

Appendix

Appendix 1 - Laws and Regulations

Year	Policy
1980s	<p>Fisheries Law of the people's Republic of China (1986)</p> <p>Frontier health and Quarantine Law of the people's Republic of China (1987)</p> <p>The Standardization Law of the People's Republic of China (1988)</p> <p>Law of the People's Republic of China on Import and Export Commodity Inspection (1989)</p>
1990s	<p>Law of the People's Republic of China on the Entry and Exit Animal and Plant Quarantine (1991)</p> <p>Agriculture Law of the People's Republic of China (1992)</p> <p>Product Quality Law of the People's Republic of China (1993)</p> <p>Law of the People's Republic of China on Protection of Consumer Rights and Interests (1993)</p> <p>Food Hygiene Law of the People's Republic of China (1995)</p> <p>Law of the People's Republic of China on Animal Epidemic Prevention (1997)</p> <p>Regulations on Pesticide Administration (1997)</p> <p>Regulations on Live Pig Slaughter Management (1997)</p> <p>Grain purchase regulations (1998)</p> <p>Regulation on the Administration of Feed and Feed Additives (1999)</p>
2000s	<p>Regulations on Administration of Agricultural Genetically Modified Organisms Safety (2001)</p> <p>Emergency regulations on public health emergencies (2003)</p> <p>Regulations of People Republic of China on Certification and Accreditation (2003)</p> <p>Grain circulation management regulations (2004)</p> <p>Special Rules of the State Council on Strengthening the Supervision and Management of the Safety of Food and Other Products (2007)</p> <p>Regulation on the Supervision and Administration of the Quality and Safety of Dairy Products (2008)</p> <p>Regulation on the Implementation of the Food Safety Law of the People's Republic of China (2009)</p> <p>Circular of the State Council on Establishing the Food Safety Commission of the State Council (2010)</p> <p>State Food and Drug Administration changed its name to China Food and Drug Administration (2013)</p>

Consumer perceptions and attitudes towards Farmers' Markets: the case of a Slow Food "Earth Market"

Claudia Bazzani^a, Daniele Asioli^{a,b}, Maurizio Canavari^c, Elisabetta Gozzoli^c

^a University of Arkansas, USA

^b Nofima AS and Norwegian, University of Life Science, Norway

^c Alma Mater Studiorum-Università di Bologna, Italy

Summary: This research aims to investigate attitudes, motivations and purchasing behaviour and identify consumer segments among Earth Market's shoppers. The Earth Markets[®] are a particular type of Farmers' Markets which are organized and promoted by Slow Food[®] association. Thus, in the Earth Markets[®] the criteria of the Slow Food philosophy may play an important role to define the profile of Earth Market's[®] shoppers. We performed a survey conducted on a sample of 185 consumers who buy food products at the Earth Market of Bologna in Italy during fall 2011. Data were analyzed using descriptive, bivariate and multivariate statistics. Results show that consumers perceive food products of the Earth Market[®] as tasty, high quality, fresh, local, seasonal and safe. Social and environmental aspects are the main factors that drive consumers to buy at the Earth Market. Three consumer segments were identified, described and discussed. Suggestions and recommendations for farmers, Slow Food[®] association and policy makers are provided.

Key words: Earth Market[®], Slow Food association[®], local food, Italy, consumers, attitudes, perceptions, segmentation

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Introduction

1.1. Long and short supply chains

The increased participation of different stakeholders along the mainstream food supply chain, called "Long supply chains - LSC_s", mostly dominated by large retail chains has been subjected to several criticisms in the recent literature (Raffaelli *et al.*, 2009; Sonnino & Marsden, 2006). Among the different criticisms, the increased distance between farmers and consumers and the loss of market power of farmers have led to the development of the so called "Short and Local Supply Chains" (SLSC_s). SLSC_s represent a new form of direct marketing from producers to consumers which "*the emphasis upon the type of relationship between the producer and the consumer in these supply chains, and the role of this relationship in constructing value and meaning, rather than solely the type of product itself*" (Marsden, Banks & Bristow, 2000). Thus, one of the main differences between LSC_s and SLSC_s is the smaller number of intermediaries between the producer and the consumer and/or a limited geographical distance between the two that characterized SLSC_s. During the recent years, the relevance of SLSC_s have been continuously increasing. SLSC_s have been promoted with the purpose to revalorize the role of farmers in the modern retail distribution system and to reduce the distance between farmers and consumers (Bazzani & Canavari, 2013; Higgins *et al.*, 2008).

There are different SLSC_s models: *Farmers' Markets* (FMs), where consumers can interact "face-to-face" with the farmers (Rocchi, Cavicchi & Baldeschi, 2010); *Community Supported Agriculture* (CSA), which are communities of consumers directly involved in the management and cost-support of producing (Cone & Myhre, 2000); *Box Schemes*, very common practice in the UK, based on the dealing of food products directly from the producer to the house of consumers; "*Adoption*" of crops, gardens or animals and finally the "*pick-up-your-own*" based on the possibility of consumers to picking the food products from the ground or from the tree themselves. This paper focuses on FMs only.

1.2. Farmers' Markets

According to the U.S. Department of Agriculture - USDA defines FMs "*as a retail outlet in which two or more vendors sell agricultural products directly to customers through a common marketing channel (direct marketing)*" (Ragland & Tropp, 2009). FMs are the most popular model of SLSCs. Indeed, especially in urban settings where the concept of buying food

directly from producer has many perceived consumer benefits, FMs continue to rise in popularity (Betz & Farmer, 2016; Gao, Swisher & Zhao, 2012; La Trobe, 2001).

This paper focuses on FMs, seeking an assessment of their sustainability. FMs can be considered as the return to purchasing at FMs lowers developed countries. FMs can be of different types: informal street-markets, weekend markets, etc. (La Trobe, 2001). Since the 1990s, new FM initiatives have widely spread in developed countries from the US to the EU.

In Italy, a mix of historical, political, institutional and cultural factors supported the resilience of traditional forms of retail, such as the urban outlets for vegetables and fruits (Rocchi *et al.*, 2010).

Despite the legislative decree n. 228 of 18 May 2001 (art. 4) and the art. 1, paragraph 1065 of the 2007 Finance act of the Italian government that established the direct selling of food products of farmers, there are no official regulations or rules of the characteristics that FMs must have, nor is there, as in other European countries, a national association that sets common rules concerning the maximum distance of producers/growers from the market and type of foods allowed (Vecchio, 2010) or other features of FMs. Thus, each FM has its own specific principles and guidelines with the only exception of the Slow Food^{®1} association which has established the Slow Food Earth Markets[®] (EMs) where each EM must meet some common basic features (Slowfood, 2014; Vecchio, 2010).

The largest Italian farmers' association Coldiretti counted 758 FMs in 2011 in the Italy (Campagna Amica, 2012). What characterizes a FM is that the supply of local food is mandatory. FMs play an important role from a social point of view because of the opportunity for consumers to establish and improve relationships with their traditions, cultures and territories (Rocchi *et al.*, 2010). FMs are also considered as a social event (Carey, Bell, Duff, Sheridan & Shields, 2011), a way to revitalize public areas (Saili, Rola-Rubzen & Batt, 2007) and to support the local economy by safeguarding local jobs and benefiting local traders (Bullock, 2000). It is maintained that purchasing at FMs drives to a lower environmental impact because of the reduction of "food miles" in comparison to the conventional food supply (Pirog, Van Pelt, Enshaya & Cook, 2001) even though some contradicting findings have been identified (Cholette, 2011; Saunders & Barber, 2007).

Previous studies found out that FMs shoppers are mainly female (Rocchi *et al.*, 2010), married with children (Zepeda & Li, 2009). FMs shoppers tend to have high education and high income (Govindasamy *et al.*, 2002). FMs

1. Slow Food[®] is an organization founded in Italy in 1989 and now operating globally aimed at linking "the pleasure of good food with a commitment to local communities, biodiversity and the environment".

shoppers look for fresh, high quality, nutritious, pesticide-free food products which are locally grown at a suitable price (Carey *et al.*, 2011; Spiller, 2012). The support to the local economy and the reduction of environmental impact are further motivations that drive consumers to purchase at FMs (Chen and Scott, 2014; Winter, 2003).

1.3. The Slow Food "Earth Markets®"

As mentioned in the section 1.2, EM is one of the most recent projects promoted by Slow Food® as an international network of FMs following specific Slow Food guidelines. The "Earth Markets®" is a private brand belongs to the Slow Food® association. The project started in 2006 when Slow Food® Foundation for Biodiversity and other partners aimed to promote markets of local food producers all over the world (Tencati & Zsolnai, 2012). Basically, EMs are forms of SLSc where seasonal, territorial, and high-quality products are supplied (Pollan, 2006) thanks to the joint efforts of small scale farmers and artisans, local enterprises, local communities, and municipalities (Tencati & Zsolnai, 2012).

EMs are becoming more and more popular in European and extra-European countries (e.g. Israel, US, etc.) where 57 EMs are currently identified (Earth Markets, 2016b). According to Slowfood (2014) EMs are FMs sponsored by Slow Food convivial and differ from other FMs that are characterized by the pleasure of local good food, commitment to local communities, biodiversity of resources, attention to environment as well as the presence of social and educational activities (Jones, Shears, Hillier, Comfort & Lowell, 2003; Slowfood, 2014). In particular, EMs must comply with the following rules:

- *Food products* must be consistent with the quality criteria determined by the Slow Food experts. The food products must be produced under sustainable production methods, preserving the culinary traditions of the local communities and protecting the biodiversity of the territory. These rules are summarized with three keywords that must describe all food products sold at EMs: "Good" (fresh, seasonal, healthy and with high sensory value), "Clean" (from local production, grown using sustainable growing techniques and GMO-free) and "Fair" (reasonable prices for any kind of consumer and must guarantee a fair compensation to the farmer).
- *Marketing and advertising* is managed and sponsored by Slow Food convivial.
- *Management and control* of the EMs is the responsibility of the internal body of the Slow Food® association ("Management Committee") that is

2. "Mercati della Terra[®]", in the Italian language.

responsible for controlling compliance with the rules, including logistics activities, accounting of the EMs and organization of events.

- *Other activities*: all EMs must arrange educational activities, cultural events and tasting of the products sold by food producers.

As mentioned before, the quality of food at EMs reflects the "good", "clean" and "fair" criteria conceived by Slow Food which aim at highlighting the connection between good taste and social and environmental responsibility (Slow Food Foundation for Biodiversity, 2016). Thus, consumers that attend EMs can consume foods that do not only represent a source of nourishment, but that also include extrinsic values such as history, local identity, culture and health (Slow Food Foundation for Biodiversity, 2016). In addition, at EMs consumers are able to share their pleasure and enjoyment in buying and/or eating foods with strangers or friends. This aspect represents an important source of sharing knowledge and values related to food consumption (Slow Food Foundation for Biodiversity, 2016). Finally, at EMs consumers can also learn how to gather responsibility and pleasure through tasting, listening and cooking (Slow Food Foundation for Biodiversity, 2016). Indeed, consumers at EMs can be involved in different activities which regard not only farmers, but also extra-curricular activities organized by local schools, or tastings led by producers, or culinary events led by professionals or enthusiasts (from chefs to grandmothers, the guardians of our food traditions) (Slow Food Foundation for Biodiversity, 2016).

Thus, EMs are places where trust among consumers and producers is built which means "trust in what we put in our mouths, in those who produce it, and in the communities we belong to" (Slow Food Foundation for Biodiversity, 2016). Also, EMs contribute to emphasize the role of farmers in the food supply chain by giving to producers the chance to sell their products, to meet personally the consumers, to involve consumers in tasting their products and in other activities that may provide them useful information for the development of new products.

While consumer profiles at FMs have been widely investigated (González, 2009; Govindasamy, Italia & Adelaja, 2002; Zepeda, 2009), literature regarding the development of EMs, in particular regarding EMs shoppers' profile is scarce. Only one study by Vecchio (2010) included one EM in a qualitative study of three different FMs in Italy, including one EM.

1.4. Objectives

The goal of this study is to investigate attitudes, preferences and profiles of EM's shoppers. The purpose of the analysis is basically descriptive, but the method we use can be replicated in other EMs. Knowing the profile of

EM customers is useful to define whether these customers have homogeneous profiles or whether they have different characteristics and therefore have different preferences from other shoppers. This information is useful to practitioners who work in similar contexts or who would like to establish similar initiatives, as well as to policy makers who need to evaluate the support to FMs. The originality of this paper is twofold. First, the choice of EMs, which are characterized not only by the presence of local farmers and the supply of local food products (Vecchio, 2010), but also by social, cultural and educational events and other special features fostered by Slow Food®. Second, a quantitative survey describing and profiling customers in an EM is conducted for the first time.

2. Materials and methods

Due to budget limitations, we performed a survey only at the Bologna Earth Market (Mercato della Terra® di Bologna - MTB) which is one of the most important EMs in Italy (Slowfood, 2014). MTB counts 40 farmers selling their food products every Saturday morning all over the year and Monday evenings during summer. According to the Slow Food guidelines, MTB farmers sell food products (e.g. vegetables, pasta, olive oil, etc.) which have the following characteristics: seasonal, locally produced³ and sold at fair prices. For detailed information about MTB please see Earth Markets (2016a).

2.1. Data collection and questionnaire

The target population of this study was composed by MTB shoppers that are consumers who visit MTB to buy food. A systematic sampling procedure was performed to ensure that each shopper had an equal probability to be selected. However, it should be stressed that MTB shoppers who visited MTB more often had a higher likelihood to be selected. Two expert interviewers selected every fifth MTB shopper after they had bought food products.

The data were collected by using a questionnaire divided into four sections (see Appendix I):

- *Section A:* this section was devoted to the description of MTB shoppers. A list of 15 structured questions that regard the shoppers habits of MTB (e.g. frequency of visiting MTB, length of presence at MTB, etc.), distance of MTB from home, knowledge of the Slow Food brand, etc. was provided.

3. Within 40 km around Bologna, with the exception of fishermen from the Adriatic coast.

- *Section B:* this section investigates the characteristics of MTB related to food quality characteristics, sustainability, social aspects, location and services. The respondent was asked to declare his/her degree of agreement/disagreement with a list of 39 items using a 5-point Likert scale with levels and extremes marked levels from "Completely Agree" to "Completely Disagree". The items were sub-divided into five groups referring to: a) characteristics of food products marketed through MTB (e.g. freshness, GMO free, origin, etc.); b) sustainability of local economy, farmers and relationships farmers-consumers (e.g. "MTB sustain local economy"); c) environmental and social aspects (e.g. "MTB contribute to safeguard tradition"); d) location and services provided by MTB (e.g. "at MTB I like the atmosphere").
- *Section C:* this section is devoted to investigate how much are important for consumers the characteristics of MTB related to sensory quality of food products, safety of food products, presence of local producers, quality/price ratio, location, sustainable to SMES, extra-activity and possibility to have lunch or dinner. The section is composed by 8 items. The respondent is asked to declare his/her degree of importance with the items using a 5-point Likert scale with levels and extremes marked with "Not important at all" and "Very important".
- *Section D:* the final section of the questionnaire is composed by 8 items aimed to collect a list of essential socio-demographic information (i.e. age, professional status, employment). Respondents are also asked to define their family's income according to four levels qualitative scale.

The questionnaire was designed and then pre-tested during September 2011 on a sample of 17 consumers. Then the final version of the questionnaire was submitted to a sample of 185 consumers (N=185) who were intercepted and interviewed face-to-face during fall 2011. To avoid possible questions order bias, two randomly ordered versions of the questionnaire (A and B) were used.

2.2. Data analysis

Data were analyzed in several steps. Firstly, socio-demographic and behavioral attributes have been analyzed using descriptive statistics. Then, we applied the following statistical methods: Principal Component Analysis (PCA), Cluster Analysis (CA), ANOVA, Pearson's Chi-square and Kruskal-Wallis tests. All the analyses were performed using the multivariate statistics software package SPSS 17.0.

2.2.1. Measurement of consumer attitudes, perceptions and preferences

A total of 36 variables from sections B and C of the questionnaire were used and splitted in three groups considering their conceptual similarity:

- "Product's Perception": 14 items;
- "Location": 13 items and;
- "Social, environmental safeguard and relational aspects": 9 items.

In order to reduce complexity and to avoid redundancy, for each group, a limited set of factors were identified to be used as dimensions for the classification of consumers, by using the PCA data reduction technique. The main advantage of using PCA was that, while most of the variance in the original data was retained, the resulting components are uncorrelated to each other and could be interpreted as aggregates of the original variables. Varimax rotation was performed on the dataset related to the analysis of consumers' perception towards the MTB and the quality of the products. The selection of extracted factors was determined by the criterion of having an Eigenvalue greater than 1 (Kaiser, 1960). Since the output of a PCA procedure was represented by factor scores that were automatically standardized, they allowed for easily comparison of individuals on each component, but in order to compare individuals considering different components, it was necessary to take into account that the scores were centered on the average (equal to 0). Therefore, negative values of the scores indicated that individual was below the average, but not necessarily that the individual expressed a negative attitude or perception in absolute terms.

2.2.2. Cluster analysis

Based on factors extracted with PCA, a cluster analysis (CA) was performed in two steps. In the first step, a hierarchical CA with Ward linkage method was used in order to define the appropriate number of clusters. The most suitable n-clusters solution was identified by visual interpretation of the obtained dendrogram. Secondly, the K-means quick clustering method was applied for the creation of the clusters.

2.2.3. Post-classification profiling

Finally, ANOVA test, Pearson's Chi-square test and Kruskal-Wallis test were performed in order to verify if and how the socio-demographic and behavioral variables differentiate within the three clusters. One-way ANOVA was used to assess how distinct the clusters were considering the components used for classification, while Tukey Post-Hoc was used to determine where

the differences lie, Pearson's Chi-square and Kruskal-Wallis tests were performed in order to verify if and how the socio-demographic and other behavioral variables differentiated within the three clusters identified.

3. Results

3.1. Sample description

The socio-demographic profile of the sample is described in Table 1. The sample is made up of a nearly equal percentage of women and men. Half of MTB shoppers interviewed were not married, while 29.7% were married. The largest part of the sample is composed of MTB shoppers belonging to households with two members (33%), followed by single MTB shoppers (31.9%). Younger MTB shoppers (less than 30 years old) represented the smaller group (15.7%), while more than half of the sample (55.6%) were adult and middle aged MTB shoppers (31-50 years old) and finally mature MTB shoppers (older than 50 years old) counted for the 28.7% of the sample. In addition, half of the sample (51.4%) has a university degree, while 28.1% of the MTB shoppers had a diploma of high school diploma and finally 19.5% had a post-graduate qualification.

Table 1 - Socio-demographic characteristics of the consumers interviewed

Indicator		Sample (%)	Indicator		Sample (%)
Gender	Male	45.4	Age	Young	15.7
	Female	54.6		Middle age	55.6
Education	Elementary school	1.1	HH size	Mature	28.7
	High school	28.1		Single	31.9
	Bachelor degree	51.4		2 members	33
Income	Post-graduate degree	19.5	Marital status	3 members	17.3
	Lower than 24,999 €	27		4 members	11.9
	Between 25,000-34,999 €	19.5		More than 4 members	5.9
	Between 35,000-44,999 €	17.8		Married	29.7
	Higher than 45,000 €	35.7		Not married	50.9
				Not declared	19.4

Source: our elaboration

Figure 1 shows that the sample was largely composed by regular customers of the MTB, indeed 55.7% of interviewees visited the market regularly four times a month and 21.6% twice a month. Figure 2 shows that 63.3% of the interviewees spend more than one hour in a visit to MTB. Consumers were asked about the level, or expected level, of expenditures at MTB: the majority of the sample (67.1%) spend less than 25 Euro, while only 19.1% stated that they spend more than 46 Euro (Figure 3).

Figure 1 - Frequency of visits at MTB

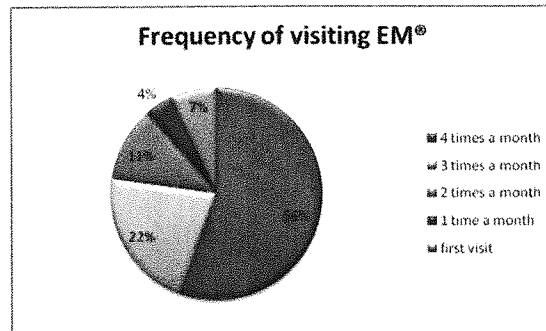


Figure 2 - Length of stay at the MTB

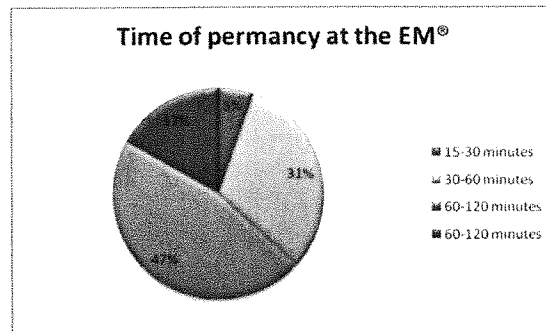
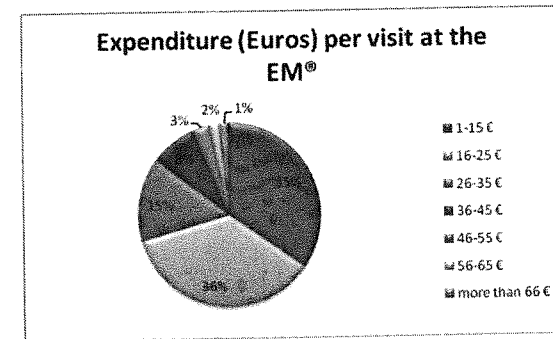


Figure 3 - Food expenditure (Euro) per visit at MTB



3.2. Measurement of consumer attitudes, perceptions, and preferences

Altogether, 10 factors were identified from the three separate PCA_s.

3.2.1. Group 1: Products' perception

Four factors were identified and described by fourteen variables (Table 2). KMO value (0.83) verifies the appropriateness of the factor analysis and the Bartlett's test of sphericity is significant ($\chi^2 = 796.2$; p-value < 0.0001). The data reduction procedure is also acceptable in terms of total explained variance: 60.7%. For the purpose of interpretation of the components, each variable was associated to the component with the highest absolute loading. The first component labelled as "Sensory quality and safety-hygienic aspect of products" (33.4% of total variance) and it was related to products' sensory quality and safety/hygiene aspects. The second component, labelled as "Local and seasonal food products", (11.8% of total variance) highlights the interest of consumers in buying local and seasonal products. Component 3, labelled as "Sustainable labels", is related to consumers' perceptions towards food products characterized by sustainable food labels (GMO free, organic). Finally, the component 4 ("Cost of the products") included the variables concerning the economic aspect of MTB food products and it explained the consumers' perception that MTB products are cheaper than food products from other kinds of outlets.

Table 2 - Factors and variables related of Group 1

N	Factors	Variables
1	Sensory quality and safety-hygienic aspect of products	MTB products are good MTB products are healthy MTB products are fresh MTB products are safe MTB have a safe origin Presence of local farmers whom I trust MTB products are high quality products
2	Local and seasonal food products	At MTB fresh fruits and vegetables are seasonal At MTB local food products are offered At MTB the majority of food products are cultivated inside an area of 40 km
3	Sustainable labels	At EM® products are GMO free At EM® products are organic
4	Cost of the products	MTB products are more expensive than non-MTB products MTB products are cheaper than non-MTB products

Source: our elaboration

3.2.2. Group 2: Location

A second PCA was applied to variables regarding the logistic characteristics of the MTB. The 13 variables were reduced to 4 factors that account for 60.7% of the total variance (Table 3). KMO value (0.693) revealed the appropriateness of the factor analysis and the Bartlett's test of sphericity was significant ($\chi^2 = 390.57$; $p < 0.0001$). The first factor ("Atmosphere and activities") described the variables related to the atmosphere and activities present at MTB and explains the 22.6% of the total variance. Factor 2 ("Broadness of the products' range") accounts for the broadness of products' range (12.2% of total variance) available to MTB: it showed that consumers consider the offer of the products wide and various. Factor 3, "Facility of reaching EM® and facility of parking" (11.2% of total variance) includes the variables underlying the facility of reaching MTB and the facility of parking nearby the MTB. Finally, factor 4, "Dining at EM® and sanitary conditions" (9% of total variance) was defined by the variables related to the enjoyment of having lunch/dinner at MTB and the valuation of the hygienic-sanitary conditions of the market (Table 3).

Table 3 - Factors and variables related of Group 2

N	Factors	Variables
1	Atmosphere and activities	Social event are present at MTB I like the liveliness of the MTB I like the atmosphere of the MTB I like the atmosphere of the Cinematheque "Lumiere"
2	Broadness of the products' range	At the MTB food products are of broad range At the MTB food products are not of broad range
3	Facility of reaching MTB and facility of parking	MTB is easy to reach It is possible to park nearby the MTB
4	Dining at MTB and sanitary conditions	I enjoy having lunch/dinner at the MTB The MTB is clean

Source: our elaboration

3.2.3. Group 3: Social, environmental safeguard and relational aspects

Finally, a PCA has been performed in order to analyze the ethical and relational aspects which are linked to the MTB. Two factors have been extracted from a series of 9 variables for an overall accounts for 51.5% of the total variance (Table 4). The Bartlett's test of sphericity is significant ($\chi^2 = 796.22$, $p < 0.0001$) and the appropriateness of the analysis is confirmed by the KMO value (0.829). Factor 1 ("Engagement in social and environmental safeguard"), represents the 37.4% of the total variance and was described by the variables which define an engagement in the social and environmental safeguard, as supporting local economy and family-run farms or environmental protection. Factor 2 ("Relational aspect") included the variables concerning the relational aspects of MTB especially the relation between farmers and consumers and accounted for 14.1% of the variance.

Five factors ("Cost of the products", "Sustainable labels", "Broadness of the products' range", "Facility of reaching EM® and facility of parking", "Dining at EM® and sanitary conditions") are composed by two variables, possibly, because of the brevity of the scale used in the questionnaire. For this reason, a Cronbach's Alpha Test could not be used to test the internal consistency of the factors. Therefore, the authors relied on the face validity of the results obtained in the PCA.

Table 4 - Factors and variables related of Group 3

N	Factors	Variables
1	Engagement in social and environmental safeguard	Buying at MTB I support the local economy Buying at MTB I support family-run farms At MTB there are no intermediaries Buying at MTB I safeguard the environment Buying at MTB I safeguard the regional culinary tradition
2	Relational aspect	At the MTB it is worthy to talk with growers At MTB I get informed about the production techniques At MTB I ask for advices to growers At MTB I receive information in detail about a product

Source: our elaboration

3.3. Consumer groups

Using the 10 PCs as classification variables, three clusters have been identified: one large and two small (Table 5). It is necessary to point out that, considering a significance threshold of Fisher Test equal to 5%, the factor "Facility of reaching MTB and facility of parking" resulted not significant, then this factor has not been considered crucial in differentiating of the clusters. With the performance of the Tukey Post-Hoc test, we could observe that every factor except "Dining at the MTB and sanitary condition" significantly differentiates ($p < 0.05$ following mean difference) within cluster 1 and 2. On the other hand, cluster 1 and 3 are significantly different in case of the factors "Organoleptic quality and safety-hygienic aspect of food products", "Local and seasonal food products", "Atmosphere and activities", "Dining at MTB and sanitary conditions" and "Relational aspect", while cluster 2 and 3 significantly differ in terms of "Organoleptic quality and safety-hygienic aspect of food products", "Cost of the products", "Broadness of the products' range" and "Engagement in social and environmental safeguard".

Table 5 - Final Clusters centroids (factor scores)

Factors	Cluster		
	Cluster 1 (17.3%)	Cluster 2 (74%)	Cluster 3 (8.7%)
Sensory quality and safety-hygienic aspect of products	-0.953	0.287	-0.558
Local and seasonal food products	-0.841	0.175	0.250
Sustainable labels	-0.069	0.051	-0.360
Cost of the products	-0.148	0.157	-1.052
Atmosphere and activities	-0.077	0.278	-2.372
Broadness of the products' range	-0.408	0.169	-0.676
Facility of reaching MTB and facility of parking	-0.519	0.116	0.047
Dining at MTB and sanitary conditions	-1.117	0.247	0.128
Engagement in social and environmental safeguard	-1.487	0.344	0.083
Relational aspect	-0.279	0.220	-1.462

Source: our elaboration

The post-classification profiling allowed the verification of if and how the socio-demographic and behavioral attributes differentiate within the three clusters. The variables "Gender" and "Number of family members" were not statistically different for any of the clusters.

3.4. Groups profiles

Cluster 1: "Experiential consumers". "Experiential consumers" do not pay special attention to any characteristics of the MTB related to social and environment safeguard, quality products and logistic aspects. What captures the least their interest is the quality and the origin of the food products and the "ethical" aspect related to the social and environmental safeguard. "Experiential consumers" pay more attention to the social events organized at the MTB. Indeed, they generally spend one or two hours at the MTB and they are regular visitors. On the other hand, they tend to buy few products at the MTB because they spend the lowest amount of money per visit. "Experiential consumers" were the youngest and most educated.

Cluster 2: “Enthusiastic consumers”. This is the largest cluster. Consumers who belong to this group are enthusiastic about the MTB since they perceived every aspect of the market more positively than the average consumers, with special emphasis on organoleptic and sensory quality, hygienic-safety aspects of the products and enjoyed encouraging the local economy and safeguarding the environment. The communication with farmers plays an important role in choosing MTB. Their appreciation for MTB is confirmed by the fact that, in comparison to the other two groups, they tend to spend the highest amount of money and the most time at the market. Furthermore, what differentiate them from the “experiential” and “out of trend” consumers is a higher level of annual income.

Cluster 3: “Out of trend consumers”. This is the smallest cluster. The “out of trend” consumers are those consumers who attend the MTB, but had less appreciation than other consumers for the relational aspect of the market, the presence of events, activities, the elements that enhance the liveliness of the marketplace, which are key features that define the uniqueness of the MTB. “Out of trend consumers” pay particular attention to the costs of products which may influence their choice. Indeed, they claim that MTB are more expensive than others. In addition, the range of products available was not relevant. They are interested in local origin and seasonality of the products. The “out of trend consumers” represent the only cluster with a percentage of married and older people higher than average.

4. Discussion and conclusions

Due to the fact that we investigated just one EM in Italy we cannot draw conclusions that can be extended to all the EMs. This is also due to the fact that the sample is quite small ($N=185$) and that even if standardized guidelines given by the Slow Food® association exist among EMs (see the Section 1.4), differences regarding producers, consumers, locations, etc. due to the different traditions, culture, geography, climate, etc. across EMs could be significant.

However, the analysis identified some interesting trends. Even if the largest part of MTB shoppers are women, the percentage of males is higher than in other food distribution channels. This is similar to the results found by Vecchio (2010) in an EM in Tuscany.

Three consumer segments were identified: one represented almost 75% of the sample and the others accounted for 25% of the sample. One possible explanation of why $\frac{3}{4}$ of the consumers were “*The enthusiastic consumer*” is that the sample selection procedure probably makes the recruitment of consumers who are frequent MTB visitors more likely, and we can

hypothesize that those consumers are more “enthusiastic”. According to previous studies (Autio, Collins, Wahlen & Anttila, 2013; Carey *et al.*, 2011), the characteristics of the larger cluster called “*The enthusiastic consumer*” are similar to the features of general FM shoppers. First, MTB shoppers pay particular attention to sensory qualities, freshness and the hygiene-safety aspect of the food products. Second, MTB shoppers go to shop there because they can find local food products and can communicate directly with farmers and ask for information about the production, growing techniques, etc. The interest in being connected with producers is also confirmed by the willingness of consumers to support the local economy and small and medium-sized farms. The latter finding is similar to the findings of Vecchio (2010) in an EM in Tuscany. The local origin aspect is more important than the GMO-free and/or the organic nature of the product and the price becomes less relevant. By purchasing “local”, MTB shoppers feel involved in respecting the environment and in meeting regional culinary traditions. Furthermore, MTB shoppers trust the quality of the products that they receive directly from the farmers from their region and which are produced following the “Slow food” criteria “Good”, “Fair” and “Clean”. The local and seasonal qualities of the products and the social and environmental safeguard represent the appeal to the MTB even for “*out of trend consumers*”, who are less interested in participating in cultural events. Only a very small part of the sample (8.2%) had a negative perception of the activities of the MTB. Indeed, the presence of social events and the lively atmosphere of the “*Lumière cinémathèque*”⁴ are the main attractions for those consumers (the “*experiential consumers*”) who are less demanding in terms of the quality of food products. Unlike previous studies of FMs, the intense involvement in the activities of the market is what mostly differentiates consumer motivations to visit the MTB (Govindasamy *et al.*, 2002; Rocchi *et al.*, 2010; Zepeda, 2009). Indeed, generally, consumers tend to spend more than one hour at the MTB in order to enjoy the educational activities, the live music and the live shows. The presence of cultural and educational activities may be appeal to visit the MTB even for those consumers, who do not usually shop at FMs. Thus, differently from other FMs, the MTB is considered not only as a market for grocery shopping, but also a meeting point where families and friends can come together to enjoy the tastes and flavors of their traditions.

Suggestions and recommendations for practitioners are related to key role played by social activities, social and environmental safeguard as well as the sensory-safety qualities of food products in attracting MTB shoppers. Farmers may have a chance of increasing the number of customers and

4. It is a movie-theater with the cultural mission of disseminate historical movies which are no longer distributed or ignored by the market.

their revenues by participating in the MTB because shoppers are attracted by the social, cultural and educational activities as well as by the Slow Food® brand which is becoming more and more popular. However, it should be taken into account that farmers have to strictly meet Slow Food guidelines which could be more challenging than participation in other types of FMs. A suggestion for farmers that participate in MTB is to continue to offer high quality food products (e.g. sensory, freshness, etc.), but at the same time also offer a certain number of products at a lower prices (e.g. discounts) who may attract more "out of trend consumers" which seem to limit their purchases due the high costs of the products offered. A suggestion for the Slow Food® association is to set up cultural events and social activities *ad-hoc* for older and married people which may attract more "out of trend consumers". Finally, research is needed to extend similar consumer segmentation to other EMs and to compare market types. Research also is needed to extend similar consumers segmentations to others EMs and then compare the results as well as to investigate the willingness to pay (WTP) for EMs products characterized by the Slow Food® brand. Nonetheless, the present study contributes to limited literature on the subject and indicates additional research needs.

References

- Autio, M., Collins, R., Wahlen, S. & Anttila, M. (2013). Consuming nostalgia? The appreciation of authenticity in local food production. *International Journal of Consumer Studies*, 37(5), 564-568. doi: 10.1111/ijcs.12029.
- Bazzani, C. & Canavari, M. (2013). Alternative Agri-Food Networks and Short Food Supply Chains: a review of the literature. *Economia Agro-Alimentare*, 15(2), 11-34. doi: 10.3280/ECAG2013-002002.
- Bullock, S. (2000). *The economic benefits of farmers' markets*. Retrieved from www.foe.co.uk/resource/briefings/farmers_markets.pdf.
- Campagna Amica. (2012). Mercati di Campagna Amica.
- Carey, L., Bell, P., Duff, A., Sheridan, M. & Shields, M. (2011). Farmers' Market consumers: a Scottish perspective. *International Journal of Consumer Studies*, 35(3), 300-306. doi: 10.1111/j.1470-6431.2010.00940.x.
- Chen, W. & Scott, S. (2014). Shoppers' perceived embeddedness and its impact on purchasing behavior at an organic farmers' market. *Appetite*, 83, 57-62. doi: 10.1016/j.appet.2014.08.010.
- Cholette, S. (2011). Addressing the greenhouse gas emissions associated with food distribution: a case study of Californian farmers' markets. *Economia agro-alimentare*, 13(3), 145-169. doi: 10.3280/ECAG2011-003009.
- Cone, C. & Myhre, A. (2000). Community-Supported Agriculture: A Sustainable Alternative to Industrial Agriculture? *Human Organization*, 59(2), 187-197. doi: 10.17730/humo.59.2.715203t206g2j153.
- Earth Markets (2016a). Mercato della terra di Bologna. Retrieved from www.mercatidellaterra.com/ita/network/bologna.
- Earth Markets. (2016b). The Network. Retrieved from www.earthmarkets.net/pagine/eng/network/pagina_network.lasso?-id_pg=13.
- González, J.A.A. (2009). Market trends and consumer profile at the organic farmers market in Costa Rica. *British Food Journal*, 111(5), 498-510. doi: 10.1108/00070700910957320.
- Govindasamy, R., Italia, J. & Adelaja, A. (2002). Farmers' markets: consumer trends, preferences, and characteristics. *Journal of Extension*, 40(1), 1-7.
- Govindasamy, R., Zurbruggen, M., Italia, J., Adelaj, J., Nitzsche, P. & VanVranken, R. (1998). Farmers markets: consumer trends, preferences, and characteristics. *New Jersey Agricultural Experiment Station*.
- Higgins, V., Dibden, J. & Cocklin, C. (2008). Building alternative agri-food networks: Certification, embeddedness and agri-environmental governance. *Journal of Rural Studies*, 24(1), 15-27. doi: 10.1016/j.jrurstud.2007.06.002.
- Jones, P., Shears, P., Hillier, D., Comfort, D. & Lowell, J. (2003). Return to traditional values? A case study of Slow Food. *British Food Journal*, 105(4/5), 297-304. doi: 10.1108/00070700310477095.
- Kaiser, H.F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, 20, 141-150.
- La Trobe, H. (2001). Farmers' markets: consuming local rural produce. *International Journal of Consumer Studies*, 25(3), 181-192. doi: 10.1046/j.1470-6431.2001.00171.x.
- Marsden, T., Banks, J. & Bristow, G. (2000). Food Supply Chain Approaches: Exploring their Role in Rural Development. *Sociologia Ruralis*, 40(4), 424-438. doi: 10.1111/1467-9523.00158.
- Pirog, R., Van Pelt, T., Enshaya, K. & Cook, E. (2001). *Food, Fuel, and Freeways: An Iowa perspective on how far food travels, fuel usage, and greenhouse gas emissions*. Ames, Iowas.
- Pollan, M. (2006). *The omnivore's dilemma: A natural history of four meals*. New York: The Penguin Press.
- Raffaelli, R., Coser, L. & Gios, G. (2009). Esperienze di filiera corta nell'agro-alimentare: un'indagine esplorativa in provincia di Trento. *Economia agro-alimentare*, 11(1), 25-42. doi: 10.3280/ecag2009-001003.
- Ragland, E. & Tropp, D. (2009). USDA National Farmers Market Manager Survey 2006. Washington, D.C.: Agricultural Marketing Service, U.S. Department of Agriculture.
- Rocchi, B., Cavicchi, A. & Baldeschi, M. (2010). Consumers' attitude towards farmers' markets in Tuscany. In *PAPER PREPARED FOR THE 116TH EAAE SEMINAR "Spatial Dynamics in Agri-food Systems: Implications for Sustainability and Consumer Welfare"* (p. 13). Retrieved from http://ageconsearch.umn.edu/bitstream/95224/2/133 completo.pdf.
- Saili, A.R., Rola-Rubzen, M.F. & Batt, P.J. (2007). Review of farmers' markets. *Stewart Postharvest Review*, 3(6), 6-14. doi: 10.2212/5pr.2007.6.14.
- Saunders, C. & Barber, A. (2007). *Comparative Energy and Greenhouse Gas Emissions of New Zealand's and the UK's Dairy Industry*. Agribusiness and Economics Research Unit Research Report (vol. 297). Lincoln University.
- Slow Food Foundation for Biodiversity. (2016). An Earth Market is not just a place to buy and sell food. Retrieved from www.fondazione Slow Food.com/en/what-we-do/earth-markets/what-is-an-earth-market/not-just-another-market/.

- Slowfood. (2014). Earth Markets. Retrieved from www.mercatidellaterra.it/welcome.lasso.
- Sonnino, R. & Marsden, T. (2006). Alternative Food Networks in the South West of England: Towards a New Agrarian Eco-Economy?. *Research in Rural Sociology and Development*, 12, 299-322. doi: 10.1016/S1057-1922(06)12012-0.
- Spiller, K. (2012). It tastes better because... consumer understandings of UK farmers' market food. *Appetite*, 59(1), 100-107. doi: 10.1016/j.appet.2012.04.007.
- Tencati, A. & Zsolnai, L. (2012). Collaborative Enterprise and Sustainability: The Case of Slow Food. *Journal of Business Ethics*, 110(3), 345-354. doi: 10.1007/s10551-011-1178-1.
- Vecchio, R. (2010). Local Food at Italian Farmers' Markets: Three Case Studies. *International Journal of Sociology of Agriculture and Food*, 17(2), 122-139.
- Winter, M. (2003). Embeddedness, the new food economy and defensive localism. *Journal of Rural Studies*, 19(1), 23-32. doi: 10.1016/S0743-0167(02)00053-0.
- Zepeda, L. (2009). Which little piggy goes to market? Characteristics of US farmers' market shoppers. *International Journal of Consumer Studies*, 33(3), 250-257. doi: 10.1111/j.1470-6431.2009.00771.x.
- Zepeda, L. & L.J. (2009). Who Buys Local Food. *Journal of Food Distribution Research*, 37, 1-11.

Appendix

Appendix 1 - Questionnaire

Range of responses	Description	Item
Section A) – Consumer's MTB habits and knowledge of Slow Food brand	How many times do you go to the MTB?	1
	Are you satisfied of the frequency of the MTB?	2
	How long do you stay at the MTB?	3
	How much time does it take to reach the MTB?	4
	By what means do you reach MTB (e.g. walking, biking, etc.)?	5
	How far is the MTB from your home?	6
	What is the shelf life of fruit and vegetables that you buy at the MTB?	7
	On a percentage basis how much of your weekly expenditures on groceries items are represented by purchases at the MTB?	8
	Today, how much did you spend or how much would you like to spend to purchase food products?	9
	How did you learn about the MTB?	10
	Where do you usually buy fruit and vegetables?	11
	Are you familiar with Slow Food® Association?	12
	Do you go to the MTB because it has been created by Slow Food® Association?	13
	Are you a member of Slow Food® Association?	14
	How did you become familiar with Slow Food?	15
Section B) – Aspects related to food quality characteristics, sustainability and social aspects, location and services of MTB.	... food products are good	1
	... food products are fresh	2
	... food products are of high quality	3
	... food products are safe	4
	... food products are GMO free	5
	... food products are healthy	6
At MTB...	... food products are cheaper in respect of other distribution channels	7
	... only local foods are sold	8
	... fruit and vegetable are seasonal	9
	... I am sure about the origin of food products	10
	... food products are well presented and located in stalls	11

Appendix 1 - continued

Range of responses	Description	Item
Section B) – Aspects related to food quality characteristics, sustainability and social aspects, location and services of MTB. At MTB...	... the majority of food products are cultivated inside an area of 40 km	12
	... I have the chance to taste food products	13
	... food products are more expensive than other distribution channels	14
	... the range of food products is wide	15
	... the range of food products is limited	16
	... farmers receive a fair remuneration	17
	... sustain local economy	18
	... I like chatting with farmers	19
	... there are farmers of this area that I trust	20
	... contribute to help small and medium farms	21
	... I like discover and ask how things are produced	22
	... I like to be advised by producers	23
	... there are no intermediaries, but only producers	24
	... buying, I believe to the help the environment	25
	... I believe to safeguard traditions and gastronomic culture of the territory	26
	... there are often courses, special events, fairs	27
	... I am drawn by the activities	28
	... I like the atmosphere	29
	... I like the environment	30
	... I have lunch/dinner	31
	... is easy to reach	32
	... is easy to find a parking place	33
	... is always clean and ordered	34
	... I have detailed information about product's characteristics	35
	... there is not much waiting at the stalls	36
	... is possible to meet people and get to know people	37
	... the waiting at the stalls is annoying	38
	... I wait too much time at the stalls before being served	39

Appendix 1 - continued

Range of responses	Description	Item
Section C) – At MTB how important is...	... the organoleptic quality of the food products sold	1
	... the presence of local producers	2
	... the quality/price ratio	3
	... the location	4
	... the support to SMES	5
	... the extra-activities (e.g. events, courses, animations, etc.)	6
	... the chance to have lunch/dinner in some stalls of MTB	7
	... the safety of food products sold (e.g. GMO free, etc.)	8
Section D) – Socio-demographic features	Gender	1
	Citizenship	2
	Marital status	3
	Number of household family members	4
	Number of children	5
	Education level	6
	Profession	7
	Annual income	8