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ECONOMICS OF FAMILY FARMS BUSINESS IN VUKOVAR - SRIJEM COUNTY

EKONOMIKA POSLOVANJA OBITELJSKIH POLJOPRIVREDNIH GOSPODARSTAVA U VUKOVARSKO SRIJEMSKOJ ŽUPANIJI

SUMMARY

The paper deals with the issue of business economics in family farms and the poor knowledge level on business's internal economics by family farm members. It is assumed that the owner of a family farm is an entrepreneur who manages the business venture. Many family farms use assets that are not registered on farm's asset list in production processes. In addition, family farms which produce more than one primary product do not know the economics of internal operations and the profitability of individual sorts, cultures and products. Is there a financial model that solves this problem? Do the owners of family farms consider the information about the internal economics of their business as important for further business decisions? This paper is based on a tested statistical sample of family farms in Vukovar-Syrmia County and proves that their knowledge level of crucial internal-economic information, which is necessary in successful decision making, is very poor. In addition, the paper explains the causes of this poor knowledge level and gives a conclusion as a recommendation of how the authors consider it necessary to solve this problem.

Key words: *internal economics of the business, family farms, prices, costs*

SAŽETAK

U radu se obrađuje tema problematike nepoznavanja ekonomike poslovanja obiteljskih poljoprivrednih gospodarstava od strane njihovih članova. Pretpostavlja se da je vlasnik OPG-a poduzetnik koji upravlja svojim poslovnim poduhvatom. Mnogi OPG-i koriste imovinu koja nije u popisu imovine OPG-a u vlastitoj proizvodnji. Također OPG - i koji proizvode više primarnih proizvoda ne poznaju internu ekonomiku poslovanja i rentabilnost pojedinih sorti,

kultura i proizvoda. Postoji li uopće financijski model koji rješava ovaj problem? Smatraju li vlasnici OPG-a da su informacije o internoj ekonomici poslovanja važne za daljnje poslovno odlučivanje? Rad se temelji na ispitanom statističkom uzorku OPG-a Vukovarsko – srijemske županije i dokazuje nepoznavanje elementarnih informacija koje su nužne za poslovno odlučivanje. Također u radu se objašnjavaju uzroci nepoznavanja interne ekonomike poslovanja. U radu se daje zaključak kao preporuka na koji način autori smatraju potrebnim riješiti ovaj problem.

Ključne riječi: *interna ekonomika poslovanja, obiteljska poljoprivredna gospodarstva, cijene, troškovi*

1. Introduction

During 2011 around 9.548 family farms have operated in Vukovar-Syrmia County (*hereinafter referred to as VSC*), whereof 33% did not own any land, 53% owned 0-20 ha of land and 9% owned more than 20 ha of land (Matić, 2012). It is not necessary to give proofs that the owner of the family farm is an entrepreneur since the practicing of agricultural activities requires a business to be registered either as a natural person (craft, family farm), a legal entity (Inc., Ltd.) or a cooperative. The basic hypothesis is that the largest number of family farms produces two or more products and that the owners of family farms and their family members do not know the internal economics of their businesses.

The authors believe that the assumption is determined by two key factors: lack of basic education in economics and financial valuation models which are not adequately adjusted for valuations of agricultural production. This hypothesis is supported by the fact that agricultural production of certain cultures requires a significant portion of production resources to be used in a previous time period while the revenues are generated in the current time period. Family farms use single-entry accounting which is very similar to craft accounting. Accounting phrases and terms used in family farm accounting are not synonymous with those that are used in corporate accounting (Inc. and Ltd) and the terms such as *receipts and disbursements* have different meaning for those two types of entities. Family farm accounting is not familiar with the terms *revenues and expenditures*. Corporate accounting considers receipts as collection of receivables (in cash, rights or assets) and does not take them into account when calculating corporate profits. Family farm accounting considers receipts as collection of receivables (in cash, rights or assets) as well but together with disbursements they represent a basis for a calculation of total income. The solution to this problem should be viewed from the expertise point of view and should presume a valuation model which should value the agricultural product correctly by taking into account logical methods.

2. Methodology

We have randomly surveyed 30 family farm owners in VSC. The owners have responded to 23 questions that aimed to determine whether they and their family members know the internal economics of their businesses. The questions were classified in three main groups: the first group refers to general information about the owner and the family farm (total receipts, age of owner, etc.), the second group is related to the internal economics of family farms (number of different products, production costs, the usage of fixed assets per cultivated culture, etc.) and the third group considers strategic management (vision, long-term objectives, business plans etc.). The third group of questions is not a subject of this work and will be discussed in another research paper.

3. Research results

Family farm owners who are younger than 30 years represent 10% of the surveyed sample, 30% are 31-40 years old, 23% are 41-50 years old, 30% are 51-60 years old and 7% are 61 years old or older. The small number of family farm owners who are younger than 30 years indicates that the number of young persons in the role of entrepreneurially active farmers is very poor. The lack of young and educated farmers represents a significant problem for future development of agricultural sector which is a strategically important activity in Croatian economy.

More than 83% of all respondents are men while less than 16% are women. A reason for this could be the evolution of agricultural production from a labor intensive activity to highly capital-intensive production. The farmers in the VSC cultivate mainly traditional cultures that do not require high levels of humidity. The VSC does not have melioration systems. Due to insufficient rainfalls the melioration systems are necessary for cultivation of some other (vegetable) cultures.

According to our research around 40% of respondents reached a production value of less than 200.000 HRK in 2011, some 47% reached a production value between 200.000 and 1.000.000 HRK in 2011 and slightly more than 13% reached a production value between 1.000.000 and 2.000.000 HRK in 2011. The results point out the fact that most family farms are still engaged in a type of agricultural production that was typical for the period prior to 1990's.

During last year 10,34% of surveyed family farms have produced only one agricultural product while 89,66% of family farms have produced two or more products. This confirms our basic assumption that the majority of family farms produces two or more products and that the valuation of specific products presumes the knowledge the internal business economics.

All respondents who had produced two or more products during previous year listed at least three pieces of fixed assets (agricultural machinery) which were used in the production of all of their products.

Only 10% of respondents have kept record about the usage of fixed assets (agricultural machinery) per agricultural acreage or per specific product while 90% of respondents did not keep track of such information.

Additional fixed assets that were not registered on farm's fixed asset list were used in production by 40% of family farms. 60% of owners confirmed that they do not use additional (not registered on farm's fixed asset list) assets in agricultural production.

Around 87% of family farms produce at least one agricultural product whose production requires the production resources to be used in previous periods while the revenues are generated in the current period.

87% of family farms do not have any kind of written price calculation for their products, 10% of family farms have a written price calculation for some of their products while only 3% of family farms have a written price calculation for all of their products.

59% of family farm owners did not know the production costs of their products after the production process; only 17% of family farm owners knew it for some of their products while 24% claimed to know it for all of their products.

The following questions were answered by choosing one option on a scale from 1 to 5 (5 - highly important, 4 - important, 3 - intermediate, 2 - less important and 1 - not important). When asked how important it is to know the production costs of each product after the

production process, 43% of the respondents have answered that it is *highly important*, 43% have answered that it is *important*, 11% said that it is *intermediate* while 3% consider it as *less important*

When asked if it would be important for them to know the production costs before the actual start of the production 37% of family farm owners responded that it would be *very important*, 37% claimed that it is *important*, 10% considered it *intermediate*, 10% said it is *less important* while 6% answered that it is *irrelevant*.

4. Interpretation of research results

The research results confirm our hypothesis: *the largest number of family farms produces two or more products and does not know the internal economics of its business*. Why does the production of two or more products presume the ignorance of the internal economics knowledge? The basic assumption of managerial accounting is the double-entry accounting system, cost center tracking and cost unit tracking. Such information provides much clearer insight into the basis of primary expenses in industrial production. However, such cost tracking is not usual in agricultural production. The legislature has appointed clear accounting rules only to simplify the tax collection.

FADN (Farm Accountancy Data Network) is a database of agricultural accounting data that is collected in the EU, and its aim is "*... the efficient collection, processing and dissemination of agricultural statistics and determination of income in farms which voluntarily engage in researches*." (FADN.hr., 2009). The main objective of the database is to provide information to: the state administration; representatives of farmers; advisors; scientific researchers; farmers (to make the decision making process more effective). The aim and purpose of the database is not the taxation process at all. Thus, the FADN does not provide us with the necessary information to monitor the internal economics of family farms either.

We can perceive a clear discrepancy. On one hand, there are rigid accounting rules which basically aim to determine the tax base and on the other hand there is a sophisticated FADN system that evaluates agricultural producers (mainly corporations) through a system of financial and structural data. This raises a reasonable question: *is there a model that can evaluate the agricultural product after it has been produced?* It seems that there is no such model; at least there is not a well-known and widely accepted model. We can conclude that the monitoring of internal business economics is left to be conducted by every individual advisor separately on a basis of its own individual knowledge. Using only its own individual knowledge every individual advisor is trying to evaluate the agricultural product.

On one hand, almost 86% of family farm owners think that it is important or very important to know the internal economics of their businesses and to know the production costs of each of their product after the production process. On the other hand 59% of all respondents claimed that they did not know the production costs for none of their products while 17% of all respondents said that they knew it only for some of their products. Moreover, it remains questionable if anyone of all respondents does know the exact production cost of its product since the models as well as the methods which were used to evaluate the production costs are not known. Clear evidence that the evaluation approach was wrong is the fact that nearly all respondents have used at least three pieces of fixed assets in production of two or more products but at the same time did not keep record on the usage of fixed assets per specific product or per agricultural acreage. If there is no accurate record of used machinery hours, used human labor, used energy and other costs per specific product or agricultural acreage it is impossible to allocate some of other common costs also (accounting services, telephone etc.). Another evidence is that fact that 87% of surveyed farmers produce at least one product

whose production requires the production resources to be used in previous periods while revenues are generated in the current period.

We can draw a conclusion that a financial model for evaluation of agricultural products in family farms which produce more than one product does not exist.

5. Conclusion

It is necessary to approach the problem from the expertise point of view. The largest number of experts and scientists who are engaged in cost accounting, internal economics of businesses, profit-center and managerial accounting base their knowledge on double-entry accounting data from corporations (Inc. and Ltd). Single-entry accounting system, agricultural economics and especially internal economics of family farms are not in the focus of their work and research.

It is impossible to evaluate agricultural products without the basis knowledge in management accounting, the knowledge of IAS 2 – inventory - and the knowledge of single-entry accounting systems used in family farms. Agricultural production is an activity of strategic importance for Croatian economy. It is not necessary to give proofs that family farms, cooperatives and crafts are also small and medium sized entrepreneurs.

This research points out that there is a need for specific expertise which should deal with problems that are related to the internal economics of family farms. Feasibility studies and other financial analyses are essential for business decision making. Certainly, this type of entrepreneur invests a significant portion of its own assets and its own labor force in order to achieve targeted business success. The risks which arise from their business decisions are high. It is not a coincidence that most family farm owners considered it important or very important to know and to track their businesses per specific business segment.

The authors believe that it is necessary to create a clear and logical model which should be used to evaluate the business results of specific business segments and the profitability of specific products. To create such a model interdisciplinary knowledge in corporate accounting, cost accounting, family farm accounting and managerial accounting is a key predisposition.

REFERENCES

- Belak, V. (1995): *Menadžersko računovodstvo*, RRIFplus, Zagreb
- Belak, V. (1994): *Profitni centri i interna ekonomija poduzeća*, RRIFplus, Zagreb
- Belak, V. i drugi (2009): *Računovodstvo proizvodnje*, II. Dopunjeno izdanje, RRIFplus, Zagreb
- Defilippis J. (2005): *Poljoprivreda i razvoj*, Školska knjiga, Zagreb
- Defilippis J. (2002): *Ekonomika poljoprivrede*, Školska knjiga, Zagreb
- Grahovac P. (2005): *Ekonomika poljoprivrede*, Golden marketing i Tehnička knjiga, Zagreb

Knez-Riedl, J. (2007): *Benchmarking and Controlling*, Ekonomski fakultet Rijeka, Rijeka

Petrović, G. (2007): *Logika*, Element, Zagreb

Šošić I. (1998): *Zbirka zadataka iz statistike*, Mikorad i Ekonomski fakultet Zagreb, Zagreb