

# Direct Selling: a Marketing Strategy to Shorten Distances between Production and Consumption

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# Direct Selling: a Marketing Strategy to Shorten Distances between Production and Consumption

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**Abstract.** Direct sales became in recent years a diversification strategy increasingly used by farms to answer the CAP reform, as well as to react to the continuous price squeeze. Direct sales is in fact a form of marketing that allow farmers to retain a higher share of the final value of products. Far from being a way back to tradition, short chains and direct sales can be seen as strategies to capture new segments of demand interested in local and fresh food, and in more direct contact between consumers and suppliers.

The aim of this work is to study the recent evolution of direct selling in Italy and the determinants of the adoption of this marketing strategy. The first part of the paper analyses the evolution of Italian short supply chains and the development of the related institutional framework (national laws and financial incentives). In the second part of the paper the analysis is focused on the determinants of the adoption of direct selling. Specific attention will be devoted to empirically test if the probability of using of this marketing channel is influenced by the farm location in proximity to urban areas.

**Keywords:** farm diversification, direct selling, short supply chain, periurban agriculture, discrete choice models.

## Introduction

Direct sales are a marketing strategy that may allow farmers to contrast the adverse effects of productivism and the imbalance of power in the international agro-industrial food supply chain.

There has lately been a succession of polemics about the rise in prices of some raw materials and agricultural products. In the case of food public attention has focussed on the imbalance of power and possible speculations along food supply chains as the main causes of the increasing gap between farm-gate and retail prices. The issue of the margin between producer prices and the prices paid by consumers has been recently discussed in the EU Parliament<sup>[1]</sup> and among the solutions advocated to help bridge the gap are improving direct relations between consumers and producers, shortening the marketing channels to consumers and emphasising the concept of local foods.

In Italy farmers' profits are driven down not only by imbalance of power in the supply chain, but also by inefficiencies in the logistics infrastructures, especially insufficient and costly transport. In this context, the debate was rekindled about improving supply chain organisation and greater use of short supply chains as one way of reducing the price gap, guarantee reasonable prices for consumers and profit margin for growers.

Add to this, a series of food scares have undermined public confidence in conventional agriculture. The changes occurring in civil society, specifically with consumers, with greater awareness of nutrition and attention to health risks from food, are all elements that increase demand for products guaranteed for freshness, safety and limited processing. Direct contact between producers and consumers represents an instrument to gain information about the products origin and characteristics and control their quality and freshness.

Farmers' markets and other forms concerning the direct sale of agricultural products, recorded over recent years an extraordinary recovery of the popularity. Neighbourhood food markets represented, for a long time, one of the main supply sources of fresh products for the cities' consumers, but their importance rapidly diminished because of, on one hand, the evolution of the food industry and the beginning of large-scale distribution and, on the other hand, due to the change in life styles and consumption and the role of the woman within the family. At the moment, in the food market supermarkets, in which the food supply available is very wide, standard in quality, levelled out on brands that are more or less well-known, coexist with small scale distribution systems aimed to shorten the distance between producers and

consumers in order to allow farmers to capture more profit and to guarantee high quality and safe food at reasonable prices for the consumers.

Present farmers' markets, shows some characteristics that are quite distinct from the traditional, neighbourhood market. The current farmers' markets, in the way they are organised, offer added value from a social and cultural point of view, which traditional markets did not have, inasmuch as they often provide an occasion to share and exchange information. Very often, together with the sale of agricultural products, events are organised, in order to supply information for the consumers and encourage their knowledge and communication. This means that farmers markets answer to the new social need of information, contact with nature and reduction of distances between urban and rural areas.

All the different forms of short supply channels seem therefore to represent an interesting and complex occurrence in the European and Italian agricultural scenario from different standpoints, from the economic to territorial, social and cultural one.

This paper gives a brief overview of direct selling in Italy. First, demand and supply reasons for the renew of interest in this marketing approach are explored. Then the attention is focused on the evolution and state of art of direct selling in Italy. In addition, the Italian FADN-RICA data are used to explore the factors motivating producers to engage in short supply chains. Finally, we test if proximity to urban markets is a factor in the adoption of direct selling.

## **1. The strategic aspects of the short chain from the supply and demand point of view**

Direct selling may refer to sales on the farm or in farmers' markets, roadside sales, community supported agriculture (CSA)<sup>1</sup>, consumers' buying groups, direct supplying local shops, restaurants and schools. Their most important common feature is that they shorten the distance and favour a direct relationship between producers and consumers. In this respect they are a structure alternative to globalized supply chains distributing industrialized and undifferentiated products .

As for farmers, direct selling can be interpreted as a diversification strategy that can lead to higher profits and better farm household incomes (Jarosz, 2008)<sup>[2]</sup>.

The local scale of direct marketing help farmers first of all to minimize transport costs. Given the seasonal and territorial characteristics that distinguish direct sale, other cost savings may result from the reduced needs in terms of storage and packaging.

In addition to decreasing production costs, direct sales allow farmers to bypass middleman in the distribution chain. Hence, they allow farmers retaining more value added, without passing it on to the distribution sector.

Finally, direct marketing of products to consumers is a form of diversification in which labour resources of the farm household are re-deployed into on farm activities different from traditional agricultural production. This redeployment can result in an increase of farm household income both because some labour resources available in the farm household, not previously employed on farm, can find a new form of employment in the marketing activity or because farm labour that took the form of disguised unemployment<sup>2</sup>, can be shifted to an activity where returns are higher than from traditional agricultural production business.

As for consumers, direct sales offer first of all the chance to purchase high quality food at reasonable prices. The absence of intermediaries result in the above mentioned cost savings that, in turn, make high quality products moved by means of direct channels generally cheaper for consumers compared to those offered by traditional long food supply chains. The final decision in favour of direct purchasing is also affected by transaction costs that may offset the above mentioned savings. "Shopping requires more organizational efforts and it is more time demanding"<sup>[3]</sup> because of the distance, the constraints in variety of products and delivery arrangements.

The existence of savings for consumers is supported, for example, by the findings of a recent survey made by the Italian Farmers Association (CIA)<sup>[4]</sup>, according to which when food is purchased directly from the producer, the savings for consumers are between 30 and 35%. Furthermore, there is greater transparency concerning the price creation process, which the consumer is able to assess; a factor that becomes more

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<sup>1</sup> CSA means that consumers pay farmers at the beginning of the growing season and then receive weekly deliveries of seasonal produce throughout the growing season.

<sup>2</sup> Disguised unemployment refers to those cases in which marginal productivity is less than hourly wage. For more details, see Yasuoki Takagi, "Surplus labour and disguised unemployment". Oxf. Econ. Pap..1978; 30: 447-456

complicated in the case of a chain with a number of different intermediaries. For example, a recent analysis of the fruit and vegetable chain in Italy conducted by the National Competition Authority has shown that the mark-up on the final price ranged from 77% recorded in the case of a direct purchase to 300% when three-four intermediaries were involved (National Competition Authority, 2007) <sup>[5]</sup>.

The demand for low cost food coexist with an increased interest in diversity and distinctiveness in food, and even for higher quality and safe food (Verhaegen, Van Huylenbroeck, 2001<sup>[6]</sup>; Higgins *et al.*, 2008<sup>[7]</sup>). For example, in Italy consumers search for quality, freshness and healthiness of the products is recorded among the main reasons for consumers to purchase directly from the grower (Coldiretti, 2007<sup>[8]</sup>), and in some cases even more important than the search for lowest prices (Agri2000, 2006<sup>[9]</sup>).

Short distribution system put more emphasis on the quality and on the origin of the product. They re-localize food, in this way offering a closer connection with the point of production, thereby improving the quality of food and restoring public confidence and trust in food production (Higgins *et al.*, 2008<sup>[7]</sup>).

A part from economic determinants, there are environmental and social factors motivating consumers to engage in direct purchasing. The agro-industrial food system has a number of harmful environmental side-effects. For examples, growing concern has been recorded for the “food miles”, that is for the distance travelled from the place of production to the place of consumption, and for the large amount of waste and residue connected with the use of the packaging required by modern distribution. Direct purchasing offers a more environmentally friendly alternative to the traditional long supply chain. Furthermore, the direct sales channel often becomes the ideal instrument to diffuse organic and integrated agriculture products, hence to reduce another important environmental burden from agriculture.

Finally, locally embedded short supply chain often becomes an occasion to re-discover the existence of seasonal cycles, regional identities, biodiversity, landscape but even of local eno-gastronomical traditions and, more broadly, the rural culture.

The calculation of the net sum of cost and benefits of shifting from long to short supply chains is complicated by the existence of transaction costs occurring both on the demand and supply side.

## **2. The evolution and state of art of direct selling in Italy**

### **2.1 The legislative framework concerning direct sales in Italy**

The possibility of Italian, agricultural farms performing direct sales was implemented through the Law of 2001 (the (Italian) Legislative Decree Law No. 228/01)<sup>3</sup>, according to which the agricultural entrepreneurs, who are registered in the Register of Companies, are entitled to sell the products that mainly come from their own farms. The farmers are allowed to perform activities such as processing, manipulation, conservation, commercialisation and enhancement, further to a communication addressed to the Town Hall, where they are resident. Subsequently, two circulars issued by the Ministry of Production Activities brought in their intervention, declaring that said form of sale was not applicable to the fruit and vegetable sector. In 2006, the (Italian) Law No. 81 issued a deregulation, establishing that retail sales made by farms do not require any communication concerning the start-up of activities. In 2007, the Finance Act intervened by providing a new boost, establishing new limits concerning the income derived from the sale of farm products, until the legislation on trade is applied, thus, permitting the entrepreneurs to maintain the fiscal benefits inherent in the agricultural activities. The Mipaaf (*Food and Forest Agricultural Policies Ministry*) Decree, dated 20th November 2007, rigorously established the conditions for instituting markets allocated for direct sales, stating the Town Halls would be entitled to authorise agricultural markets that must meet specific standards and promote information for the consumers on the quality characteristics of the agricultural products on sale<sup>4</sup>.

The recent measures encouraging farmers have also been derived from indications at a Community level relative to the rural development policy 2007-2013: one of the fundamental objectives of the 1698/2005 Regulation concerning rural development is that of increasing the competitiveness of agriculture and

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<sup>3</sup> “Agricultural sector trends and modernisation, pursuant to Article 7 of the Law No. 57, dated 5<sup>th</sup> March 2001”

<sup>4</sup> The Decree established that markets can be instituted in public areas, in premises open to the public, as well as in private areas. The individuals allowed to sell are agricultural entrepreneurs who are registered in the Register of Companies, who comply with certain conditions. Amongst which, besides those that have already been set forth in the Legislative Decree Law No. 228/01, there is the location in the regional territory, the origin of the products of the company, itself, even obtained further to manipulation and transformation, the selling by the company’s owners, partners or employees, the products’ compliance on the subject of food health, the labelling in force with reference to individual products and an indication as to the place of territorial origin and the producer company.

forestry and among the key activities foreseen by the strategic, Community Trends, there is the development of new outlets for agricultural and forestry products.

At a regional level, there is an increase in the administrations that are issuing calls for bids, very often within the scope of the Rural Development Policy 2007-2013, in order to encourage the setting up of farmers' markets. The Piedmont Region is at the forefront, where direct sales represent 6-7% of food and agricultural trade, and are practised by approximately 3,300 agricultural firms and has foreseen, for 2009, financing in the amount of Euro seven hundred thousand<sup>[10]</sup>. In Tuscany, in 2007, the Project, "Filiera Corta - Rete regionale per la valorizzazione dei prodotti agricoli toscani" ("*Short Chain – a regional network to enhance Tuscan, agricultural products*") was created, with a sinking fund of regional contributions amounting to 80%. Between 2007 and 2008, financing was granted in the amount of approximately Euro 2.3 million in support of producer markets, as well as local sales outlets, chain agreements and other food and art events<sup>[11]</sup>. Furthermore, in order to quote some other experiences, the Lazio region issued the Regional Law No. 28, dated 24<sup>th</sup> December 2008, allocating contributions to promote markets set aside for direct sales to benefit both municipalities as well as the agricultural entrepreneurs, themselves<sup>[12]</sup>. Once again, in December 2008, agreements were executed to start up forty-two farmers' markets in Sicily, financed by the Regional Agricultural Council, which allocated Euro one million<sup>[13]</sup>.

## 2.2 Direct selling in Italy

For an overview of data about direct sales in Italy, the most up-to-date, complete source is the National Observatory on Direct Sales, created in 2005 by Coldiretti together with Agri 2000<sup>[14]</sup>. According to their surveys, 57,530 farms practiced direct sales in 2007. These account for 6.1 percent of all commercial farms, i.e. those enrolled in Register of firms of the Chambers of Commerce. The number of farms engaged in short supply chain is growing at very fast rates: it increased of 18 percent over 2005 and of 48 percent over 2001.

Direct selling is more widely diffused in the Northern (43%) and Central (34%) regions than in the Southern ones. At present, the regions in which direct selling is more widely diffused is Tuscany (16.8%), followed by Lombardy (10.6%) and Piedmont (10%) (see Graph 1). The very positive result recorded in Tuscany is partly due to the provision and calls for organisation of farmers' markets issued by the regional administration. Tuscany is the top ranking Region even diffusion frequency is calculated by dividing the occurrences by the total farms in the region.

Direct sales are concentrated mainly in the wine-and-grape sector (37.2% of the total), but an important share (27.7%) is also held by farms specialized in the production of fruit and vegetables and in the olive sector (19.5%). Other products moved by direct sales include milk and dairy (10.8%), meats and prepared meats (8.1%) and honey (3.4%). In dynamic terms, the greatest growth among various products between 2005 and 2007 affected cheese and honey, with three-figure increases in percentages of farms, +157% and +177% respectively. Olive oil and fruit and vegetables follow, with increases of 44.6% and 39.8%.

Most farms sell directly on site, accounting for 63.4% of total sales, followed by direct sales in markets and local fairs (24%). A smaller percentage of direct sales are operated in farm shops (14%).

Finally, the value of sales in Italy in 2007 is estimated at 2.5 billion euro, 4.1% higher compared with the previous year (+2% at constant values). Wine (47%) and fruit and vegetables (28%) make up 75% of total value for the channel. Next come animal products (meat, prepared meats and milk and dairy) which account for 12% of value.

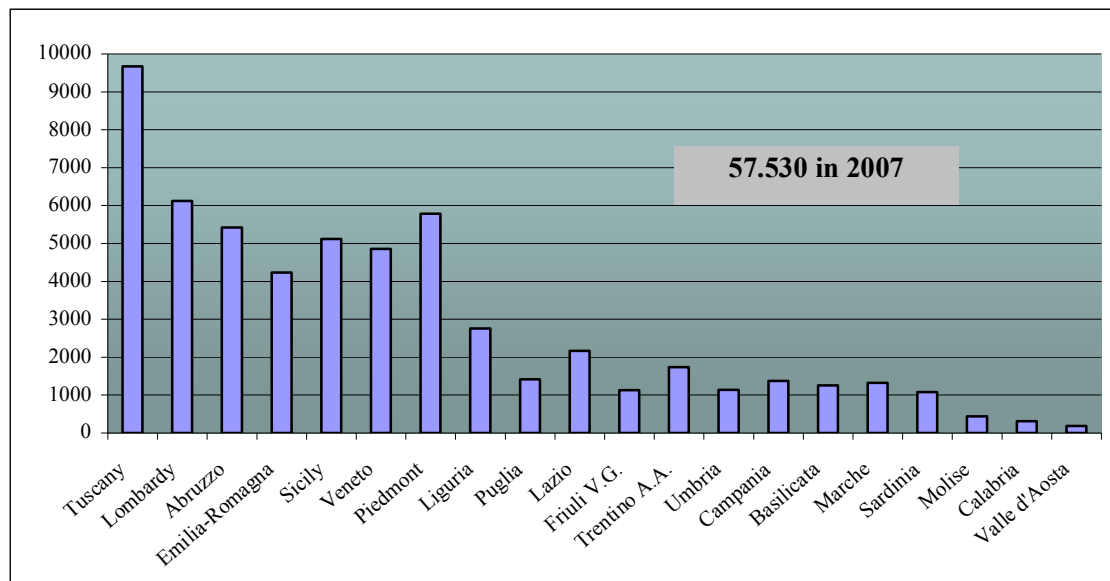


Figure 1. Direct selling (n° of farms) in Italian regions in 2007

### 3. The determinants of adoption of direct selling

We now analyze the determinants of Italian farmers' choice of using direct selling by estimating a discrete choice model<sup>5</sup>.

The decision on whether or not to make use of direct marketing is considered under the general framework of utility or profit maximization. It is assumed that farmers sell directly only when the perceived utility or net benefit from using such a market channel is significantly greater than is the case without it. Although utility is not directly observed, the actions of farmers are observed through the choices they make. The *Probit* model is used for this analysis.

#### 3.1 Sample and variables

The dependent variable is the presence or absence of direct sales, thus defined as a dichotomous variable that assumes the value 0 where direct sales are absent and 1 elsewhere. This information is obtained from the FADN survey of 2006. There are 13,980 observations in the 2006 sample<sup>6</sup>, 3,471 (24.8%) of which make use of direct sales. The FADN tends to overestimate the presence of direct marketing respect to the National Observatory of Direct Sales, the difference is partly due to differences in the way in which the information is collected<sup>7</sup>.

Following the indications given in previous literature on adoption of innovation, the **variables** that are hypothesized to influence the engagement of Italian farms in direct sales can be divided into three types: a) farmer specific (gender, age, off-farm income); b) farm structural and economic characteristics (farm type, work units, SGM); c) location of the farm (altimetric localization, Natura 2000 Network, distances among municipalities). This set is enriched by variables referred to the use of multifunctional practices, for example the adoption of organic farming and low-impact techniques. These practices may be indicative of environmentally concerned farmer that may also be more prone to use direct selling than conventional farmers.

As for farm types, we expect greater probability of direct sales especially for wine, olives and fruit, both as primary products and processed products, for which consumers perception in terms of freshness and

<sup>5</sup> For a similar exercise applied to 2005 sample, see Aguglia L., Henke R., Salvioni C. (2009), *Multifunctional Agriculture. Entrepreneurial behaviors and strategies in the search for diversification*. ESI, Rome.

<sup>6</sup> The sample does not include farms based in Emilia Romagna given the information about the use of direct selling is not collected in this region.

<sup>7</sup> In the FADN survey farmers are whether they use direct sales without further information about frequency of activity, percentage of farm production moved through the short channel, or whether sales to cooperatives are included in direct sales.

healthiness is more satisfied and for vegetable crops, which, in addition to that, can be distributed over a more extended period.

The complete set of variables used to estimate the probability of adoption of direct selling are equations are presented in table 1.

**Table 1.** Variables definition and descriptive statistics (averages – weighted values)

Variables	Definition	Direct sales=0	Direct sales=1	Universe
cond11	Direct management*	0.941	0.967	0.948
cond12	Management with salaried*	0.047	0.029	0.042
age	Farmer's age *	57.473	57.156	57.394
sessod1	Farmer's gender*	0.218	0.243	0.224
r_indip	Off-farm income from independent labour*	0.066	0.079	0.069
r_dip	Off-farm income from dependent labour*	0.131	0.181	0.143
r_pens	Off-farm income from pensions*	0.248	0.330	0.268
r_cap	Off-farm capital income*	0.008	0.015	0.009
sau_ln	Utilised Agricultural Area (log)	1.924	1.898	1.918
saup_sau	Owned area to total	0.760	0.777	0.764
ult	Total work units	1.277	1.200	1.258
ulf_ult	Family work units to total	0.896	0.904	0.898
pianura	Location in plains*	0.371	0.249	0.340
collina	Location in hills*	0.475	0.595	0.505
montagna	Location in mountains*	0.154	0.157	0.155
z_sva	Location in less favoured area*	0.476	0.590	0.504
z_v_a	Localization in Natura 2000 Network*	0.599	0.591	0.597
rls_sa~n	Gross standard margin per hectare (log)	7.761	7.605	7.722
ude8	ESU till 8 *	0.396	0.469	0.414
ude8_16	ESU from 6 to 16*	0.275	0.278	0.275
ude16_40	ESU from 16 to 40*	0.208	0.184	0.202
udepiu40	ESU over 40*	0.121	0.069	0.108
abio	Use of organic techniques*	0.036	0.068	0.044
aria	Use of low impact techniques*	0.062	0.047	0.058
trasf	On-site processing of farm products*	0.287	0.770	0.407
pl_tra~n	On-site processing in value	2.276	6.360	3.292
prodce~g	Quality certification*	0.102	0.115	0.105
tur_all	Agritourism (Farm Stays)*	0.015	0.030	0.019
p_paes	Participation in landscape conservation measure*	0.006	0.008	0.006
p_este	Participation in extensification measure*	0.015	0.008	0.014
p_esti	Participation in biodiversity conservation measure*	0.003	0.004	0.003
p_all	Participation in almost 1 measure*	0.084	0.109	0.090
ocm_ln	Participation in First Pillar measure*	2.843	2.325	2.714
por_ln	Participation in ROP measure*	0.020	0.041	0.025
psr_ln	Participation in RDP measure*	1.076	1.158	1.096
ote_cop	Specialization in arable crops*	0.195	0.095	0.170
ote_oliv	Specialisation in production of olives*	0.102	0.191	0.124
ote_vino	Specialisation in production of grapes and wine*	0.085	0.073	0.082
ote_FA	Specialisation in production of fruit and citrus*	0.120	0.055	0.104
ote_all	Specialisation in cattle*	0.136	0.094	0.125
ote_ort	Specialisation in production of vegetables*	0.036	0.036	0.036
ote_la~e	Specialisation in production of milk *	0.077	0.052	0.071
ote_al~m	Specialization in other permanent crops*	0.118	0.209	0.140

r_abr	Location in Abruzzo*	0.031	0.060	0.038
r_ala	Location in Alto Adige*	0.027	0.006	0.022
r_bas	Location in Basilicata*	0.025	0.039	0.029
r_cal	Location in Calabria*	0.068	0.055	0.065
r_cam	Location in Campania*	0.091	0.064	0.084
r_fvg	Location in Friuli Venezia Giulia*	0.019	0.022	0.020
r_laz	Location in Lazio*	0.045	0.074	0.052
r_lig	Location in Liguria*	0.014	0.019	0.015
r_lom	Location in Lombardy*	0.075	0.015	0.060
r_mar	Location in Marche*	0.035	0.040	0.036
r_mol	Location in Molise*	0.011	0.029	0.016
r_pie	Location in Piedmont*	0.080	0.053	0.073
r_pug	Location in Puglia*	0.114	0.230	0.143
r_sar	Location in Sardinia*	0.040	0.052	0.043
r_sic	Location in Sicily*	0.143	0.051	0.120
r_tos	Location in Tuscany*	0.035	0.110	0.054
r_tre	Location in Trentino*	0.020	0.004	0.016
r_umb	Location in Umbria*	0.016	0.021	0.017
r_val	Location in Val d'Aosta*	0.002	0.003	0.002
r_ven	Location in Veneto*	0.111	0.052	0.096

\*=dummy variable

As for characteristics of the farmer and family of farmers using short marketing channels, from the sample's analysis results that 97% are family-operated. Family work units used on the farm are 1.01 on average for total of farms, with a range varying from 0 to 10 units. The average age of the farmer is 57 years and 75% of them are male. In 48% of cases, the operator gains some off-farm family income, usually represented by pensions.

Moving on to variables referred to structural and economic farm characteristics, 59% of farms with direct sales are located in hillside areas, followed by the 25% located in plains. Either in terms of Utilised Agricultural Area (UAA) and of economic size farms making use of direct selling are small. 40% of them are less than 4.8 hectares, and 31% between 4.8 and 11.2 hectares. Average UAA of farms is 13.6 hectares. 47% of total farms have an economic size below 8 ESU, followed by those in the next higher category, 8 to 16 ESU, with 28% of the total.

In terms of farm type (FT) a significant part of the total are specialized in the production of permanent crops, especially olives (19%), wine (7%) and fruit (5%). Another 19% is non-specialised and produces mixed crops, while only 9% are specialized in annual crops and another 9% in livestock. Direct sales are practiced mainly in Southern (49%), and Central (33%) Regions<sup>8</sup>.

Comparing the features of farms with direct sales to those without (see table 1), the most relevant differences are for the economic dimension, the localization and the farm type. In terms of ESU, in the class under 8 ESU we find 46.8% of farms with direct sales against 39.5% of the farms without; on the opposite, in the higher class, over 40 ESU, fall 6.9% of farms with direct sales and 12.1% of farms without.

Referring to localization, 59% of farms with direct sales are situated in less favoured areas compared to 47.5% of farms without; in addition, farms with direct sales are widespread more in hills rather than plains and the contrary is true for farms without direct sales. Regarding farm type, farms with direct sales are specialised more in olive crop and in other permanent crops (different from the fruit and wine), while farms without are more frequent in arable and fruit crops and in cattle. The comparison underline also the importance of processing activity in direct sales farms (77%), rather than in farms without (29%).

### 3.2 Estimation strategy and results

<sup>8</sup> Regions where direct sales are most widespread are Puglia (23%), Tuscany (11%), Lazio (7%) Campania (6%) and Abruzzo (6%).



We started estimated the *probit* model exploiting all variables expected to have an influence on the probability of making use of direct (full model), to arrive successively, using the Likelihood Ratio test and applying AIC and BIC criteria, to a parsimonious model with a lower number of variables. The results of this latter model with the estimated coefficients, along with statistics of goodness of fit and marginal effects, are presented in table 2.

**Table 2.** Probit model results for direct sales

Variables	coef	se	mfx
cond11	0.132	(0.0923)	0.034
age	-0.00544***	(0.00183)	-0.001
sesso_cond1	-0.0896	(0.0646)	-0.024
r_pens	0.161***	(0.0574)	0.045
sau_ln	-0.0884***	(0.0235)	-0.024
ulf_ult	0.298**	(0.135)	0.081
collina	0.178***	(0.0648)	0.048
montagna	0.390***	(0.102)	0.117
z_sva	0.070139	(0.0639)	0.027
z_v_a	-0.0711	(0.0568)	-0.019
abio	0.365***	(0.106)	0.113
pl_trasf_ln	0.152***	(0.00695)	0.041
p_este	0.765***	(0.207)	0.263
psr_ln	-0.0138	(0.00862)	-0.004
ote_cop	-0.355***	(0.0738)	-0.086
ote_oliv	-0.416***	(0.115)	-0.097
ote_vino	-0.411***	(0.108)	-0.094
ote_FA	-0.212**	(0.105)	-0.053
ote_all	-0.268***	(0.0743)	-0.066
ote_ort	0.274**	(0.113)	0.082
ote_alperm	-0.111	(0.0881)	-0.029
r_val	0.466*	(0.240)	0.150
r_ala	-0.515***	(0.181)	-0.109
r_abr	0.417***	(0.120)	0.131
r_bas	0.444***	(0.104)	0.141
r_fvg	0.819***	(0.102)	0.284
r_laz	0.569***	(0.128)	0.185
r_mar	0.317***	(0.111)	0.096
r_mol	0.711***	(0.124)	0.242
r_pie	0.578***	(0.0932)	0.187
r_pug	0.616***	(0.104)	0.196
r_sar	0.640***	(0.125)	0.212
r_sic	-0.311**	(0.126)	-0.075
r_tos	0.796***	(0.110)	0.271
r_tre	-0.532***	(0.194)	-0.111
r_ven	0.427***	(0.102)	0.132
Constant	-1.562***	(0.198)	

\*\*\* p<0.01, \*\* p<0.05, \*p<0.1

The value of the PseudoR<sup>2</sup> (adjusted McFadden's R<sup>2</sup>), indicating the percentage of total observed variability explained by the model is rather low (23%). The inclusion of additional available variables has proved not to have significant influence on explaining the phenomenon under analysis. For a *post estimation* analysis, the *probit* model correctly classify equal 80% of cases. Sensitivity, that is the ratio between positives correctly estimated by the model and total positives, is 45.2%, whereas

specificity, that is the ratio between negatives correctly predicted and the total of cases with no direct sales, is equal to 91.3%. The model better predict the absence of direct sales rather than the presence.

As for variables referred to characteristics of farmers or family, results show that age has a negative, statistically significant influence on the probability of adoption of direct sales. In other words younger farmers are more engaged in direct selling than the elders. Among old farmers those with a pension are more interested in this practice.

The probability of direct marketing is higher in farms operated with a large percentage of family labour force. This can be related to the possibility to absorb exceeding family labour in an activity different from farming in order to maximize the family employment and global income.

As for farm characteristics, we find that most of farm type (wine, olives, fruit) have a significant but negative impact on direct sales, while specialization in the production of vegetables increases the probability of adoption, likely due to the greater suitability of some crops for selling directly because they are available over long periods.

The presence of on farm produce processing has a positive and high impact on the probability of direct selling. This result confirms hypotheses made in previous studies according to which on farm processing increases the value added to the primary good without passing this additional economic benefits to other stages of the supply chain. The high positive marginal effect of this variable suggests that the use of short marketing channels benefits more farmers which are increasing the value of the products they sell by some form of processing.

The positive coefficient of organic farming validates theories suggesting that the short channel is an ideal tool for moving products with a high information content and intrinsic value and, most of all, with low environmental impact. Organic farming and local product sales reducing transport pollution and waste are strictly related. Similar considerations apply to the positive high impact of EU payments for the use of extensive farming: interest for direct sales is wider among farmers making use of sustainable production techniques.

As for location variables, the positive coefficient of less favoured areas and of mountainous areas indicate wider adoption of direct sales. In these cases direct marketing can be a way to complement and increase farm incomes that are low due to the marginality of the territory or to the existence of environmental restrictions in protected areas.

Finally, the estimated coefficient confirm the existence of regions characterized by socio-economic conditions that result more conducive to direct selling (Toscana, Molise, Puglia and Sardinia, but also in Friuli Venezia Giulia).

### 3.3 Proximity to urban centres and direct farming

In this paragraph we test whether the adoption of direct selling is more widely diffused in peri-urban areas, that is in those areas that are closer to the *milieu* in which the demand for new agricultural functions arises.

The relationship between urban and rural areas has changed during the last years due to different factors and the traditional dichotomy urban-rural seems to be no longer able to describe the complexity of the evolution of a territory. The coexistence in peri-urban areas of urban and rural elements was originally hypothesized to be a transitory phenomenon, in fact it has developed in a consolidated situation, in which urban factors, such as high population density, prevalence of constructions on open space, marginalisation of agricultural sector, coexist with rural factors, such as presence of not marginal firms, good level of employment rate and value added related to the agricultural activities (Pascucci, 2007)<sup>[15]</sup>.

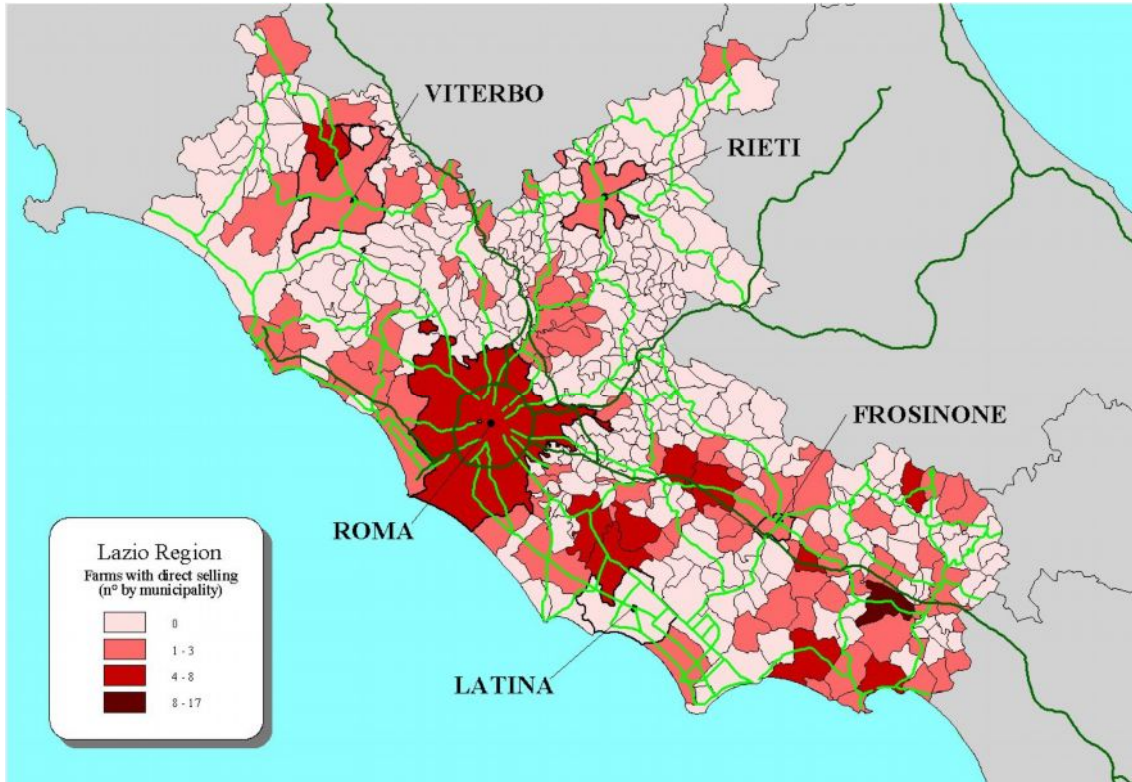
From this point of view, the agricultural sector could become the link between urban and rural areas, providing a new channel and market for farmers living closer to urban centres and a direct contact for food expenditure for consumers.

Peri-urban agriculture benefits from the proximity to the city. Farmers on one side face a high demand for food and recreational services. On the other side they take advantage of the proximity to the source of knowledge and technology often based in urban areas (Donadieu, 2006)<sup>[16]</sup>. Farm in peri-urban areas have better chance have better chances to go diversified and farm households to be pluriactive.

In the food market there could be opportunities of direct selling thanks to the possible reduction in transaction costs produced by the availability of infrastructures and logistic services and to more efficient connections within the food chain; As rural regions in proximity to metropolitan areas restructure from agro-industrial forms of production to smaller scale family farms, urban growth creates demand for seasonal, locally grown foods. These processes simultaneously promote and put a constraint to the emergence and development of AFNs (Jarosz, 2008)<sup>[2]</sup>.

Recently it has been recorded an upsurge of interest in direct selling as a result of the “relocalisation perspective” support to food produced, retailed and consumed in a specific area. According to this perspective, reducing the distance between farmers and consumers is thought to have a re-vitalising effect on the rural community, at the same time benefiting local farmers and consumers’ health and the natural environment (Fonte and Grando, 2006) <sup>[17]</sup>.

We test the influence of proximity to urban areas on the adoption of direct selling on a regional subsample extracted from the FADN national sample and referred to the Lazio region. The region is characterized by the presence of the capital, Rome, a very big and attractive market for farms operating in the surroundings, and of other four towns (chief of provinces) representing important food markets even if smaller than the Roman one (see figure 2).



**Figure 2.** Direct selling in Lazio region in 2006.

To test the influence of proximity of farms to urban markets on the uptake of direct selling, we estimated a probit similar to the one used in the previous paragraph and we included the information of the distance of farms from the urban town market in the explicative variable set.

The results of this regional model are presented in table 3.

**Table 3.** Probit model results for direct sales in Lazio region

Variables	coef	se	mfX
age	-0.011	-0.007	-0.004
r_pens	0.758***	-0.263	0.275
sau_ln	-0.289***	-0.098	-0.096
collina	0.395*	-0.220	0.125
z_sva	-0.379	-0.249	-0.125
z_v_a	-0.199	-0.225	-0.065
trasf	0.867***	-0.221	0.291

ote_cop	-0.750	-0.466	-0.199
ote_vino	-0.484	-0.477	-0.136
ote_FA	0.331	-0.339	0.117
ote_all	-0.350	-0.244	-0.107
ote_ort	-0.466	-0.357	-0.134
dist_rm	-0.0157*	-0.009	-0.005
dist_vt	0.001	-0.008	0.000
dist_fr	-0.0341***	-0.011	-0.011
dist_rt	0.0162**	-0.008	0.005
dist_lt	0.0364***	-0.009	0.012
Constant	-0.273	-1.117	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The influence of farmer characteristics are in line with what already found in the national model: the higher the farmers' age the lower the probability, but the uptake increases when the farmers receives a pension. These results are not in contrast if we think that there are two different trends: as long as the farmer is young, the age and the propensity to innovation lead to invest time and resources in organizing direct selling activities, as a new competitive strategy; in correspondence of an higher age, the incentive becomes the need to complement low retirement income.

As for farm structural characteristics, the adoption of direct selling is higher when the farm is small, located in hillside areas and when products are processed on-farm. As for farm types, only farms specialized in the production of arable crops have a statistically significant influence on direct selling but with a negative sign.

As for proximity, the negative and statistically significant coefficient for the distance of each farm from Rome and from Frosinone support the hypothesis of the positive influence of proximity to urban markets and, especially in the second case, by the existence of a good net of roads.

The positive sign of the coefficients for the distance from Latina can be related to the very specialized and industrialized agriculture of this area that make farms operating in this province less interested in operating in alternative short supply chains. The positive coefficient of the distance from Rieti can in turn be explained by the difficulties of connections and transports related to the morphological characteristics of the territory (mountain).

## 4. Conclusions

Direct sales, in their various forms, ranging from the more traditional to more innovative ones, are giving the agricultural sector a breath of fresh air and new chances to farmers.

In Italy, direct marketing is very widespread, in addition it is not relevant only to a specific typology of farms. Both large-scale and small family farm invest in this kind of diversification strategy to take advantage of the many benefits stemming from its adoption and that range from reduction in production and distribution costs to increases in efficiency in the use of family labour, hence in higher farm incomes.

In this paper we first examine the influence of socio-economic determinants on direct sale adoption in Italian farms. The results of the probit model have shown first of all that the probability of uptake of this marketing strategy is higher among multifunctional farms, for example among organic farms.

We then test on a smaller regional sample the influence of proximity to urban areas on the adoption of direct selling. The results show that the probability of uptake is higher when the farm is close to big urban markets. This is an indirect evidence that direct selling tends to benefit farms and communities within a short drive of major population centres. In fact it is localness rather than other quality factors, for example certification of origin, the attribute to be emphasized in direct farming. Localness of products, especially freshness of food products, appears in fact to be the most appreciated attribute. Efforts should be made to facilitate the direct contact between consumers and producers, in this way offering a valid alternative to the undoubted advantages of large scale distribution. For example by increasing the number of opening days of farmers' markets, the delivery hours of farm shops or enlarging the variety of products offered through consumers buying groups. These results have to be obtained without undermining the central positive feature of direct sale, that is the shortness of supply chains, hence savings stemming from the absence of intermediaries.

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