Local economies and consumer participation: the organic food fairs

LUIGI CEMBALO* - GIUSEPPINA MIGLIORE^ - GIORGIO SCHIFANI^

corresponding author: Luigi Cembalo (cembalo@unina.it), Dept. of Agricultural Economics and Policy, University of Naples Federico II (Italy)

^ DEMETRA Department, University of Palermo (Italy)



Paper prepared for presentation at the 127th EAAE Seminar - 10th Wageningen International Conference on Chain and Network Management,
May 23-25, 2012, Wageningen, The Netherlands

Copyright 2012 by Luigi Cembalo, Giuseppina Migliore, Giorgio Schifani. 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.

Abstract

New consumption habits stand out against the idea of a rational consumer, which is aimed at maximizing utility according to budget constraint. Presently, people have the tendency to behave differently according to various purchase opportunities; a significant role is played by both ethical sides and selfless motivations. These new trends fall within the context of a new social paradigm that foresees postmodern society's rise. Consumers have the tendency to use the market as an arena in which political, ethical and environmental issues may arise, starting a new trend of an alternative consumption called "political consumerism". In this paper we'll try to understand how new consumption habits mirror features of postmodern society, starting with research work on specialized fairs of organic food in Sicily.

Key words: Postmodern Society, Political Consumerism, Alternative Food Network, Institution and Economics.

JEL classification: D63, D71

1. Introduction

The appearance of both new consumption areas and new consumers' habits has characterized the market of food-farming products over the last decades. The increasing distribution and consumption of guaranteed products by appropriate certifications are both aimed at reassuring consumers about safety, quality and good ethics of production processes. A lead role in purchasing choices is often played by the trust relationship with producers that sometimes become a real and fair support relationship. A producer-consumer cooperation is created, in which producers have the tendency to accommodate consumers' new needs (ecological or recyclable materials for packaging, productions programming, and so on).

New consumption habits stand out against the idea of a rational consumer, which is aimed at maximizing utility according to budget constraint. People have the tendency to behave differently according to the various purchase opportunities, so that theoretical interpretations and analytical assessments based on a neoclassical approach are ineffective. On the other hand, these new trends seem to better fall within the context of a new social paradigm that sees a new postmodern society overcoming the modern one, a paradigm in which people show a high behavioral complexity and both ethical aspects and selfless motivations play a considerable role. Basically, the following figure is taking shape: the choices of an eclectic consumer are influenced by ethical, fair and environmental aspects related to political consumerism elements but also combined with well-known factors such as value for money, convenience and familiarity with the brand.

We are often dealing with consumers willing to improve their link with the surrounding reality, by purchasing local food and having direct interaction with the producers, in the attempt to restore community and institutional values. The ideas touched on in this short introduction will be developed further on and are of no immediate empirical use. The objective of this paper is therefore to go beyond this limit by analyzing the link between a proxy variable of political consumerism and the explicative variables that can be interpreted as an approximation related to both the part of consumers behavior linked to real factors as well as the other part of their behavior linked to typical habits of a postmodern approach. If both variable groups turn out to be useful in order to explain the phenomenon or even if the second group of variables prevails, then it will be possible to say that the part of consumer behavior outlined by the postmodern approach on its political consumerism "making" has been captured in an analytical way.

In the second section key concepts of postmodern society are defined. In the third section, it is described how the scientific literature defines how political consumerism, which ties with empirical work, can be identified in a modern key. The fourth section describes the alternative food networks

in Sicily, the submitted questionnaire and the applied econometric model. The paper ends with some final considerations.

2. Postmodern society

Several studies on various subjects have been made with the object of describing the typical society of contemporary man. At the moment there are no unambiguous, clear or undisputed definitions capable of defining postmodern society. Some authors describe this with the synonym of "society of the uncertainty", "liquid modernity" (Bauman, 1999; 2000), or "the global age" (Giddens, 2007), indicating how both uncertainty and loss of meaning prevail and describing the shift from a firm system that claims to explain the world with integrating principles to a continuous system that is fluid as well as ever-changing.

If the principle characteristics of modernity were the idea of progress – development, trust in human reason and in its use to reach supremacy over nature (rational order), the postmodern paradigm queries all this together with the materialization of the ecological issue.

There are no certain dates to indicate the origin of the postmodern age: many people state that this period started from the end of the XX century, especially in association with the spread of mass media and global communication. First of all, postmodernism is characterized by mistrust towards all-embracing macro-knowledge that is typical of the modern age and the related break-up of stable certainties, all of this appearing on the variety of senses and the identification of a reality that reveals itself through multiple aspects (Lyotard, 1981). The decline of the totalitarian ideologies and the extreme fundamentalism therefore identifies a new willingness for both cultural exchanges and revaluation of diversity. Such aspects contribute to an increase in man's attention to the protection of the inalienable rights that are based on the respect for diversity and protection of nature (Vattimo, 1989).

Basically a *weak thought* (Vattimo and Rovatti, 1985) stands out against the strong standardizing and totalitarian ones, in which the absence of stable bases and truths reveal itself, making the social setting more chaotic.

The loss of reference points has made people suffer from a personality overlap, combined with a perpetual change and search for an identity to be built. Such personalities, as the so called *zapping* ones, are therefore unable to thoroughly follow a plan and express a depersonalized, confused and insecure interiority. Within this setting the construction of a new personality may be possible by building new specific ways of social cohesion, with a preference for the links with the surrounding world, in the attempt to recover the value of links as a self-realization need (Romano, 2010).

The liquidity of postmodern personalities is reflected in the consumption area: the consumer shows complex and chameleonic behaviors (Cova, 1999), making Slow Food oriented choices, but also fast food, choosing food typical of our culture, but also food of other cultures (Cicia *et al.*, 2011).

This instability of consumption preferences essentially shows a lack of orientation that is reflected in the consumers' free choices in every area of daily life. It has already been mentioned that these elements make it difficult to explain consumption habits according to a neoclassical approach that is still oriented to the modern consumer's view, suggesting the need to redefine an analytical structure capable of interpreting the dynamism of preferences and also considering that people's welfare is related to both expense possibilities as well as quality of life, in which environmental, social and freedom aspects are involved (Nussbaum and Sen, 1993).

3. The political consumerism and the agricultural system's de-globalization

Some researches show that in postmodern society food acquires a new identity and it represents a solidarity symbol, as well as a social relations and cultural identities enhancer (Cova, 1999, Elliot, 1999).

In the postmodern society absolute certainties fade and deconstruct the traditional institutions of the social life (Romano, 2010) so that compared to the past new life styles and social organizations come out. In the attempt at building a new identity, the postmodern consumer has sometime the

tendency to use the market as an arena in which he raises political, ethical and environmental issues.

Political consumerism shows itself in various forms, from the most fundamentalist – the boycotting campaigns against some multinational companies' products – to the so called *buycotting* (Micheletti, 2009), that is a critical consumption practices including purchase of fair trading product, organic food and Slow Food. In all cases, consumers' action has the tendency to promote a critical dialogue with the consumerist capitalism.

However within the expense framework, the political consumerism can develop on different levels where both the *positional factor*, that is purchasing specific goods in order to stand out from others exerting a kind of social reputation, and the *social factor* of the most radical consumerism – the society of mass consumption – of the moderate expense and the sense of cooperating for the common good (Bellanca, 2011), both prevail even if on different intensity levels.

The spread of the political consumerism mostly depends on some grass roots associations' actions, founded with the purpose of both sensitizing citizens on the *externality* of their own consumption behaviours and promoting a personalized assumption of responsibility (Micheletti, 2009).

As Mardsen and Wrigley (1995) claim, the future of food-farming system will depend on social and political conscience's development of the consumers; according to the authors, people have an "underdeveloped" conscience rather than a political one, which they need to develop until they acquire a collective awareness, that is needed to issue an effective challenge for the productive system.

From this point of view the consumer can therefore affect the system by his capability to stand for rights, impose behaviours, duties and rules that govern processes (Goodman and De Puis, 2002).

One of the most well-established areas of political consumerism concerns organic production that, as everybody knows, has greatly spread over the last years: from a niche market its consumption has been constantly growing and significantly affecting even the GDO.

In reference to food processing (but not only to that), most consumers' political actions are translated into the creation of alternative food networks, acting out of the mass markets, with the purpose of recontextualizing both production and consumption within new social interactions.

Furthermore, within the field of alternative food networks, not only do consumers have the possibility to exercise their free choice, but they also often interact with new producers and play an active role within supply systems and new meaning-making structures (Brunori et al., 2008).

Alternative networks of food-farming therefore converge on the creation of new communication structures between farmers and consumers. The Community Supported Agriculture, the Solidarity Purchase Groups (Brunori 2008, 2011; Cembalo *et al.*, 2010; Schifani, *et al.*, 2009; Schifani and Migliore, 2011), the Pick-it yourself, the rented vegetable gardens and the purchase at the Farmers Markets are typical examples.

The tendency is to contribute to sustainable development by re-embedding production processes as well as distribution ways within local contexts. Furthermore, local food, besides strengthening such social factors as conviviality and a sense of belonging, are seen as more natural and of a better quality compared to "global" products.

4. Alternative food networks in Sicily

The local spread of alternative food networks not only touches active political action of a large group of consumers on a global level, but also helps in making new trust-based trade between producers and consumers, as well as new development strategies of marginal agriculture.

Farmers Markets rouse both public institutions and mass-media's interest among the various experiences of alternative consumption that encourage direct consumer-producer relations.

In Italy Farmers Markets have been formally acknowledged after National Government issuing of the MIPAAF act, num.85/2007 that concerns the "making of markets dedicated to direct sales of the farm products", whose objective is to "meet consumers' needs with farm products that have a direct link to the production area".

In the last years many promoting initiatives have spread nationally. Sometimes they have been supported by professional associations (CIA and Coldiretti), the Italian Association of Organic Agriculture (AIAB), the Legambiente and by various local governments that encouraged their spread through specific legislative measures.

In Sicily, the interventions on behalf of Farmers Markets are provided by PSR 2007-2013, more precisely by action A of Measure 321 that concerns the making of *market areas* dedicated to direct selling and by measure 121, which among the various interventions plans to fund investments in both modernization and adjustment of those farms that plan to carry out a short supply chain.

The local initiative gave rise to the making of 49 farmers markets spread all over the local territory: in addition to these, another 34 Campagna Amica markets promoted by Coldiretti Sicily and 4 'A fera bio events supported conversely by associated producers and consumers, in which AIAB is involved too.

In all circumstances we are talking about either weekly or monthly periodic appointments, and an ever-growing phenomenon characterized by a constant increase of both firms and events.

However, the earlier mentioned initiatives show some significant differences among each other.

With the exception of 'A fera bio events that are specialized local street markets strictly open only to organic producers, all the other events don't have product regulations or certificates that can guarantee both products and product-making processes.

The 'A Fera bio events take place monthly in Messina (first week of the month), in Catania (second week of the month), in Palermo (third week of the month), in Enna (fourth week of the month) and on a weekly basis in Caltanissetta (on Wednesdays).

The 'A fera bio peculiarity lies in its nature of being a consumerist association in which both producers' and consumers' roles are proactive.

The activity of this Association (made of autonomous provincial structures) is especially to promote the widespread consumption of local organic products coming from medium and small-sized farms, in addition to supporting social solidarity activities, with the objective of contributing to the change of both economic and relational systems as well as creating alternative economics that are environmentally and people friendly.

Among the 'A fera bio events those held in Catania and Messina are particularly interesting due to the large number of show floors and consumers.

Furthermore, in the two main Sicilian cities the success of this event may be related to the progress of specialized retailing. In fact, in the last years the specialized large-scale retail trade increased the number of sales points both in Catania and in Palermo, but it is still not very competitive as far as various products and the general range of fresh products are concerned. At the same time a decrease in the quantity of specialized retail has been observed, in a measure due to the bad pricing policy, but mainly due to the increase in purchasing opportunities related to a short distribution chain and especially due to the development of GAS and Farmers Markets.

5. The survey

As far as data collection is concerned, a questionnaire was directly submitted to 197 consumers that were interviewed between November 2010 and February 2011 at the 'A fera bio events, which take place in Palermo and Catania. The interviewees were selected on the basis of their availability to collaborate on the survey, while the sample extent was estimated according to the local residents in the two provincial capitals in January 2010. The interviews lasted 30 minutes on average.

The questionnaire was structured in three parts, each of them with 31 yes-no questions on the whole: the first part included all the variables concerning the socioeconomic features of the interviewees; a second variable set, expressed in a metric scale (Likert 1-5), was used to investigate purchase features in terms of frequency, organic share upon the whole, purchase channels, and expense quotas in organic products; finally, the third part of the questionnaire was dedicated to collect opinions, expressed in a Likert scale 1-5, about the relationship with the producers, critical

consumption, social solidarity, respect for the environment, and level of knowledge about organic products. The last two sets are believed to be able to identify the multi-layered behaviour of the consumers.

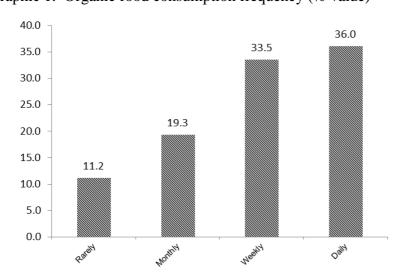
The processing of collected data allowed to initially profile the 197 interviewed purchasing managers of whom 62% are female. As far as age distribution is concerned 27% of the interviewed consumers are within the class of those aged between 40 and 49 years old, 23.4% are between 50 and 59 years old and 22.8% between 30 and 39 years old. Among the interviewees, which all together represent as many units for a total of 556 consumers, the average level of education is generally high, with a little more than 55% of the interviewees declaring to have a degree and about 40% have completed high school. The total income of the units appears to be mainly average (about 54% of the described units are double-income, 43% are single-income and 3% are multiple-income): in a little less than a quarter of the examined cases the family income of between 1,751 and 2,500 euro, a little less than 17% between 3,501 and 5,000, in both cases the total income is between 1,250 e 1,750 euro and in little more than 16% of the units turns out to be less than 1,250.

As far occupation is concerned little more than 47% of the sample has a salaried job, about 24% are a self-employed workers, about 12% are housewives, 7% are retired, a little more than 6% are of the working class and 3.6% are students.

In relation to organic product consumption habits, almost 70% of the family units show a regular consumption: in 36% of the cases indeed there is a daily consumption and in more than 33% there is a weekly consumption (Graph 1).

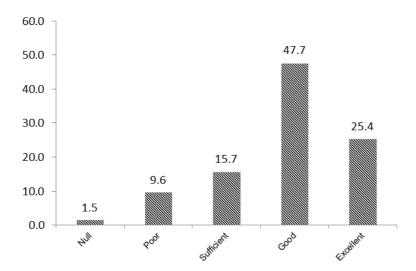
Almost 70% of the sample also stated that they pay quite a lot or much attention to the products' place of origin and in more than 73% of the cases the possibility to meet and directly know the producers at 'A *fiera bio* events is believed to be a very high or quite important factor among the reasons that lead to the purchase of organic products (Graph 2).

67% believe they have sufficient knowledge of organic products' certification and control systems, but only 8.6% states that they have a very deep knowledge while 33% stated not to know the system or to have a limited knowledge of it (Graph 3).



Graphic 1. Organic food consumption frequency (% value)

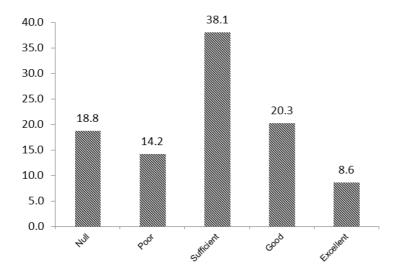
Graphic 2. Elements that influence the purchasing decisions of organic food: direct knowledge of the farmer (% value)



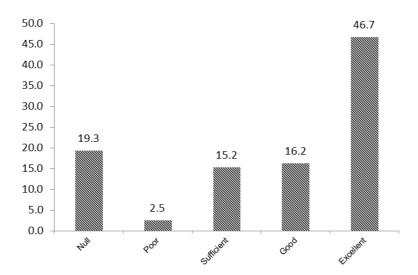
From the interviewees given opinions about organic products' purchase it follows that more than 46% of the interviewees buy them according to a high environmental sensibility (Graph 4), while 34% buy organic products at 'A Fera bio event because they strongly sympathize with the producers (Graph 5).

Even more selfish reasons coexist with the altruistic and ethical reasons that lead the interviewees to buy local organic products: as a matter of fact, more than 54% of the 197 consumers who bought at 'A Fera Bio stated that they buy organic products because they highly consider those factors which are related to food safety (Graph 6).

Graphic 3. Level of knowledge of certification and control system of organic food (% value)



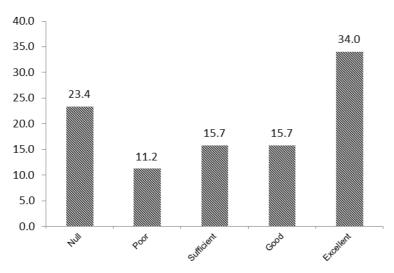
Graphic 4. Elements that influence the purchasing decisions of organic food: worry for the environment (% value)



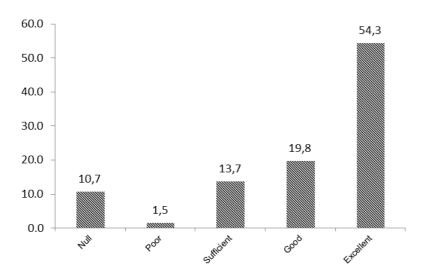
Even if this last factor may therefore be ascribed to selfish attitudes, the consumers at issue do not seem to have particularly rational behaviour, that is with the intent to maximise the benefits according to mere income (neoclassical point of view).

By crossing-check the data relating to the average monthly income of the examined units with the interviewees given opinions about the choice in purchasing at 'A Fera Bio as an opportunity to save up, no connection is brought up even for the lowest income family units.

Graphic 5. Elements that influence the purchasing decisions of organic food: solidarity with farmers (% value)



Graphic 6. Elements that influence the purchasing decisions of organic food: worry for the food security (% value)



5.1. The empirical model

The ordered logit was the econometric model of reference. As mentioned before, the model-dependent variable is the organic consumption rate on the total food expense, which is divided in 3 levels.

In the presence of dependent variables expressed by categorical data that may fall in one of the different categories in a mutually exclusive way we are referring to multinomial models (Camernon and Trivedi, 2005). When the categories are ordered, as in the specific case of the increasing expense rate for organic products on the total expense for food, then we are dealing with ordered logit or probit models. The "ordered results" are modelled as a latent variables' sequence, through gradually increasing threshold levels. For the i-th individual, it is stated that:

$$y_i' = x_i'\beta + u_i$$

In this particular case study, a low level of consumption (less than 20%) of organic products on the total food consumption will correspond with low levels of y^* ; for $y^* > \langle_1$, the organic expense increases to a level of between 20% and 50%; for $y^* > \langle_2$ the expense level on the total amount increases to more than 50%.

More generally, for an ordered model with m alternatives, it is possible to state:

 $y_i = j$ se $\alpha_{j-1} < y_i' \le \alpha_j$, $j = 1, \dots, m$ $\alpha_0 = -\infty$ e $\alpha_m = \infty$

where Therefore,

$$\begin{split} Pr(y_i = j) &= Pr(\alpha_{j-1} < y_i^* \le \alpha_j) \\ &= Pr(\alpha_{j-1} < x_i'\beta + u_i \le \alpha_j) \\ &= Pr(\alpha_{j-1} - x_i'\beta < u_i \le \alpha_j - x_i'\beta) \\ &= F(\alpha_j - x_i'\beta) - F(\alpha_{j-1} - x_i'\beta) \end{split}$$

where F is the cumulative distribution function of u_i . The regression parameters β , and the m-1 parameters of the $\alpha_1, \dots, \alpha_{m-1}$ threshold are obtained by maximization of the Log-likelihood function with $p_{ij} = Pr(y_i = j)$. In the ordered logit model, u is distributed as a logistic $F(z) = e^z/(1 - e^z)$

The three examined levels of the organic consumption rate on the total (C-Org) are indicated as follows: C_Org1, organic expense on the total below 20%; C_Org2, organic expense between 20% and 50%; C_Org3, organic expense on the total over the 50%. The 197 interviewed consumers were distributed as follows:

Table 1 – Distribution of the three levels of the dependent variable

iency	Percentage	Cum. %
59	29.95	29.95
75	38.07	68.02
63	31.98	100
97	100	
(63	53 31.98

The explicative variables implemented in the model, in addition to the socio-economic ones, approximate that part of the consumers' behaviour relating to tangible factors as well as the part relating to consumption behaviour that is typical of the postmodern approach (Tab. 2).

Among the implemented variables, those with a statistical significance of at least 10% are shown in the table n.3.

In an ordered logit assessment the sign on the estimated coefficients must be interpreted as the variation direction of the dependent variable according to the regressor's increase. In other words, the estimated positive coefficient indicate that as the regressor increases, the probability of being in the lowest category (C_Org1, organic rate on the total <20%) decreases, while the probability of being in the highest value category (C_Org3, organic rate > 50%) increases. All the signs of the estimated coefficients are highly significant and in line with the expected signs. The latent variable C_Org increases as all the explicative variables increase except for K_D_Cert_Trac (knowledge level of the traceability certification) and D_Prov (dummy with value 1 for the interviews in Palermo, with value 0 for the interviews in Catania). The threshold parameters (1 and 2) are both statistically and significantly different from each other so as to indicate that the dependent variable is well represented by three categories.

The comparison between the estimated probabilities and the three C_Org categories' frequency allows us to check the forecast capacity of the model. From Table 4 one can infer that the estimated probabilities are on average significantly equivalent to the frequencies for each of the C_Org modalities (deviation of 0.001).

Table 2 – List of variables implemented in the econometric model

Variabile	Type*	Description	Name
Age	С		Age
Gender	d	1 if male	Sex
Education	cat	1 to 4	Educ
Occupation	cat	1 to 7	Occup
Income	c		Inc
Other experience in short chain	d	1 if yes	Exper
Degree of knwoledge on organic products	cat	1 to 5	K_D_Org
Degree of knwoledge on organic certification	cat	1 to 5	K_D_Cert_Org
Degree of knwoledge on certification and controlling system	cat	1 to 5	K_D_Cert_Sys
Purchase of organic products within a GAS	d	1 if yes	Org_GAS
Rate of organic purchase directly in an organic farm	cat	1 to 5	Farm_Org
Organic Purchase motivation: taste better	cat	1 to 5	Mot_taste
Organic Purchase motivation: ethical and responsible	cat	1 to 5	Etical_Mot
Organic Purchase motivation: food safety	cat	1 to 5	Food Sec Mot

Organic Purchase motivation: environmental awareness	cat	1 to 5 Mot_Env
Purchase in Aferabio motivation: solidarity to producers	cat	1 to 5 Afer_sol
Purchase in Aferabio motivation: less expensive products	cat	1 to 5 Afer_saving
Purchase in Aferabio motivation: trust to producers	cat	1 to 5 Afer_trust
Purchase in Aferabio motivation: wider choice set of organic products	cat	1 to 5 Afer_supply
Purchase in Aferabio motivation: interface to producers	cat	1 to 5 Afer_interf
Degree of attention to product source	cat	1 to 5 Prod_prov
Degree of attention to organic certification organism	cat	1 to 5 Att_Org_Cert
Rate of organic expence on total food expenses	cat	1 to 3 C_Org
Participation to a GAS	d	1 if yes GAS
Degree of knowledge about certification on traceability	d	1 if medium/high K_D_Cert_Trac
Degree of knowledge about certification on health safety	cat	1 to 5 K_D_Cert_San
Degree of knowledge about certification on firm social responsability	cat	1 to 5 G_K_Cert_RSI
Degree of knowledge about environmental certification	cat	1 to 5 K_D_Cert_Env
Degree of knowledge about certification on typical production	cat	1 to 5 K_D_Cert_Tip
Degree of knowledge about certification on quality management	cat	1 to 5 K_D_Cert_QM
Degree of knowledge about certification on food safety	cat	1 to 5 K_D_Cert_FS
Province	d	1 if Palermo D_Prov

^{*}Variable typology. C: continuos; D: dummy; Cat: cathegorial

The odds-ratio (OR) measures the variation in probability of the independent variable resulting from a unit variation of the regressor (Tab. 5).

When the OR value is 1, the effect of the regressor's unit variation on the dependant variable is null. The bigger the gap from the unit value the bigger that regressor's effect is on the dependent variable, keeping the other explicative variables' values constant.

This shows that active participation in a fair purchasing group strongly affects (5.4 times) the probability of having a high expense rate for organic products on the total expense for food. On the other hand an inversely proportional relation between the knowledge level on the traceability certification (K_D_Cert_Trac) and the rate of organic expense on the total of food expense is brought out.

Table 3 – Results of the econometric model

Ordered Logit	No. obs.		
Log-likelihood -164.08	LR chi2(9)		102.61
-		Pr > chi2	0.000
Dependent variable: C_Org		Pseudo R2	0.238
Variabiles	Coef. [Conf. Interval 95%]		
K_D_Cert_Sys	0.42*	0.205	0.637
Org_GAS	1.68*	0.878	2.488
Etical_Mot	0.22**	0.020	0.429
Food_Sec_Mot	0.22**	-0.013	0.457
Afer_interf	0.26***	-0.054	0.581
Prod_prov	0.38*	0.137	0.624
K_D_Cert_Trac	-0.99*	-1.794	-0.189
Att_Org_Cert	0.35*	0.053	0.647
D_Prov	-0.68**	-1.345	-0.021
/threshold1	4.19	2.388	5.990
/threshold2	6.63	4.655	8.602

^{* 1%; ** 5%; *** 10%}

Table 4 – Comparison of absolute frequencies and the estimated probabilities for each category

Variables	Average	Pr(C_Org)-C_Org	St. Dev	Min	Max
C_Org1	0.299		0.459	0	1
C_Org2	0.381		0.487	0	1
C_Org3	0.320		0.468	0	1
Pr(C_Org1)	0.298	-0.001	0.263	0.00	0.94
Pr(C_Org2)	0.382	0.001	0.145	0.05	0.54
Pr(C_Org3)	0.320	0.001	0.265	0.01	0.95

Last but not least the marginal effects (ME) of the statistically significant variables in the model have been calculated. The marginal effects were calculated as an average sampling effect on the probability to choose a j alternative resulting from a x_{τ} regressor's variation, and they are given by:

$$\frac{\partial Pr(y_i = j)}{\partial x_{\tau i}} = \left\{ F' \left(\alpha_{j-1} - x_i' \beta \right) - F' \left(\alpha_j - x_i' \beta \right) \right\} \beta_{\tau}$$

Such values show the variation in the single modalities of the dependent variable resulting from the variation of each of the explicative variables. The ME units of measurement turn out to be equal to the variables' ones.

Table 5 – Odds ratios calculated on the results of ordered logistic regression

Variables (Dep. Var.: C_Org)	Odds Ratio	[Conf. Interval 95%]	
K_D_Cert_Sys	1.524*	1.227	1.891
Org_GAS	5.380*	2.405	12.034
Etical_Mot	1.252**	1.020	1.536
Food_Sec_Mot	1.248**	0.987	1.579
Afer_interf	1.302***	0.948	1.788
Prod_prov	1.463*	1.146	1.866
K_D_Cert_Trac	0.371*	0.166	0.828
Att_Org_Cert	1.419*	1.054	1.910
D_Prov	0.505**	0.261	0.979

^{* 1%: ** 5%: *** 10%}

On the other hand, a particular solution was adopted for the discrete variables. In fact, it has been taken into account that the dummy variables (0/1) and the categorical variables (1-5) express unit variations. In this sense, the marginal values were calculated according to the variation of the Cumulative Distribution Function (CDF), $F'(\cdot)$, moving from one value to another with a unit increase. However, such computed effects can be interpreted like those relating to the continuous variables. In reference to the obtained results (Tab. 6) it is possible to observe at least three factors. The first is related to the ME signs, which turn out to be negatives for C_Org1 and C_Org2, while they are positive for C_Org3. Such a result was anticipated by the estimated coefficients' signs in

the model: all the positive (negative) estimated coefficients could only involve negative (positive) marginal effects about the lower organic expense levels on the total and positive (negative) marginal effects about the higher organic expense levels.

The second factor is about the poor statistical significance of the ME for C_Org2. Such a result would point out the intermediate organic expense class (between 20% and 50% on the total expense for food) almost not influenced at all by the examined variables. This may be related to this class' consumers being hardly influenced by the context. The third and last factor is about the "absolute" values of the assessed marginal effects. The Org_GAS and K_D_Cert_Trac variables have the most considerable marginal effect in both C_Org1 and C_Org3 expense categories. In both of them the expense classes have similar values to each other even with opposite signs (Org_GAS -0.214 in C Org1 and 0.285 in C Org3; K D Cert Trac 0.144 in C Org1 and -0.133 in C Org3). It is worth pointing out the connection between a greater level of knowledge about the traceability and the Organic consumption. While the traceability would seem to constitute a sufficiently reassuring guarantee in leading consumption choices of the C_Org3 category's consumers, as far as the C_Org1 expense category is concerned, a greater level of knowledge about the traceability leads to a bigger probability of Organic consumption.

The effect of the dummy D_Prov variable in the C_Org3 category (-0.102 compared to 0.094 in C Org1) is much more significant. This last result points out the organic consumer in Catania to live in a more mature reality in confirmation of the fact that organic expense percentages bigger than 50% on the total expense for food are more likely to be found in the consumers living in Catania.

Table 6 – Marginal effects per single level of C Org [95% Conf. Interval]

Variables	Coeff.	[95% Conf. Interval]		
C_Org1				
K_D_Cert_Sys	-0.059*	-0.0865	-0.0313	
Org_GAS	-0.214*	-0.2826	-0.1459	
Etical_Mot	-0.031**	-0.0593	-0.0037	
Food_Sec_Mot	-0.031**	-0.0634	0.0012	
Afer_interf	-0.037***	-0.0806	0.0067	
Prod_prov	-0.053*	-0.0851	-0.0213	
K_D_Cert_Trac	0.144*	0.0234	0.2646	
Att_Org_Cert	-0.049*	-0.0896	-0.0085	
D_Prov	0.094**	-0.0033	0.1914	
C_Org2				
K_D_Cert_Sys	-0.003ns	-0.0109	0.0049	
Org_GAS	-0.070ns	-0.1566	0.0159	
Etical Mot	-0.002ns	-0.0062	0.0029	
Food_Sec_Mot	-0.002ns	-0.0061	0.0028	
Afer_interf	-0.002ns	-0.0075	0.0036	
Prod_prov	-0.003ns	-0.0101	0.0047	
K_D_Cert_Trac	-0.011ns	-0.0409	0.0184	
Att_Org_Cert	-0.003ns	-0.0092	0.0041	
D_Prov	0.008ns	-0.0058	0.0223	
C_Org3				
K_D_Cert_Sys	0.062*	0.0323	0.0915	
Org_GAS	0.285*	0.1424	0.4268	
Etical_Mot	0.033**	0.0034	0.0628	
Food_Sec_Mot	0.033**	-0.0013	0.0667	
Afer_interf	0.039***	-0.0074	0.0852	
Prod_prov	0.056*	0.0214	0.0906	
K_D_Cert_Trac	-0.133*	-0.2289	-0.0365	

Att_Org_Cert	0.052*	0.0092	0.0939
D_Prov	-0.102**	-0.1947	-0.0099

^{* 1%; ** 5%; *** 10%;} ns: non siginificant, >25%

6. Concluding remarks

The overall interpretation of the obtained results allows some considerations about the theorical hypothesis expressed in the beginning part of this paper. One of the first factors to highlight is that the apparent inconsistency of organic consumers within modern society schemes turns out to be perfectly understood and interpreted once a postmodern social setting is considered. The certainties' decline, the society's "liquidity" in which the consumer aims to maximize his happiness' function rather than his utility function, lead to behaviour that would have been defined as irrational up to few years ago. A consumer, who expresses himself and his own political belief deeply by attending GAS or such events as 'A Fera bio and whose purchasing actions alternate between big retailers chain's convenience and the consumption of organic products strongly connected to the territory, stands out instead. A consumer who strongly believes that either a conscious or a political consumption could change the surrounding society; a consumer, whose ethical reasons, together with the pragmatic ones about food safety, strongly affect the decisions of directing the available financial resources for food to the purchase of such particular products as the organic ones. These consumers' activism takes shape in attending the GAS, where the awareness of being able to give a change to society is increasingly developed.

The direct connection between consumers' presence at 'A fera bio, as an opportunity to personally interact with the producers, and a higher expense level for organic products on the total expense for food, shows further the purchase decisions to be influenced by non-commercial factors.

Within this context the postmodern consumer looks not only at the products' quality, claiming it to be certified, but also looks for and buys such specific signs as the products' authenticity and the sense of saving the local context, threatened by globalisation.

Furthermore, it is interesting to point out the inverse link between knowledge level about traceability certification and the organic expense rate on the total family expense for food. This result shows that a higher knowledge level about traceability reassuringly guarantees consumption choice-making.

According to the obtained results, the participation at 'A Fera bio events is only one of the actions taken by organic consumers in order to feel more active in a postmodern society's setting. That is shown by the attention given to the geographical origin of the products, which favours local productions, even if other non-organic certified purchasing channels are not excluded.

We are still a long way from making the complex, cognitive and behavioural world of postmodern consumer measurable. Nonetheless, this contribution must be seen as one small portion of a much wider puzzle that is believed to potentially represent both a breathing space and a food for thought as well as for further and more exhaustive studies on this subject.

References

Bauman Z., (1999): La società dell'incertezza, Bologna, il Mulino

Bauman Z., (2000): Modernità liquida, Roma, Laterza.

Bellanca N. (2011): *L'economia solidale di fronte all'economia e alla politica*. Atti dell' 11° convegno nazionale GAS DES, Aquila, 24-26 giugno.

Brunori G, Rossi A., Guidi F., Lari A. (2008): In che modo i consumatori consapevoli possono contribuire allo sviluppo sostenibile? Un'analisi a partire dal consumo alimentare. Laboratorio di studi rurali SISMONDI, Working paper n.5.

- Brunori G., Rossi A., Malandrin V. (2011), Co-producing Transition: Innovation Processes in Farms Adhering to Solidarity-based Purchase Groups (GAS) in Tuscany, Italy, *International Journal of Sociology of Agriculture and Food*, Vol. 18, No. 1, pp. 28–53
- Cameron A. Colin, Pravin K. Trivedi (2005) Microeconometrics: Methods and Applications, 1st edition, Cambridge
- Cembalo L., Migliore G., Schifani G. (2010): Modelli di consumo e nuovo paradigma della sostenibilità: I Gruppi di Acquisto Solidale in Sicilia. *Rivista di Economia Agraria*, anno LXV, n.4.
- Cicia G., Cembalo L., Del Giudice T., Verneau F. (2011): *Il sistema agroalimentare ed il consumatore postmoderno: nuove sfide per la ricerca e per il mercato*, paper presented in the plenary session at the XIX Congress of the Italian Society of Agro-food Economy, Benevento (ITA), June 9-11.
- Cova B. (1999): From Marketing to Societing: When the Link Is More Important than the Thing, in Brownlie D., Saren M., Wensley R. and Whittington R.: Rethinking Marketing. Towards Critical Marketing Accountings, London, Sage.
- Elliot R. (1999): Symbolic meaning and postmodern consumer culture, in Brownlie D., Saren M., Wensley R. and Whittington R.: Rethinking Marketing. Towards Critical Marketing Accountings, London, Sage.
- Giddens A. (2007): Europe In The Global Age. Cambridge UK.
- Goodman, D., DuPuis E.M., (2002): Knowing food and growing food: beyond the production-consumption debate in the sociology of agriculture. *Sociologia Ruralis* Vol 42 (1), pp. 6-23.
- Lyotard J F. (1981):, La condizione postmoderna: *rapporto sul sapere*, Milano, Feltrinelli, (trad. di Carlo Formenti).
- Marsden, T.K., N. Wrigley. (1995) Regulation, retailing and consumption. *Environment and Planning* A 27, pp. 1899-1912
- Micheletti M. (2009): La svolta dei consumatori nella responsabilità politica e nella cittadinanza, in Forno F., Tosi S.: Partecipazione e Conflitto. Partecipazione politica e denaro, n. 3, Milano, FrancoAngeli.
- Nussbaum, M, Sen A. K., (1993): The Quality of Life, Oxford, Clarendon Press.
- Romano R.G. (2010): Identità e Alterità nella società postmoderna: quale dialogo?, *Quaderni di Intercultura*, anno II.
- Schifani G., Migliore G. (2011): Solidarity Purchase Groups and the new critical and ethical consumer trends: first results of a direct study in Sicily, *New Medit, Mediterranean Journal of Economics, Agriculture and Environment*, n°3/11.
- Schifani G., Albanese A., Migliore G. (2009): I Gruppi di Acquisto Solidale in Sicilia: modelli organizzativi e di comportamento attraverso l'analisi di un caso studio, *IV Workshop GRAB-IT*, *Agricoltura Biologica: sistemi produttivi e modelli di commercializzazione e di consumo* (*Crescimanno M., Schifani G., a cura di*), *ISBN 978-88-6213-011-0*, pag. 151-158.
- Vattimo G. (1989): La società trasparente. Milano, Garzanti.
- Vattimo G., Rovatti P.A. (1985): Il Pensiero debole, Milano, Feltrinelli.