



Thesis of Doctoral Dissertation

**The effect of succession on agricultural businesses' capacity for
cooperation, innovation and competitiveness**

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1. INTRODUCTION

1.1. Relevance of the topic

Increasing globalisation permeates every walk of life with its advantages and drawbacks alike. Being an open market, Hungary cannot escape different international effects and the Hungarian agricultural sector is no exception either. Although the Hungarian agriculture and food industry used to be recognised beyond the national borders before the regime change, they became the greatest victims of the transformation period. The transition led to detachment from the rest of the world and left the agriculture disintegrated. Accession to the European Union could have provided a new opportunity if the appropriate institutional background would have been established and farmers would have been prepared for it. Today, the so often mentioned Hungarian advantages within Europe in terms of our natural conditions prevail to a lesser extent due to the effects of climate change. However, even these advantages are debatable, since “the natural conditions of countries’ agriculture have never been (reliably) assessed or qualified”¹ In my understanding, when looking at the many factors affecting the agricultural sector and agricultural competitiveness, those have to be given priority that can be influenced easily, such as willingness to cooperate, or capacity for innovation.

Agricultural renewal closes the gap, provides development and gives advantage. However, it requires continuity, that is, people to cultivate the land, harvest crops, tend animals and manage farms. Passing on businesses, the family farms to successors is yet to be solved though. Alongside the shrinking population, it is a problem that careers in agriculture are not exactly popular with people in their 20s these days. In my opinion, creating and maintaining a competitive agriculture requires successful generational change. I believe that the new generation’s different approach can solve existing problems such as the low level of cooperation among farmers and refusing to take part in their integration. They can improve attitude to innovation and might be able to accept the sacrifices of today with a view to a brighter future. Is there any cooperation, and if yes, in what form, among today’s farmers or they keep up historical traditions and refuse any kind of integration?

It is a legitimate question to ask whether the Hungarian farmers are ready to make use of the aforementioned advantages, or not, and, in the latter case, for what reasons. Answering this question entails studying generational change as an essential factor for development.

The present research aims at studying these hypotheses and based on the research results to be able to propose ways to progress and lay the foundations for another academic research project. Several publications have been devoted to the topics of agricultural innovation and cooperation, but the role generational change plays in influencing these competitiveness factors has not been investigated so far.

¹ L. Gockler (2013): A magyar mezőgazdaság helyzete az EU-ban, *Mezőgazdasági Technika*, 43. p.

1.2. Research aims and objectives

Aims:

1. Literature review for learning about the current situation of Hungarian agriculture in comparison with EU countries, and exploring the effects of past tendencies on the present.
2. Presenting the competitiveness situation of Hungarian agriculture and its influencing factors, including relevant international opinions.
3. The research project aims at studying the role of innovation in the competitiveness of agribusinesses.
4. I find farmers' and agricultural businesses' willingness to cooperate a vital factor; therefore, I wish to examine if it has changed over the past few years, and if the answer is yes, in which direction.
5. The research also aims to answer the question to what extent succession influences competitiveness factors in agriculture such as innovation and cooperation.

Objectives:

Secondary research:

- Mapping agricultural characteristics, presenting the current situation of agriculture using statistical data.
- Studying the agricultural characteristics and performance of Jász-Nagykun-Szolnok County.
- Overview of competitiveness models and their applicability for agriculture.
- Overview of competitiveness factors having the largest impact on agricultural production, learning about their effects.
- General presentation of innovation, studying the situation of agricultural innovation.
- Investigation of the forms of agricultural cooperation and the importance of vertical and horizontal integration.

Primary research:

- Learning about the opinions of family agribusinesses on the current situation of agriculture.
- Exploring factors and processes motivating farmers' development, with a special emphasis on innovation and cooperation.
- Investigation the effect of generational change on competitiveness factors.

Research hypotheses

Defining the research aims was followed by formulating the hypotheses below:

H1: The new generation looks for different, more innovative solutions for business problems, and develops its relationships with the direct competitors in a different way.

H2: The new generation is conscious to develop new and long-term integrative cooperation, because they view it more beneficial than their predecessors.

H3: The new generation perceives internal and external competitiveness factors differently, and they consider innovation and accessing new technologies the most important.

H4: The size of the producers' agribusiness has an influence on their innovation capacity and willingness.

H5: Among competitiveness factors, attitude to innovation is influenced by farm size, the scope of agricultural activity and respondent age.

H6: Farmers taking part in integration find different competitiveness factors important than non-participating farmers.

H7: Family and non-family businesses view competitiveness factors differently.

2. MATERIALS AND METHODS

2.1 Research process

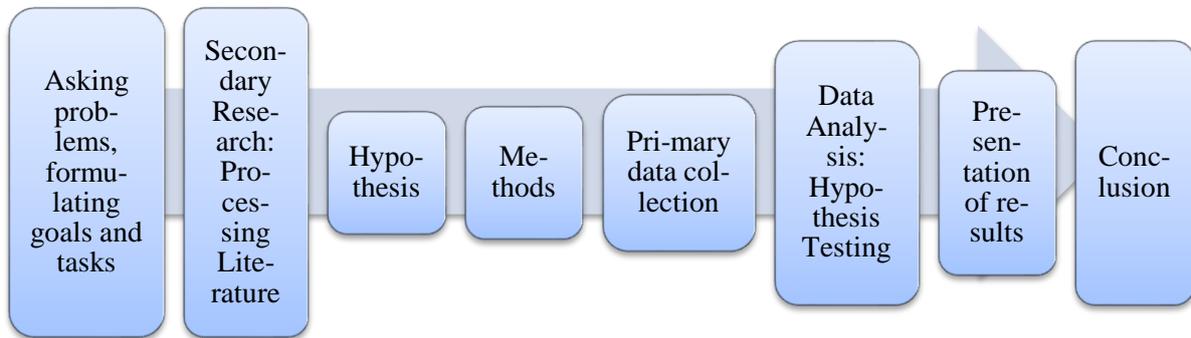
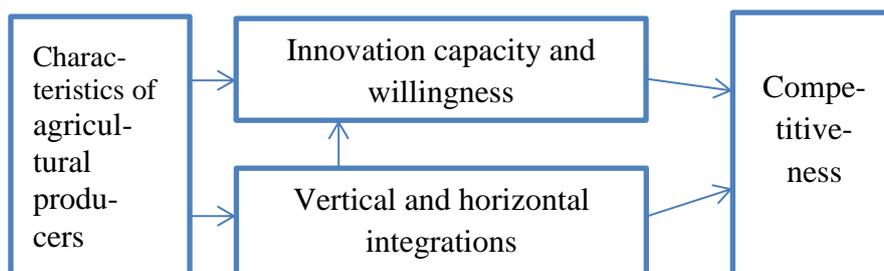


Figure 1 Research process, its logical structure
Source: own compilation

After defining the problem and formulating the aims, the literature review included the following areas:

- competitiveness definition, competitiveness models, defining competitiveness factors based on competitiveness studies;
- innovation and cooperation definitions, their role in competitiveness;
- characteristics of the Hungarian agriculture, its situation, actors, factors influencing its competitiveness, forms of agricultural cooperation: vertical and horizontal integration;
- presentation of the agricultural situation of Jász-Nagykun-Szolnok county chosen for investigation.

After conceptualisation and formulating the hypotheses, the research model was developed as depicted in Figure 2.



2. Figure: Relationship between the characteristics of farmers and factors influenced competitiveness. Source: Edited by Author

Based on the research model, the effect of different demographic factors such as age, education level, scope of activities and size, on innovation and integrative cooperation was examined. Family businesses and the effect of succession on competitiveness factors were analysed separately.

2.2. Research methodology, data collection

Qualitative research method

Qualitative data collection was carried out using research interviews and case studies. The interview helps learn about the topic from different angles, whereas case studies help understand competitiveness influencing factors, and the role of innovation. For a better understanding of the situation of agricultural producers, alongside interviews used in the case study, several research interviews were compiled based on the literature reviewed.

The interview questions were partially structured, and obviously comprised open-ended questions. I had chosen the individual research interview format, that is, the face-to-face conversation method; the sessions usually lasted 1.5-2 hours each. The interviews were recorded with Dictaphone, making it possible to listen to recordings multiple times. Unfortunately, for certain interviewees only the technique of taking notes could be used. The interviews were conducted prior to the quantitative research, at different dates.

Criteria for selecting interviewees:

- an agricultural producer who is part of minimum one integration or is an integrator;
- has already carried out a larger-scale development, investment;
- second generation family producer or family business (succession is at least in progress)

While conducting the case studies, written based on the interview, first-hand experience was gained about their motivation, experience and their opinion about cooperation and innovation.

Quantitative research method

To test hypotheses using qualitative data collection, questionnaires were used. To enable sampling, first the population was chosen, as the basis for the research. The population is the agricultural producers of Jász-Nagykun Szolnok county. The subjects taking part in the qualitative research were randomly chosen. Representativeness was ensured by sample size and characteristics. Sampling lasted from June to the end of November, 2017. Several methods were used for data retrieval: with the help of the Jász-Nagykun Szolnok county village agronomist oral questioning, and online questionnaire, which was created using Google drive.

Sample size for the research (to reduce the risk of the effect of non-response) was determined to be 161, thus fulfilling the criteria that the observations remain within the 3% relative margin of error for the 95% confidence interval.

The standardised questionnaire had the following structure:

- I. *Characteristics of the agricultural operator*: enterprise's legal form, size, scope of activity, average annual workforce, farmer's age, level of education.
- II. Hypotheses regarding *cooperation and integration*: Using a filter question respondents were divided into farmers taking part in integration and non-participants to be able to test the hypothesis. The questions concerned the form of integration, the scope of services, and their advantages and disadvantages. In addition, the distinctness of vertical and horizontal integration among producers was measured.
- III. The third group of questions assessed producers' integration possibilities. The questions pertained to the form, source and achieving of integration.
- IV. Family farming and generational change constituted the fourth group of questions, with focus on succession. It also contained a Likert-scale where respondents could mark their level of agreement for a series of questions.
- V. The last group contained questions referring to competitiveness factors. By means of prioritisation grouping became possible, providing further analyses.

3. RESULTS

3.1. Results of secondary research

Hungarian agriculture has suffered a significant loss of space in the economy since the 1990s, as evidenced by statistics. While in 1991 it accounted for 8.1% of GDP, it fell to 7.1% in 1995 and to 3.7% in 2016. The rate of employment fell from 16.1% to 5.5%. Food exports were 23.1% in 1991 which down to below 10% in the next decades (8.6% in 2016), and this 2004 EU accession did not help. The structure of agricultural production has changed, the former leading sector at the detriment of animal production. While it was 55-60% in the 1980s, it dropped to 33% by 2007. This ratio is still present and has not changed in recent years. Examining the organizational framework of farming, the number of farms dealing with agriculture is constantly decreasing. On the basis of agricultural census, in 2000 it still exceeded 965 thousand, while by 2016 it fell to less than half to 431 thousand. “According to the data of KSH (2016), the age composition of farm workers is unfavourable and has not improved in recent years. In 2016, 31% of sole farmers were over 65 and 6% were under 35 years of age. The proportion of under-35s was nearly the same as in 2013 (6.0%), but decreased by 1.5% (to 58.5%) over 55 years of age. In parallel with the decline in the number of farms, the most the number of people aged 55-64 fell (by 20%), while those aged 35-44 and 45-54 fell by 10%.”²

3.2 Agricultural producers’ motivation, processing interview questions

- Based on the interviews I established that those who contract the same integrator for a longer period of time find cooperation more beneficial than disadvantageous.
- They use pre-financing with production assets and guaranteed produce purchase services.
- Innovation is understood as improving their machinery and technology, that is, modernisation, replacing old machinery.
The major aim is to ensure safe production conditions and investments are funded from accumulated profit reserves.
- Innovation is mostly seen as more optimal ways of organising work, which is important due to the nature of agriculture.
- The following are also considered as important competitiveness factors:
 - adequate number of sufficiently skilled employees
 - knowledge of funding sources,
 - appropriate infrastructure
 - consistent legislation
 - less bureaucracy
 - better water management and irrigation

² KSH (2016): Az alföld élelmiszergazdasága. Időszaki kiadvány. 5.p.

3.3 Family farming and succession

The interviews and case studies helped outline the process and advantages of successful generational change of Hungarian agribusinesses. The following were found:

Handing over family businesses shows a certain cyclical pattern:

1. childhood: getting acquainted, playful learning;
2. adolescence: formal learning, acquiring practical experience in basic work procedures, assuming low level of responsibility;
3. period of reflection: tertiary professional education or leaving the profession and choosing a different career path, acquiring new experience with other businesses;
4. return: period of settling down, when successors enter the family business with their own and the predecessors' existing knowledge, they assume management tasks and prepare for the takeover in 4-5 years.

Young farmers have more willingness to cooperate because they lack bad old practices and experience.

They view innovation as using the latest technology, not only as a way of replacing assets but the introduction of state-of-the-art, newest automated systems.

The results of the exploratory research helped better understand the chosen target population and compile the questionnaire for further exploration.

3.4 Analysis of agricultural producers' opinions using a questionnaire

Grouping the sample

The 161 respondents were divided into groups based on their demographic characteristics along a priori lines relevant to the research questions. The groups are as follows:

- young graduate farmers: under-35 farmer with a professional degree;
- young non-graduate farmers: under-35 farmer without a professional degree;
- over-35 farmers: over-35 individual entrepreneur, small producer;
- family farms, non-family businesses.

The original hypothesis was that the groups differ in terms of competitiveness factors such as cooperation and innovation.

Statistical methods of hypothesis testing:

First, questionnaire data were analysed in general using descriptive statistical indicators, since the data served as a basis for further analysis.

Variance analysis and Tamhane's post-hoc test:

When the result of the variance analysis is not significant, that is the end of analysis, and it is concluded that there is no significant difference among the group averages. There are other methods which group averages into "similar", "homogenous" classes; therefore, a group in such a class differs significantly from a group in any other class.

All pairwise comparison methods are varieties of the T2 test; these are the post-hoc tests. Concordance of standard deviations is not a prerequisite for performing the Tamhane test, for this reason, I chose this method of pairwise comparison.

Spearman's rank correlation coefficient

To measure the strength of a rank correlation relationship, the simplest indicator is Spearman's rank correlation coefficient (ρ).

Using factor analysis the original variables pertaining to competitiveness were reduced into three groups. To improve adjustment varimax rotation (orthogonal rotation) and Kaiser normalisation were used.

The three resulting factors:

1. „**innovation and anti-bureaucracy**”
2. „**HR factors**”; and the third
3. „**financing and infrastructure**”.

Non-parametric procedures

Non-parametric procedures are vital in evaluating the questionnaire, as several questions in the interview represent low levels of measurement, namely nominal and ordinal scales.

Spearman's rank correlation coefficient (ρ)

The Kolmogorov-Smirnov test is distribution-free, and it can be applied for more than just assessing normality.

3.5. Results of testing the hypotheses

Based on the investigations and results, I have formulated new and novel results and thesis statements as follows.

- 1. The new generation seeks different, more innovative solutions for business problems.**

My first hypothesis **was not proven correct**, that is, willingness and capacity for innovation are not affected by age. Variance analysis was used for testing and no significant difference was found. Innovativeness characterises all the farmers, and it is

more likely to be affected by factors such as capital, which enable implementation and expansion.

2. The new generation is conscious to develop new and long-term integrative cooperation, because they view it more beneficial than their predecessors.

The hypothesis was segmented into three parts which were analysed separately.

First part: under-35s plan new integrative cooperation, whereas over-35s do not. **It was proven correct.** Association test: chi-squared test: there is a significant association between the two variables: $\chi^2=8.027$; $p=0.005$. Cramer's V coefficient: $V=0.223$; $p=0.005$

The **second part** of the hypothesis says that the new generation view integrative cooperation more beneficial than their predecessors. Test method: variance analysis. **Not proven correct.** There is no difference in averages referring to the above statement for the two age groups: ($F=0.481$; $p=0.489$): scale average for the younger group was 7.38; for the older group it was 7.01.

The **third part** of the hypothesis says that the new generation is conscious to develop new and long-term integrative cooperation. **It was proven correct.** Test method: association test, chi-squared test: there is a significant association between the two variables: ($\chi^2=33.973$; $p=0.005$). Cramer's $V=0.230$.

It was proven, that under-35 young farmers are less wary of cooperation with other farmers, of some forms of integration than over-35s. The second part of the hypothesis, however, was not proven correct, as both age-groups find integration beneficial if they have taken part.

3. The new generation perceives competitiveness factors differently, and they consider innovation and accessing new technologies the most important.

Test method: variance analysis.

Ranking competitiveness factors was not affected by respondent age, they perceived the order similarly. According to the averages **all the producers find consistent legislation the most important factor.** The accessibility of new technologies ranked second, for all ages.

4. The size of the producers' agribusiness has an influence on their innovation capacity and willingness.

Test method: variance analysis. The importance of accessing new technologies was ranked differently among micro and small businesses: small businesses ranked it much higher (2.54) than micro enterprises (4.94). This difference is significant ($F=4.288$; $p=0.015$).

As a result of hypothesis testing it was proven correct that **agricultural producers**, micro and small businesses **are followers with respect to innovation**, they prefer using new technologies developed by others to developing their own.

Competitiveness factors were grouped into three main factors using factor analysis:

Factor 1: „**Innovation and anti-bureaucracy**”

Factor 2: „**HR factors**”

Factor 3: „**Financing and infrastructure**”.

Using these, producers' opinions on competitiveness factors were analysed. The following were proven true:

- 5. Among competitiveness factors, attitude to innovation is mostly influenced by the form of farming, while it is unaffected by the scope of activities and the farmer's age.**

Variance analysis was carried out on the factor groups with regards to the form of farming, its scope of activities and the farmer's age. With respect to how different forms of farming rank competitiveness factors, there is a significant difference for innovation and anti-bureaucracy, $F=7.938$; $p=0.000$, whereas scope of activity and farmer's age are non-influencing factors.

- 6. Taking part in innovation influences the attitude to competitiveness factors. For those who take part in integration, innovation, the accessibility of new technologies and a low-level of bureaucracy were the most important factors.** On the other hand, non-participants find professional training and an adequate number of sufficiently skilled employees important. The type of integration also has an effect on ranking competitiveness factors. **PO (producer organisation) members view financing and infrastructure higher-ranking factors** than those taking part in other forms of integration.

Variance analysis showed significant differences in every respect.

- 7. Family and non-family businesses view competitiveness factors differently.**

Hypothesis 7 was proven correct: family businesses find innovation and **anti-bureaucracy** much more important competitiveness factors than non-family businesses. Variance analysis showed significant, $F=22.607$; $p=0.000$ difference for innovation with regard to family/non-family categories. In the other categories the difference was not significant.

3.6. New and novel scientific results

The research yielded the following new or novel scientific results:

1. Based on the data it was proven that technological renewal, innovation are major competitiveness factors that are influenced by the size and the legal form of the agribusiness. Micro and small enterprises find development important, however, their low level of own capital prevents them from own development, therefore they are innovation followers.
2. Data from the processed questionnaire proves that there is a change in attitude towards integrative cooperation. Young producers with a degree tend to develop long-term integrative relationships, and they do not refrain from different types of integrative opportunities.
3. Using factor analysis, competitiveness factors were narrowed down to three factors (innovation and anti-bureaucracy; HR factors; financing and infrastructure) and it was found that those who participate in integration have a different attitude to these factors than non-participants. For participants innovation and the accessibility of new technologies are more important than a skilled workforce or knowledge of financing.
4. Literature review revealed that family businesses are crucial in every sector of the Hungarian economy. Also, in agriculture family has always played a decisive role. Using variance analysis on the questionnaires proved that the three factors are viewed differently by family and non-family businesses, and the most important factors are innovation and anti-bureaucracy.

4. CONCLUSIONS AND RECOMMENDATIONS

The present dissertation concerned the historically grown situation of Hungarian agriculture. The sector has witnessed major changes over the past few decades and is facing several problems nowadays. Among these are fragmented land structure, low rate of capital resources, out-migration from the agricultural sector, aging farming population and the negative attitude to cooperation stemming from the era of agricultural cooperatives. A crucial question arose: to what extent can the Hungarian agriculture and food industry be competitive seeing that production processes are becoming more and more internationalised. To answer this question I focused on three main areas. The process of generational change, willingness to cooperate and innovation capacity were examined. Naturally, these factors are interrelated, thus their interrelations were also studied.

This topic was dealt with complexity in mind; therefore, the first step was a review of the history of the Hungarian agriculture to highlight those turning points that have played a role in the development of the present situation. These mile stones were repeated land distribution, the establishment of agricultural cooperatives and finally privatisation. Due to the constant changes in the farming environment, the rate of agricultural performance is still below the 1970s levels. Cultivated land area shrank, there is a disproportion in the distribution of arable and livestock farming, and the duality of farm structure made it less efficient. The problem is further exacerbated by the unfavourable current change in the age distribution of the farmer population, especially the increase in the rate of over-65s. The Hungarian agriculture is ready for the generational change, but, despite government support, less and less young people choose this profession.

The research project comprised three topic areas and several activities.

- The topic of generational change, which I have already researched within the frameworks of the INSIST project.
- The analysis of cooperative capacity and its influencing factors. In my professional opinion, cooperation capacity and its efficiency are significant competitiveness factors.
- Innovation and competitiveness studies.

The research hypotheses were formulated in relation with these areas.

The research project included primary and secondary research, literature review, research interviews and questionnaire survey. During the investigation, I worked in close cooperation with the Hungarian Chamber of Agriculture and the farmers of Jász-Nagykun-Szolnok county; and, besides other publications, analyses based on the Research Institute of Agricultural Economics' FADN database proved very useful.

The renewal and development of the Hungarian agriculture is implausible without the new generation, as demonstrated by the research. I believe it is also necessary to prepare

successors by means of education, training and a greater involvement from the part of consultancy firms.

As far as I can see, it stands proven that generational change is an inevitable process and that younger farmers with higher degrees are able to manage more competitive agribusinesses.

Further research is required though, in the following two directions:

- A possible direction is studying agricultural employees. It would be worth investigating the distribution of employee age, level of education and professional training. The attitude of employees belonging to different categories towards innovation, cooperation and investment could also be analysed. Alongside owners' professional attitude it is a significant factor how employees in the sector relate to their employer economic operator.
- Further research is needed in the other regions of the country, especially in areas of agricultural significance. It would be worth comparing Hungarian results to international experience, to see what needs improvement, and learn about our actual competitive advantage that could be utilised in the future.
- The research results underline the need for increasing the level of education and the importance of consultancies.

5. LIST OF PUBLICATIONS OF THE AUTHOR FOR THIS TOPIC

Articles published in scientific journal in Hungarian language:

- Szentesi I. (2009): Az agresszív finanszírozás kockázatai. *Economica*, a Szolnoki Főiskola Tudományos Közleményei, 2009. 2. szám, 31-46. o.
- Szentesi I. –Túróczi I.(2013): Objektív érték meghatározás, vagy az alkudozás alapja. Vállalatértékelés elméleti és gyakorlati összefüggései a mai magyar gazdaságban. *Controller Info szakmai folyóirat*. 2013. IV. szám, 12-14. o.
- Márkus R. S. - Medgyaszai Zs. – Szentesi I. (2013): A vállalkozások versenyképességét befolyásoló környezeti tényezők – Adóváltozások hatása az elmúlt 5 évben. *Economica*, a Szolnoki Főiskola Tudományos közleményei, 2013. VI. Új évfolyam.

Conferences:

Hungarian language

- Szentesi I. (2011): A vállalkozások finanszírozási lehetőségei és hatásuk a vagyonszerkezetre. Erdei Ferenc VI. Tudományos Konferencia, 2011. augusztus 25-26., Kecskeméti Főiskola, Kecskemét, Konferencia kiadvány, III. kötet, 517-522. o.
- Szentesi I. (2012): Pénzügyi döntések egy vállalkozás életciklusában. Vállalkozói és gazdasági trendek a Kárpát-medencében. *Sapientia Erdélyi Magyar Tudományegyetem, Gazdaság és Humántudományok Kar, Csíkszereda, Románia*, 2012. április 20-22. Konferencia kiadvány, III. kötet, 85-99.o.
- Szentesi I. – Hollósy Zs. (2012): A versenyképesség értelmezésének aktualitásai LIV. Georgikon napok, Nemzetközi tudományos Konferencia, Pannon Egyetem, Keszthely, 2012. október 10-12., Keszthely, Pannon Egyetem – Georgikon Kar, Konferencia kiadvány, 455-464. o.
- Hojsza Gy. - Szentesi I.(2012): A külföldi tőke szerepe a magyar gazdaság versenyképességében. Magyar Tudomány Napja alkalmából rendezett tudományos konferencia, 2012. november 15. Tudomány és Technika Háza, Szolnok. Szolnoki Tudományos Közlemények XVI., Konferencia kiadvány, 13-19. o.
- Szentesi I. (2015): Valóban előregszik az agrártársadalom? – Helyzetkép és várható hatások vizsgálata. LVII. Georgikon Napok, 2015. október 1-2. Pannon Egyetem, Georgikon Kar, Keszthely. Konferencia kiadvány, 368-372. o.

English language:

- Szentesi I. (2013): Investment/project decisions – Evaluation of a specific institutional investment, X. Nemzetközi Gazdasági konferencia angol nyelven, X. Annual International Conference on Economics and Business, 2013. május 10-12. Sapientia Magyar Tudományegyetem, Gazdaság és Humántudományok Kar, Csíkszereda, Románia, 249-264. p.
- Szentesi I.(2014): Management accounting as a tool of controlling applied to agribusiness. XI. Annual International Conference on Economics and Business. 2014. május 16-17. Sapientia Magyar Tudományegyetem, Gazdaság és Humántudományok Kar, Csíkszereda, Románia, CD.
- Szentesi, I. (2015): Quality Meat Ltd. (Good Practice in the Succession Process), Hungarian Case Study, Erasmus + INISIST Project, Budapest: Budapest Business School – Faculty of Finance and Accounting, May, 12. p.

Other publications:

Book chapters

- Szentesi I. (2017): Az együttműködés gyakorlati kérdései a mai magyar mezőgazdaságban. in: Gyenge B. et al (szerk): Folyamatmenedzsment kihívásai – Társadalmi-gazdasági fejlesztési irányok Gödöllő, 2017. 125-142. p.