunities of spot market? This association reflects the farmers expectations about their trading activities. Provided the light connection among farmers and its horizontal pattern, we suggest that the association can be interpreted as a network: thus the understanding of the reasons for association move from this perspective. On the other hand, close relationships between producer and consumers appear to be a distinctive characteristics of these market. What is the meaning of the closeness it is thus a crucial point to be addressed. Powell (1990) identified the network as an organizational form autonomous from the market and the hierarchy and pointed out, among others, that the units of network exist in relation to other units and that 'non-market' and 'non-hierarchy' forms of exchange represent particular form of collective action in which: a) cooperation can

be sustained over the long run as an effective arrangement; b) networks creates incentives for learning and the dissemination of information, thus allowing ideas to be translated into action quickly; c) the open-ended quality of networks is most useful when resources are variable and the environment uncertain; d) networks offer a highly feasible means of utilizing and enhancing such intangible assets as tacit knowledge and technological innovation. The Rural Sociology approach share several analytical aspects with this conceptualization, but under an economic point of view this should entail further factors. Williamson (1991) conceptualizes the network in the context of the continuum between the market and the hierarchy and staes that the networks is just a hybrid form reflecting the attempts of the agents to align the governance structure to the attribute of the transaction. The Organization Economics has enhanced the comprehension of relationships among firms in a supply chains (Soda, Grandori, 1995) and provides the analytical tools to investigate the field addressed here. The concept of network is thus considered at two levels: it is invoked in the relationships producers-consumers (Sonnino, Marsden 2006; Renting, Marsden, Banks, 2006), but it is also seen playing a role in the relationships among the farmers.
The hypothesis proposed here is that the Farmers Markets emerge as outcomes of a network of farmers and of a network of producers and consumers. We add to the analytical framework mentioned above by arguing that:

a) specific economies are common antecedents of the farmers networks giving raise to the markets;
b) Farmers Markets reflect a network organization principle as they often share common staff and pool buildings and further resources;
c) Trust is an outcome of the network (Grandori, Soda, 1995), due to the interaction among producers, experience and communication;
d) Trust is an outcome and a keystone of the network producers-consumers.

4.1 The producers network

An inter-firms network is here considered as a mode of regulating interdependence between firms which is different from the aggregation of these units within a single firm and from coordination through market signals (prices, strategic moves, tacit collusion, etc.) and which is based on a *cooperative games with partner specific communication* (Grandori, Soda, 1995). It is contended here that a network of farmers (producers) emerges due to economic factors and that this network is at basis of the Farmers Market. This hypothesis is coherent with the perspective of Economic Sociology emphasizing the influences of social networks on economic performance (Granovetter, 2005) and points out the role of the cooperation problems in the market process (Beckert, 2007). Nonetheless the focus here is on the emerging of the network in the light of the Organization Economics. According to Grandori and Soda (1995) three main elements have to be considered: a) the antecedents of networks formation and forms; b) the mechanisms of organizational mechanisms by which cooperation is achieved; c) the modes of inter-firm cooperation (forms of networks).
Three main economic antecedents seems to operate to promote the constitution of the Farmers network. The first is the (weak) interdependence among the farmers which activate a Farmers market. This is usually due to the necessity of pooling resources, renting and managing the buildings where the market takes place are example of that as well as the search and the communication of information about the consumers need and expectations. The communities may support the availability of resources (Brown, Miller, 2008), while private investments tends to be really small. The basic interaction among producers and consumers also implies low costs for collecting and managing information. As a consequence the interde-

pendence among the producers is usually weak and the partners face low costs of entering and exiting the network.
The second antecedent of the Producers network is summarized by the economic concept of economies, first of all economies of specialization and experience. Farmers connected in organizing their markets exploit the advantage of using their own resources – in particular, land, labour and tacit knowledge - in producing goods they know to produce (Marsden, 2000; Higgins *et Al.*, 2008). Furthermore, the contribution of a farmers to the market supply is sometimes complementary to the contributions of the remaining farmers. Furthermore, there are economies related to the use of unused services of resources (Penrose, 1963). The emphasis on the economies also allow one to address the analytical problem about the terms of complementarity between the participation to Farmers Markets and to "long" food chains.
The third antecedent is the necessity of choice a common staff to manage the market as an organization. Administrative issues, advertising activities and the search for public funding of the initiative are frequently managed by representative persons. The Figure 4 summarizes the influences of the economic antecedents examined.

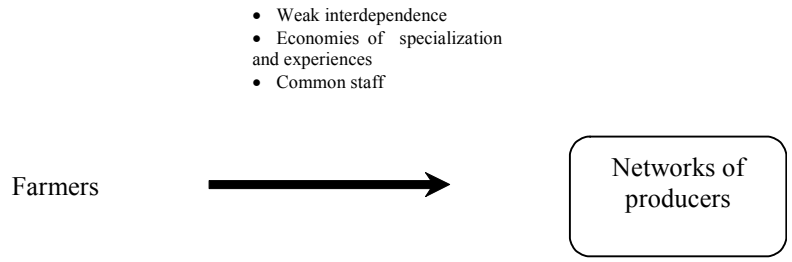

Figure 4. The emerging of producers network
Source: our elaboration

The mechanism of coordination that operates within the network is mainly the social coordination and control. Group norms, even stemming form the basic community, are usually working ensuring fairly enforcement of the agreements and a sort of finalized reciprocity. Furthermore the individual reputation and peer control also operate supporting the coordination in particular in the construction of quality. It is also to consider that the common staff reduce the costs of coordinating.
As for the form of the producers networks is often a simply social, personal network based on the link among the farmers. Nonetheless, this can evolve in bureaucratic network, i.e. a inter-firms coordination mode more formalized like in trade association.

4.2 The emerging of Farmers-Market

The Farmers Markets are classified as *Face-to face* (Renting, Marsden, Banks, 2003). The Organizational Economics approaches allowed to identify the network of producers as a basic factor determining the emerging of a Farmers Markets. Albeit individual farms may enter or exit the association depending on their expectations, one has to recognizes the influence of the networks antecedents mentioned. The Figure 5 illustrates the emerging of Farmers Markets due to the pushes of two networks: the producers network and the producers-consumers networks.

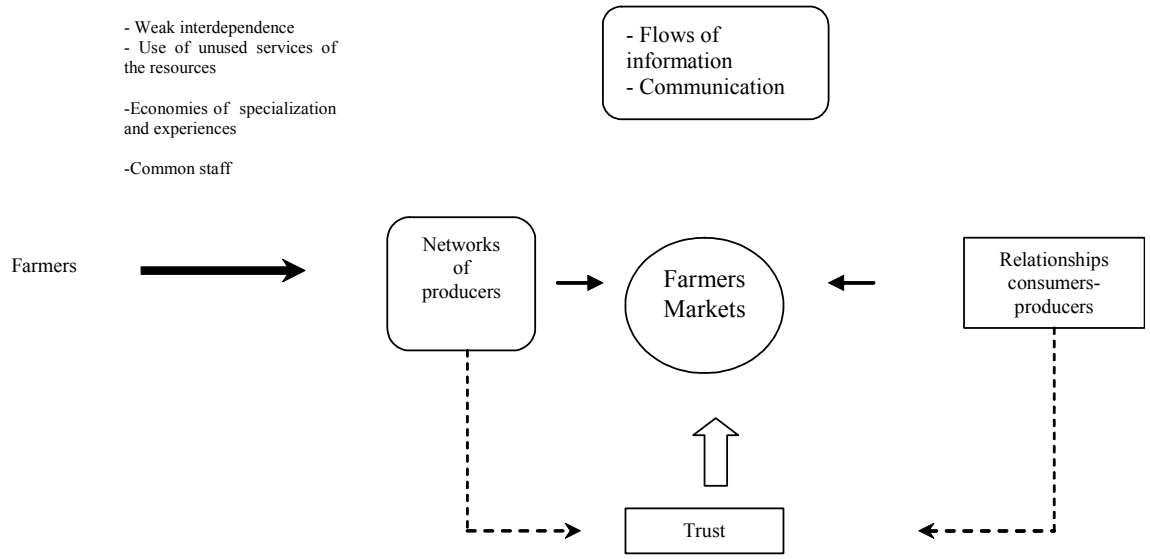

Figure 5. The emerging of Farmers' Markets: a conjecture
Source: our elaboration

The direct contact between producers and consumers identify a general trait of the market institution which also influence the competition among the farmers. Furthermore, it mediates trust and authenticity and gives raise to the settlement of quality approaches based on human judgments. The systematization of the information within an articulated cognitive framework contributes to the creation of common knowledge, which in turn fosters communication patterns (Ancori *et al.*, 2000) which in turn influence the market activities. Under this view trust operates at level of the two network, but it also appears to be a characteristics of the markets *per sè*. It has also to point out that a problem is posited due to a crucial conclusion of the sociological analysis stressing on the existence of several, competing forms of exchange within the short food supply chains (Renting, Marsden, Banks, 2003). Provided that embeddedness be the common source, why does not an unique form arise? The idea here is that the Farmers Markets considerably reduce the search and information costs for consumers and producers, then they exhibit an advantage with respect to the simply individual, spot market.

Attention has also to be paid to sustainability as a basic principle of the food chains architecture and

And Food research (Fritz, Schiefer, 2008b). Firstly it has be noted that the Farmers Markets meet the pre-requisite for long-term sustainability: the transparency along the chain and the communication of sustainability to consumers (Fritz, Schiefer, 2008b, p.2). On the other hand, the assessment of the level of sustainability of the Farmers Markets has to be elaborated within a more general analytical framework, addressing the mapping of the sustainability. Thirdly, as among the crucial issues to be addressed there is also the simulation of new chains (Fritz, Schiefer, 2008b), better equipped in terms of sustainability, one may wander whether or not Farmers Markets allow for this outcomes. It is just the analysis proposed which allow for a preliminary, tentative answer. We recognize that the extent to which (sustainable) Farmers Markets can be diffused in no more larger than the functional space delimited by the factors operating as their antecedents.

5 Empirical evidence

A preliminary empirical investigation was carried out in order to corroborate the conjecture about the emerging of the Farmers' Markets. The approach was based on few structured interviews framed within some empirical evidence available in literature. The question addressed are namely whether or not the markets emerge in connection with a producers networks and what is the role for trust. The interviews were conducted by a simple questionnaire submitted to managers responsible for Farmers's Market in Central Italy, The data collection is still in progress and below we report just four cases.

Aguglia (2009) argues that in the USA there are more than 4300 Farmers' Markets, 500 in UK and more than 5.000 in Germany. In Italy the total number of farms involved in the direct selling activity increased in recent years up to 60.700 which corresponds to the 6.8% of the total Italian farms (Agri2000, 2008). As for the territorial distribution, the regions with the larger percentages are Tuscany (16,8%), Lombardia (11%), Piemonte (10%), Sicilia, Abruzzo e Veneto (about 8%), Emilia Romagna (7,6%).

The fort four products channelled by the direct selling were: wine (35.2%), vegetables (31.0%), olive oil (12.7%) and cheese (13.6%). In the period 2005-2008 the number of farms engaged by product is increasing for the vegetables (from 18% to 31%) and for cheese (from 2% to 14%).

Table2. Distribution of the marketing forms by region – Italy, 200**8**

Regions	At farm (not specialized investment)	Farm's shop	City Food Shop	Farmer markets and agricultural fairs	Direct delivering	Other
Liguria	76,8%	11,1%	1,8%	21,2%	7,0%	0,0%
Lombardia	73,8%	19,5%	1,1%	22,8%	10,3%	1,6%
Piemonte	79,0%	9,3%	4,2%	34,7%	5,0%	0,0%
Valle d'Aosta	70,0%	0,0%	0,0%	40,0%	0,0%	0,0%
NORTH-WEST	**72,9%**	**12,1%**	**2,0%**	**35,2%**	**6,3%**	**0,7%**
Emilia-Romagna	70,3%	19,2%	2,4%	27,0%	6,7%	0,9%
Friuli VG	53,9%	26,9%	1,8%	17,5%	1,4%	0,7%
Trentino AA	85,0%	9,2%	7,0%	85,0%	0,0%	0,0%
Veneto	79,8%	11,2%	0,9%	13,0%	0,8%	0,0%
NORTH-EAST	**74,9%**	**15,2%**	**2,4%**	**29,3%**	**2,9%**	**0,4%**
Lazio	53,0%	9,2%	1,8%	38,7%	4,6%	0,0%
Marche	44,6%	9,7%	2,0%	56,5%	11,0%	0,0%
Sardegna	47,5%	3,0%	8,0%	27,5%	14,3%	0,0%
Toscana	76,8%	11,1%	1,8%	21,2%	7,0%	0,0%
Umbria	22,0%	25,0%	0,0%	1,0%	0,0%	0,0%
CENTER	**63,9%**	**11,2%**	**2,1%**	**26,5%**	**7,1%**	**0,0%**
Abruzzo	57,1%	17,1%	2,8%	41,6%	8,3%	0,0%
Basilicata	85,0%	5,0%	0,0%	10,0%	0,0%	0,0%
Campania	74,9%	26,5%	0,0%	24,5%	6,6%	0,0%
Calabria	65,5%	20,0%	1,5%	0,0%	8,6%	0,0%
Molise	52,9%	10,7%	0,0%	59,3%	0,7%	0,0%
Puglia	57,7%	31,0%	7,4%	20,4%	0,9%	0,3%
Sicilia	60,2%	12,9%	1,6%	19,9%	6,7%	0,0%
SOUTH	**62,0%**	**16,9%**	**2,3%**	**27,8%**	**6,0%**	**0,0%**

Source: Agri2000 (2008)

Interview 1 - Central Italy

The market has been established on 2009. The number of farmers who participate is between 20-30. The market is specialized in the supply of vegetables, with organic products which are about the 20% of the total supply. All the product supplied are produced by a distance not large than 20 Km. The consumers usually exploiting the market opportunities is around 500. The market does not entail specialized management except than for the initial project planning; therefore each farmer plan his own activity, the use of the market space and the contact with the customers. The market takes place four times/month.
The farmers involved in the market are actively engaged in the life of the professional organization. Transportation means are the specific investments made for the market by the farmers. The advantage provided by the market – but just to some extent – are due the larger selling price; to a more close relationship with the customers and to the possibility of enhancing the degree of satisfaction of the customer.

Interview 2 - Central Italy

The market has been established on 2009. The number of farmers who participate is between 20-30. The market is specialized in the supply of vegetables, with organic products which are about the 20% of the total supply. All the product supplied are produced by a distance not large than 20 Km. The consumers usually exploiting the market opportunities is around 500. The market does not entail specialized management except than for the initial project planning; therefore each farmer plan his own activity, the use of the market space and the contact with the customers. The market takes place four times/month.
The farmers involved in the market are actively engaged in the life of the professional organization. Transportation means are the specific investments made for the market by the farmers.
The advantage provided by the market – but just to some extent – are due the larger selling price; to a more close relationship with the customers and to the possibility of enhancing the degree of satisfaction of the customer.

Interview 3 - Central Italy

The market has been established on 2009. The number of farmers who participate is about 10. The farmer supply vegetables, cheese, meat, wine and oil, with organic products which are about the 20% of the total supply. All the product supplied are produced by a distance between 20-50 Km. The consumers usually exploiting the market opportunities is around 500. The market entails specialized management concerned with the time planning of activities and the control. The market takes place more than four times/month exploiting buildings provided by the agricultural Union. The farmers involved in the market are actively engaged in the life of the Union. The farmer made investments for the market activity (storage and transportation means and equipment for the selling activity).
The advantage provided by the market – but just to some extent – are due the larger selling price; to a more close relationship with the customers and to the possibility of enhancing the degree of satisfaction of the customer.

Interview 4 - Central Italy

The market has been established on 20098. The number of farmers who participate is about 10. The farmer supply vegetables, cheese, meat, wine and oil, with organic products which

are about the 20% of the total supply. All the product supplied are produced by a distance between 20-50 Km. The consumers usually exploiting the market opportunities is around 500. The market entails specialized management concerned with the time planning of activities and the control. The market takes place more than four times/month exploiting buildings provided by the agricultural Union and by the Public Administration. The farmers involved in the market are actively engaged in the life of the Union. The farmer made investments for the market activity (storage and transportation means and equipment for the selling activity).
The advantage provided by the market – but just to some extent – are due the larger selling price; to a more close relationship with the customers and to the possibility of enhancing the degree of satisfaction of the customer.
The interviews show that there are string similarity among the markets under several critical dimensions (like the asset specificity and the pattern of management). Furthermore it is recognized the role of the Public Authority in supporting the market. The markets considered have small size and are based on the activity of farmers actively involved in Agricultural Unions. These provide the basis for a the interrelation among the growers and suggest the existence of the network.
As for the trust, the interviewed persons explicitly recognized the importance of trust in the market setting and the influence of trust in sustaining the exchange relationships.

6 Discussion and final remarks

Macias (2008) analyzing some forms of Community based agriculture found out that differences exist just on the involvement of the community and the Farmers Markets do not necessarily enhance the social integration. Follet (2009)goes in depth in analyzing the alternative forms of supply systems emerging with the change of food chains. Weak network are thus contrasted with the Strong network forms, with the latter being supposed to be able to be effective in contributing to the restructuring of food chains. A critical point provided by the interpretation and the analysis of the empirical data is that in the strong form the participants focus on the network as a whole and on relationships, transparency and trust (Follet, 2009; p. 39). This evidence integrates the outcomes of the interviews and seems to support the hypothesis that Farmers Markets are based on producers and producers-consumers networks. The main outcomes of the sociological perspective have been examined and it has been pointed out that further factors have to be considered in order to enhance the comprehension of these markets. Thus the discussion of the coordination problem solved by the Farmers Markets is proposed and it has been conceptualized the emerging of the Farmers Markets as an outcome of the activities of the network of producers and the network of producer-consumers.

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