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CENTRE FOR AGRICULTURAL SCIENCES
FACULTY OF AGRICULTURAL ECONOMICS AND RURAL DEVELOPMENT
DEPARTMENT OF ACCOUNTING AND FINANCE

**DOCTORAL SCHOOL OF INTERDISCIPLINARY SOCIAL AND
AGRICULTURAL SCIENCES**

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PhD Thesis

**COMPARATIVE ANALYSIS OF ACCOUNTING INFORMATION SYSTEMS
OF THE NETHERLANDS AND HUNGARY IN ORDER TO REVEAL THE
POSSIBILITIES OF IMPROVING THE HUNGARIAN SYSTEM**

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DEBRECEN
2006

1. OBJECTIVES

The availability, commerce and usage of information and knowledge are more and more common in today's economy and society. This means that information society becomes more and more popular and plays increasing role in economy. Information has got economic value. With information, economy can be better organized, faster, and economic stakeholders can meet each other more efficiently, productivity and economic efficiency increases.

After the accession to the EU, Hungary became the member of the EU's integrated information system. On one hand this means that Hungary has to provide accurate and appropriate information to the information systems of the European Union and on the other hand Hungary got access to the database, knowledge base and intellectual property of the EU. The effective utilisation of this capacity could become the key factor of Hungary's economic development. Beside this, we have to put emphasis on the goal that stakeholders have to receive information in time, with the necessary and sufficient format and content.

Understanding the economic value of information the **main objective** of the dissertation is **to improve the Hungarian information system, improve its operation and efficiency while using, understanding and elaborating the available information, knowledge and observations.**

The dissertation focuses on only one segment of economic inputs, namely on **accounting information**. The main objective is broken down into three well-defined objectives:

- 1) **Comparison of the Hungarian and Dutch financial accounting systems and improving the Hungarian system** via evaluating the main differences between the two systems. During the comparison I focus on the following topics:
 - ⇒ The annual report
 - ⇒ Contents of the balance sheet and the profit and loss statement
 - ⇒ Evaluation methods

The Hungarian accounting information system showed a significant development in the last few years and it was subject of a European harmonization process. Nowadays,

the Hungarian financial accounting information system meets the requirements of the EU's regulations. An effectively operating information system has to be flexible and to reflect the changes in economic life, new expectations. The answers given to the same type of problems, challenges could help our country to improve its own accounting system.

- 2.) After comparing and evaluating the financial accounting systems I focus on one sector of the economy, the **agriculture**. The European Union operates a separate, special information system in order to gather information about agriculture. This information system is the Farm Accountancy Data Network (FADN). FADN is a network that gathers representative data about agricultural holdings from all the EU member states. The aims of the network are to gather accountancy data from farms for the determination of financial performance, to provide a business analysis of agricultural holdings, to measure the impact of the EU's agricultural policy and to support the on-farm decision making process. The network supports the European Commission's decision-making process by providing reliable and representative information about the member states' agricultural performance.

In relation to this, the second concrete objective of the dissertation is:

- ⇒ **Evaluation of the accounting system of the Hungarian Farm Accountancy Data Network,**
- ⇒ **to reveal the possibilities of improving its efficiency, furthermore**
- ⇒ **to make a proposal of a wider utilisation of the available collected, processed and aggregated agricultural accounting information, namely to broaden the users of this agricultural accounting information.**

In the dissertation I focus on the field of accounting of the FADN, so I do not examine other, similarly important areas of its operation (like the representativity of the network, ensuring the efficiency of the data collection).

- 3.) The third concrete objective of the dissertation is **examining the usefulness of information collected and processed by the Farm Accountancy Data Network for agricultural holdings**. In the dissertation I analyze the impact of management

information provided by the FADN on the short and long term profitability of agricultural producers.

This objective is also related to the evaluation of the Farm Accountancy Data Network.

Reliability of data published by FADN strongly depends on the farmers that provide information to the network. If FADN can provide information, reports to the agricultural holdings in the network that have positive effect on the farms; this could significantly improve the accuracy and motivation of data providers and their faith in the network. According to this, FADN has to put extra emphasis on the appropriate quality, content of information provided to the farmers and on the timing as well, in order to ensure that farmers can utilize these data in their own microenvironment.

2. PRECEDENTS AND APPLIED METHODS

In order to realize my research objects first of all I placed the theme of my dissertation in relevant literature. After treating the relevant literature connected to information, accounting information I showed the method of comparative accounting in detail, as I – applying this method made an independent research comparing the EU within that the Dutch and Hungarian financial accounting and the accounting system of the FADN. I structured my dissertation in a way that there are several chapters introducing the accounting systems (financial, agricultural) of the EU, the Netherlands and Hungary. As the EU regulation forms the frame of the operation of the member states' accounting systems I thought it was necessary to introduce this regulation in details. In the different chapters the financial accounting regulation and the structure of financial accounting system; the regulation concerning the FADN and the structure and the evaluation of this system are presented.

The **comparative analysis of the financial accounting systems** (the Netherlands, Hungary) are done according to the concerned relevant literature. The part about the EU regulation and the is rather descriptive. During the comparison of the Dutch and the

Hungarian financial accounting systems I used the methodology of comparative accounting. I focused on those areas of the annual report that differ in the two countries.

It gives reason to the analysis of the accounting system of the FADN that the EU membership – among other tasks – set Hungary an objective to organize and operate the EU conform Hungarian FADN. The EU conform, effective and successful operation of the FADN is to both the EU and our country's interest. The FADN in the EU is an already existing and functioning system, thus the most evident and cost efficient way of the examination is to utilize the already given information, namely to make use of the already effectively operating FADN of a member state as a basis of comparison, a starting point. Any country can advance and effectively operate its own accounting system in a way that it learns from history and pays attention to the way other countries deal with their similar accounting problems. In my dissertation - through the example of a EU member state, the Netherlands – I examined the accounting regulation of the FADN applying the comparative financial accounting method. Through the operation of the Dutch FADN I present how they apply the theoretical accounting rules of the EU in practice. After the examination of the Dutch FADN I show the Hungarian FADN. With introducing the differences of the two systems my goal is to evaluate the accounting rules and operation of the Hungarian system and to elaborate the improvement possibilities. Because of the time and size limits as well as the worthiness and actuality of the certain parts not all lines of the annual report are examined in details at the same rate. In realizing the object the dissertation I put special emphasis on the utilization of the given, collected, treated and systemized information, namely on the widening possibilities of the economic participants using the information.

After the comparative analysis of the different accounting systems during my research I put emphasis on the effectiveness of providing data by the FADN.

The FADN, for getting data, in return gives reports, business analysis, that is management information, for the farms in the system. The goal of my research is to report about the effect of this management information on the short and long term profitability of the Dutch farms, and – in case of positive result - to elaborate a plan to

operate a similar information service for our country. In order to make the research a microeconomic multiple regression model is developed which studies the change of the farms' profit in terms of several factors (for example technological improvement, labour cost, structures and so on, and the management information provided by the FADN). The research starts with the elaboration of the theoretical model – after introducing the concerned relevant literature – into which all the factors are built in that influence the profit of an agricultural farm. The elaboration of the theoretical model is followed by its empirical specification. During the study of the dual model for profit maximizing farms the variable under study – which is influenced by several independent variables – was the profit of the farmer. The information provided by the FADN is built in the model as an independent variable. The objective of the research is to find out whether this independent variable has a significant effect on the farmer's profit, which is the dependent variable. Furthermore, the model studies what kind of effect the information had on the quantity of the concerned business' products and the shadow price of the production factors (energy, materials, services) and the fixed costs within a certain period of time. The examination concentrates on the small and thus homogeneous group of the Dutch agricultural holdings, namely the horticultural businesses cultivating potted plants. Data about sample farms needed for the research were provided by the LEI (Farm Accountancy Data Network in the Netherlands). These data are from the period of 1975-1995. In the database are 207 farms and 985 observations of the farms. In my dissertation I took the FADN of only one EU member state as a starting point, although in the future it could be instructive to apply this method for the FADN of other member states (for example Germany) and use it in improving Hungary's one.

3. MAIN CONCLUSIONS OF THE DISSERTATION

After the accession to the EU, Hungary became the member of the EU's integrated information system. On one hand this means that Hungary has to provide accurate and appropriate information to the information systems of the European Union and on the other hand Hungary got access to the database, knowledge base and intellectual property of the EU. The effective utilisation of this capacity could become the key factor of Hungary's economic development.

Understanding the economic value of information the main objective of the dissertation is to improve the Hungarian information system, improve its operation and efficiency while using, understanding and elaborating the available information, knowledge and observations.

3.1. Comparative analysis of the Dutch and the Hungarian financial accounting systems

The comparison reveals how the EU member states with different historical, economic and political background meet the accounting requirements of the European Union. The aim of evaluating the differences between Hungary and the Netherlands is to elaborate proposals for the development of the Hungarian financial accounting system. In order to contribute to a better understanding of the differences between the Dutch and the Hungarian accounting systems in theory and in practice, the dissertation revealed the main differences in the regulation of the financial accounting systems in the two countries. During the analysis of the Dutch financial accounting system the method of comparative financial accounting was used. There are several reasons that explain the importance of comparative international accounting. Some of them are: the increase of the world trade, the growing number of multinational enterprises, increasing demand for harmonisation, and the fact that it is possible for a country to improve its own accounting by observing how other countries reacted and are reacting to problems.

Both the Hungarian and the Dutch systems meet the requirements of the EU Directives but due to the different history and economy etc. there are still differences between the two systems, however these differences are not really significant.

The Dutch external accounting system was famous for its permissiveness and liberty. The law included rather minimal requirements on disclosure. The incorporation of the Fourth Directive into Dutch law led to the moderation of the former permissiveness in order to meet EU requirements. The number and details of disclosure rules and rules prescribing the valuation of assets increased. In Hungary the former regulation was stricter; the principle of prudence and conservatism had primacy, that's why there were many legal detailed instructions on accounting. After the amendment of legislation financial reporting is significantly closer to reporting systems of EU member states.

The accounting systems of the two examined countries put emphasis on different areas of **accounting principles**. The Netherlands lay more stress on the principle that the financial statements of a company should give a faithful representation of its assets and performance opposite to the formal requirements. The Dutch legal regulation permits more departures from the legislation than the Hungarian one, in order to assure the reliable and faithful representation of the annual report. In Hungary the former regulation was stricter; the principle of prudence and conservatism had primacy, that's why there were many legal detailed instructions on accounting. The detailed rules relating to the formation of provisions for liabilities and charges, comparison of book value to market price at the end of the year, the calculation of loss on receivables are good examples to represent Hungary's prudence in accounting.

The result of comparing the **evaluation methods** in the two countries is that the general practice in valuation is the application of the Historical Cost (HC) method in both countries, although the Dutch legislation allows the use of Current Cost (CC) method for fixed assets, investments, stocks. The possibility for using Current Cost accounting method could be an advantage for the Netherlands during the harmonization process with the accounting rules of the IAS (International Accounting Standards). Before the implementation of EU Directives there was no legal regulation applicable to the accounting evaluation methods. This demonstrates the liberalism of the Dutch accounting system. However, in practice there is no significant difference between the evaluation methods applied in the two countries as the majority of Dutch enterprises use Historical Cost accounting.

To sum up, the Dutch accounting system is more permissive than the Hungarian one, it allows far more liberty, and taxation has smaller effect on the accounting system than in Hungary. Contrary to these differences both accounting systems meet the requirement of the EU Directives. These differences originate from the different accounting background and different emphasis on accounting principles (e. g. the primacy of the principle of prudence and conservatism in Hungary). The further harmonization of these two financial accounting systems can be executed through a more global harmonization process. The results of the comparison in the dissertation give a guidance to understand and compare the annual reports prepared in the two countries and no proposals were formulated in order to change the Hungarian financial accounting system.

3.2. Comparison of the accounting systems of the Dutch and the Hungarian Farm Accountancy Data Network

The aim of the analysis is to examine and evaluate the Hungarian FADN and to reveal the possible areas of further development and wider dissemination of information provided by the FADN.

First I introduced the EU legislation of the FADN and afterwards I used a member state's efficiently operating FADN as a basis of comparison. In the dissertation the Dutch FADN was used as the basis of comparison, as it can provide many solutions to the practical problems of the Hungarian FADN. FADN applies specific accounting rules and principles during the evaluation of income of agricultural holdings. The accounting methods, specialities of the system and the contents of the annual report were introduced in the dissertation. The applied evaluation methods, calculation of income, depreciation etc. were introduced through the example of the Dutch and the Hungarian FADN. In this part, the dissertation focused on the practical solutions instead of theoretical rules. The Dutch FADN served as a useful example for Hungary, taking into account, of course its limits and local conditions.

In spite of the recognized practical problems and difficulties of the Hungarian network, it can be stated that the Hungarian FADN is capable to provide reliable and EU conform information about the profitability, income and property status of the Hungarian agricultural holdings based on the data collected by the system.

The **results of the research** can be grouped into four categories:

- ⇒ Evaluation methods;
- ⇒ Historical cost accounting versus current cost accounting;
- ⇒ Data collection;
- ⇒ Publication of information collected and processed by the FADN.

Evaluation methods

One main characteristic of the FADN is that actual market value (*Current Cost accounting*) is used mainly in the annual reports instead of historical costs, which is the general practice in financial accounting. However, the actual market value is not always available or it would be rather expensive to acquire it. Evaluation of accounting data collected by the Hungarian FADN is based on the regulation of the Hungarian law of accountancy, which is not necessarily compatible with the EU requirements. The **positive** aspect of the Hungarian practice is that it intends to identify actual market value during the evaluation of agricultural assets more and more extensively, although the applied practical method is limited to the usage of expert knowledge. As a result, the reliability of these evaluations strongly depends on the skills and experience of these experts. The dissertation introduces some practical recommendations; methods (based on the Dutch experience) that can be easily applied during even the first level data collection of the FADN, and that can meet the EU requirements also at this level of data collection. The dissertation presents some more reliable valuation methods as well that can also be used extensively. It is important to note that the usage of the Current Cost methods can result in a better financial and profitability situation of the Hungarian agricultural holdings.

In the dissertation I recommended different methods to estimate market value if the actual market price is not available.

- ⇒ estimating market price from data about related assets (e.g. the market value of a specific type of tree is calculated by modifying the market value of a familiar type of tree)
- ⇒ expert knowledge (e.g. in the case of some types of apple trees the LEI expert estimates the actual value)
- ⇒ benchmark

- ⇒ standard formulas (e.g. determining market value of breeding livestock with filling a general, stable formula with actual data about the animals)
- ⇒ net present value

Historical cost accounting versus current cost accounting

As Historic Cost accounting has significant role in Hungary (e.g. taxation), it would not be favourable to eliminate or ignore this system. The literature of agricultural accounting recommends a parallel usage of Historic and Current Cost accounting (KAY and EDWARDS, 1994). A balance sheet with two columns: one column shows the items at Historic Cost, the other column shows the same items at Current Cost.

It is **suggested** for the Hungarian FADN to implement this methodology. Accounting could be based on Historic Cost accounting. In addition to this, liaison agencies should determine the actual market value of the balance sheet items. Determination of actual market value has already begun in the Hungarian FADN, however mainly the method of expert knowledge is applied by the liaison agencies. This means that there is not a generally accepted methodology that can be used all over in Hungary. AKI, head of the Hungarian liaison agencies summarizes the collected data and makes the necessary (statistical and other) correction of the data. The experts working at AKI have got a common basis for a countrywide comparison. However, the disadvantage of this system is that these experts at AKI do not know the local, regional specialities of agricultural holdings.

Data collection

The other **problem** of the Hungarian FADN is the scarcity of available database and accounting documentation about private agricultural holdings. In order to alleviate this problem, I **recommend** the followings:

- ⇒ To build communication channels with official bodies, organisations that have such type of information, like farmland. In order to determine the market price of real estates, it is recommended to contact local real estate agencies or registry offices.
- ⇒ There is a high number of agricultural machinery, equipment and cars which change hands only seldom or never. Therefore it is especially difficult to determine their

actual market price. I recommend working out a valuation system, a policy (based on the practice of the Dutch FADN) that determines the actual market value of these typical agricultural assets. In the following years the actual market price could be determined by multiplying the former market price with a specific price change indicator calculated by AKI. The value of an asset would be determined in this system according to a function of its age, type, power and other technical parameters. The establishment of such a system is a complicated and expensive task, but updating this system based on actual market prices, technology changes etc. can be easily executed. This could ensure that the Hungarian liaison agencies provide EU conform information about actual market values. The Market Information System, the Hungarian Central Statistical Office could cooperate with the FADN in working out such a system.

⇒ Cash movements should be registered by accounting documents like bank account statements or contracts. Precondition of this is the increasing portion of transactions paid via money transfers.

It is important to note that the profitability, equity of the Hungarian agricultural holdings could be more favourable in several areas of accounting using the methodology of the FADN. It is difficult to predict the net effect of applying this different evaluation method on the assets and profits of agricultural holdings. Due to the application of Current Cost accounting the value of assets may increase and at the same time equity / shareholders' capital may increase as well. With this different method the overall financial situation of farmers may be better than in the system of financial accounting. The financial indicators of farmers could also improve applying these different evaluation methods.

In the future it would be useful to apply this comparative accounting methodology and compare the Hungarian FADN with other EU member states (Germany, for example) and find more possibilities for the development of the Hungarian Network.

Publication of information collected and processed by the FADN

Reliability of data published by FADN strongly depends on the farmers that provide information to the network. In the Hungarian FAND test farms are not selected from a

random sample explicitly, furthermore the rotation of the sample is not guaranteed in such a way like in the Netherlands. This explains that the successful operation of the Hungarian network strongly depends on the agricultural holdings taking part in the network. In order to ensure the reliable and accurate information from agricultural holdings it is important to motivate farmers to participate in the network actively. One possible way of motivation is rewarding farmers with detailed reports on their own farm and a comparison with other individual farms (bench-marking) prepared by FADN. The detailed and aggregated financial, natural and accounting data collected and processed by the Hungarian FADN enable this network to reward Hungarian farmers with market information and bench-marking data. The network has to put extra emphasis on the appropriate quality, content of information provided to the farmers and on the timing as well, in order to ensure that farmers can utilise these data in their own microenvironment. In the dissertation, I worked out a proposed information brochure that contains natural and financial data, financial ratios, indicators, managerial accounting reports and bench-marking analysis of the farms participating in the network. In the future this brochure could be published in a wider and wider range of agricultural holding.

3.3. Effects of management information from FADN on profitability of agricultural holdings

The third objective of the dissertation was **to measure the effect of management information provided by the FADN to farmers on the short and long term profitability** of these agricultural holdings.

In order to analyze the effect of experience in the FADN on profits, a multiple micro-economic regression model was developed. A dual model of profit maximizing farms was developed that allows measuring the impact of management information on profit. In the model the profit was the dependent variable and I tried to build as many independent variables (that has an impact on profit) in the model as I could. One of the independent variables was the management information provided by FADN. The objective of the analysis was to find out whether management information has got a significant impact on profit.

Furthermore, the model analysed the effect of information on other variables: output, variable inputs (energy, materials, services) and quasi-fixed inputs (structures, machinery and installations and labour). The impact on quasi-fixed inputs is measured by changes in shadow price of the input. (Shadow price or marginal product In a production function, shadow price or marginal product of a factor is the increase in output due to a unit increase in the input of the factor; that is, the partial derivative of the production function with respect to the factor. In a competitive equilibrium, the equilibrium price of any factor is its marginal value product in every sector where it is employed.)

Management information provided by FADN was built in the model as a variable representing years spent in the network. This means that the model reflects the assumption that firm operators learn from the management information received from FADN and after a few years of participation in the system the positive effect of information can be detected. (This analysis is important also for the representativity of FADN, as sample farms in FADN have to represent the whole agricultural sector. If the network has an influence on the sample farms, rotation of the sample becomes especially important in order to ensure the representativity of the data collection. In the Netherlands, in order to ensure the representativity of the system, sample farms participate in the FADN for an average of 5 years.) Data used in the regression model represent a relatively homogenous group of potted plant firms and cover the period of 1975-1995. The data set contains 985 observations on 207 horticultural firms.

After determining the parameter estimates, I checked the parameter estimates (whether they differ significantly from zero), the preconditions of the model (like convexity of the profit function on prices etc.) and goodness of fit of the model. This was followed by the interpretation of the results.

Results show that management information results in savings in services and materials (-23 and -1%), whereas the use of energy increases (+14%). The net effect on variable profit is negative (-9 and -15%). The savings in services and materials is a positive effect of information as managers learn that they can make considerable savings in these inputs. These savings can be judged as a result of improved efficiency and the substitution of some services by managerial information. The increased use of energy can be explained as a temporary inaccurate understanding of managerial information (especially bench-

marking data) or firms intend to reform their production but not in the best (or energy-economic) manner. These results suggest that the FADN has to explain and emphasize how firms should interpret and use management information (with special focus on the most problematic input, energy).

Calculation of shadow prices for different years of participation in the FADN shows that the value of structures, machinery and installations and labour increases (by 7, 6, 13% respectively), implying that management information increases long-term profitability and allows firms to operate at a larger scale. The results show that management information is more likely to have a positive effect on profitability of potted-plant firms in the long-run rather than the short-run. In other words, management information has negative effect on (factual) profits, but it transmits the possibility of increasing profitability in the long run (which is expressed in the form of higher shadow prices of quasi-fixed inputs). This result implies that rotation of the FADN sample is important in order to preserve its representativity for the whole population of potted-plant firms.

In other words, the effect on short term profits can be explained with the assumption that farmers did not understand correctly the information received from FADN; but on the other hand we can assume that as an effect of the management information, farmers reorganized the management of their farming and started long term investments. Long term investments always mean a sacrifice of short term profit in order to gain a higher profit in the long run. The results also showed that farmers have learned how to utilize this management information and approve the efficiency and profitability of their farming in the long run.

Taking into account the fact that farm operators in the Netherlands also receive management information from their accountants, a stronger effect of management information from the FADN on profitability can be expected in the new EU member states. In the case of Hungary this can be explained with the fact that the majority of agricultural holdings are private and family farms. Especially in their case, farmers generally do not have a long history of receiving business analysis and other types of managerial information. Results have shown that management information provided by FADN can not only increase the long term profitability but can teach farmers to utilize

the advantages of information, and participants of the network can learn a conscious, well-defined, achievement oriented farming.

The results suggest that it would be useful to build the same multiple regression model for the Hungarian system. At the moment the Hungarian system does not provide this type of information directly to the sample farms, so the Hungarian network has not got a data base with the sufficiently big number of farms and covering a sufficiently long period of time, so the model would not result statistically reliable results.

The dissertation compared the Dutch and the Hungarian financial accounting systems; evaluated the accounting system of the Hungarian FADN; made proposals for the development of this system and analyzed the impact of the management information provided by the Farm Accountancy Data Network on the short and long term profitability of agricultural producers. With all this work, I contributed to the main objective of the dissertation, namely to improve the Hungarian information system, improve its operation competitiveness and efficiency while using, understanding and elaborating the available information, knowledge and observations.

„Riding the information wave – guiding the evolution challenge”¹

¹ <http://www.ittk.hu/web/kuldetesnyilatkozat.html>

4. RESULTS

- ⇒ The comparative analysis of the Dutch and Hungarian financial accounting systems. As a result of the analysis I ascertained that both systems meet the requirements of EU regulations, and the differences are due to the different accounting, economic, political history and the different objectives in the systems.
- ⇒ The analysis and evaluation of the Hungarian FADN. According to the research done I pointed out that Hungarian FADN – with the data collected by them – is capable of providing information about the financial, profitability situation of the Hungarian farmers at a level that meet the EU requirements. On the basis of the research I make suggestions for improving the evaluation procedure, data collection method, the format of the report used by the Hungarian FADN.
- ⇒ The elaboration of an information brochure for the Hungarian FADN which, in use, can help the agricultural holdings get market, economic and management information thus helping a better understanding of the operations of the farms, find out improvement possibilities and increase profitability.
- ⇒ I made a short analysis to introduce how the property, financial and profitability situation of the agricultural farmers applying the financial accounting regulation of the FADN.
- ⇒ Microeconomic regression analysis about the effect of the information provided by the FADN on the income of the farmers. The results of the research justify the fact that in the long term the information provided by the FADN has positive effect on the income of the farmers. This means that it is necessary to improve the FADN in this way and utilize it in Hungary in the future.

5. UTILIZATION OF THE RESULTS IN PRACTICE

- ⇒ The results of the comparative analysis of the Dutch and the Hungarian financial accounting systems pointed out that – as both of the systems meet the requirements of the EU regulations – the harmonization of the two financial accounting systems can be realized only through a more global harmonization process in order that reports will be compared more easily. So the results of the comparative analysis offer help to the experts making the comparison of the reports in the two accounting systems.
- ⇒ During the analysis of the Hungarian FADN I took the Dutch one as a starting point and my suggestions about the improvement of the Hungarian system have a basis in the Dutch practice in several fields. This justifies the fact that the elaborated suggestions can be realized in practice. The condition of the practical application of the suggested evaluation methods, the communication channels to build, the data collection methods, the report formulas is the availability of the appropriate professional, organizational and financial support.
- ⇒ The information brochure made for the Hungarian FADN contains such information that is available for the FADN, so with this information brochure delivered to the farms, the farmers gain help in connection with planning their activity and decision making.

The information brochure contains the following:

- natural and accounting information about the given farm,
- financial indices, management accounting information based on farm's basic data, for example profitability of product groups, cash-flow information and so on, and
- business analysis about those agricultural holdings with the same region, size and activity. Bench marking data show the numbers of the given farm and also information about its competitors plus the average data of the given group.

It is important to give this information to the farmers directly and in a format that they are capable of using, understanding and utilizing.

⇒ The effect of the information provided by the FADN on the income of farmers supports the importance of the information brochure which is exactly the information service of the FADN towards the farms.

6. PUBLICATIONS RELATED TO THE TOPIC OF THE DISSERTATION

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Csajbók I.: Konjunktúrafelmérés (Hajdú-Bihar county April 2004). Kamarai Hírlevél XII/6. szám 2004. 4-6. p.

Csajbók I.: A holland és a magyar számviteli rendszer összehasonlítása. Számvitel-Adó-Könyvvizsgálat 2002. 496-499. p.

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Csajbók I. – Oude Lansink A. – Huirne R.: Effects of management information from FADN on profitability of Dutch potted-plant firms. Agricultural Economics. 2005. 325-332. p.

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Csajbók I.: Management accounting in the Farm Accountancy Data Network. Nagyszeben, Romania, ISBN 973-651-500-1 2002. 210-217. p.

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