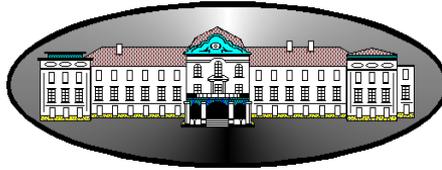


SZENT ISTVÁN UNIVERSITY
GÖDÖLLŐ



THESIS OF PHD PAPERS

**THE ANALYSIS OF THE FINANCIAL SITUATION OF
FAMILY-RUN FARMS IN JÁSZ-NAGYKUN-SZOLNOK
COUNTY**

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1. INTRODUCTION

At the end of the 1980s and the beginning of 1990s significant changes took place in Hungarian economy and, as a result, the conditions of market economy were created. **As a result of the changes in agriculture, the former farm structure has completely been transformed.**

In my thesis I examine the situation of individual farms, which have been transformed in many ways. Based on the results of my examination I also try to give some suggestions to improve the conditions of their present operation. The topicality and importance of the topic chosen lie in the necessity of our accession to the EU. Like in the case of other countries during the former enlargement process, one of the most sensitive areas of the accession is agriculture in Hungary, as well.

THE OBJECTIVE OF THE RESEARCH

The main objective of my research is to trace down the changes in the lives of domestic individual farms, to explore the reasons for these changes as well as examining the tendencies. **I have put the individual farms of Jász-Nagykun-Szolnok county inside Hungary in the centre of my analysis.**

The most important stages of the research

- By reviewing the specialist literature I give a summary of land proprietorship-land use as well as the process of the change of the regime and compensation in Hungary and in Central Eastern Europe to highlight the procedures, which the present structure of farms can be attributed to. In connection with it I also wish to explore the viability of the present system in creating a competitive and prosperous structure.
- The review of family-run farms
- The examined individual farms in Jász-Nagykun-Szolnok county are grouped by a method worked out in the European Union. By means of it, the necessary parameters to reach the minimal farm size are defined regarding farms of animal husbandry, plant production and of mixed management.
- The financial situation of the individual farms is evaluated based on primary data collection in 628 farms of Jász-Nagykun-Szolnok county and in connection with it suggestions are made to develop the system of subsidies and financing.

To realise these objectives, I relied on national and international specialist literature, which gave me a stable base to start an own research and draw the right conclusions. In the methodology of analysis and the realisation of my objectives I was aided by my consultant and the specialists of AKII and KSH (Central Statistical Office) to a great extent.

2. THE PROCESS OF CHANGING LAND PROPRIETORSHIP AND LAND USE IN HUNGARY

The nature of family-run farming is decided mostly by its social-economic climate and the method of its joining to them, thus **it is important to look through the historical roots of the operation of present-day individual farms.** Only by using this information can I answer the question what they preserved from the past as well as how their present situation was formed and how it determines their future development.

The era before the land reform – at the beginning of the 19th century – the standard of national agricultural production lagged at least one century behind the fully developed countries of Western Europe. Agriculture was characterised by extensive farming- among all the most important ones that could be highlighted are rotation in courses and nomadic animal keeping. Low quality cultivation, the lack of manure, the underdeveloped state of cultivating tools could only ensure low yield even with significant workload. The standards of production stagnated till the Compromise of 1897 while farms performing more intensive production were formed and a change of stocks was started in agriculture. The lack of intensive development lies in the fact that besides the prevailing feudal conditions domestic demand still stayed low. On the whole, in the second half of the 19th century Hungarian agricultural development started when all economic and economic-political conditions were given. Their effect was felt in the following things:

- Production structure was transformed,
- Intensive cultures were used,
- Better quality species were domesticated which gave a better yield.

The effect of the land reform in 1945 on agri-structure

On 17 February the Council of Ministers approved the reform schedule of the National Farmers' Party and issued its order on “ ceasing the system of vast estates and allotting farms to the farming society”. (BUDAY 2001)

During the course of the land reform the size of the land per capita could be so big that the family could cultivate. The size of the land allotted could not exceed 15 kh in the case of arable and meadow and 3 kh in the case of vineyards and meadow, respectively. The area necessary for the land reform comprised 34.6 % of the total area in the country. 3.3 million kh of it was allotted between 642 thousand claimants

and the rest, namely 2.3 kh – mainly forest, pasture and pond- became indivisible common property. (HONVÁRY 1997) As a result of the land reform, the system of vast estates was abolished and farming agri-structure became exclusive in land use. The number of farmers with small farms almost doubled. Bigger farms possessed 30 kh on average and smaller ones had 3-6 kh areas to cultivate. Small-scale production became decisive as a result of the land reform but the crowd of people without land still remained, their number is estimated to be 300 thousand. New farmers had to face the biggest difficulties who did not even have the necessary expertise for farming.

Collectivisation completely transformed the existence of individual farmers and parallel with it the small-scale production of the farmers was totally transformed and

- Household farms
- Household farms of the members of the cooperative
- Ancillary farms
- Individual farms

It was only at the end of the 1960s when the conditions of farming became better and as a result, all barriers to household farms were abolished by issuing Act III: of 1967. This law put an end to restrictions on livestock and ensured the right of land for all the members of the household farms as well as recognised agricultural small—scale production. To sum it up, we can state that at the end of the 1970s agricultural small-scale production became the integral part of agriculture.

By the end of the 1980s consensus was reached between the politicians of both the ruling party and the opposition that it would be an inevitable step to switch to market economy. Now I would like to quote the words of GYULA VARGA (1996): „ There is a need for deep proprietary changes, privatisation, cutting back on the dominance of state properties and the creation of “real” owners. The task of this transformation will fall to the new parliament. “

The first steps of the change of the regime

With the oil crisis of 1973, the continuous development of world economy since World War II. was brought to a halt and an era of depression came to last till the 1990s. The change also had negative effects on Hungarian economy and the biggest problem was that the political leadership would not recognise that oil crisis was not the result of a temporary crisis- it was the beginning of an economic reform.

Due to the change of the regime taking place at the beginning of the 1990s all injuries –partly resulting from nationalisation- were compensated. Its well -known form is a ticket, which was mostly used as a means of getting land ownership. (Table 1. shows the division of land due to farming forms in the last 10 years.)

After the compensation the owner and the user of the land became separated. Almost 7 million hectares of land was privatised during the process of compensation. The new and the old owners both had to face several problems. Due to low

profitability, lack of capital, high interest rates, difficulties of sales, the lack of expertise many owners opted for leasing instead of cultivation. As an effect of compensation, 5.1 million ha land were distributed among 2.2 million people. During the three years of compensation the grievances of 3 million people were remedied by the state and made a decision in the question of the fortune whose estimated worth was 1.000 billion. Land, which was worth more than 30 million AK was privatised again. The summarised data of the bids for national and cooperative land can be found in Table 2.

At the time of our EU accession a crucial question is how the profitability of agriculture could be improved as only a well-developed and strong agriculture can compete with the economies of the Union. Even before the completion of compensation such opinions appeared which urged the launch of concentration based on foreign examples.

In the past decades due to the well-spread part-time small-sale production most parts of families have come into contact with agriculture whose head was not engaged in agriculture at all. 60 % of the households took part in part-time agricultural production in Hungary, which possessed the most developed small—scale production.

Based on Table 3. in Hungary, Poland and Bulgaria profound changes took place in business environment between 1988 and 1991. As it is reflected by an OECD study (1992) this transformation in Hungary and Poland took a form of a planned transition while in Bulgaria only a mere collapse of the socialist institutions took place. Transformation was much slower in the Czech and Slovak Republic while in Russia the real market transition was not even started till the end of 1991.

3. MATERIAL AND METHOD

Parts of the examination and material and method connected to it

- The examination of the unity of land ownership and land use after the compensation as well as the analysis of the changes in the size of individual farms. The database of this research was ensured by the data of the KSH as well as own collection.
- The analysis of the financial situations of individual farms to which the data of the Inland Revenue served as a base supplemented by own data collection.
- The analysis of the manpower use of individual farms based on KSH data and own collection.
- Grouping the size of individual farms according to EU directives.
- The description of individual farms in Jász-Nagykun-Szolnok county (regarding size, manpower, profile, financial situation, wish to join the EU, machinery) based on that of the Inland Revenue, KSH and own collection.

Own data collection and the method of processing

Preparing a questionnaire comprised an important part of the research. The aim of the questionnaire was to create such a primary database, which ensures sufficient information to define the suitable farm size in compliance with the EU standards and to describe the certain size categories. To define the size, I also asked about the size of the land cultivated by the farmer, the structure of production as well as the size and nature of livestock.

The questionnaires were sent out to the farmers' network in January, 2001 and received in June 2001. They were not only distributed to primary producers but also to entrepreneurs. By the end of June nearly 63 % of the questionnaires were received.

As far as the type of the questionnaire is concerned it was standardised with both real and yes/no questions. Questions were asked so that I could receive all relevant information to describe the individual farms of Jász-Nagykun-Szolnok county. The questionnaire contained both qualitative and quantitative questions and that is what defines the method of processing best as well as the nature of the applied statistical programme. The processing of data collected was carried out by a statistical programme called SPSS.

The method of evaluating data

Chi square trial was used to describe the individual farms as well as to examine the connection between the certain characteristics. The analysis of the financial situation of individual farms is based on the accounting of Standard Break-Even

Contribution. The definition of farm size based on the criteria of the European Union is also attached.

The typology of individual farms based on the European standards

The main objective of the examination is to define the size of the farms according to the directives of the European Union. Thus the knowledge of certain committee decisions is indispensable. The employees of the Agricultural Department of the KSH helped me a lot in the interpretation of the decisions.

Setting up the common typology

The statute of the European Committee on 7 April 1978 (78/463/EEC) on setting up the Common typology of the farms identifies the two factors in Par. 1. on which the Common typology is based on, namely, the type of farms and the size of it. The definition of these two factors is based on the Standard Break-Even Contribution (SGM).

The definition of the Standard Break-Even Contribution

The Standard Break-Even Contribution (SGM) means the balance between the standard value of production and the standard value of certain costs; this balance should be defined within each region for different animals and plants. All standard break-even contribution of the farm should be equal to the sum of the multiplications, which derives from the multiplication, and then the addition of all typical units and the specific SGM value of the unit. The standard break-even contributions should be calculated by using the average of the basic data of several previous years and should be updated by taking the economic trends into consideration.

The size of the farm

The size of the farm should be defined on the basis of the total standard break-even contribution of the farm expressed in European Standard Units (ESU).

The definition of the European Standard Unit (ESU)

To update and modernise the SGMs, a value expressed in 1000 ECU should be multiplied by the coefficient, which considers the global agricultural processes existing within the Community as a unit from a financial side.

This coefficient is calculated by the Committee and records it after negotiating with the member states. At present (2002) the family farm size is defined in 1.200 EURO which roughly corresponds to 308.000 Ft in Hungary.

Based on the farm size, categories can be created where the examined farms can be grouped into. In 1998 the EU distinguished the categories presented by Table 4.

In the past years there have been some alterations in the interval limits of the categories, which are presented below.

Farm categories based on their annual performance in 2002:

Mall-scale farms:	under 8 ESU
Small-middle-scale farms:	8-16 ESU
Big-middle-scale farms:	16-40 ESU
Big farms:	40-100 ESU
Very big farms:	above 100 ESU

4. RESULTS

4.1. APPROACHING THE NOTION OF FAMILY FARMS, THEIR EVALUATION IN A NATIONAL AND INTERNATIONAL CONTEXT

There can be several terms found in the specialist literature to define the content of family-run farms, which I have reviewed, and I try to make an attempt to define this term more precisely regarding the farms of Jász-Nagykun-Szolnok county.

„The precise definition of the nature of family farms has caused several problems for researchers all over the world.” (REINHARDT - BÄRLETT 1989)

The farming family and family farming are widely used terminologies but in spite of this fact they are very difficult to define.

The agricultural family is such a unit which comprises the parents, children and if necessary, the relatives, as well which owns and runs a production unit, i.e. the family-run farm. (BENETT 1982) To assess it in the right way, the basic definition should be determined more precisely. One of the methods is the systematic approach, which means that a ranking system is created on the basis of the data of practice from which the general features can be concluded. (WHATMORE ET AL. 1987) I also applied this theory for the examination of individual farms when I defined the size of the farms based on the SFH. **FURNESS (1993) also defined the size of the English farms on the basis of the SFH. This made it possible for him to relate a lot of statistical data about the types, regional spread, production, manpower-use and income of the farms to definite categories.** There is no direct connection between the ESU value and the organisation of the agricultural ventures. The fact that certain sizes of farms can be operated on a family basis does not mean that they actually work this way. This was also felt during my research. The examined farms can both be run by primary agricultural producers or individual entrepreneurs while their family members are also drawn into the process of farming.

In the 1990s after the change of the regime several Hungarian researchers dealt with the family farms within the transforming agriculture by analysing its components and features. An attempt was made to define the family farms not only in the

international specialist literature but also Hungarian researchers tried to define the components. In the next part I will present these attempts.

The term for the family farm was not used for several decades and was roughly a synonym of the term of small-scale producer. (FERTŐ 1996)

According to KÁROLY DOBOS the family farm is a kind of productive activity, which aims at employing and using family manpower and tries to gain exclusively or decisively more and more income.

According to JÓZSEF ALVINZ –TIBOR VARGA (2000) the family farm is a venture based on the family relations and resources. The capital is possessed by the family, which runs the farm and does the productive activity at the same time.

The definition for the family farm is exactly defined by the modified version of the land law according to which: “the family farm is a farming family with a possession of maximum 300 ha soil or its lease, use with all its soil and the use of tangible and intangible assets listed in its inventory which is a kind of farming form based on the full employment of at least one family member and the active participation of the other members.” (Act CXVII/2001.)

During the analysis of the situation of family farms it can cause a big problem that we do not possess exact information about where, what and on what size area the farms produce. In connection with the share of land proprietorship we hardly have any data and we have to rely on only estimates. According to the 1997 data of the KSH the individual farms cultivate almost 3.6 million ha land and more than 50% of it is cultivated by small-scale farms or at least possess it). The interpretation of data is even made more difficult by the fact that among these farms there are many part-time farms, whose characteristic is “family-like” but agricultural production is only carried out to have an extra income. **On the whole, the viable family farm is such an individual unit of production where agricultural activity is carried out with the involvement of the family members under the management of the managing farmer and with the unity of labour and capital. The size of the farm ensures the income for the family necessary for the standard of living and the quality of life expected from the side of the society.**

The definition of the features of the farm size to ensure the income is part of my research, which is dealt with in the later sub-chapters.

4.2. THE ANALYSIS OF THE SITUATION OF SMALL-SCALE AGRICULTURAL PRODUCTION IN THE PAST TEN YEARS

In 1994 two thirds of the population of the country was engaged in smaller or bigger-scale agricultural production. Among the more than 2 million households the number of small-scale farms decreased to almost 1.4 million in 1991. (LACZKA - OROS - SCHINDELE 1994)

The KSH regards the farmer who has at least 1,500 m² arable land or orchard and vineyard separately or altogether 500 m² or keeps at least one bigger animal or 50

poultry, or 25-25 rabbits, furry animals, pigeons or bees to be individual farmer. If someone renders a service this can only be regarded to reach the standard farm size if it rendered agricultural services during 12 consecutive months or carried out intensive horticultural production. (The agriculture of the Hungarian regions 2000, KSH)

The households, which do not fulfil one of these criteria, cannot be regarded as a farm. The formation of the number of individual farms is presented by Table 5.

The table clearly shows that the decrease of the number of individual farmers is continuous. The reason for the decrease is the natural decline of the population on one hand, and the abolition of household farms and other allotments of the cooperatives and state-owned farms. The theories according to which a great number of individual farms came to exist after the compensation were not proven. In real, we cannot decisively talk about new owners, rather about such a farm where agricultural production has already been carried out on household and allocated land. The farms, which were connected to cooperatives and state-owned, farms after the compensation became independent after the compensation and stood apart from the integrated organisations. As the number of the ones reaching the farm size declined, it resulted in the increase of the average farm size per farm, which influences the nature of farming. The composition of the individual farms is presented by Table 6. The data of the table well reflect the fact that the number of farms significantly decreased in the past ten years, which also had an influence on the formation of the average farm size. Information about the average farm size can be found in Table 7.

Thus the average farm size gets bigger which is due to two factors. On one hand, the total are used by individual farms increases, which was made possible by the creation of compensational land funds. The second reason for the increase of the average farm size is the continuous decline of the number of farms. The entitlement for land use should also be taken into consideration in connection with the land use. In 2000 regarding the ratio of leased and owned land national data cannot be found, thus an estimate was made on the basis of own survey. (Table 8.) Information about the process of arable land concentration is presented by Table 9. Three estate categories were formed on the basis of the data of the table according to the size of the land. The first category includes farmers managing an area of 1 ha or less, the second category comprises the ones reaching 1 hectare but possessing less than 5 ha. The ones possessing more than 5 hectares can be found in the last category.

The examination of the tiny farms below one hectare

71 % of all the individual farmers possessed one hectare of land or less in 2000. (Table 9.) Although their number decreased in the past ten years but their ratio is still significant in the category of farmers. When compared to 1991 their number declined by more than 20 % but the area cultivated by them shows an even bigger decrease. In 1991 such individual farmers where the size of the land was below 1 ha cultivated 338 thousand ha. At that time the land cultivated by them accounted for more than 50 % of the land used by individual farmers. In 2000 the farms below 1 ha cultivated 173 thousand hectares, which was only 6.8 % of all agricultural land. The decrease was more than 510 % to the gain of the farmers with bigger areas.

Land concentration is only true in its tendency, as we cannot talk about it in the case of smaller farms. Although their number declined by 20 %, the area cultivated by them got even smaller (it declined by 20 %). In the case of the individual farms of 1 ha or below it we cannot talk about enlargement. As the area cultivated by the tiny farms decreased this brought along the increase of the farms of other categories while the tiny farms became even more separated. On the long run the tiny farms cannot (and do not want to) enlarge their size.

Tiny farms above 1 ha

As far as farms between 1.1-5 ha are concerned, they are obviously characterised by growth. The effect of compensation was the biggest on this category. The total area cultivated by them was also characterised by decline. The number of the farms doubled in this category when compared to 1991, the ratio of the total area cultivated by them fell behind to 43.7 % so we can see further separation here. When analysing absolute numbers the growth is obvious but when it comes to comparing the ratios, the growth per year cannot be proven.

Farms reaching the standard size

When examining the farms the biggest concentration can be seen in the case of the third category, i.e. their number, and the size of the area cultivated by them. By 2000 the number of the farms of more than 5 ha doubled. They cultivate 77.6 % of the area cultivated by individual farmers. To sum it up, it can be stated that the number of the farms grow but land use also grows proportionally by almost 57 %. Diagrams 1-2. and 3-4. show these three categories as well as their comparison.

4.3. THE OBJECTIVE OF INDIVIDUAL FARMING

On the basis of the objective of farming those carrying out agricultural activity can be divided into four categories by the KSH, which are shortly described now.

Producers primarily for sale

The ratio of the active aged population is the highest, 74.4% in this category while the pensioners comprises 25.6%. Most of the members of the family workforce are aged between 40-49. The ratio of the ones possessing higher education certificates is the biggest here. 49 % of the workforce possesses at least secondary education certificates and 14.7 % of higher education. When compared with all the other categories the number of the ones not even possessing elementary education and carrying out agricultural activity is the lowest. When regarding specialist training, this category comes forward with 13.1 %. This means that the majority possesses a kind of education but in most cases it has nothing to do with agriculture. To sum it up, we can state that in the case of the producers producing primarily for sale the average age is the lowest. Most of them possess specialist education but many of them not professionally act in economy. This is also proved by the fact that almost 46.8 % have other sources of income. Pensioners obviously belong here. How many persons can be regarded full-time employees in agriculture? According to an EU avis, one has to work at least 225 days in agriculture, which is fulfilled by only 13.1 % (21.793) of the people engaged in economy producing for sale. All the other individuals cannot be regarded full time employees. The tiny farms due to their size cannot ensure the

proper living not even for the farmers let alone the permanent employment of outer workforce.

Besides the farms producing for sale **the farms producing surplus** also play an important role. This category is represented by 66.097 people. The ratio of the ones working more than 225 days is 6.9 % (45.874 people) which is only half of the previous category and double of it regarding the members – thus this category must also be given as much importance as to the previous one. As far a seduction is concerned it hardly lags behind the previous category but the ratio of the ones with higher education certificates is only half. Considering specialist education it is decisive that the majority (92.8%) have no education at all or only furnished with elementary one. **36.9 % of the family workforce is pensioner, thus this category is characterised by higher average age.** 57.3 % of the family workforce has no other sources of income apart from agriculture. The number of people possessing licenses as primary producers or individual entrepreneurs is 376.130 (57 %). 660.097 people produce in 302.400 farms thus the average membership is 2.2. Here every second person possesses licenses as primary producers or individual entrepreneurs. Presumably there can be such farmers from farms selling the surplus who later will opt to be professional producers.

Farms producing for home consumption

The ratio of pensioners is the highest here (40.9%) thus the average age is also the highest in this case. The ratio of the ones with secondary or higher education is the lowest here. 19.3 % possess licenses as primary producers or individual entrepreneurs so licenses as primary producers can also be obtained here if it makes taxation more favourable.

Farms rendering mostly agricultural services

This category includes the fewest people and the ratio of the ones who have no other sources of income besides agriculture is the highest here. At the same time, the average age is the lowest. The ratio of the pensioners is only 17.2 %. Specialist training is also outstanding. 600 out of 4.402 people are individual entrepreneurs and 1.611 act as primary producers. 26.6 % of the ones rendering services can be regarded full-time employees.

The data about the other sources of income besides the farm in the case of the farmers are shown by Table 11.

4.4. The analysis of the income situation of individual entrepreneurs based on the APEH (Tax Authority) database

The examination of the individual entrepreneurs takes place on the basis of the amount of income declared and the form of taxation, which directly derives from it.

In the case of the average incomes there can be a significant difference in the case of the same activity. The reason for it can lie in keeping the records or the different ways of calculating costs. Basically the avoidance of administrative costs plays the biggest role in choosing the form of taxation. Besides this, we must also

mention the amount of costs, which is possible to be calculated in connection with production. Farmers who have less justifiable costs normally choose taxation based on lump sum. In this case I think it is a significant problem that the justifiable income should be calculated on the basis of the year 1997 together with the declined profitability in agriculture. The analysis of the APEH data proved that the income situation of the farmers couldn't clearly be seen on the basis of the tax returns.

In 1998 8% of the ones opting for lump sum based taxation, in 1999 6.4 % and in 2000 5.8 % declared some income and fulfilled their duty regarding the payment of tax advances and taxes. Since the introduction of the license their number is continuously decreasing. On the average a primary producer paying lump sum taxes had 120.060 Ft of income in 1998.

According to the APEH registration this kind of taxation is the least preferred but at the same time, the number of primary producers opting for this form is continuously growing – due to the significant tax reduction. Regarding the national APEH data it can be stated that despite the favourable cost calculations fewer primary producers choose the method of itemised cost calculation. Their number is constantly increasing when analysing the certain years and the reason for it is that this form of taxation causes a significantly less tax liability despite of the more detailed registration liability. Unfortunately, the esteemed income fraction in the case of lump sum tax has not been modified these days despite the increased costs. During the recent years the rate of inflation has not been considered, either as the unchanged income is regarded as a base. The constellation of all these factors causes the differences in the average income amounts when analysing the certain forms of taxation.

4.5. THE QUESTIONNAIRE-BASED SURVEY OF INDIVIDUAL FARMS IN JÁSZ-NAGYKUN-SZOLNOK COUNTY

The objective of the questionnaire-based survey:

- The collection of the necessary basic data to calculate the production value as well as the standard break-even contribution in the case of the same farms
- the definition of farm size based on the EU standards and its separation from the typified agricultural accounting unit by the KSH
- the exploration of the factors typical of the farms and the examination of the connection between the certain factors.

The data collected by the questionnaire-based survey were processed by a statistical programme named SPSS. **The production value and the value of the SFH per farm were defined by considering the size of the farm and the livestock of different kind and size in the case of each farm.** The basic data of the values per branch to calculate the standard break-even contribution were furnished by the AKII.

The evaluation of the questionnaires

With the help of the farmers' representative 1000 questionnaires were distributed between the producers and 628 were returned. When evaluating the certain questions it was also considered to what extent the response could be evaluated in the case of the actual question. The production value and the calculation of the standard break-even contribution took place separately from farm to farm.

The first question is based on the age of the managing farmer and this was filled in by all the respondents. The aim of getting to know the age was to separate the active earners from the pensioners, thus separately describe their farms. The group of 25 or younger was also treated separate within the active wage earners. The ratio of pensioner farmers is less from both a national point of view and that of Jász-Nagykun-Szolnok county. Based on the pensioners the future of the farm can be concluded. **In this respect the majority do not want improvements and regards agricultural activity as a hobby, so only want to maintain the farm as the other source of income.** 79 farms are involved in it- according to the survey.

The characteristics of pensioners and active earners

The characterisation of the farmers of Jász-Nagykun-Szolnok county is primarily approached by their education. I examined if there was a connection between education and age as well as the size of the farm.

45.5% of the active population examined possess specialist agricultural qualification and in the case of the pensioners the ratio is only 3.8 %. An independent trial was used to examine the connection between age and specialist training. **As a result, we can state that there is a significant connection between these two examined factors, i.e. the number of farmers is smaller in the younger group who do not have specialist training. As the age advances, the ratio of the people with specialist training also decreases.**

The existence of a connection of the specialist training and the size of the farm was further proven by the value of the Chi square trial.

The bigger the size of the cultivated area of the farmer, the more important it is to have education. Only 23.5 % of the farmers with 2.5 ha or less area have specialist training while in the case of farms between 2.6-50 ha it is 52 % and in the case of farms of more than 50 ha it is 67 % who have the specialist training.

I also examined if age could have an effect on the number of family members involved in farming as well as the temporary or permanent employment of outer workforce. The results are the following: 46 % of farmers got one more person involved in farming besides his own workforce. The involvement of two more persons is also typical (35.7%) and the least typical is the one with three or more persons (18.3%). 35.7% employs seasonal workforce besides their own labour force and in 64.3% of them it does not take place at all. The number of required seasonal workers ranges from 1 to 30-40. Pensioners have the least family workforce. The ones between

25-62 years of age are mostly characterised by involving 2 or more family members and in the case of the ones under 25 the involvement of 1 person is decisive. The person involved in most cases is a spouse and in the case of the older generation, the children or grandparents. 1.660 people act in 628 farms examined. On the average, there are 3 people in each farm, which means a bigger value with one more person than the county average.

In the case of the pensioner-run farms the ratio of those possessing small farms is the highest, which run with at least 1 family member involved. The pensioner farmers carry out agricultural activities partly to ensure the home consumption as well as to have another source of income. These objectives are ensured by even the small size but they have neither the capital nor the expertise or the intention of development to improve their farms. The subsidy coming into these farms primarily helps the everyday living. After the examination of the connection between the age and the size of the farm I try to get an answer if there is a connection between the age and the entitlement of use. Based on the Chi square trial I can conclude that own property is decisive in the case of the pensioners while the leased areas play an important role when regarding the active aged population.

The additional incomes of the pensioners can also be ensured by the 1 ha big area or even under it as well as the livestock comprising 1-2 animal types. If this objective can only be met by leasing then this activity will finally be non-profitable. The survey proves that the older farmers have difficulty even in the cultivation of the available land in many cases so they can lease it and have the additional income by this way. In the case of the younger generation the intention for developing and improving the farm is quite typical which can only be hindered by the lack of capital. Due to low profitability even the low prices of the arable land are difficult to earn so they would rather choose leasing as a means of enlargement.

The development intention of the farmer

The future of the farm is in close connection with the question of development. Surveys prove that development primarily depends on the size of the sources available. The connection between the age and the intention of development cannot be regarded as neutral, either. Regarding the question of development 624 farmers responded. The connection between the two factors is obvious. The youngest generation is the most ambitious thus it is typical of them that they possess specialist training and land-lease is decisive in their land use. The 26-62 years old are also characterised by the intention for development but this ratio is lower and many think that they have already reached the level of management, which ensures realising their objectives. This is also proved by the survey according to which the pensioners are the most unlikely to plan the development of their farms.

The analysis of the activities of the examined farms

Land ownership is also dominant in the case of the examined farms. The individual farms manage an area of 14,820.3 ha. 52.2 % of the farms use soil. On the average there are 27.3 ha of land per farm. 60 % of 542 farms defined their soil size precisely. If we only consider these farms then each farm comprises 39.8 ha.

Regarding the size of soil given by the farmers exact categories can be created regarding the farm size with the help of the SPSS programme. To form the farm categories, the KSH typology is used on one hand, and the categories of the German statistics on the other. These two ways of application are important because the KSH typology typifies the farms of more than 10 ha based on a too big interval but I experienced significant discrepancies in the case of the sizes of the examined farms- especially those of above 10 ha. The categorisation on the basis on the German typology gives a true picture of the fact that the farm size of the bulk of those involved in agriculture (94.1%) well exceeds 2 ha. 51.6 % of the respondents manage an area between 10-30 ha.

The typology of the KSH shows a similar picture although the category of 10-50 ha comprises a wide interval in itself and this can distort the average category. In the county the ratio of the farms below 1 ha is 68.1% and it is only 4.9 % in the case of the examined farms. **The tiny farms of below 1 ha cannot be regarded as competitive farms, i.e. the economic size of the KSH is only a registration unit, to reach the economic size of the EU we need to possess the multiplied form of this unit.** Due to the small sizes the subsidies mainly serve a social purpose for the producers. In 200 in Jász-Nagykun-Szolnok county 11114 received a land-based subsidy whose 84 % possess an area below 20 ha.

The sowing pattern of the examined farms

The data of the certain farms were defined while taking the estate category as well as the structure of the production into consideration. Besides the fallow and other categories 14 species of plants were named. In the case of farms of less than 1 ha such plants are dominant which can directly be made use of in the households (e.g. vegetables). In farms of more than 1 ha there is a great diversification within plant production but this process does not characterise farms of more than 100 ha. These farms possess such a machinery park, which can serve the whole branch. Due to the small size, the others would rather use hired manpower, as the capacity of the machines could not be put into full use at such a size.

The examination of the farms based on their production value

To calculate the production value all farms have to be examined and the typical production values of the soil and the given animals have to be determined in each farm. Based on the KSH data it can be concluded that – in the case of Jász-Nagykun-Szolnok county- the production value per ha is 119.1 thousand Ft, in the case of

animals it is 339.1 thousand Ft, and later on with the help of these figures the total production value was stated per farms.

Regarding the calculation of the production value 494 out of 628 farms provided with useful information. The production capacity of these farms greatly differs from both the national and the county data. The production value of the farms examined was bigger than the national and regional data serving as the basis of comparison. 58.6 % of the farms produce a value of more than 1 million Ft, which requires at least 7 types of animals or an area of 20.6 ha in the case of plant production. (The data of production values are shown by Table 10.)

The evaluation of the examined farms on the basis of standard break-even contribution (SFH)

Only plant producing farms

According to the survey 158 farms carry out such activities. 62.7 % of them reach the limit of the two European size standards. The production value (PV) earned by the plant producing farms is 1,448,930.65 Ft. The area cultivated by them is 8724 ha which is 58.7 % of the total registered land. On the average, the area per farm is 55.2 ha.

The value of the SFH produces by the farms is 367,000 thousand Ft, the SFH per farm is 2,326.6 thousand Ft which is equal to 7.6 ESU. This is a small farm-according to the EU typology. In the case of plant producing farms only 25 % of the production value can be regarded as SFH value, which is best explained by the fact that the majority of the farms can be regarded small despite of the fact that the average size of these farms is more than double the average size of the EU.

Mixed farms

The PV of these farms is 1,400,000 thousand Ft, the produced SFH is 749,330 thousand Ft. The number of farms reaching the EU standard is 183 while the ratio of the ones not reaching the standard is 10.7 %. A farmer carrying out mixed farming cultivates 29.7 ha and has the number of livestock of at least 4.5. The SFH value of the soil is 546,286 thousand Ft in the mixed farms. The SFH value is 203,044 thousand Ft in animal raising farms. On the average, 3,655.3 thousand Ft value falls to a farm which means 11.9 ESU units and that is a medium-small category according to the typology. The agricultural activity is the most profitable in the case of farms performing both plant production and animal husbandry at the same time – the value of the SFH is 53 % of the PV.

Animal keeping farms

Only 47.3 % of 131 respondents reached the minimal value of 2 ESU. The lowest SFH and PV are produced here. The value of PV is 475,372.72 thousand Ft, the SFH is 191,109 thousand Ft. 55.1 % of the animals can be found in these farms. In this examined category the SFH value per animal is 167,872.5 Ft. The SFH value per farm is 1,458.8 thousand Ft which equals to 4.7 ESU and means a small category, as well. 40 % of the production value can be regarded SFH value. The animal keeping farms are more profitable than their plant-producing counterparts. Only 2 milking cows can ensure to reach the economic size. (The spread of the examined farms based on the SFH is presented by Table 11. and 12.)

SFH per hectare

To calculate the SFH per hectare I have to define the area of the land cultivated by the individual farms. At the same time, there is a need for the total SFH value produced by the farms. Not only the ones of plant production must be mentioned but also those of a mixed nature have to be considered from the point of view of the SFH deriving from land cultivation. The total value of the SFH of plant producing farms and the one of the mixed farms via plant production is 913,886 thousand Ft – according to the calculations. If we divide it by the cultivated 14,821 ha area of land, we will see that the SFH value per hectare is 61,661.6 Ft.

SFH per animal

The process of the calculation is similar to the one of the land. The total number of animals kept in only animal raising farms as well as in mixed farms is 2,066.2. The total value of SFH produced by them is 394,150 thousand Ft, so it is 190,761 Ft SFH per animal. Then we can answer the question of how big size and how many animals are needed to reach the 2 ESU size.

- In the case of only animal-producing farms it is 1.6 animals
- In the case of only plant producing ones there should be a cultivated area of at least 5 ha.

In the case of 1.6 animals any kinds of animals can be kept to reach this number and the farmer will have the necessary income related to the farm size. The value of the reached income can greatly be influenced by utilisation. In the case of plant producing farms on the 5 ha the production of the traditional plants (maize, sugar beet and potato) endures enough income to reach the economic size. In the case of the vegetables the reached income ensures a size exceeding 2 ESU.

On the average, 2 people work in the examined farms and if considering the amount of the minimum income at least 1200 thousand Ft SFH should be produced to ensure

gaining such an income, which covers the basic needs of everyday life for the farmer and one of his family members.

The SFH value necessary for living expects an economic area of at least 4 ESU, which means the cultivation of 20 ha arable land or the keeping of 6.4 animals- according to my estimation. 58.4 % of the examined farms can meet these requirements.

By defining the size categories there is a possibility of comparing the spread of the size categories of the examined farms with the similar EU data based on the ESU. The data show a shocking disparity while we must also consider the fact that in the EU a farm comprises 26 ha area statistically. At the same time, **in the case of the examined farms this is 55.2 ha in the case of the plant producing farms and in the case of the mixed farms the average farm size is nearly 30 ha, as well. This proves that in the case of the national farms the biggest problem is not only the question of size but also the rather low level of profitability.**

There was no possibility for defining the sizes of the farms according to the EU standards on a national level till 2002. After the General Agricultural Survey the specialists of the KSH and AKII in cooperation defined the size of the registered individual farms. These data were published in May 2002. **More than 90 % of the near 1 million farms do not reach the limit of the economic size accepted by the EU and based on the SFH.**

Still, the KSH data do not allow us to define the economic parameters necessary to reach the economic size and data prove that the economic size defined by the KSH is only a unit of accounting. We hardly have any information about the remaining 10 % of the farms although they cultivate more than 70 % of the area cultivated by the individual farms. When comparing the ESU size of the national and county farms (Table 12.) it can be seen that more individual farms in the county reach the limit of the economic size designated by the EU. The spread of the economic size of the examined farms in Jász-Nagykun-Szolnok county differs from the national and county data and this could only happen to the advantage of the farms reaching the economic size. These data prove that regarding the question of subsidies and financing, subsidising the ones below the economic size cannot be disregarded. However, these farms cannot be competitive with the EU farms-due to their size. Taking the small size of the farms, the KSH has formed another category within 1 ESU. 64 % of the farms on a national level (it is 60 % in the county level) reach 25 % SFH value of 1 ESU (according to my calculations that is 77.000 Ft). These data prove that farming mainly serves as an additional source of income. **The disparity between the national and county data also supports taking regionalism into consideration when designating subsidies.**

After designating the economic size the connections between the questions were analysed furthermore. The above mentioned independence trial was used to explore the connection between the questions.

The connection between tax declaration and income

Of the 628 respondents 618 filled in the form regarding the tax file. 460 of them were ready to file it in 2000 and only 25.3 % did not intend to declare tax concerning last year. (1999) In their case, income must not exceed 250.000 Ft. The income of 10.7 % of the farmers filing their tax return does not exceed 250.000 Ft but it is not true because of their other sources. The income of 69.8 % of the respondents was between 250.000-4.000 thousand Ft.

The number of farms with an income of more than 4.000 thousand Ft is quite significant (almost 90 farms). Naturally, the connection between the size of income and filing the tax return is obvious: the higher the income, the more probable they are to file their tax returns. The survey provides with quite different data from the national ones. Here the ratio of choosing the itemised cost declaration is higher than that of the lump sum tax. The reason can be found in the bigger economic size and the income. On the basis of the analysis of the national data I found that it was the size of the income, which determined the choice of the types of taxation. The result of the Chi square trial also proves it according to which there is a significant connection between the type of taxation and the size of the income. In the case of an income of 0-250 thousand Ft rather lump sum tax is preferred as there is no need for a tax file but if they should exceed it then only incomes should be collected and a minimal tax should be paid. In the case of the income between 250 thousand-4.000 thousand Ft the number of those opting for the itemised cost declaration is decisive. The reason for it can be the above mentioned favourable terms of taxation as if we consider the same size of income then there will be a tax liability in the case of lump sum taxation but in the case of the itemised cost declaration there will not be any.

The size of income and the level of mechanisation are also interrelated. 97.8 % of the respondents gave an answer in connection with the machinery. 60 % of them do not possess the necessary machinery necessary for production. The more the income, the bigger the number of people who state to have the suitable level of mechanisation.

83.4 % of those reaching less than 250 thousand Ft income do not possess the necessary machines, the farmers with an income between 250 thousand-4.000 thousand Ft -this means 58.7 % of the respondents while only 25 % of them with an income of more than 4.000 thousand Ft consider it as an obstacle. When analysing the size of the income there is a question if it has an influence on improving and developing the farm. **The answer is definitely yes. In connection with the development of the farm I received 622 answers. The majority of them (51.8%) do not want to invest into economy later on.** Maintaining the level of farming is the strongest in the case of farms of 0-250 thousand Ft and here 72.7 % of the respondents do not intend to develop later on. In the case of the category between 250 thousand-4.000 thousand Ft this ratio declines to 48.9% and above 4.000 thousand Ft it is only 28.3%. In real, it is they who would greatly make use of the resources. The use of the subsidies as well as the connection with the income are also characterised

by significance so if the income grows, the number of the applicants for subsidies also grows at the same time.

In the case of farm not reaching 250 thousand Ft of income only 60.4 % apply for subsidies, this ratio is 84.6 % in the next category but in the highest one the ratio of applicants is 87 % already.

In the case of farms carrying out plant production or mixed farming the land-based subsidies have a great significance. In connection with it I tried to find an answer for the question if the number of applicants changes in relation with the size of the cultivated area. The Chi square trial proved it. The bigger the size of the cultivated area, the more typical application for subsidies is. Of 599 respondents 474 took up a loan. Most of them possess an area between 2.6-50 ha. 94 % of the farms of more than 50 ha take up loans.

The question of our European Union accession is becoming more and more topical for the farmers, too. I wondered what opinion the farmers have about the accession.

All farmers had an opinion about our joining the European Union. The question of the accession was examined from two points of view: age, one on hand and income, on the other. There is no connection between age and the answer to the accession. 60.4 % of the respondents approve the efforts for accession and hope to gain advantages. However, the declaration about the accession and the size of the income are not so independent from each other. When analysing the replies the following statement was made in relation with the size of the income: In the case of ones reaching low income the ratio of the answers is bigger who do not approve the EU accession. (this means 54.1 %) At the same time, in the case of an income above 4 million Ft this holds true only for 27.2 % of the replies. The answer lies in the economic size. Smaller farms have a greater concern about their future than the bigger ones because regarding their size they can be allotted small-scale subsidies. The smaller farms are afraid that with the EU accession their situation will become even worse and can lose their other sources of income.

The connection between the farm size and mechanisation

81.7 % of the ones with a farm of 0-2.5 ha have no machinery for the cultivation of land, this is 59 % in farms of 2.6-50 ha and in the case of those exceeding 51 ha the ratio of farmers is the highest who find the standard and the level of the mechanisation of their farms satisfactory. In the case of farmers possessing tiny farms the ratio of the respondents refusing to develop their farms (76.5%) is the highest. Only 32.8 % of farms owners of more than 51 ha expressed a wish for non-development and improvement.

Farmers also declared what kind of help they would need to help their agricultural activities. Based on the answers, most of them (50.4%) would like to see even more direct subsidies for their production, which could at least to some extent rectify the problems caused by low profitability. The respondents gave high priority to

economic stability, ensured demand and thrives for tightening the parity between agricultural and industrial products.

4.6. New and modern scientific results

- 1) The number of individual farmers has been continuously decreasing since 1981. The views according to which there would be a great number of individual farmers after the compensation were not proven. In real, we cannot talk about new owners but such farmers who carried out agricultural activities even before. After the compensation they became independent, separated from the integrated organisations – so their situation became fragile. Since the change of the regime the nature of farming has been transformed to a great extent. While in 1991 mixed farms were dominant (45.7 %), in 2000 their ratio decreased to 38 %. Despite of it, it is these farms, which produce 66 % of the product value done by the individual farms. The reason for it is that these farms have a size bigger than the average due to concentration. The ratio of animal raising farms is on the rise but unfortunately this holds true only for the farms, as livestock has suffered from a continuous decline since 1981. This process can raise the possibility when livestock can become sparse. The number of farms dealing with plant production has also decreased in the past 10 years and the reason also lies in concentration.
- 2) Based on the analysis of national data I concluded that the process of concentration in land use shows different characteristics in the estate categories. 70.8 % of the farmers in 2000 still manage a farm of 0.15-0 ha. This datum is 20 % lower than the one in 1991. The typical estate size in this category is 0.254 ha. The effect of concentration in land use can best be traced here and despite the great number of farmers they have a share of 6.8 % of the land cultivated by individual farms. Farms of 1.1-5 ha comprise the second category. The number of farmers belonging here shows a continuous rise while their share of the cultivated area declines. The average farm size is 2.16 ha, thus farm size here has not grown, and on the contrary, it has decreased. From the point of view of land use the biggest change has an effect on farmers managing farm sizes of 5.1 ha or above. The number of the farmers of this category has significantly risen and at the same time, they have a considerable share of the total land cultivated by individual farmers. While in 1991 this share is 10 %, in 2000 it nearly reaches 80 %. The average farm size is 20.5 %. The land freed from the first category is mainly made use of by these farms. There should be a system of subsidies created which is suited to the altered ownership- system and would help the development of the bigger farms, mean better profitability and strengthen the market position.
- 3) The name “individual farm” elaborated by the KSH (Central Statistical Office) can only be regarded as a unit when it comes to surveying and not as a competitive farm. This is proved by the fact that in 2000 only 4.7 % of 1,982,679 employees working in 960 thousand individual farms can be

regarded as full-time workers according to the EU directives. The purpose of individual farming is to provide for home-consumption as well as selling the surplus and getting supplementary incomes by this way. 38.2 % of the nearly two million people working in agriculture are pensioners. Their ratio can be regarded high but it also signals the fact that it is not only they who are compelled to carry out agricultural activity but also the great number of active earners have to be engaged in agriculture. Subsidising farms below 2 ESU size is a social political, not an agricultural political task. Farm concentration should be promoted to reach the 2 ESU size as only the farms reaching this size can be subsidised in the EU, as well.

- 4) The analysis of both national and international data has proved that for the primary agricultural producers the income and the amount of costs considered rank number one when choosing the form of taxation. While analysing the incomes declared I drew the conclusion that the ones opting for itemised cost declaration declare less income than the ones paying tax lump sum. The reason for it is that in the case of lump sums the earning content of the income has not changed much since 1997 while profitability has continuously declined, which can only be balanced by producers opting for itemised cost declaration. This can cause serious problems especially for plant production. So it is impossible to define the farm size precisely from the point of view of taxation.
- 5) Defining family farms by means of a representative survey. Viable family farm is such an individual business entity in which work and capital form one single unit and besides the coordination of the farmers all family members are involved in agricultural production. The size of the farm ensures the income necessary for the family to realise a socially accepted standard of living as well as quality of life.
- 6) I have carried out the assessment of the financial situation of the farms by defining the standard break-even contribution (SFH) produced by the farms and with its help I have defined the criteria of farm size ensuring a sound living. The European Union regards the farm up to standard if it manages to produce at least 1200 EUR worth SFH. Based on my calculations it should at least possess 5 ha arable land or a livestock of 1.6 animals although due to the low profitability this size cannot even ensure the living of one person. In the examined farms there were 2 persons on the average and they would need at least a farm size of 4 ESU to which the cultivation of a 20 ha land or the raising of livestock of 6.4 animals are necessary. Nearly 60 % of the examined farms have complied with these conditions. The 4 ESU sized farm can only ensure the income for living but it does not make the development of the farm, the employment of new technologies and investments possible. For this purpose, there should be several subsidies before our EU accession to improve competitiveness. The subsidies of farms should be managed by considering regionalism in which the profitability of certain branches, the existence of natural endowments and the farm size should be decisive.

5. CONCLUSIONS AND SUGGESTIONS ON THE BASIS OF THE RESEARCH RESULTS

I have chosen the analysis of the financial situation of family-run farms as a topic of my research and several databases were used simultaneously among which I have found the survey carried out in Jász-Nagykun-Szolnok county decisive, which supplied data for judging the situation of farms operating in the county.

Based on typifying individual farms my conclusion is that not only farm concentration should be promoted but also factors ensuring a suitable level of profitability suited to the present structure should be allowed to prevail. Based on my calculations the necessary size for one ESU is: in the case of animal raising farms- 1.6 livestock, in the case of plant producing ones- an area of 5 ha. The farmer in Jász-Nagykun-Szolnok county who meets this size requirement can hope for a subsidy well after Hungary's EU accession. To have a share in national and union subsidies after the accession, farm concentration should still be supported but the system of subsidies should be created in a way that the social subsidies of farms below the average size stand aloof from the other types of agricultural subsidies. The profitability of agriculture should be improved as soon as possible and the average size of the farms should be enlarged so that individual farms remain competitive after the accession with other EU farms.

I think this is the only way that farmers can conform to the changed market, economic and subsidy system after the accession. The basis for applying for Union and national subsidies is primarily the economic size regardless of the form or if the managing farmer has a full or a part-time job there.

My suggestions made on the basis of my research are included in the following points, which were created by considering the opinions of the farmers collected by means of a questionnaire.

- 1.) The individual survey proves that the specialist knowledge of the farmers is improving but still lags behind the ratio of trainees in other branches. So there is by all means a need for specialist training and study tours abroad.
- 2.) Farmers do not possess the right kind of information necessary for farming and to manage the problems caused by these lacks a more intensive operation of counselling should be promoted.
- 3.) It is necessary to run information centres necessary for free subsidies and concessionary credits for the farmers.
- 4.) Less application administration. The fee of the applicant for an application should also be accounted as a tax relief – not only the fee of the accountant.
- 5.) I would make the unified system of taxation possible for the farmers as the reform of the taxation system up to a designated income level. With one single tax I would conform to all tax liabilities so there would not be different earnings in the case of the same income. At the same time, the complicated tax and registration bureaucracy would be abolished.

- 6.) The efficient operation of the share of machinery. Due to low profitability farmers are unable to buy the machines necessary for farming. The more intense support of sharing the machinery would mean a solution. The so-called “machine society” would buy the assets and their maintenance would be the liability of the farmers. By employing hired workforce the society could have more gains.
- 7.) The differentiation of subsidies regarding size and local peculiarities. Ensuring more subsidies due to unfavourable natural endowments. In the case of reaching the European standard ensuring more subsidies to help further processes of concentration.
- 8.) Creating information centres to sell, buy, process and store products. This task could also be done by safeguarding bodies. Selling possibilities would be clear for the producer and taking them into consideration later on he would be able to change his production structure.
- 9.) More support to inputs necessary for agricultural production (e.g. sowing seeds, chemicals etc.) This could also help low profitability.
- 10.) A more efficient system of informing farmers about the kinds of subsidies after the accession.

6. SUMMARY

In my thesis I deal with the individual farms, which can be found as family-run farms according to the national fashionable terminology. First I review the situation of small—scale production, the certain stages in history by highlighting and pointing out the favourable and unfavourable processes affecting the lives of individual farms throughout history. I examined the question of land allotment in 1945, the effects of nationalisation and finally the questions of land ownership policy after the change of the regime. These processes had a profound effect on the production conditions of individual farmers and the structure of their connections.

Presumably this present situation cannot be seen as the end as during our accession to the European Union will surely change the present system which will have a further effect on both the production structure and the size of the farm categories. The evaluation of the situation of small-scale production was carried out by studying the works of national specialists. It has become obvious for all economic participants that the farm structure should not be defined in one single way and subsidy should be directed to one segment. There are such branches, which can efficiently run by individual farms and some others where the efficient economic size necessary for production is ensured by cooperatives and partnerships. Individual farms play a decisive role in the present agri-structure, and the size of these individual farms shows significant differences. To define what exactly is meant under the term “individual farm”, I have reviewed the literary background of the term family run farm and thus I tried to give a more modern definition by using the domestic circumstances and the experience of the research. The central part of my thesis is the examination of individual farms based on national data. The basic data to examine the examined interval -the last ten years- were ensured by the KSH.

The most important findings of the examination are that in the case of the certain farm categories the process of farm division is not over yet. Concentration is typical first of all for farms of more than 5 ha but the subsidy of the farms of this economic size should not evolve into a social question (like in the case of tiny farms) as the farms, which could be the competitors to the farms of the European Union, cannot evolve and develop then.

To create the suitable policy of subsidies it is indispensable to get to know the present income situation of the individual farms and the size structure tightly connected to it.

At present the domestic test system has the most complex information, which, unfortunately, does not ensure full informational cover on certain regions. To compare the results of my examination with the same points of examination of the European Union, I can experience great differences. From the point of view of land-lease and ownership the separation of these two factors is also typical in Hungary but in the case of the individual farms the cultivation of the own area is decisive as opposed to the practice of the Union where the ratio of the leased area can be as high as 40 %. The reason for it mainly is the legal non-regulation of the leasing system on one hand, and the fact that leasing fees are difficult to come by at such a low profitability, on the other.

Part-time and additional agricultural work also spread in the EU. Part-time jobs are also decisive in Hungary both on a national and a regional level. I do not find it a good solution if subsidies are linked to professions, which have to be maintained in the long run. (family farmer).

In the EU there are two criteria to define the term family run farm: on one hand, the family must be based on mainly family workforce and on the second, it has to ensure a decent living for the family. Based on my survey in Jász-Nagykun-Szolnok county there is one-two members of the family involved in farming besides the head of the family but in the case of seasonal work it can be multiplied. A decisive difference from the Union practice is the different profitability. I think the reason for this disparity lies not in the size or the economic size of the farm – the Union average is 18 ha per farm– rather in the relative relationship between expenditure and profit.

I think that the decline of profitability deriving from the open state of the parity between industrial-agricultural products should not be stopped by increasing profits by all means, rather by the more effective use of expenditure and by creating and operating a more effective system of subsidies suited to the Union practice.

2003 has brought newer changes in taxation for the agricultural primary producers and family farmers. According to it, the limit of the tax-free income has been increased to 400 thousand Ft for producers opting for lump sum taxation, in the case of the ones choosing itemised cost declaration it is enough to file a simplified tax return up to 3 million Ft of income provided that the producer has invoices of the costs covering 20 % of the income. The introduction of the simplified Company Tax has not brought profound changes for the farms carrying out agricultural activities as there is no possibility for cost declaration so it is not worth paying the tax, which is 15 % of the positive tax base besides low profitability as it would mean a heavy burden on producers.

APPENDIX

Table 1.

The use of land by management types between 1991-2000

Name	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Companies, business entities	32,9	38,7	33,4	33,2	27,9	28,1	25,4	25,9	28,2	29,1
Cooperatives	51,5	45,4	42,3	29,3	23,7	21,6	19,6	18,0	16,1	12,5
Business organisations	84,4	84,1	75,7	62,5	51,6	49,7	45,0	43,9	44,2	41,6
Individuals	15,6	15,9	23,7	22,3	43,4	45,1	49,7	51,0	50,4	41,9
Other	0,6	15,2	5,0	5,2	5,3	5,1	5,4	16,5
Total	100	100	100	100	100	100	100	100	100	100

From: Agricultural Statistical Almanac, 2000 KSH (According to the KSH institutions, organisations and other public firms without agricultural activity comprise the “other” category.)

Table 2.

The total bid data of state and cooperative owned lands

Name	Number of bids		total AK value of bids	Number of proprietors
	Advertised	Held		
State owned land	6.351	6.431	5.677.632	195.346
Cooperative land	20.507	20.064	33.490.646	511.810
Total	27.058	26.495	39.168.278	707.156

From: own calculations based on OKKH data

Table 3.
Realisation of economic reforms (end of 1991)

NAME	CZECH R.-SLOVAKIA	HUNGARY	BULGARIA	RUSSIA	POLAND
STOP TO PLANNED ECONOMY	YES	YES	YES	NO	YES
PRICE LIBERALISATION	NO	YES	YES	YES	YES
LAWS HELPING THE PRIVATE SECTOR	YES	YES	YES	NO	YES
WORKFORCE MOBILITY	NO	YES	YES	NO	YES
PRIVATISATION	YES (91)	YES (89)	NO	NO	YES (90)
BANK REFORM	IN PROGRESS	YES	NO	NO	YES
CAPITAL MARKET	DEBATED	YES	NO	NO	NARROW
BANKRUPTCY LAW	NO	YES	NO	NO	LIMITED
LIBERALISATION OF FOREIGN TRADE	YES	YES	YES	NO	YES
OPENNES TO WORLD MARKET	YES	YES	YES	NO	YES
LAND REFORM	NO	JUST BEGAN	NO	NO	NO

FROM: GRANVILLE AND ROLLO 1992, STALEV 1992, OECD 1992, WILLIAMSON 1993, CSITE - KOVÁCH 1994

Table 4.
Categories of European sizes

Name	Size in ESU
Too small	< 4
small	4-< 8
Medium/small	8-< 16
Medium/big	16-< 40
big	40-< 100
Very big	>=100

From: European commission (1998)

Table 5.
The number of individual farms

Name (year)	1981	1986	1991	1994	2000
Number of individual farms (thousand)	1 500	1 415	1 396	1 201	960

From: own calculations based on KSH data

Table 6.
The number of individual farms based on management type

Type of management	1991		1994		2000	
	000	%	000	%	000	%
Mixed	638	45,7	530	44,1	364,8	38
Plant production	573	41,0	423	35,2	374,4	39
Animal husbandry	185	13,3	248	20,7	211,2	22
Total	1.396	100	1.201	100	960	100

From: own calculations based on KSH data

Table 7.

The number of registered farmers, used land size and their average estate size

Year	Farm n. (thousand)	Land size (000 ha)	Average estate size (ha)
1985	1.415	544	0,38
1991	1.396	640	0,46
1993	1.581	886	0,56
1994	1.201	1.500	1,25
2000	960	2.544	2,65

From: own calculations based on KSH data

Table 8.

Cultivated land based on the entitlement of use

Name	1990	1994	2000
Own area	63,4	85	94,3
Hired area	17,8	12	5,7
Used by other entitlement	18,8	2	-
Total	100 %	100 %	100 %

From: KSH data and own data collection

Table 9.

Arable land concentration

Size of arable land (ha)	Individual farmers					
	Total area (000 ha)			percentage		
	1991	1994	2000	1991	1994	2000
Under 0.5	200	219	99,2	31,3	14,6	3,9
0.51-1	138	96	73,8	21,6	6,4	2,9
1.1-5	230	400	399,4	35,9	26,7	15,7
5.1-10	36	203	292,3	5,6	13,5	11,5
Above 10.1	36	582	1679	5,6	38,8	66
Total	640	1600	2544	100	100	100

From: own calculations based on KSH data

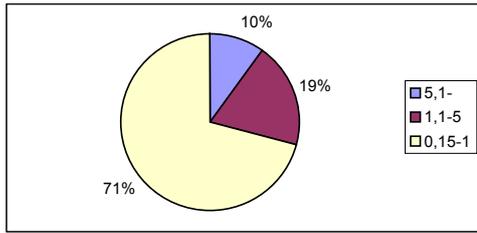


Diagram 1.

The division of the number of individual farmers in estate categories in 2000

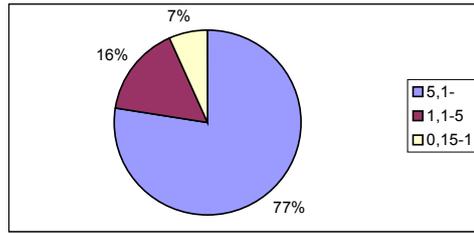


Diagram 2.

The division of land area per estate category in 2000

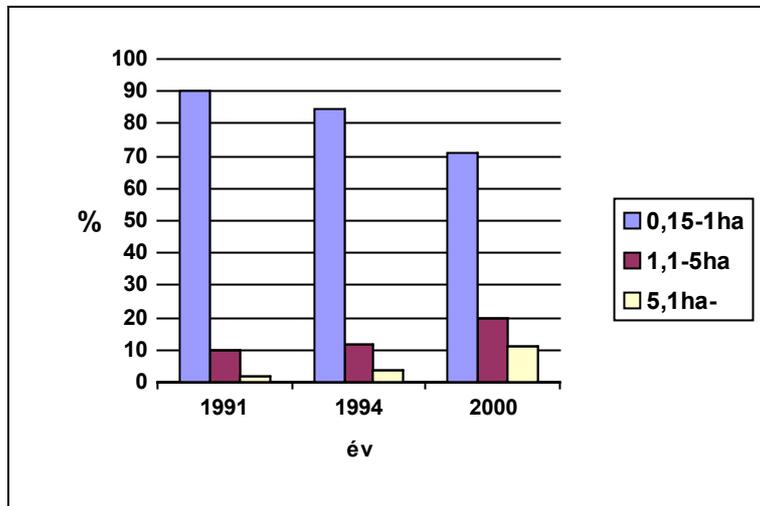


Diagram 3.

The number of individual farmers per estate category 1991-2000

FROM: own calculations

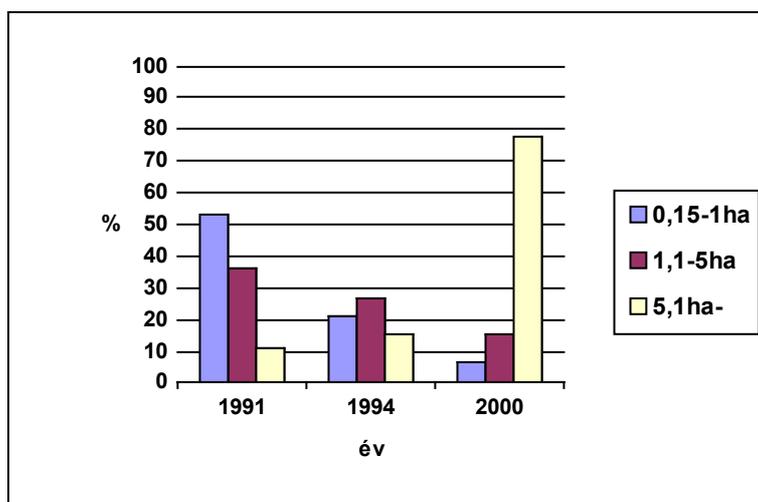


Diagram 4.

The division of individual farm areas per estate category between 1991-2000

From: own calculation

Table 10.

The division of individual farms based on the size of agricultural product value

NAME	AGRICULTURAL PRODUCT VALUE (000F T)							
	-50	51-100	100,1-200	200,1-500	501-1000	1001-5000	5001	%
ANALYSED	3,3		6,8	18,1	11,4	36,6	22	100
FARMS PER COUNTY	8,8	20,3	24,8	23,1	11	10,4	1,5	100
DATA	11,9	20,5	26,1	22,3	9,3	8,7	1,3	100

From: own calculations

Table 11.

The division of farms reaching 2 ESU size

NAME	TYPE OF FARMS						TOTAL
	PLANT PRODUCTION		ANIMAL HUSBANDRY		MIXED		
	piece	%	piece	%	piece	%	
REACHING STANDARD SIZE	99	62,7	62	47,3	183	89,3	344
BELOW STANDARD SIZE	59	32,3	69	52,7	22	10,7	150
TOTAL FARMS	158	100	131	100	205	100	494

From: own calculations

Table 12.

The division of farms in the EU and in the examined farms

Size of economic dimension	EU farms %	Examined county farms %
Under 8 ESU	33	65,4
8-16 ESU	19	20,6
16-40 ESU	31	10,2
40 –100 ESU	13	2,9
Above 100 ESU	4	0,9
Total EU	100	100

From: EU data (European Commission 1998) supported by own calculations

list of publications connected to the research
ARANKA BARANYI

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