## Szent István University Gödöllő Faculty of Economics and Social Sciences PhD School of Management and Business Administration



# DIRECT SELLING ON THE MARKET OF AGRICULTURAL PRODUCTS

## THESIS OF DOCTORAL (Ph.D.) DISSERTATION

Csíkné Mácsai Éva

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Name of PhD school:	Szent István University PhD School of Management and Business Administration
Scientific field of PhD school:	management and business administration sciences
Head of PhD school:	Dr. István Szűcs, professor, doctor of the Hungarian Academy of Sciences, Szent István University, Gödöllő Faculty of Economics and Social Sciences, Institute of Economics, Law and Methodology
Supervisor:	Dr. József Lehota, professor, doctor of the Hungarian Academy of Sciences Szent István University, Gödöllő Faculty of Economics and Social Sciences Institute of Business Studies, Department of Marketing
approved by head of school	approved by supervisor

## 1. PRELIMINARIES OF WORK, OBJECTIVES SET

#### 1.1. RELEVANCE OF TOPIC

The share of large-scale chain-stores and retail stores with large floorspace is increasing on food market, too, due to the concentration and globalization processes which go on in trade. Owing to the competition resulted by the concentration of food trade, the tendency of declining purchase prices in case of agricultural products is more and more obvious. Moreover, the producers should face the fact that the market competition has started to become fiercer after the EU accession, the conditions imposed by the trade sector have tightened and - in addition to these - there are more market uncertainties to cope with. All these factors lead to an extremely great pressure on agriculture as a sector, and the producers are compelled to look for new possibilities of earning income. Besides rural tourism and processing agricultural products, direct selling can be regarded as an activity which can be performed paralell with farming and it can be an option for producers to earn money. Selling directly to consumers is a way for producers to increase their share in consumer prices, thus excluding part of intermediate traders from distribution of their products. In order to be successful in the field of direct selling, the producers should inevitably change the attitudes: instead of production orientation – which is typical in agriculture – higher priority should be given to marketing orientation, in the frames of which producers should consider and adapt to the needs of consumers. This aspect explains partly the relevance of the thesis, because in order to meet the consumer needs at an increasingly higher level, it is essential to determine the target group which may become the main market of products supplied through direct selling.

Besides the examination of consumer side, as demand side, it is highly important to analyse the other side of the coin, that is the producer side. It is made even more significant by considering the reform of the Common Agricultural Policy of European Union which has included short supply chains and local products into the sets of measures to be supported in the frames of rural development from 2014.

The research of direct sales by producers is one of the most neglected areas of modern agri-marketing, but the importance of the topic is being recognized because in the recent decade a number of research projects have dealt with the examination of direct selling both from producer and consumer aspects. In contrary to this, the scientific research of the topic has been started only recently in Hungary. The research programs are multidisciplinary regarding their type, since the papers approach the topic from rural development as well as marketing aspects.

### 1.2. OBJECTIVE OF THE PAPER

The present paper focuses on direct selling from marketing aspects. The main objective is to examine the topic both from supplier – that is producer – side, and from demand – that is consumer – side.

Considering this, basically three main aims were set in the elaboration of the dissertation:

C1: Systematic review of professional literature connected with direct selling. In the frames of this, my aim is to outline the main directions and main results of research related with direct selling as well as to systematize the concepts in the field of direct selling because these are often mixed up even in professional references.

In accordance with this, the first part of the paper focuses on the determination of theoretical correlations of the topic as well as the main directions of research, introducing the key scientific results reached in Hungary and abroad.

C2: Examining the role and evaluation of direct selling among agricultural producers.

C2a: Examining the special features of sales in case of fruit and vegetable producers dealing with direct selling.

As the first step of examining the supply side, I made qualitative research among agricultural producers engaged in fruit and vegetable production. Due to the extreme complexity of the topic I considered it necessary to limit the research to one product group. Since it was concluded on the basis of secondary research that direct selling is the most significant in fruit and vegetable sector, I chose the examination of features of sales in case of producers dealing with fruit and vegetable growing.

C2b: Examination of differences between the attitudes and objectives of producers applying different marketing channels, as well as the impacts of differences on enterprise behaviour and decisions on choosing marketing channels.

The next step of examining supply side was a questionnaire survey compiled on the basis of the qualitative research and carried out also among fruit and vegetable farmers in order to highlight the differences with the help of quantitative data between farming specialties of producers applying different marketing channels.

# C3: Examination of food purchase habits of Hungarian people in regard to direct selling, and segmentation in terms of influencing factors.

Representative research was made among Hungarian people in order to examine the demand side and explore the role of different product groups and forms of direct selling in food purchase, as well as factors affecting food purchase.

By fulfilling the above objectives, my main aim was to draw up useful conclusions and recommendations on the basis of the paper both for academic purposes and everyday practice.

#### 2. MATERIAL AND METHOD

As I have already drafted above in the introduction of the objectives, the aim of the present paper is the examination of role and assessment of direct selling. In order to highlight this, I considered it necessary to review both the supply and the demand side of the given topic. Accordingly, the research was made in two directions. On the one hand, I examined how the producers chose marketing channels and their opinion concerning direct selling, on the other hand, I examined the purchasing patterns of consumers connected with direct selling. Hereinafter, the methods applied in the research of these two sides are reviewed in detail below in Figure 1.

Figure 1:

#### Systematising primary research

#### PRIMARY RESEARCH

#### PRODUCER SIDE

## **CONSUMER SIDE**

# $\begin{array}{c} \textbf{Qualitative research} \\ \textbf{(N=21)} \end{array}$

Examining farming features of farms dealing with direct selling;

Revealing factors which affect the selection of marketing channelsa;

Examining the role of marketing channels and different forms of direct selling.

# Quantitative research (N=136)

Examining the role and assessment of direct selling; Examining the impact of objectives and attitude of farmers on enterpreneurial behaviour, strategic decisions and choosing a marketing channel.

# Quantitative research (N=1015)

Examining the role of direct selling in food purchase according to food groups and forms of sales;

Examining the role of factors determining food purchase and their impact on direct selling..

Source: Own work, 2013.

### 2.1. METHOD OF PRODUCER RESEARCH

In order to examine the role and assessment of direct selling (C2), I performed qualitative and quantitative research among agricultural producers dealing with fruit and vegetable farming. During the course of research I tried to find out how the producers evaluate direct selling as a marketing channel and how this affects their decisions concerning sale channel selection.

The main obstacle in researching producer side was the lack of a reliable database about the producers dealing with direct selling, thus it was rather difficult to reach them. The other problem was that a relatively long questionnaire should have been compiled in order to explore the topic in detail, and going through the questionnaire was possible only with personal interviews. Considering these difficulties and the available resources, the research, unfortunately, does not meet the requirement of representativeness. In spite of this, however, I think it provides a comprehensive general picture about the current situation and evaluation of direct selling. Moreover, it should be stressed, that direct selling is not identical with market sales which is highlighted by the paper, but it is taken in much broader sense. On the basis of the research, however, it was concluded that this is the most widespread among the forms of direct selling and the role of the other forms of direct selling is so marginal that their examination was not possible by considering the available resources.

## 2.1.1 Qualitative research to examine the producer side

## 2.1.1.1. Objective of research

The objective of qualitative research (C2a) was to examine the experiences of fruit and vegetable producers - who dealt with such kind of sales - concerning direct selling. In the frames of this research I wanted to find out the following in regard to producers engaged in direct selling:

- 1. what the special features are in their farming,
- 2. what marketing strategy they follow,
- 3. how do they evaluate direct selling as channel of marketing?

In connection with C2a objective and on the basis of reviewing the references, I could draw up the following hypotheses:

**H1**: Farms applying direct selling have special farming strategy.

**H2**: Farms engaged in direct selling deal with direct selling primarily in order to reach higher income.

#### 2.1.1.2. Conditions of research

The research was implemented in the frames of research program titled "Role and possibilities of direct selling in marketing the products of domestic food industry" managed by the Research Institute of Agricultural Economics.

In the frames of qualitative research, altogether 21 persons were interviewed personally or through telephone. It was a requirement that the respondent should deal with fruit and vegetable production and sell products through direct selling, therefore I made the survey among farmers selling their products on the market. The respondents were farmers who sell their products weekly on markets in Debrecen, Heves, Szombathely, Budapest in Fehérvári street, Kórház street and Bosnyák square, as well in Pesthidegkút on the producer market organized every two weeks.

The selection of respondents was made by snowball sampling. The managers of markets selected by arbitrary sampling were asked to pick those sellers who produce their products on their own and are not traders. Thus I could ensure that the respondents are really vendors performing farming activities. The preliminary consultation with market managers positively affected the willingness of respondents to take part in the survey.

I used half-structured questionnaire in the survey: closed questions were used for exploring the features of farm (legal form of farm, size, number of workforce, etc.) while open questions were asked to survey the factors affecting the selection of marketing channels and issues connected with the practice of direct selling. The questionnaire applied in the research can be found in attachment no. 4 of the dissertation. I used the method of content analysis for evaluating the responses received.

## 2.1.2. Quantitative research to examine the producer side

#### 2.1.2.1. Objective of research

Following the qualitative research – also utilizing its results – I performed a quantitative research in order to collect numerical data concerning the role and assessment of direct selling (C2b).

In the frames of this I tried to explore

- what are the impacts of differences between the aims and attitudes of producers on their entrepreneurial behaviour and strategic decisions,
- and how it affects the decision-making of producers connected with the selection of marketing channels, with special regard to direct selling.

In this regard I could draw up the following hypotheses:

**H3**: Farms which use direct selling as main marketing channel typically perform agricultural production on small areas.

**H4:** There is a correlation between the ratio of different marketing channels within the total sales and the objectives which are regarded important by the producers.

**H5**: Producers dealing with direct selling regard the development of their farms less important than those using other types of marketing channels.

#### 2.1.2.2. Conditions of research

As I have indicated above among hypotheses, I have presumed on the basis of preliminary review of references and qualitative research that direct selling is differently assessed by those agricultural producers who are engaged in this form of marketing and by those who do not deal with it. Therefore the main point in sampling for the research was to highlight the differences in the evaluation of direct selling.

In order to confirm the hypotheses of research I tried to involve in the survey both types of producers: who deal and who do not deal with direct selling. Since there is not any database available about producers dealing full-time with direct selling, I performed the survey among producers selling their products on the market, thus ensuring that the respondents really conduct direct selling. In regards to interviewing producers who do not deal with direct selling – or only as supplementary source of income – the most reasonable solution was to call producers who sell their products through PO (Producer Organizations), because – as the main principle - PO members sell 100% of products produced by them through the organization.

Due to the nature of the questionnaire I preferred personal interviewing, which made the method of sampling a bit difficult. The questionnaire applied in research can be seen in Attachment No. 5 of the dissertation.

By observing the above criteria, the data collection based on personal interviews was made in spring 2011, in the frames of which I called on producers on markets operated by Market Hall and Market Place Department of Budapest Municipality (Fehérvári street and Bosnyák square markets), and Organic Market operated by the Hungarian Organic Culture Association (altogether 90 persons), as well as members of Fresh Fruit Producer and Sales Cooperative (TÉSZ) of Kecel (46 persons).

I selected these places by arbitrary sampling, the respondents involved in research were chosen by assessment sampling. At the end those agricultural producers were invited in the research who deal with fruit and vegetable farming and sell their own products on the market. In order to ensure this, the market surveillance bodies were also included in the sample. The members of Kecel TÉSZ were interviewed at the annually held general assembly. The data concerning the composition of the sample can be found in Table 29 of Attachment No. 2.

Due to the method of sampling, it is important to note that the results of the research cannot be regarded representative, thus conclusions cannot be drawn for the total population, but it was not my objective, anyway. My aim was to highlight the differences between the special features of producers farming activities.

The data recorded and cleared after the survey was processed with the help of SPSS 16.0 statistical software. In this process - in addition to descriptive statistics - I made bi- and multivariate correlation tests, out of which I used linear, regression, factor analysis, cluster analysis, correlation calculations, variance analysis and two-sample T-test methods.

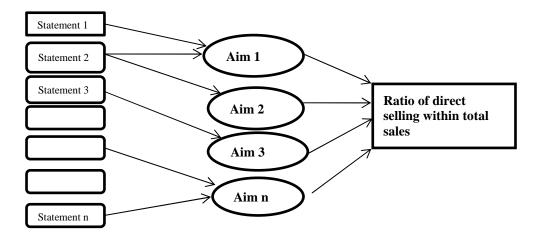
#### 2.1.2.3. Introducing the model which served as the basis of research

The basis of the research was provided by a theoretical modell developed by Bergevoet et al (2004) on the basis of the Theory of Planned Behaviour (TPB) set up by Fischbein-Ajzen. Bergevoet et al (2004) conducted a survey among Dutch cattle farmers, in which they assumed that according to the neoclassic economics an optimum farm size should be formed in order to maximize profit. In spite of the economic arguments, however, there were huge differences between the sizes of Dutch cattle farms. Therefore they presumed that farmers were influenced not only by economic, but other factors, too, when they made their business decisions.

It was proved by the research that the producer behaviour showed correlation with the objectives of producers, which were connected with producer attitudes, subjective standards and observed behaviour control. In total it can be concluded that the objectives and attitudes of producers basically determine their strategic and entrepreneurial behaviour.

Figure 2:

How the share of direct selling within total sales is related with the statements about producer aims, attitudes, subjective norms and observed behaviour control



Source: Own work, on the basis of 2013. Bergevoet et al., 2004

The share of direct selling within total sales expresses the producer behaviour which is related with the objectives of producers, which in turn are connected with the statements about producer attitudes, subjective norms and observed behaviour control. The research focused on the analysis of these correlations.

#### 2.2. METHOD OF CONSUMER RESEARCH

## 2.2.1. Aim of research

The aim of research was the examination of food purchase habits of Hungarian population in regards to direct selling and the segmentation according to the influencing factors (C3).

In the frames of this I was exploring the following questions:

- what are the roles of different forms of direct selling within the food purchase habits of consumers,
- what is the share of different product groups within direct selling;
- what are the factors that affect consumers in the course of food purchase,
- what kind of consumer groups can be determined according to the factors affecting food purchase decisions.

In connection with this I drafted the following hypotheses:

H6: The different forms of direct selling are preferred typically by highly qualified consumers with high income.

H7: Direct selling is the most widespread on the market of vegetable and fruits.

H8: For those purchasing frequently through direct selling the subjective aspects – besides objective ones - are also important in food purchase.

H9: There is a consumer group within Hungarian consumers who are open to direct selling.

H10: Those who prefer the new forms of direct selling belong typically to the younger generation.

#### 2.2.2. Conditions of research

Data collection was made in September 2011 in the frames of research project Omnibus 2011 by Cognative Piackutató Ltd. Altogether 1015 persons were interviewed. The questionnaire used can be read in Attachment 6 of the dissertation. Sampling was carried out by using the method of restricted random walking, with the help of layered sampling formed on the basis of settlement and region types. The actual respondents were selected with the birthday key method. The multicomponent weighing of data was made on the basis of Microcensus data of 2006 of Central Statistical Office, weighing on age, gender, school qualification, marginalities according to region and settlement types. Thus the sample can be regarded representative considering the above variables, among Hungarian population older than 15 years.

The data recorded and cleared after the survey were processed with the help of SPSS 16.0 statistical software. In this process - in addition to descriptive statistics - I made bi- and multivariate correlation tests, out of which I used the methods of cross tabulation, variance, factor and cluster analysis.

In the course of cluster and factor analysis, in case of frequency of purchase through some forms of direct selling I used combined variables (several times per week, weekly, several times per month, monthly = frequently, few times per year = occasionally) instead of the original variables (several times per week, weekly, several times per month, monthly, few times per year, never) in order to make the results more explicable.

### 3. RESULTS

C1: Systematic review of professional literature in respect to direct selling. In the frames of this, my aim is to outline the main directions and most important results of research related with direct selling as well as to systematize the concepts in the field of direct selling because these are often mixed up even in professional references.

It has been proved during the review of literature that the research connected with direct selling examine the given subject basically from two aspects: on the one hand, from rural development aspects, on the other hand, from marketing aspects. The aim of the present paper is to analyse direct selling as a way of selling goods from marketing aspects therefore the points of rural development are only marginally discussed.

Basically two main directions of research seem to be drawn within marketing-oriented approach: the approach from producer – that is supply – side and from the consumer – that is demand – side.

From supply side, the producer research focuses primarily on the main characteristics of farms engaged in direct selling and the success factors of this form of selling. On the basis of references, it can be concluded that farms using direct selling usually operate on smaller areas. Moreover, it is important to note that the workforce needs of direct selling are well above the workforce needs per square meter of farms not dealing with direct selling. It is due partly to the production of high-quality products, partly to the extra time spent on the organizational tasks of selling. Accordingly, using direct selling as a marketing channel means extra (human) workforce engagement and – respectively – cost increase, too. In addition to the above, open-mindedness to innovation is inevitable, because the implementation of direct selling often goes together with the reorganization of work processes and production. Considering all the above, the main motivation factor in the development of direct selling system is the need to increase profitability.

In respect to demand side, the research focuses on exploring the main target group of direct selling as well as the related preference and consumer satisfaction examinations.

On the basis of international research results connected with the determination of main target group of direct selling it can be concluded that those consumers buy directly from producers who have higher educational qualifications, higher income and belong to the older generations. In contrary to this, in Hungary, only one special form of direct selling, the markets have been analysed so far, and the results are rather controversial. According to a non-representative research (Juhász and

Szabó, 2012) the typical buyers on the markets are mostly from the capital, have higher educational qualifications, have family, are active in business, aged between 30-39 years. In contrast, on the basis of household panel data of 2011 of GfK Hungária (market research company) the typical buyers on the market are older, live in 1-2-person households and residents of the capital or large cities. There are some similarities in the results of the two national research projects concerning the residence of market visitors, because both outcomes say that markets are the favourite shopping places of consumers from Budapest and other large cities. As regards age and family status, however, there are some contradicitions given by the different circumstances of the two research programs.

In regards to the results of preference examinations, the direct relations between producers and consumers play an extremely important role besides the consumers' expectations concerning marketed products. Direct relation is one of the key elements of direct selling.

On the basis of the results of consumer satisfaction research, it seems to be obvious that – besides product quality and assortment – the appearance of location, the staff who sells and the services provided also play very important role in terms of consumer satisfaction.

The literature in respect of the relations between direct selling and sustainability, as well as the concepts of alternative food systems are closely connected with theoretical research. In this field the use of concepts in technical references is often not unified: the concepts of alternative food systems, short food systems, local food systems and direct selling are frequently used as synonyms of each other in the special terminology. Therefore I tried to highlight the real meaning of these concepts.

# C2: Examining the role and assessment of direct selling among agricultural producers.

I set out two sub-aims within C2 objective:

# C2a: Examining the sale specialties of fruit and vegetable producers dealing with direct selling (T1).

In the frames of the research, on the basis of the results of half-structured interviews made among producers I could state that farms dealing with direct selling pursue a special farming strategy (*H1 hypothesis confirmed*). In this regard, they try to develop their product assortment in order to ensure wide range of goods permanently on the market and to sell the produced quantity through this channel. Basically two different strategies seem to be outlined in the development of large product assortment: one group of producers try to keep more crops in the supply,

while the other group aims to provide more varieties within less types of crops. Producers pursuing these two types of strategies are typically perform agricultural production on smaller areas, specifically with the aim of direct selling. In case of those producers who deal with fruit and vegetable production on large areas, typically marginal role is given to direct selling. Since they make fruit and vegetable production on relatively large areas, their main marketing channels are the wholesalers/acquirers and the POs. They regard direct selling as a tool of reducing their vulnerability and standing on more feet.

In summary, I came to the conclusion that besides farms working on small areas – which use direct selling as a main marketing channel – there is an emerging group of producers who look for new alternatives besides the longtime familiar marketing channels. They consider it important to build up direct contacts with consumers in order to increase profitability of farming activities.

According to producers, the main advantage of direct selling — compared to other channels — is the higher price that can be realized and getting the income immediately. Moreover, another factor that affects their decisions in respect to selecting channels is that through direct selling they have greater say in forming the prices and are not exposed to the acquirers who act as price leaders. In addition to the economic advantages of this form of sales, it is important to highlight the socal advantages, too. There is a solid group of frequent customers at most of the producers and they form a stable purchasing power. Due to the closer relations, producers can directly follow the changes of consumer needs and next year they can develop their product assortment accordingly, which can be the key to successful sales (*H2 hypothesis partly confirmed*).

C2b: Examination of differences between the attitudes and objectives of producers applying different marketing channels, as well as the impacts of these differences on enterprise behaviour and decisions on choosing marketing channels (T2).

The cluster analysis made on the basis of the share of each marketing channel within total sales has confirmed the conclusions formed from the results of qualitative research. Namely, that farms using direct selling as main marketing channel (*Producers engaged in direct selling*) and farms using it casually (*Producers applying mixed marketing channels*) can be basically distinguished. My hypothesis concerning the size of the farm - according to which farms engaged in direct selling typically perform production on small areas - is confirmed because the average size of farms using direct selling as main marketing channel is 5,5 ha, while the farms using direct selling only occasionally, carry out agricultural activities on 15 ha on average (*H3 hypothesis confirmed*).

The objectives set by the farmers are grouped basically as economic and non-economic objectives. It is in line with the results of the related references, too (Coughenor-Swanson, 1988; Fairweather-Keating, 1994; Gasson, 1973; Gasson-Errington, 1993; Willock et al., 1999 In.: Begevoet et al., 2003). Besides economic type of objectives, the non-economic targets are also important for the farmers involved in the examination. The assessment of individual targets is different in the farms applying different marketing channels. Those farms which use direct selling as the main marketing channel give higher emphasis to the production of quality products and to non-economic objectives – like for example the enhancement of professional reputation and maintenance of the region's values – than those farmers who do not deal with direct selling.

By examining the economic objectives, it can be concluded that increasing the size of farms and modernisation is considered less important for those farms which have low income from agriculture than those ones which live on agriculture to a larger extent. Moreover, the producers dealing with direct selling attach much lower priority to modernisation than producers who do not use direct selling. This latter conclusion – that producers engaged in direct selling consider modernisation and farm development less important – is in line with the results of Kuhnert (1998) who says that agricultural enterprises typically have solid and traditional corporate culture, which appears in production orientation and less innovative and less market-oriented attitude. It can be an obstacle to modernisation, too. In addition to this, in case of direct selling, the activities and controlling connected with sales diverts resources from development and expansion of production (Martinez et al., 2010 In: Juhász et al., 2012), because direct selling is extremely time-consuming (Juhász et al., 2012; Wirthgen-Maurer, 2000).

The insignificance of modernisation is also indicated by the fact that farms engaged in direct selling use typically traditional production technology and try to minimise the chemical use. They want to ensure the uniqueness of their products this way because in case of direct selling it is especially important. In spite of their efforts to reduce the use of chemicals, however, most of the producers interviewed were not open to integrated or organic production technology (except for producers who sell their products on bio-markets) but they give high priority to quality production. It is also reflected in the outcome of an examination, which states that the main objective is not to perform large-scale farming but rather an environmentally friendly production. As regards age, younger agricultural producers give higher priority to expand farm size than the older generation, who more often prefer to maintain the size of the established farm.

Farms which use direct selling to a greater extent have a wide variety of goods, which is one of the success factors of direct selling, according to a number of research. The greater assortment of products have positive significant relation with profitability (Uematsu and Mishra, 2011, In: Juhász et al., 2012).

The respondents engaged in direct selling to a greater extent regard the trust relationship with consumers extremely important, while developing an appropriate relation is more difficult for those producers who sell their products typically through PO. Perhaps this is one of the reasons why they do not use direct selling as a main marketing channel. For those producers who are involved in direct selling, it is important to improve the opinion of consumers concerning food producers by offering quality products for sale.

In summary, it can be concluded that in case of farms using direct selling to a greater extent, the non-economic objectives and objectives connected with direct selling are highly important, while for producers who sell their products mostly through PO, these objectives are not important. They give higher priority – in contrast to producers dealing with direct selling – to the modernisation of the farm. Therefore the improvement and modernisation of the farm is less important for those producers who are engaged in direct selling. It can be due to the fact – and it was also confirmed by the results of the preliminary qualitative research – that producers dealing full-time with direct selling are prepared to serve a permanent consumer group and do not intend to open to other marketing channels which would be necessary if the product quantity is increased due to a development project. On the other hand they regard traditional production technology as the key to their competitiveness therefore they do not want to implement new production technologies (*H5 hypothesis confirmed*).

In contrary to this, those producers who mostly sell their products through POs are more open to modernisation and business development, because the extra yield resulted by innovation projects can be sold through PO, because there is no such limit to sales like in case of direct selling.

All these outcomes lead us to the conclusion that the attitude of agricultural producers concerning direct selling and the subjective standards connected with farming all affect the producers in choosing their targets in farm management and these targets basically determine the marketing channel through which the given agricultural producer finally sells the produced crops and products (*H4 hypothesis confirmed*).

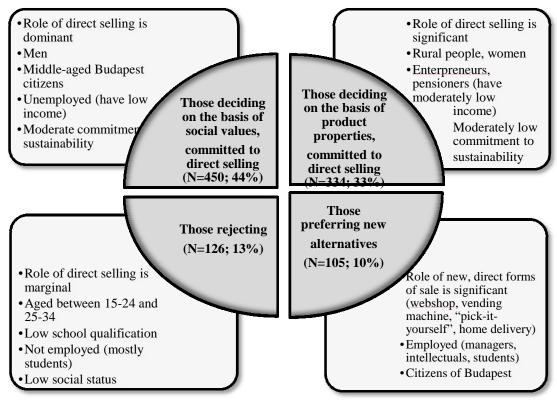
# C3: Examining the food purchase habits of Hungarian people in connection with direct selling (T3) and segmentation according to the influencing factors (T4).

By reviewing the frequency of purchases through different forms of direct selling in terms of social demography it has been proved that direct selling is primarily preferred by consumers with high educational qualifications and high income (*H6 hypothesis confirmed*). This result is in line with the outcomes of foreign research (Spiller et al., 2007; Gandee et al., 2003; Henneberry et al., 2004; McGarry Wolf et al., 2005 Varner és Otto, 2008; Kezis et al., 1998; Recke et al., 2004), and domestic research projects (Juhász and Szabó, 2012). In respect to age, the picture is more complicated. Consumers above the age of 65 buy the least directly from the producers, they are under-represented in case of purchases on the market, through webshops, pick-it-yourself movement, home delivery, from vending machines or on the roadside. It can also be concluded that older consumers buying through direct selling are affected primarily by the features of the product, the social values are typically less important for them. It also proves that this marketing channel is less prioritized by this age group in regard to food purchase.

In contrary to this, the young consumers (age between 15-24) typically like to buy through modern direct marketing channels: this age group is over-represented in case of purchases through webshops, home delivery or vending machines. It is also proved by the result of the cluster analysis, which states that there is a consumer group which gives priority to the new forms of direct selling, they typically frequently buy through webshops, from vending machines, pick-it-yourself movements and home delivery. The age group of 15-24 years old is in the largest proportion in this cluster compared to the whole sample. It should be highlighted because on the basis of cluster analysis made in regard to factors affecting food purchase, the age group of 15-24 is also over-represented among the members of the consumer group rejecting direct selling, claiming that they never buy on farmyards, producer's shops, pick-it-yourself movements and community initiatives, or on the roadside. It leads to the conclusion, that the younger generation is open to the modern channels – although they use the traditional forms of direct selling less (*H10 hypothesis confirmed*).

The features of consumer groups formed on the basis of the results of cluster analysis can be seen on Figure 3.

Figure 3: Features of consumer groups in terms of social demography



Source: Own research, 2011.

By analysing the role of direct selling within product groups I could state that consumers most commonly buy vegetables and fruits, eggs, honey and milk from producers (*H7 hypothesis partly confirmed*).

There are two clearly distinguishable factor groups in the decisions of domestic consumers concerning food purchase: abstract and specific product properties - like for example price, quality, freshness, product assortment, seasonal sales, etc. - as well as social values – like, for example, the support of producers, purchase of Hungarian products and traceability of the product. It is important to note, however, that the impact of factors connected with product properties is much stronger than those connected with social values. The impact of subjective factors connected with social values are important first of all for consumers with higher social status, who are committed to sustainability. Moreover, the relation between social values and the frequency of buying through direct selling clearly shows that those consumers who regard social values important in regard to food purchases

regularly buy directly from the producers and prefer the different forms of direct selling (*H8 hypothesis confirmed*). In summary, it can be concluded that a given social group seems to be emerging which consider the purchases directly from the producer important and keep social values in mind while buying food. Exploring the proprieties of this target group can enhance the development of an efficient marketing strategy, with which the producers can efficiently compete with the different forms of retailer strategies (*H9 hypothesis confirmed*).

In total, it can be declared, that there is a consumer group proven to be present among Hungarian population who are committed to direct selling. Basically there can be two types of reasons which encourage consumers to go towards direct selling: part of the consumers buy directly from the producer because of the product itself, because it is considered to be cheaper, fresher and more reliable. The other part of consumers give high priority – besides product properties – to the social values, too. They regard the support of farmers and the personal relations with them important.

### 3.1. NEW SCIENTIFIC ACHIEVEMENTS

# T1: With the help of qualitative research I have revealed the marketing specialties of those fruit and vegetable producers who are engaged in direct selling.

On the basis of the results of qualitative research carried out among fruit and vegetable producers I came to the conclusion that producers engaged in direct selling perform a specific sale and farming strategy. I could highlight that different production and marketing strategies are applied by the farms which use direct selling as main marketing channel and those farms which use it only occasionally.

# T2: With the help of factor analysis and linear regression analysis I have proved that the differences between the objectives and attitudes of producers affect their decisions concerning the selection of marketing channels.

With the help of quantitative research performed among agricultural producers and by using the method of linear regression analysis and cluster analysis I have proved that the attitude of farmers connected with direct selling and the subjective norms concerning farming all have an impact on what objectives the farmers consider important in the management of the farm. These objectives basically determine what marketing channel is chosen by the given agricultural producer to sell the produced quantity of products.

# T3: With the help of representative research I have explored the role of direct selling in the food purchases carried out by Hungarian consumers.

On the basis of a representative survey made among Hungarian consumers and by using correlation analysis I have determined by product groups and shopping locations what is the role of purchase directly from the producer in the overall food purchase of consumers.

# T4: By using correlation examinations and with the help of cluster analysis I have determined how the consumer sections formed according to the factors determining food purchase correlate to the different forms of direct selling.

In the frames of a survey among population I have determined how the consumer groups formed according to the factors affecting food purchase relate to direct selling and by using correlation analysis I have highlighted how each cluster relates to the different forms of direct selling.

#### 4. CONCLUSIONS AND RECOMMENDATIONS

#### **Recommendations for the practice:**

- **J1**: It has been proved by the examination of the producer side that farms using direct selling as a main marketing channel are less open to the development of the farm, therefore it would be advisable to consider in the policy decision-making how to develop a subsidy policy which would encourage the producers to modernise farming activities thus also improving the profitability of the sector.
- **J2**: In the course of the examination of producer side, it was a problem that only indirect data are available from the producer side in respect to the ratio of direct selling. Therefore I consider it essential to carry out a representative data collection concerning the ratio of direct selling within total sales in order to make the impact of subsidy policy measurable by statistical data and to get a real picture and to be able to track what is the role of direct selling within the total sales performed by producers.
- **J3**: It is absolutely inevitable to ensure the training or continuous training of farmers in order to strengthen the producer side, to improve their marketing-oriented attitude, to teach them about the conditions of successfully entering the market and provide them permanent information about the actual changes in legislation and other possibilities.
- **J4**: There has already been made some progress in the strengthening of producer side by easing the establishment of producer markets. Later it will be inevitable to track the operation of the markets and to carry out attraction zone examinations before setting up new markets.
- **J5**: In order to further strengthen the producer side, it is recommended in addition to the support of individual and direct forms of direct selling to support the so-called SFSC-type (short food supply chain) direct selling that is enhancing the supply from private producers to local retailers, catering and processing industrial units.
- **J6**: In order to strengthen consumer side, I recommend the support of consumer communities. By organising joint purchase, the consumer communities can reduce logistics costs thus improving the sustainability of the system..
- **J7**: By examining the consumer side it has been proved that young consumers are open mostly to the modern channels of direct selling. It should be utilised from their early childhood in the frames of primary educational programs by strengthening their awareness and drawing their attention to the advantages of buying directly from the producer.

# 5. LIST OF PUBLICATIONS PUBLISHED IN THE TOPIC OF DOCTORAL DISSERTATION

## **Book chapters**

Csíkné Mácsai Éva — Fehér István (2012): Közvetlen értékesítés szerepe a mezőgazdaságban, In.: Csete László — Fehér István (szerk.): A Duna két partján, Agrár-vidékfejlesztési és élelmiszer-marketing trendek, Fehér István 70., Szent István Egyetemi Kiadó, Gödöllő, 2012., 197-206. o. ISBN: 978-963-269-290-6

**Lehota József** — **Csíkné Mácsai Éva (2012)**: Értékesítési sajátosságok — közvetlen értékesítési csatornák In.: Szakály Zoltán — Szente Viktória (szerk.): Agrártermékek közvetlen értékesítése, marketingje, Magyar Agrárkamara, 2012., 117-154.o., ISBN: 978-615-5224-24-9

Mácsai Éva — Kujáni Katalin — Juhász Anikó — Hamza Eszter — Györe Dániel (2012): A közvetlen értékesítés szerepe és lehetősége a hazai élelmiszerek piacrajutásában — Élet a modern kiskereskedelmi csatornákon kívül?, Agrárgazdasági Tanulmányok, Agrárgazdasági Kutatóintézet, 2012, ISBN: 978-963-491-579-9

Csíkné Mácsai Éva — Lehota József (2013): A közvetlen értékesítés szerepe a magyar fogyasztók élelmiszervásárlási szokásai tükrében, In.: Sikos T. Tamás (szerk.): A válság hatása a kiskereskedelemre, Szent István Egyetemi Kiadó, 2013., 71-90.o., ISBN: 978-963-269-386-6

#### Scientific journals

#### Published in Hungarian language:

Csíkné Mácsai Éva (2011): Közvetlen értékesítés a zöldség-gyümölcs termelők körében, Gazdálkodás, 55. évfolyam, 2011. 5. szám, 494-501.o., HU ISSN: 0046-5518

Csíkné Mácsai Éva — Lehota József (2012): Fogyasztói szokások vizsgálata a közvetlen értékesítés területén, Gazdasági és Társadalomtudományi Közlemények, Bessenyei Könyvkiadó, Nyíregyháza, 2012. 9-18.o., ISBN: 978-615-5097-47-8

Csíkné Mácsai Éva — Lehota József (2013): Mezőgazdasági termelők értékesítési csatornaválasztási döntéseinek vizsgálata, különös tekintettel a közvetlen értékesítésre, Gazdálkodás, 57. évfolyam, 2013. 5. szám, 451-459.o., HU ISSN 0046-5518

#### Published in foreign languages:

**Mácsai Éva (2010)**: Role of local food systems in sustainable trade, Journal of International Scientific Publications, Vol. 4., Part 3. <a href="http://www.scientific-publications.net/download/economy-and-business-2010-3.swf">http://www.scientific-publications.net/download/economy-and-business-2010-3.swf</a>, 305-314. o. ISSN: 1313-2555

Csíkné Mácsai Éva (2011): Judgement of direct sales in the agriculture, SERiA Annals of The Polish Association of Agricultural and Agribusiness Economists, Vol. XIII. No.6, Warszawa-Poznan-Wrclaw 2011., 142-145. o., ISSN: 1508-3535

Csíkné Mácsai Éva (2012): Consumer and buying behaviour in field of direct food sales, SERiA Annals of The Polish Association of Agricultural and Agribusiness Economists, <a href="http://www.seria.com.pl/index.php/roczniki/57-2012/233-zeszyt-6">http://www.seria.com.pl/index.php/roczniki/57-2012/233-zeszyt-6</a>

**Lehota József** — **Csíkné Mácsai Éva (2013**): A közvetlen értékesítés fogyasztói megítélése Magyarországon, Hungarian Agriculutural Research, 2013. 3. szám

#### Published in proceedings of scientific conferences

#### Published in conference proceedings in Hungarian:

**Mácsai Éva (2009):** Közvetlen értékesítési lehetőségek a mezőgazdaságban, Gazdaság és Társadalom – Konferencia a Magyar Tudomány Ünnepe alkalmából, Sopron 2009. november 3., CD-kiadvány, ISBN: 978-963-9871-30-4

**Mácsai Éva** (2010): A közvetlen értékesítést befolyásoló tényezők, XII. Nemzetközi Tudományos Napok, Gyöngyös, 2010. március 25-26., 1009-1015. o., ISBN: 978-963-9941-09-0

**Rácz Georgina** — **Mácsai Éva (2010):** Fenntartható fogyasztás és kereskedelem az élelmiszergazdaságban, XII. Nemzetközi Tudományos Napok, Gyöngyös, 2010. március 25-26., 1016-1024. o. ISBN: 978-963-9941-09-0

**Csíkné Mácsai Éva (2011):** Fogyasztói magatartás kutatások a közvetlen értékesítés területén, Erdei Ferenc VI. Tudományos Konferencia, 2011. augusztus 25-26. Kecskemét, III. kötet 257-262.o., ISBN: 978-615-519-01-2

#### Published in conference proceedings in foreign languages:

**Éva Mácsai (2009):** Hemmende und fördernde Faktoren der Direktvermarktung, Erdei Ferenc V. Tudományos Konferencia, Kecskemét, 2009. szeptember 3-4., ISBN: 978-963-7294-73-0 (978-963-7294-79-2 – III. kötet)

**Éva Mácsai (2010):** Direct sale initiatives in Hungary, 6th International Conference for Young Researchers, Gödöllő, 4-6. October 2010., 190-195. o., ISBN: 978-963-269-193-0

**Éva Csíkné Mácsai (2011):** Factors affecting small fruit-vegetable producers for direct sales, Economics and Social Science Research in Food, Agriculture, Environment and Development, Nyitra, 27-29. April 2011., 546-553. o., ISBN: 978-80-552-0571-7

Kujáni Katalin, Csíkné Mácsai Éva. Fehér István (2013): Exemple d'exploitation agricole en circuits courts - Une analyse comparative régionale entre la Hongrie et la France; CCP 2013 - Les circuits courts de proximité : renouer les liens entre territoires et consommation alimentaire Konferencia, 2013. június 4-5. AgroParistech, Párizs, Conference proceedings under edition

Éva Csíkné Mácsai — Zoltán Szabó — József Lehota (2013): The role of direct sales in the mirror of food purchase habits of Hungarian consumers, International Food Marketing Research Symposium, 20-21. June 2013., <a href="http://institutefpm.com/PDFs/IFPM13">http://institutefpm.com/PDFs/IFPM13</a> Part 3b.pdf, ISBN 978-0-9856080-1-9

#### Other publications

István Fehér — Éva Mácsai (2009): Increasing marketing potential for direct food sales and its relationship to rural development, Proceedings of joint of FAO IAMA workshop at International Food and Agribusiness Management Association, 19th Annual World Forum & Symposium, Budapest, June 20-21. 2009., 245-254. o.