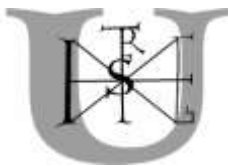


**GÖDÖLLŐ
SZENT ISTVÁN UNIVERSITY**



THESES OF DOCTORAL DISSERTATION

*Opportunities of Improving Financial Extension in Micro, Small and
Middle Scale Enterprises with Special Regard to Agricultural Enterprises*

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1. Introduction

Analysing the development of extension systems in terms of historical economics, you can say that they have always been connected to the given era and the current economic targets. In the beginning, they showed technological directions. For example, if the introduction of a new species in the field of agriculture had to be decided, then extension work was concentrated to spread the species, and if new machines and techniques were introduced, then extension had the main task of spreading them. Modern extension has to take upon itself both the field of **economy and farm management**. Private farms introduced after the political transformation had the claim of a new type of extension system. Extension system was changed a lot through the years, which could be seen in the number of services and extension became free of charge. Thanks to these changes, more and more farmers used these services. In the Hungarian economy heading towards the developed market economies, a very important field is to improve micro, small and middle scale enterprises (SME's). Another important field is to improve financial extension so that agricultural entrepreneurs can fit their businesses more to the financing opportunities. In the European Union (EU) farmers have to do exact recording and exact clearing of accounts, therefore farmers have to be aware of the solutions of their financial problems in the enterprise, and advisers have to be prepared to provide informations effectively.

1.1. Topicality of the theme and its background

Scientists started to deal with the problem of small and middle scale enterprises relatively late, in the second half of the 80's. The first bigger research dealt with foreign experiences, legislation and theoretical questions, because these categories did not exist in Hungary that time. Although there were small and middle scale enterprises in the industry and market gardens in the agriculture. Researches primarily summarised the experiences of German countries, which provided basic information in extension. Researches, publications and the teaching of basic studies in universities started before the spread of small enterprises controlled by international requirements. At the same time, you could see the tendency which exists nowadays as well, that in the economy, large scale enterprises separate given functions and organise a separate form of enterprise in order to be more cost-efficient. Therefore you can say that small and middle scale enterprises play bigger and bigger role in the development of the economy. In the decades before the transformation, the level of agricultural production increased in Hungary. This could only be reached by having good technical condition and exigent professional knowledge in the plants. The question raises: do the farmers owning private enterprises have the proper conditions for efficient production? In most cases the answer is NO. But you can contribute to their efficient production with broadening their professional knowledge, extension with good professional background, and with changing

the farmers' way of thinking about production. In my opinion financial regulation, operation of financial procedures and their efficiency can be improved by developing financial extension and making it regular. This can have a positive effect not only on the farming in micro, small and middle scale enterprises but also in households as well.

According to international experiences, 0.5-6.0% of the income of agricultural production is spent on extension and professional events in countries running extension organisations. In the developed countries of Western Europe, extension organisations have an effective and good history with decades in the background. In Hungary, extension organisation system does not make a uniform, coherent system, it is still changing. Different members operate independently from each other, their operation does not fit together.

As a conclusion, there is not a uniform and organised conception to improve extension organisations or the system of relation (not even in the field of financial extension). I think there is a need for the improvement of these things to create an efficient system. There is a need to determine the exact aims and tasks of the intermediary organisations. Among these, one of the most important thing is to prepare enterprises in terms of the management, **financial extension and the role of financial intermediators connected to the extension.**

1.2. Aims of the research

In the course of my research and analyses, my aims were the following:

1. By analysing the scientific literature with management view I would like to evaluate the role of extension with special regard to the financial aspects of improving micro, small and middle scale enterprises in agricultural extension.
2. My qualitative aim is to learn and evaluate complex opinions connected to institutes which take part in financing. I would like to make general conclusions on the grounds of the connections found, and build an extension system of aspects connected to the extension's financial background that can help to choose among the different financing ways and therefore can efficiently serve the financial processes of enterprises with financial extension. I would like to analyse the role of financial institutes in the extension system and in the process of financial extension. My quantitative aim is to analyse the economic factors hindering and helping financial extension of agricultural micro, small and middle scale enterprises.

3. My aim is to set up and define process models helping financial extension in practice, which can help to improve extension work and the efficiency of the operation of the extension system.

1.3. Hypotheses of the research

While proving the basic hypothesis of my research, my aim was to highlight the importance of financial extension and the basic financial problems of extension system. Besides I searched proof for my experiences.

Hypothesis (1):

*The role of the present intermediators in the extension system and their efficiency in financing small and middle scale enterprises have to be improved so that the importance of the SME's can remain and can be lifted to the level of the European Union's developed members. For this result, there is a need to **define those process models** which strengthen the macro (institutional) and micro (methodology) role of extension, and to **set up the rank of aspects of financial extension** with special regard to the agrisultural SME's.*

Hypothesis (2):

*Financial extension has to play role in the optimal set of the **structure, creation and use of resources** with special regard to help to provide the SME's to resources continuously. All of these has to be reached by efficient **communication techniques** because of the delicacy of financial questions.*

Hypothesis 3:

***Continuity** has to be maintained in the agricultural extension. So from the start of an enterprise to the operation and change of it, adaptation to the economic and financial environment becomes possible by **connecting financial extension with real and financial processes**.*

2. Materials and Methods

Applied background of my research is determined by the fact that I have been working in Szent István University, Central Hungarian Regional Extension Centre for more than five years. In my work I made direct relationships with farmers and micro, small and middle scale enterprises. I continuously take part in the organisation, financing and coordination of different extension programmes. My work relationships pointed not just in the direction of SME's and farmers, but also in the higher management levels in the extension. I have experiences in numerous institutional conciliations and talks connected to the development of the system in the agricultural ministry (Ministry of Agriculture and Rural Development).

I was especially interested in the way of financial matters related to the extension system in macro (state and institutional financing) and micro (other financial matters in enterprises) level, and their effect to enterprises and their financial processes. I experienced a lot of technical problems during professional programmes and my applied research, which were found during the time spent with SME's and farmers. Obviously the theme of my thesis was motivated by these experiences.

In my research I emphasized complexity, while my aim was to find the financial aspects of extension system. This means not only the macro level of the financial system but also the financial problems of agricultural SME's coming from cause and effect relations, and I suggest different ways of solving these kind of complex financial problems.

During studying professional literature I chose the method of management view, because extension helps the management (the farmer of the head) of an enterprise and to find the solution to the problems. Besides I connected the links found to my present knowledge about extension system to ensure the complexity of the research in this stage of my work. During studying professional literature I reviewed and evaluated the theories of extension paying attention to their financial aspects. I compared them using system approach and I tried to form my opinion based on my experiences and my research which contributed to the various interpretations.

During my research I used two methodologies, which are qualitative and quantitative methods. Obviously the two methods had to be synchronised to reach the aims of my research.

During my qualitative research I analysed cause and effect factors and motivations and I classified them in respect of problem-solving in order to see relationship clearly. My aim was to find the opinions made during the financial matters of enterprises which are connected to the financial aspects of extension. In order to improve the efficiency of financial intermediators and the financial matters connected to state support, I would like to analyse the claims of SME's and their decision-making processes.

From the datas I got in my quantitative research (questionnaire with 207 samples) I made conclusions and suggestions. To evaluate the datas gained from the questionnaire I used the statistical program SPSS. I sent the questionnaires to the members of a target group (agricultural SME's) chosen before. In the course of the research I sent 800 questionnaires to the target group from which 227 were delivered back and 207 of them were acceptable.

Statistical methods of the data process were the following:

- Statistical charts, averages, standard deviations,
- Relationship analyses, other analyses.

While evaluating my questionnaire I also found those **most important cross-connections** which strongly support the importance of financial

extension in the production of agricultural entrepreneurs. For the relationships found, I also made significance analysis.

In the research primary data-collection was a very important point for me. During working out my questionnaire my aim was to justify or deny the hypothesis drawn up by collecting the appropriate information. As a result of classifying data and informations of my questionnaire, a primer data base was created which was processed with the above mentioned method. When collecting the questions I took care of the reactions and multiple choices in closed questions. The questionnaire structurally consisted of 41 questions in 3 groups.

These groups were the following:

I. Usual features:

Datas related to the enterprise.

II. Questions related to the extension:

Questions related to the use and standards of extension, the level of satisfaction, and the financial knowledge.

III. Questions related to the operation (financial) of the enterprise:

Questions to the claims for extension related to the operation of agricultural SME's.

Detailed features of my research are the following:

- **Test points:** through the country
- **Method of the test:** random test
- **The way of collecting data:** postal delivery
- **The date of collecting data:** the year 2005
- **Target group:** agricultural enterprises, especially micro, small and middle scale enterprises
- **The number of questionnaires sent:** 800
- **Questionnaires delivered back:** 227
- **Rate of delivery:** 28%
- **Number of the questionnaires checked:** 207.

Basis of the empirical research and informations gained is provided by deep interviews with farmers taking part in extension programs organised by the Regional Extension Centre. With this method I could analyse claims related to financial extension. Therefore I could connect the financial part of extension system to the decision making process of the agricultural SME's.

I made deep interviews with 25 people from the target group and others working in extension, where answers for the opened questions provided the appropriate information for the aim of my research. During the interviews made with the leaders of enterprises and farmers I used the advantage of the personal relationship with them. They explained the reason of their decisions, e.g. the reasons why they chose a given financing form. In my opinion, deep

interview in my case (delicate financial questions related to enterprises and financial extension) is the best way to define management oriented financial extension in the present extension system.

During my research I talked with SME's and their leaders. These interviews took 1.5-2 hours, where we evaluated the financial problems of the enterprise together with the leaders and determined claims for financial extension and the relationship with extensional system. After the interview I wrote down what I heard trying to record the people's thoughts carefully, their aggregated opinions and the unique characteristics of their inductive and deductive conclusions.

Using the results from quantitative and qualitative analysis my aim was to set up process models helping financial extension, which can be used in practice, and extensional work and the efficiency of the operation of extensional system can be improved with them.

3. Main findings of my research in professional literature

Systems supporting SME's in the members of the European Union are different in the type of institutes, policy determining them, but all of them lays store by financial extension. Besides, there is an agreement between these member states in the field of creating the policies of SME's. Most of the members finds it important to create an enterprise-friendly environment and to initiate the agricultural enterprises to adapt to the environment and to develop.

On the basis of macroeconomic theories and the opinion of the researchers, we can say that financing habits and opportunities of the Hungarian SME's are determined by the country's infrastructure of financial law, according to international tendencies. So the financing habits of the enterprises are mainly determined by the quality of the region's financial intermediary system and the environment of the law and taxation.

More researchers emphasize that financial extension and teaching in the extension system are imperfect. Researchers point out that a bad financial strategy can easily lead to bankruptcy of an enterprise.

According to my experiences SME's find the the most important problem thindering their enterprises to gain financial resources, which can be understood, because SME's are at a disadvantage to financially stronger competitors of capital markets.

According to the opinion of researchers dealing with agricultural questions the most rational financing resource for SME's is internal financing in the whole world. With this method, the enterprise finances itself by using its free cashflow and internal reserves. **Financial extension** is important for this as well, but to gain and use external financial resources it is inevitable.

Summarizing all these, you can say that EU members have recognised the important role of SME's creating workplaces and their use in economic growth. Therefore the main aim of the regulation is to find the administrative, regulative and financial environment which helps to improve SME's, and their competitiveness.

4. Main findings of my research

In my research I found correlation between the type of the farming and the financial knowledge needed for it, which is shown in chart 1.

Chart 1. Correlation between the type of farming and the financial knowledge needed for it

Type of farming	Do you find your financial knowledge good for your farming?	
	Yes (%)	No (%)
Primary producer	36%	64%
Private entrepreneur	50%	50%
Deposit company	70%	30%
Limited company	85%	15%

Source: own research; N= 207

Obvious consequence of the chart is that organisational structure and financial knowledge (experience) are in strong relationship, which is also proved by an analysis as well. In the course of the significance analysis farming types were aggregated because of the small number of samples, therefore joint stock companies were also integrated to the analysis. ***The more organised form the enterprise has, the more characteristic the financial knowledge of the leader of the enterprise is. This fact shows correlation with the fundamental characteristics of the SME's too.*** So it is not by chance that while only the third of the primary producers find their financial knowledge good, 85% of the members of a limited company find their knowledge good. In the case of joint stock companies, these findings are way more better because different functional areas are differentiated professionally. Obviously in the case of these companies organisational structure is important, too.

In order to show the importance of financial extension fit to the change of financial environment, I analysed that in which extent the leaders of the agricultural SME's claimed extension according to the farming types. The correlation is shown in Figure 1.

In my research I chose three topics:

- Production- specifically technological,
- Farming- overall economic,
- Financial- only financial areas.

You can see in chart 1 that the claim for financial knowledge in the case of primary producers is only 57.7%, while in the case of collective farming it was 80% or more. In the case of primary producers and private entrepreneurs you cannot speak of an organised farming type, so intellectual capital can only occur minimally in the professional knowledge.

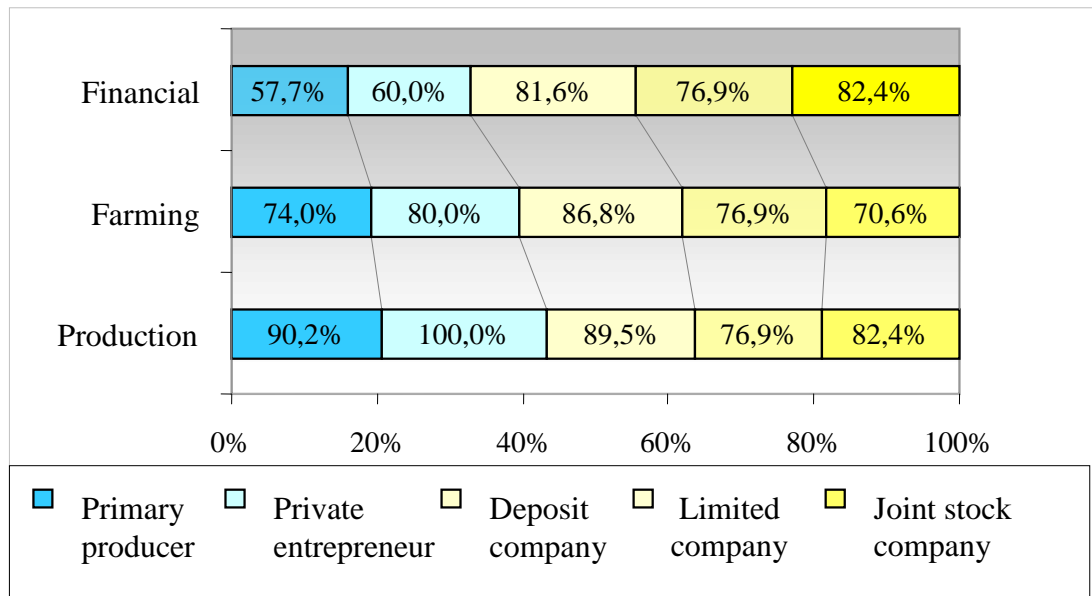


Figure 1: Share of the areas of extension claimed according to the farming type (more answers can be given)

Source: own research, N=207

As a conclusion of Figure 1, there is a correlation between the farming types according to the share of the areas of extension claimed, although differences are not so significant. According to the deep interviews and the figures though, it can be stated that the more organised type an enterprise operates, the more the leader of the enterprise recognises the importance of financial knowledge as the reflection of production processes, and the effect of decision making process.

In the course of the deep interviews I experienced that entrepreneurs hardly admit the lack of financial extension. I also found that in most cases continuous link between management tasks and financial process is not recognised by farmers. They mostly seclude themselves from the financial questions. Therefore extension communication and methods have a huge role.

Analysing extension work I examined its recognition. I explored links between the farmers' willingness to pay for extension, their participation on professional programmes, their judgement about the future, the presence of the strategy and the investment of resources. All of these are shown in Figure 2, where I found that those who regularly take part in professional programmes,

are more likely to pay for extension. Obviously this also depends on the judgement of the farmers on the efficiency of a programme. Therefore they recognise the fact that the presence on the programmes provides additional professional knowledge, which enables to do high level work.

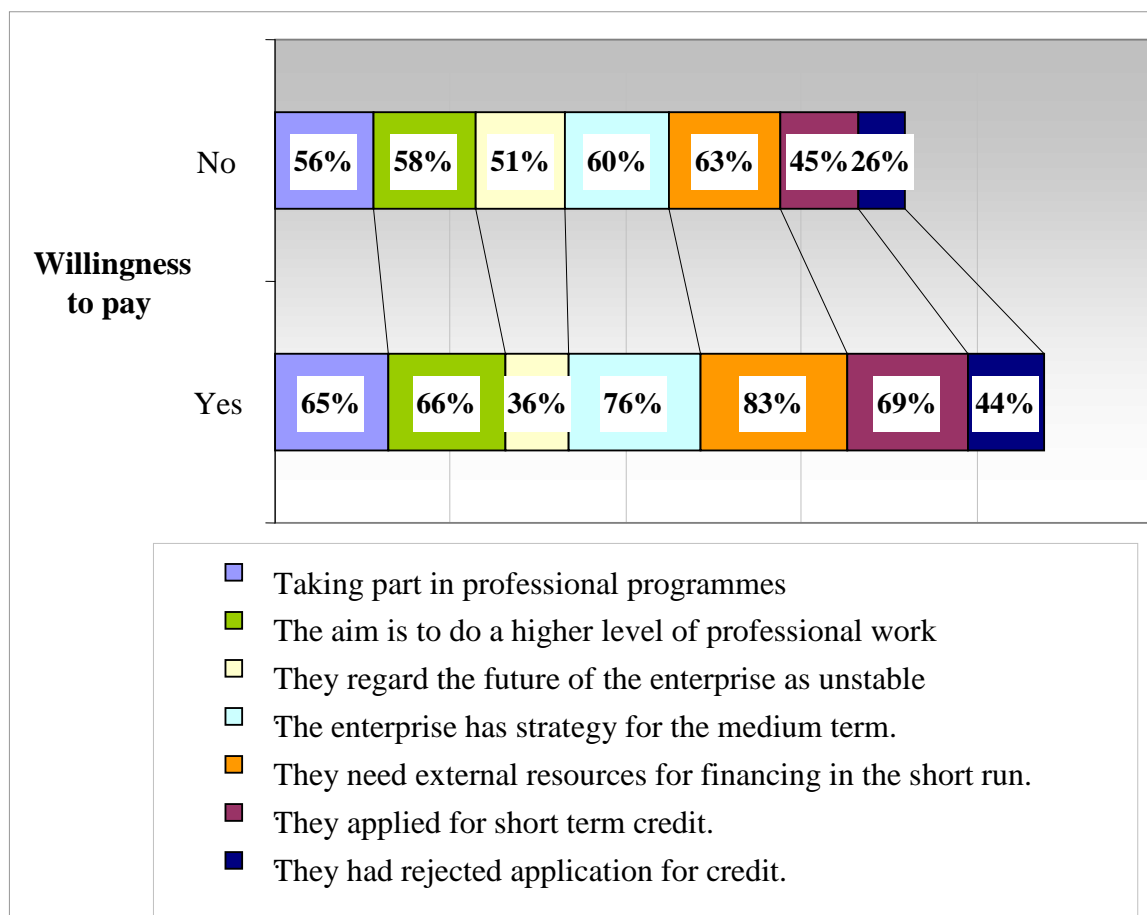


Figure 2. Cross relations of the entrepreneur's willingness to pay for extension

Source: own research; N=207

76% of the entrepreneurs is able to make up strategies who are willing to pay for extension– although significant correlation cannot be proven– and these leaders (financial decision makers) take advantages of external opportunities (20%). They are more conscious about the future of the enterprise and they are not reluctant to apply for credit as well. In the case of those who pay for extension, the value of rejected credits is relatively high (44%). In my opinion, one reason for this is the lack of agricultural advisers' financial knowledge. If we emphasize the education of advisers in this field and give the financial knowledge in extension programmes, then applying external financing forms will rise.

According to my experiences and professional programmes I found that the present extension system is also suitable for those who do not pay for extension (significant difference). In the contrary, state role has not been more

significant in the extension in the past few years. The number of free professional programmes for groups has fallen, but the interest of the farmers for the programmes has risen. In my opinion the reason for this is that entrepreneurs have recognised the need for developing farming processes and the lack of their financial knowledge.

Summarizing all these, I found the followings on the basis of the results of qualitative and quantitative analysis:

- According to their opinion, almost half of the entrepreneurs do not have the financial knowledge needed for their farming. This cuts down the willingness to invest and induces problems in liquidity. This proves the fact that financial area in agricultural extension needs to be improved.
- Farmers do not have the appropriate financial knowledge to make a strategy and they do not think in more than one year because of their problems in financial matters. So an important role of extension is to define financial strategy of the enterprise besides providing useful financial informations.
- Almost 2/3 of the enterprises have had liquidity problems before, they want to grow and produce in the long run, therefore they need external financing sources. Financial extension has to provide knowledge to the farmer in order to ensure the best financial opportunities fit to the claims of the enterprise. But financial extension has to be independent in order to not to advertise the service of the given financial institute.
- In the case of SME's, most of the financial decisions are made to maintain continuous liquidity and therefore to finance farming processes. Financial extension has to help farmers to find supported sources and to get national sources.
- One available form of external financing of agricultural middle scale enterprises can be risk capital investment. This financing form connected to the enterprises can be an important part of financial extension.
- Before the financial decision, financial adviser has to help the leader of the SME's to form a complex financial way of thinking (in the short and long run) and to adapt to the financial environment.
- Present Hungarian extension system works well in many respect, but in its present form it does not help enterprises to get and use financial knowledge purposefully.

4.1. New and Novel Scientific Findings

1.) **I proved** that the environment, the system of conditions and their relation and mechanism determines the effective realisation of financial extension of financial environment in micro level. Complex view of the system of relations of the conditions is needed that financial extension helps agricultural SME's effectively to make their financial decisions. When making decisions, the followings have to be considered:

- Financing the extension system in macro level, i.e. the role of the state, the tasks of organisations intermediating extension by standing for given organisations' interest and by developing their effective work division;
- the offers of financial organisations, i.e. the role of banking sector in the economy;
- agricultural SME's demand related to financial extension;
- support opportunities of agricultural enterprises and their financial background.

2.) **I pointed out** that the development of financial extension can only be realised in the case of agricultural SME's, if **continuity** has a priority in extension. Therefore good adaptation to the economic, financial environment becomes possible for the decision makers of the enterprises from the start of it, by **connecting the financial extension to financial processes**.

3.) **I found** the main reasons of the need of extension arisen from macroeconomic development, which are the following:

- operation of the support system (EU, national), in which the role of small and middle scale enterprises is huge (financial operations-financial extension),
- competitive operation needs the application of more effective and up-to-date management techniques,
- in the financial environment regulations, legal requirements are changing,
- in the case of the development of the economy, more dynamic improvement of the small and middle enterprises is expected, which can be favourable for financial opportunities as well, which is true also for the agricultural enterprises.

With my results **I highlighted** that in the challenges of the European Union, modern financial knowledge and methods have bigger and bigger role, but in the meanwhile agricultural small and middle scale enterprises suffer the most

in the financial area. **I called the attention** to the fact that by developing extension system, financial extension cannot be ignored. So financial knowledge of the education of extension has to be revised.

4.) **I found** those factors of financial extension which help and hinder it.

Factors which help financial extension:

- continuing financial education of advisers,
- editing financial issues and brochures and their delivering to the farmers,
- supporting those researches which are connected to the financing of agricultural enterprises,
- collecting the farmers' claims in connection with financial information,
- organising the farmers' continuing financial education.

Factors which hinder financial extension:

- lack of capital,
- problems with getting credit,
- problems with collecting debts,
- the lack of demand in the market,
- lack of information connected to the financial sources available,
- lack of intellectual capital,
- legal problems in finance (lack of compliance with the law).

5.) With process models in financial extension **I defined** the role of financial extension in the finance (in micro and macro level). So I called the attention to the need of the financial feature of extension programmes. The model are the following:

- Process model of problem solving extension.
- Process model of problem preventing extension.
- Communication process model of financial extension.
- Macro-model improving extension system.

4.2. Process models of financial extension worked out on the basis of my research

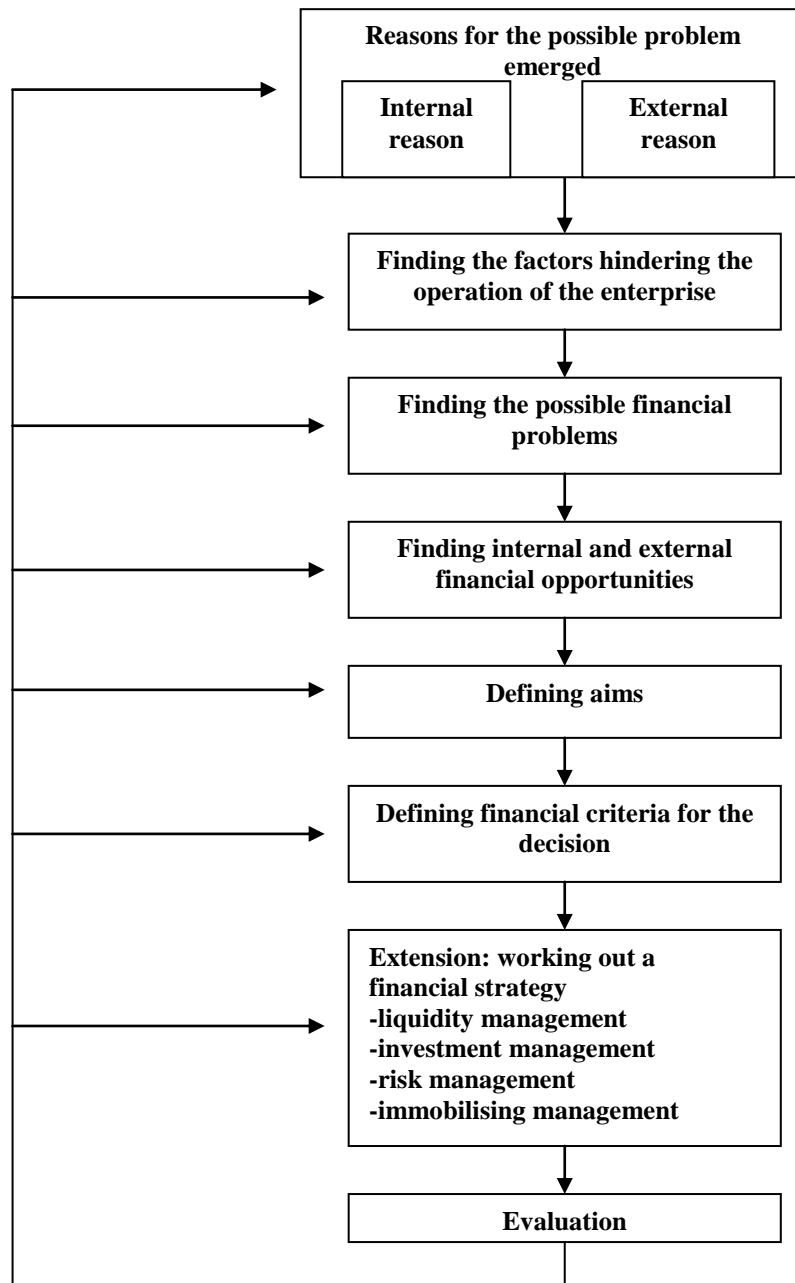


Figure 3. Process model of problem preventing financial extension
Source: own research

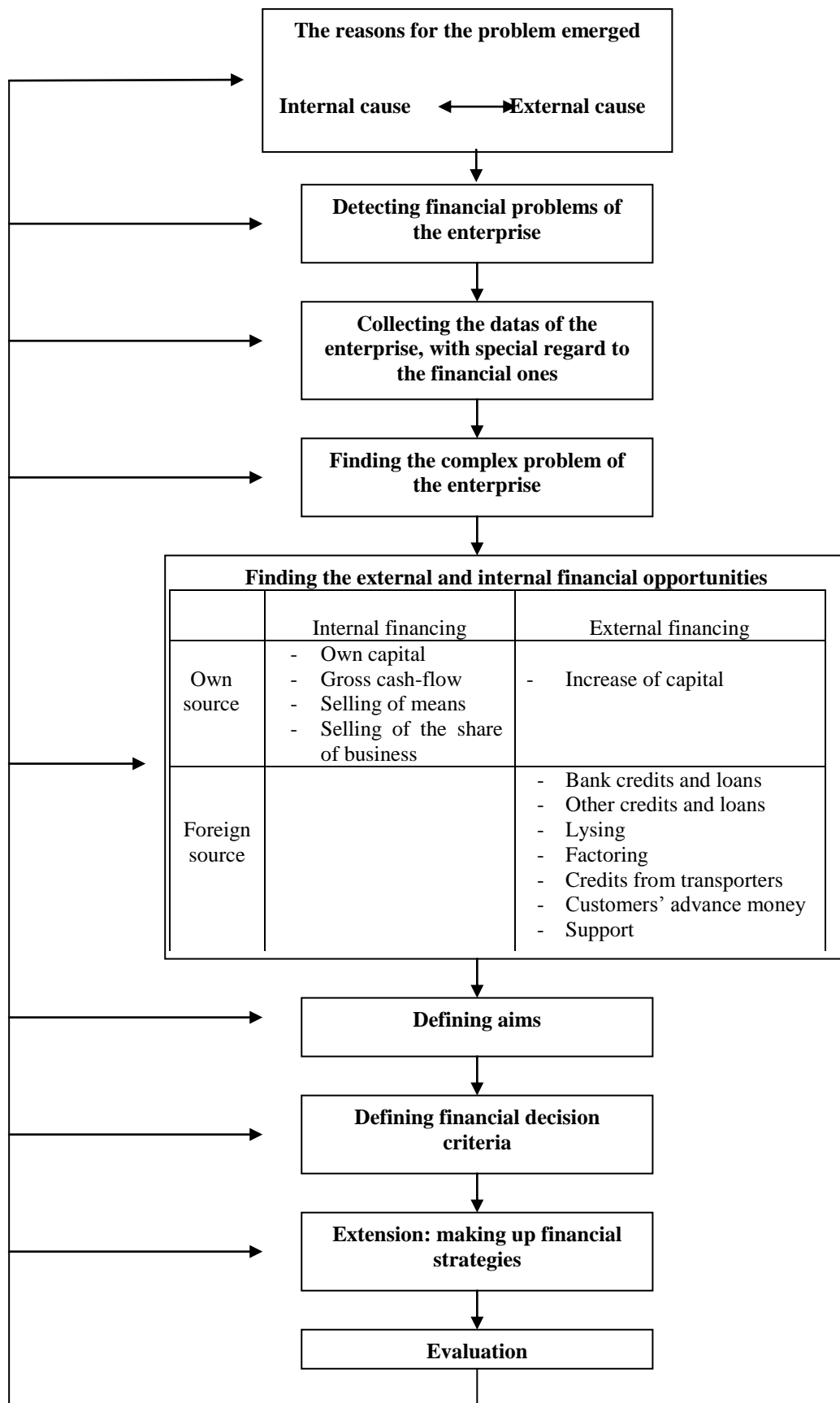


Figure 4: Process model of problem solving financial management
Source: own research

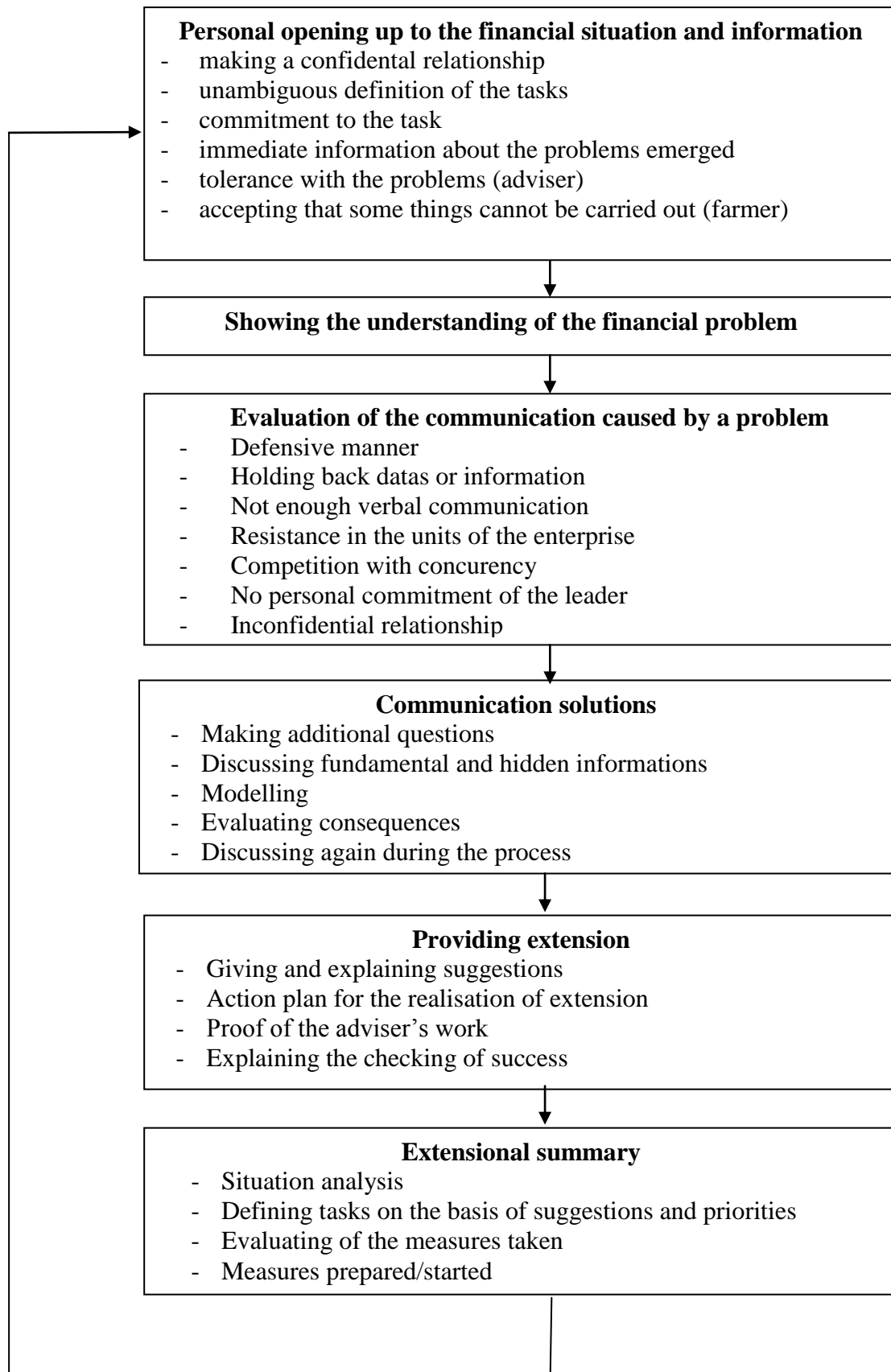


Figure 5: Communication process model of financial extension

Source: own research

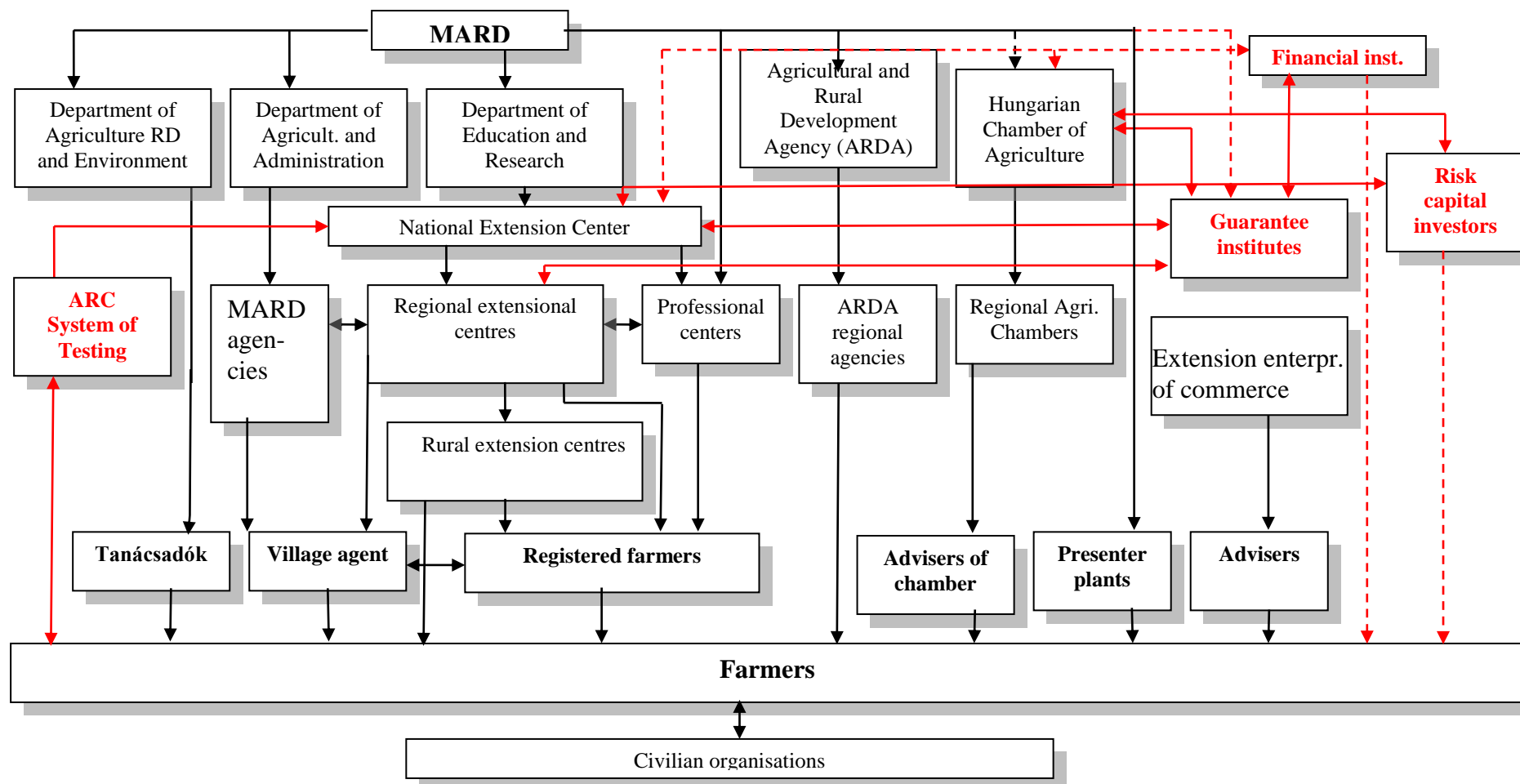


Figure 6: Macro model improving extension system

Source: own research

5. Conclusions and proposals

In my research I emphasized that modern financial knowledge and applied financial methods are going to have bigger and bigger role in the challenges of the EU. In the meanwhile agricultural SME's are facing the biggest problems in this financial area.

Summarising the theoretical background of the financial manners of enterprises and their relationship with financial extension in practice, I **emphasized the following basic tasks in financial extension:**

- Introduction of the operation and relations of financial intermediary system.
- Introduction of financial forms (internal- internal free money flow in the enterprise, internal savings; external- competent ones outside the enterprise, owners, creditors, transporters, etc.).
- Introduction of typical financing techniques of extraordinary events in the enterprise (as foundation, growth, increase of capital).
- Financial analysis (which analyses the effectiveness of enterprises in terms of profitability, debts, liquidity and the effectiveness of means.)
- Providing financial planning and the methods needed for it, practical guidelines to the leader of the enterprise (for the prediction of financial planning, for modelling the interaction of financing alternatives and decisions for finance or investment).

Incorrect financial view of the leaders of agricultural SME's and professional causes and effects determining the weak running of processes cause the need for financial advisers. Financial advisers have to be ready to help continuously in the operation of the farmer's business and to have the appropriate knowledge. According to my experiences I stated that financial extension is absent of the extension system and in the education of advisers, too. Only aggregated economic studies are present in the extension system, so the development of extension system has to have an effect on financial extension. In my opinion, the direction and the methods of extension has to be revised in the context of financial knowledge.

For the effective realisation of financial extension in micro level, macroeconomic environment and its system of conditions, its operation mechanisms have to be known, from which one of the most important is the supply of the institutes of financial intermediary system and the demand of enterprises related to financial extension. Financial traditions and opportunities of enterprises are rather determined by the features of the given region's financial infrastructure and regulation then fundamental features of an enterprise (scale, cash-flow, sector), so informations are needed about these to the leaders of the enterprise. This is also a task of extension. Among institutional financing forms, bank credits, loans and lysings play the biggest role, therefore the most important institutes in the financial infrastructure are the credit institutes.

Financial extension is also important in making relationships of farmers and financial intermediary bodies, and in the search of demand and supply (services). *As a conclusion I proved my assumption that **the present role of financial intermediary bodies has to be reformed** so that the macroeconomic importance of the SME's – with special regard to the agricultural ones – can grow and its level can be lifted to the level of the EU.*

For the small and middle scale enterprises the most logical financial source is when they finance themselves from free cash-flow and their own reserves (if they have). Usually they need external financing forms if financial demand is more than the internal sources. As a conclusion, an important task of extension is to explore and prevent financial problems. Agricultural small and middle scale enterprises usually have huge financial problems because of their limited sources. Most of the small and middle scale enterprises are undercapitalised. It is hard to get capital, credit accommodation of the banks to the sector is risky and not profitable. Finding the opportunities of source generation can be realised within financial extension. *I also proved my second hypothesis that financial extension has to play a huge role in creating the financially optimal **structure, generation and use of sources**. This is especially true to ensure the continuous availability of money to the agricultural small and middle scale enterprises. All of these has to be reached by using **effective problem preventing, problem solving and unique communication models**.*

Almost all of the entrepreneurs expect that operation conditions and financing opportunities become better. They especially mentioned that they needed extension in connection with their financial situation.

Operation of agricultural small and middle scale enterprises is way more risky than that of other small and middle scale enterprises, because the leader of the enterprise does not have the professional knowledge in solving financial problems. Because of their scale, they do not have the right bargaining position neither with transporters nor with customers, which also influences their decision mechanisms. Because of their small financial reserves they cannot survive a longer downturn of the business. *As a conclusion I proved that **continuity** has to be emphasized in the agricultural extension– for the decision makers of the enterprise from the start of it to the operation and changes, **connecting financial extension with real and financial processes**– so adaptation to the current economic and financial environment becomes possible.*

In spite of the operation problems, deep interviews and secondary information sources prove that small and middle scale enterprises are in the center of the strategy of credit institute sector in Hungary, and the sector makes huge efforts to grow the number of clients and serve them better. Active role in intermediating EU and state support can grow the SME sector of credit institutes, where financial extension can be important on transferring financial opportunities.

Financial extension has also an important task in developing the opportunities of source combinations in the respect of generating sources of agricultural small and middle scale enterprises. These can be: local, regional, state, credit institutional and

EU sources, which have to be gradually analysed by the adviser and then the farmer has to be informed about the opportunities available.

Availability of the small and middle scale enterprises to the financial sources has to be improved and entrepreneurial spirit has to be further developed. In the development like this (financial extension) basic elements of the extension system's financial environment are decisive.

As a conclusion, financial extension is going to be popular in the next years. Main reasons for this is summarised as follows:

- Operation of the support system (EU, state), where small and middle scale enterprises have an outstanding role (financial operations- financial extension),
- For the competitive operation, there is a need to more effective and modern management techniques, which are worth to learn from financial specialists of extension,
- Regulations, legal requirements can change in the financial environment, which need financial extension,
- In the case of the development of the economy, development of small and middle scale enterprises can be expected, which can have a positive effect on the financial opportunities as well, with special regard to the sector of agriculture,
- There is a continuous need to start and develop small and middle scale enterprises and to ensure the better availability of capital sources, to improve financial conditions with special regard to the debt financing of small and middle scale enterprises.

6. List of Publications

Scientific journals

In foreign language:

1. Tóth, K. - **Bárczi, J.** - Fogarassy, Cs. (2005): The Role of Extension in Technical Development of Agricultural Enterprises. In press: Hungarian Agricultural Engineering. N^o 17/2005. Periodical of the Committee of Agricultural Engineering of the Hungarian Academy of Sciences. ISSN 0864-7410 Under publication.
2. **Bárczi, J.** (2006): Extension of small and middle sized enterprises in agriculture. Bulletin of the Szent István University. No.1/2005. Megjelenés alatt.

Hungarian:

3. **Bárczi, J.** - Kozári J. - Tóth K. (2003): Where does Hungarian Agricultural Extension Go? A falu. Volume 18. No. 2. p. 21-29

Scientific book, Parts of books

4. **Bárczi, J.** – Tóth, K. - Véghné Bálint, K. (1998/a): Office management. Office Technics. Lecture notes. GATE KVA Bp., 290 p. (own source: [associate writer: Tóth, K.] 135-165. p).
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