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4.4 THE VALUE OF OWNERSHIP AND ITS INCREASE AS A FUNCTION OF AGRICULTURAL ENTERPRISES

Summary: The paper deals with the issue of agricultural enterprises, i.e. farms operating on a large scale, and the goals that their owners pursue. The research carried out in 2009/2010 was intended to answer the question of whether the theory of increasing the value of ownership – as a paradigm for action effectiveness – also applies when the functions of owner and manager in agriculture are combined. A research hypothesis was made that this is the key criterion for establishing and managing such entities that the owners consciously identify. Based on the research results it was determined that, when making their choices, owners of agricultural enterprises pursue a cluster (group) of goals. Self-reliance as a result of being self-employed and managing the enterprises was named as the most important reason for carrying out that type of activity. As business (economic) goals were also high on the priority list, the research hypothesis could not be falsification. This can be explained by the fact that, albeit being not the only incentive for agricultural entrepreneurs, increasing the value of ownership is an important criterion for evaluating the effects of running the business. Therefore, when researched from an economic point of view, the assessment of whether (and to what extent) the goal is met should be considered sub-optimization, i.e. in terms of the fulfilment of the boundary condition, as opposed to maximisation.

Keywords: value of ownership, goals, agricultural enterprises, Poland

1. INTRODUCTION AND STUDY HYPOTHESIS

The owners of agricultural enterprises, which are large-scale production holdings, should have a business approach to their activities. Assuming that, as a paradigm of operational effectiveness, the theory of increasing the value of ownership is also applicable in relation to agricultural large farms, this factor determines the allocation of resources, and has an impact on the organisational structure of enterprises, while the operations of the owners should be subordinated to the implementation of this strategic task (Rappaport 1986, Libbin et al. 2004).

The aim of the conducted research was to empirically examine if this is the actual, as well as the realised (emphasised by the owners), criterion deciding on the establishment and management orientation of agricultural enterprises?

Thus, the hypothesis was made that if agricultural enterprise owners should deem it significant that their farms is a good place to invest their own funds or allows them to extend the property, also for their descendants, it would mean that one could not dismiss the hypothesis that their conscious goals function is to increasing the value of ownership.

2. THE GOALS AND MOTIVES OF AGRICULTURAL ACTIVITIES

In the economic analyses of agricultural holdings, it is commonly assumed that farmers are oriented towards maximum or satisfactory financial results, seen either as income (in case of own unpaid work), or profit (with the recognition of labour fees). These measures constitute a certain standard for the evaluation of the prosperity of agricultural producers by virtue of holding and managing agricultural farms, and with recognition of equity cost, also taking into account the economic effectiveness of their activities (Weisbrod and Hansen 1968).

However, according to behavioural theory, the reasons for decisions have a multidimensional structure, while the motive of income/profit as the financial goal is one of the

most significant, but not the only, criterion in initiating and running activities (Gasson 1973). In their choices, farmers, including the owners of agricultural enterprises, are driven by an entire bundle (group) of goals formed under the influence of individual properties of themselves and their family members, and their adhered-to systems of values (ethical, social). Diverse impacts on the goal are made by needs conditioned by age, education, family-life stage, community, etc. (Willock et al. 1999, Van der Ploeg 2000, Burton 2006, Sorenson 2011).

Owners make important decisions on the selection of an agricultural holding as the only or additional place of work, as well as the source of supporting the family, expanding or limiting the production property, level and orientation of the children's education and selection of their own professional career, amount of personal free time, expected living conditions in the household (level of expected consumption), the field of using natural environment resources, and assumed adaptations to climate changes. Ultimately, this translates into decisions on the mode of producing and applying diverse strategies of conducting agricultural activities and expected profits from the management and ownership of an agricultural holding (Bennett 1980, Walter 1997, Vandermersch and Mathijs 2002, Brodt et al. 2006, Farmar-Bowers 2010).

Therefore, success or failure alone as the subjective assessment of obtained benefits from being the owner of an agricultural holding may be considered through the prism of realising the personal targets and preferences of the entrepreneur. The perception of certain positive states of mind, defined as happiness, satisfaction, and a sense of prosperity, may depend on the possession and management effectiveness of the agricultural holding (enterprise). However, these relationships may be reversed - the feeling of satisfaction from their personal life may impact on the perception of the results of agricultural activities (Harper and Eastman 1980, Mäkinen et al. 2009).

Due to this, the drive towards economic (business) goals such as maximisation of the financial gain/profit, and growth of the holding's value, and the technical effectiveness of using the production factors, may have suboptimal effects in reality. Meanwhile, agricultural producers can provide the research with goals other than just material benefits resulting from owning an agricultural holding.

Based on the results of surveys of American farmers, it is possible to form a thesis that there is always a group of farmers who consider self-employment and lack of labour subordination as more important principles than income/profit maximisation (Kliebenstein et al. 1980). The ownership of an agricultural farm provides the owner with the ability to act as the supervisor, and certain subjective benefits, resulting from personal work organisation, lack of supervision and control, responsibility for performing the orders of others, or even administering others.

Personality traits can render professional subordination difficult to accept for some farmers but farms as their owner's workplaces eliminate such inconveniences. In holdings employing more than one person it also entails performing the managerial function, inseparably linked with issuing orders to the hired employees or family members. Benefits derived from exercising such authority may influence the decrease in the acceptable level of financial results produced by the management or the expected profits from the change in the value of the owned farm.

Research run in Australia says that not only independence, but also the role of the social prestige of the performed work, drive for the extension of the holding, and preservation of the family tradition of being a farmer, all are perceived as secondary (less relevant) drivers by people of that country. On the other hand, Australian farmers who sustained themselves only by means of agricultural production stressed the importance of other goals. The most significant role in carrying out agricultural activity was ascribed by them to the satisfaction derived from the mere fact of owning a property in the form of an agricultural holding. It was followed by obtaining an acceptable level of current yield and ensuring the future profitability of the holdings run under their management. In their opinion, an important driver for action is the satisfaction found in the usefulness of the performed work, or, in other words, the

subjective perception valuing one's own efforts put into the holding. Therefore, in the pyramid of goals pursued by Australian farmers' economic reasons, i.e. business purposes, took precedence over independence (Robinson et al. 2003).

The decisions made by farmers are influenced by the level of uncertainty concerning the ultimately-achieved results of their activities. The limitation of risk through the stabilisation of production conditions may thus be considered as a desired state and one of the assumed goals of their activities, particularly in the conditions of an unstable community caused by the weakness of the agricultural market institutions and the exercise of the rights of its members, as well as the high costs of obtaining capital from beyond the holding (Gomez-Limon et al. 2003).

Studies carried out in Poland show that in the 1980's the primary goal of farmers was to reduce risk perceived in managing an agricultural farm that is free of any debt in the form of bank loans. Streamlining the holding, understood as the betterment of its productive capacity, as well as aspects related to raising children, faded well into the background (Majewski and Ziętaara 1997).

Political and economic transformations had a substantial impact on the formation of the rationale behind farmers' behaviour. Research conducted in 1995/1996 reported the upbringing of children and securing their future as the objective most often indicated. Lower in the hierarchy were the constraint of market risk interpreted as the certainty in respect of selling produced goods at an acceptable price and obtaining a payment in return; and the financial safety stemming, i.a., from the lack of credit liabilities (Majewski and Ziętaara 1997). In those times, safety-related issues placed themselves higher in the hierarchy of goals than the maximisation of the agricultural holding's income.

Systemic transformations were accompanied by a difficult internal situation as regards the economy, which forced an adjustment in the rationale behind the activity to make allowances for the problems farmers had to face at the time. Altruistic sacrifice for children declared as the goal of conducting agricultural activity resulted from the negative assessment of the possibility of being successful in the performance of business tasks in the then reality, while at the same time it was an expression of an anticipated improvement in the overall economic situation in the future. Hence, it was approached as some kind of cost imposed by the changes in the political system, whose effects, although postponed in time, will be enjoyed by the successors, not necessarily employed in farming.

The goal, understood as the minimisation of risk in stable institutional and market conditions, may also be of a common nature. There is a conviction that agricultural producers avoid operations, which could lead to significant differences between the achieved and expected economic results. This is confirmed by the studies of the financial security of agricultural holding activities, understood as the ability of current regulations of obligations (usually expressed in liquidity indicators), or the assessment of possibilities of obtaining and returning foreign capital (solvency). This aspect of their activities is considered as a necessary area in agricultural holding economic analyses (Gloy et al. 2005).

Individual owners may exhibit different aptitudes for undertaking actions aimed at delivering investments, introducing innovative solutions, taking risks in respect of product supply and sales, or setting the direction of production activities. While the degree of specialisation or diversification in the holding's activity may be estimated, the task of separating the individual's inclination to risk-taking from among other factors influencing farmers' decision-making process is a tremendously difficult one (Pope et al. 2011).

There is a difficulty in defining the actual goals of agricultural holding owners on the basis of their decisions, which may result from the potential situation of the lack of concurrence between the orientation of their realised operations and the actual preferences of the producers. The research into English holdings shows that despite the realisation of operations associated with the protection of the natural environment and the multifunctional development of rural areas and agriculture, holding managers saw themselves primarily as food producers.

They treated actions associated with environment protection or other leading to the limitation of the intensiveness of the held production factors as a necessity rather than a conscious need for realising specific goals. This resulted from the production regulations imposed upon them by current agricultural policy. The farmers themselves declared goals aimed towards effectiveness, i.e. an improvement in the productiveness of the production factors and their profitability, as well as the preservation of the agricultural holding in a good economic condition for the successor (Burton and Wilson 2006).

Thus, the agricultural community may lead to an overestimation of the hierarchy of goals, and also impose specific actions on the producers (Gagnè et al. 2011).

The discrepancies between the goals indicated by farmers under various studies may also come down to the heterogeneity of the analysed communities. Differences in the analysed samples, such as the volume of agricultural production, the proportion of revenue from agriculture in determining personal income, and, indirectly, also the role of the farm as a workplace, are all the product of the separate nature of the preferred goals; hence they affect the measurements taken.

Studies covering farmers from Ohio, USA, confirm such correspondence, although not in a direct manner. In a total of 302 farm-owners with a very high diversification of production scale, the respondents reported long-term profit generation as the primary objective of having an agricultural holding. Further in line was the increase in production efficiency and the preference for living in the countryside. Such values as the maximisation of free time and the preservation of the holding for one's successors were much lower on the list of farmers' priorities (Stark et al. 2002). These studies allowed us to establish a positive and statistically-relevant correlation between business-related goals (profit maximisation, holding-yield improvement) and the produced financial results. Taking into account the considerable impact of the agricultural production scale on the profitability of activity in this sample, it is possible to draw direct conclusions with regard to the influence the farm owners' aims have on the size of their holdings.

The correspondence between the generated financial yield and the declaration on the preferred lifestyle connected with dealing in agricultural production and living in the countryside by the owners, was, on the other hand, absent. On these grounds it can be then assumed that such an objective is characteristic of the smaller-size farms covered in the survey, owned by people with better qualifications, whose income comes from non-agricultural activity as well.

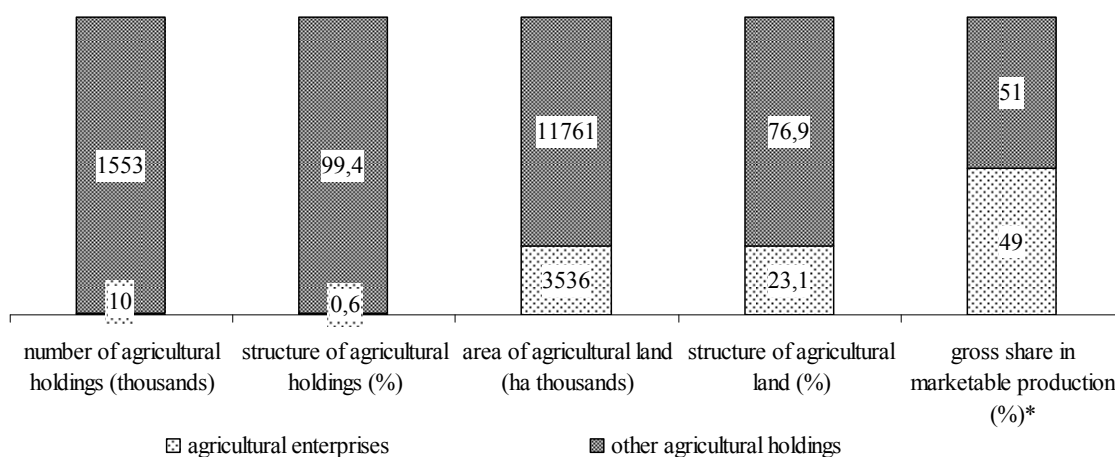
The existence of a relationship between the obtained results and the policy of producers to achieve particular goals is confirmed by a study carried out in 2001 on a group of 257 Dutch milk producers. The survey observed a variation in the goal structure of farmers depending on their different yield capacities. It was proven that along with a rise in the milk yield, conditional on the respective production quotas, farmers preference grew in respect of economic and commercial aims. Since the milk quota (production level) was closely related to the income level, financially efficient holdings exhibited congruence between the preferred and achieved economic goals (Bergevoet et al. 2004). Some interesting results were secured in 2007 in Finland when investigating a group, representative of the whole population of family farms of that country, for the attitude of farm owners towards their status as a failure or success in running a farm. In the surveyed period the agricultural holdings recorded negative financial results, and farmers' income was significantly lower than remunerations obtained in other sectors of the economy. Under deteriorating economic conditions for agriculture it was also established that there exists a positive cause-and-effect relationship between the preference for economic and commercial goals of farm-owners and farms' profitability (financial results). The strength of this relationship was, however, poor, which can indicate that the mere fact of the failure to achieve a particular goal may represent an element impacting its exposure by the producers (Mäkinen et al. 2009).

The above conclusion does not stipulate that farmers earning low income do not follow economic calculations in making strategic decisions regarding the direction of the development and operation of their agricultural holding. However, it can be assumed that research based on a subjective assessment of producers themselves is burdened with the impact of the economic standing of the holdings under their ownership. Unfortunately, there are no feasible methods for eliminating such influences, due to variability in the conditions for production, as well as differences in the owners' attitudes towards the status referred to as failure or success. When voicing their opinion, farmers can look for justification for the failure to achieve business goals by putting forward the alleged superiority of other factors which incline them towards engaging in agricultural activity.

3. EXAMINED POPULATION

In the performed research, the field of observation included the population of farms running agricultural activities on a minimum area of agricultural land of 100 ha, allowing the unambiguous classification of such units as agricultural enterprises. The selected group defined as agricultural enterprises is very small in comparison to all agricultural holdings in Poland (only 0.6%), but covers the ownership or lease of approximately 23% of the land used for agricultural purposes and, as estimated, provides almost 50% of marketable agricultural production (Figure 1).

Figure 1: Agricultural enterprises compared to other agricultural holdings in 2010



* author's estimates

Source: Report on the results. National Agricultural Census 2010.

Such a group emerged as a result of ownership transformations in Polish agriculture that began to take place in 1992. The liquidation of the former state-owned agricultural enterprises and the privatisation of their property gave rise to all businesses operating as companies, and to some part of farms owned by natural persons. The volume of large-area farms (agricultural enterprises) is complemented by entities operating as agricultural holdings in socialist times (before 1989), for whom the privatisation of state-owned property was an opportunity to take them over and expand their productive potential, leading to fundamental changes in their organisation. Thus, from the point of view of the market-operation period, the community of agricultural enterprises comprises relatively "new" entities, hence units which are currently at the growth stage, or those who have just passed that stage to find themselves at the pre-mature stage.

However, the subject of this research was not the entire population of agricultural enterprises, but only that part of the general population with the manager combining the function of the owner (the only or major holder of the rights to the equity of the enterprise) with employment, i.e. the management function. Thus, the farms with owners who treated the agricultural holding as only a

capital investment and were not employed within have been omitted. The research also omits the entrepreneurs who managed the holding, but also held minority shares, since it was decided that in both cases the assumption of the dominating role of increasing the value of ownership as a strategic business goal is not contested. Therefore, the target area of the examined population covered the enterprises with unknown numbers and parameters, simultaneously fulfilling the aforementioned criteria on ownership and management.

However, the analysis of the goals of the conducted agricultural activities was performed on a selected group of agricultural holdings falling under the sample used to monitor the entire population of non-associated agricultural enterprises in Poland (Kagan 2007). The final research was performed with the application of data for 63 units with diverse production and organisation features and achieving diverse financial results (Table 1).

Table 1: The production and economy profile of the examined sample according to data from 2009

| Selected features | Statistical measures | | | | |
|--|----------------------|--------|---------|---------|------------------|
| | mean | median | maximum | minimum | standard deviat. |
| Agricultural land area (ha) | 447 | 328 | 1963 | 102 | 396 |
| Proportion of owned land (%) | 55,9 | 64,7 | 100 | 0 | 40,7 |
| Share of arable land (%) | 81,9 | 96,8 | 100,0 | 0,0 | 28,5 |
| Economic size (ESU) | 190,8 | 125,9 | 948,4 | 18,8 | 188,0 |
| Age of manager (years) | 51,1 | 53,0 | 72,0 | 27,0 | 9,6 |
| Number of years worked in farm | 16,8 | 15,0 | 39,0 | 1,0 | 11,1 |
| Number of employees | 11,9 | 7,2 | 77,0 | 1,0 | 13,1 |
| including non-labourers (%) | 15,6 | 13,5 | 46,3 | 0,0 | 14,8 |
| Technical devices for labour ^a (€ thousands) | 118,8 | 86,1 | 467,7 | 12,4 | 89,5 |
| Labour productivity ^b (€ thousands) | 86,0 | 60,0 | 484,7 | 13,7 | 78,7 |
| Return on assets ^c (%) | 9,1 | 7,5 | 44,1 | -7,4 | 10,2 |
| Return on invested capital ^d (%) | 5,8 | 4,4 | 29,4 | -5,7 | 6,2 |
| Return on equity ^e (%) | 15,3 | 10,3 | 154,7 | -29,1 | 23,1 |

^a Relation of total capital per full-time employee, i.e. the sum of the balance and leased capital (without land value),

^b The value of total income per one full-time employee,

^c (ROA) – the relation of the net financial gain (profit) to the value of the balance assets,

^d (ROIC) – the relation of the net financial gain (profit) to the value of the property constituting the sum of balance assets and value of leased property,

^e (ROE) – the relation of the net financial gain (profit) to the average state of equity.

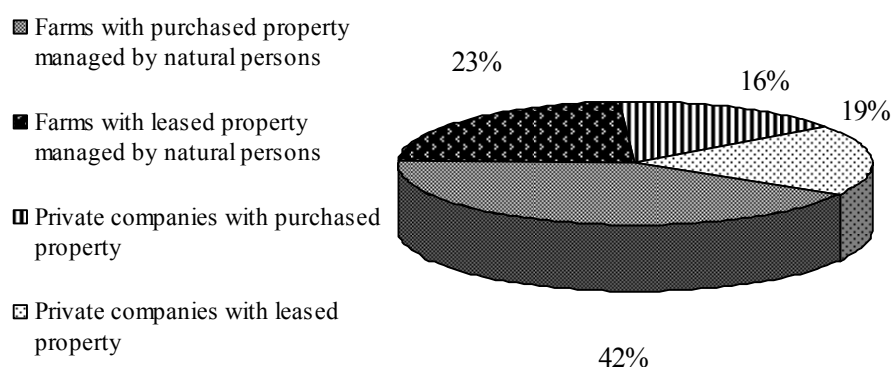
Source: own study

The highest level of change in the sample, besides the features describing the production potential (agricultural land area, economic size), was recorded through the analysis of employment of agricultural holdings. The examined enterprises also applied diverse production technologies (relation of labour, capital and land), which, combined with the management system, brought diverse economic results.

Besides the high diversity of the production potential and, to a lesser extent, qualities describing the managers of the units, the examined enterprises also varied in the specialisations of the agricultural production. Almost 60% conducted exclusively or mainly crop production. The holdings specialising in livestock production with concentrated feed (pigs and poultry) comprised 30%, while those of livestock fed with roughage comprised only 11%.

The surveyed population abounded in businesses in the form of natural-person-owned agricultural holdings, which in turn were dominated by entities whose property was entirely or to a great extent purchased by entrepreneurs (Figure 2).

Figure 2: The legal form of agricultural enterprises and the ownership status of the utilised production facility



Source: own study

In general, these included the smallest agricultural enterprises. The adopted financial result category in such holdings was a positive balance despite the lack of formal remuneration for own work. The owners themselves set the level of remuneration for own work conditional on work expenditure, education, opportunities for alternative post placement outside the farm, and the potential level of remuneration for work in other entities. The lack of homogeneity in the analysed sample in respect of the above-mentioned characteristics is not a surprise, as it is a natural consequence of the heterogeneous input population taken the study.

4. RESEARCH METHODS

The verification of the presented hypothesis was made on the basis of the answers to the questions included in the questionnaire provided by the agricultural enterprise owners. They were asked to relate to five statements concerning the main factors deciding upon their activities in the form (scale) of an agricultural enterprise (Table 2).

Table 2: The factors deciding on the running of an agricultural enterprise and objectives of owners

| <i>Name</i> | Questionnaire statement | Deciding factors | Main objectives of the owner |
|----------------------------|---|---|--|
| <i>Place of residence</i> | Due to the place of residence (location of the household), my environment (family, friends, etc.) | Influence of the environment expressed by the impact of the social, natural environment – preferred place of life | Residence and work in a preferred location |
| <i>Work</i> | The labour market is variable, while an agricultural holding ensures labour security under all conditions | Owner personality – tendency to take risks, obtained skills, education, | Risk limitation |
| <i>Independence</i> | Being the owner of a holding makes me independent, no one gives me orders | Owner personality – need for independence, preferences concerning my way of life and work | Maintaining a specific lifestyle and way of gaining income |
| <i>Profitability</i> | The agricultural holding is a good place to invest my own capital | Economic reason with emphasis on the role of obtaining current benefits | Business goals (increasing the value of ownership) |
| <i>Property advantages</i> | The agricultural holding allows me to multiply the property value, including that for my descendants, and also ensures necessary means for everyday support | Economic reason with recognition of the possibility of putting off achieving profit in time (e.g. change in property value) | |

Source: own study

The entrepreneurs assessed the level of the impact of a given factor by its valuation expressed in five categories: most important, important, “neither important nor unimportant”, of low importance, unimportant. Then, with the application of the Likert scale (a five-stage ordinal scale), the answers were encoded numerically by the growing ordination of the values (most significant reason – digit 1, significant – digit 2,..., insignificant – digit 5).

In turn, the answers to the above statements served to form conclusions on the type of causative factor deciding on the running of this form of activity by the owners and the identification of the hierarchy of their goals. The conclusion was indirectly aimed at eliminating the disturbance resulting from the perception of the examined persons, and the diverse understanding of certain concepts.

The assessment of the statistical relevance of the impact of individual driving forces on the undertaking of agricultural activity by farm owners was based on the application of Friedman’s non-parametric ANOVA test.

The relation strength measurement applied Kendall’s tau statistic, i.e. a non-parametrical test serving the determination of the compliance of the distribution of two properties. Kendall’s tau factor constitutes the difference between the probability that the compared variables will be arrayed in the same order and the probability of their arrangement in different directions. Therefore, the level of compliant and incompatible ordinance decides upon the correlation strength among the examined properties.

5. RESULTS

The research results show that the analysed group understands “independence” as the lack of official subordination at work, and it was the highest classified reason for running an agricultural enterprise (Table 3). Most owners indicated this goal as the most important (36.5%), and the least research participants as unimportant (7.9%). The average of the ranks appointed for this formula was the lowest in the survey (the lower the value, the higher the significance of the factor). This is undoubtedly related to the nature of the entrepreneurs’ personalities and their tendencies or aspirations to lead other people. Considering the relatively short period of the market activeness of the examined farmers, their owners are characterised by a high level of entrepreneurship. One of its results is the drive to self-employment.

Table 3: The results of indications concerning the reasons for running agricultural activities¹⁶

| Statement | Rank (% of indications) | | | | | Statistical measures | |
|---------------------|-------------------------|------|------|------|------|----------------------|----------------|
| | 1 | 2 | 3 | 4 | 5 | Mean | stand. deviat. |
| Independence | 36,5 | 25,4 | 15,9 | 14,3 | 7,9 | 2,32 | 1,23 |
| Property advantages | 20,6 | 39,7 | 23,8 | 6,3 | 9,5 | 2,44 | 1,22 |
| Profitability | 20,6 | 33,3 | 23,8 | 12,7 | 9,5 | 2,57 | 1,32 |
| Place of residence | 17,5 | 27,0 | 30,2 | 14,3 | 11,1 | 2,75 | 1,23 |
| Work | 7,9 | 28,6 | 28,6 | 17,5 | 17,5 | 3,08 | 1,17 |

*measures defined for the ranks of a given factor

Source: own study

The next two places were occupied by economic reasons, but from the viewpoint of the respondents, it was more important to achieve property advantages. The land rent in terms of

¹⁶ The results of the conducted ANOVA Friedman test, i.e. chi square (N = 63, df 4) = 16.95273, indicate the need to dismiss the zero hypothesis at the level of statistical significance $\alpha=0.00197$. Thus, the diverse impact of the factors (diverse objective preference) on the selection and progress of the activities in the form of agricultural enterprises should be assumed. The Kendall level of compliance near 0 (in the study = 0.06727) confirms the diversity of the rank distribution for individual reasons.

price is an important benefit to the people who have obtained ownership of land, particularly since EU integration, which provided a significant rise in the prices of this production factor.

However, with the increase in the proportion of lease, i.e. the use of property not owned by the enterprise, benefits from the changes in its appraisal are reduced. Thus, the differences between the factors defined as “property advantages” and “profitability” were caused mainly by the diverse share in the sample of people managing enterprises with purchased and leased property.

The influence of the community, including society (the family), identified as “place of residence”, found itself in second-last place. The examined entrepreneurs gave the lowest place in the hierarchy to “work”, i.e. the sense of security resulting from a guaranteed workplace. The low significance of this need results from the good preparation of the examined group for the performed profession of an agricultural enterprise manager, since it requires not only extensive knowledge of management and marketing, but also the field of agricultural production. The most frequently parameterised properties allowing such preparation include the level of education and labour tenure in the unit. Two-thirds of the respondents held higher education, while others held at least secondary education. The average period of employment in an examined enterprise was almost 18 years. Because there is a current demand for experienced agricultural enterprise managers, most entrepreneurs would have no problem with employment in other farms, which was expressed in the research.

However, there is a group appreciating the benefits of self-employment, not only in the context of leadership and independence, but also in the hazards resulting from the variability of the labour market. This share can be determined by comparing the number of indications of people considering both factors as parallel, as most important and important (12.7%). This group comprises only a fragment of the answer distribution, while the assessment of dependency requires the recognition of the entire group of both properties.

On the basis of the performed Kendal’s test, it was established that there is a mutual dependency among the ranks of the individual factors, and indirectly among the goals of the agricultural enterprise owners (Table 4).

The highest similarity in rank distribution was observed between “independence” and “work”. For both factors, the level of preference was the most similar, while the correlation strength was average. The correlation between the reasons of running an enterprise due to the residence (“place of residence”) and “work”, as well as “place of residence” and “independence” was also statistically significant. In these two cases, the orientation of dependencies was also similar, but the correlation strength was weak.

Table 4: The level and orientation of dependencies among reasons for running agricultural activities

| Statement | Place of residence | Work | Independence | Profitability | Property advantages |
|---------------------|-----------------------|----------------------|----------------|----------------------|---------------------|
| Place of residence | 1,000 | | | | |
| Work | 0,175 p=0,042 | 1,000 | | | |
| Independence | 0,176 p=0,041 | 0,404 p=0,000 | 1,000 | | |
| Profitability | -0,163 p=0,054 | 0,080 p=0,353 | 0,0750 p=0,383 | 1,000 | |
| Property advantages | 0,023 p= 0,792 | 0,041 p=0,635 | 0,009 p= 0,918 | 0,285 p=0,001 | 1,000 |

Data in the case of the probability of first-type error lower than assumed and below 5% ($p < 0.05$) in black.

Source: own study

The opposite side saw economic objectives, which also had statistically significant and positive dependency. The strength of this correlation was moderate, which was a natural consequence of the aforementioned diversity of the examined sample concerning property

ownership. In contrast to leaseholders, owners obtained additional economic benefits resulting from the change in the market value of the previously purchased land.

The lack of correlation between the economic and other goals should be noted. There were even observations of an opposite distribution of the assessments of the impact of the “place of residence” and “profitability” as reasons for running agricultural activities, and indirectly owner goals. Although statistically insignificant, the negative correlation probably results from the fact that when taking over or organising an agricultural enterprise, the leaseholders often changed their place of residence, i.e. left their native area and community. Thus, migrations of people associated with searching for the optimal means of income were observed.

The conclusion formulated above is confirmed by the strength and direction of interdependencies between the particular characteristics of agricultural enterprises and the motivations behind their owners’ decisions (Table 5).

Table : The degree of correspondence between the particular characteristics of agricultural enterprises and owners’ motives

| Selected characteristics | Place of residence | Work | Independence | Profitability | Property advantages |
|---|---------------------------|---------------------|----------------------|----------------------|----------------------------|
| Proportion of owned land (%) | 0,236 ^{***} | 0,041 | -0,074 | -0,170 ^{**} | -0,097 |
| Manager’s age (years) | -0,081 | -0,053 | 0,011 | -0,082 | -0,170 ^{**} |
| Years worked at the farm | -0,096 | 0,051 | 0,145 ^{**} | -0,060 | -0,250 ^{***} |
| Proportion of people employed in non-worker positions | 0,032 | 0,117 | 0,048 | 0,235 ^{***} | 0,155 ^{**} |
| Technical devices for labour | 0,205 ^{***} | 0,196 ^{**} | -0,014 | -0,144 ^{**} | -0,024 |
| Return on assets (ROA) | 0,137 ^{**} | -0,043 | -0,112 | 0,005 | 0,209 ^{**} |
| Return on property (ROIC) | -0,044 | -0,063 | -0,198 ^{**} | 0,052 | 0,142 [*] |
| Return on equity (ROE) | 0,092 | -0,001 | -0,093 | 0,119 [*] | 0,163 ^{**} |

In cases where the relevance level was $p < 0.1$ but simultaneously was lower than 0.05, it was marked as higher than 0.01^{**},

^a Presented is Tau Kendall’s statistics. In the event of the lack of a statistically-relevant correspondence with the owners’ rationale for conducting agricultural activity, farms’ characteristics were omitted.

Source: own study

A statistically relevant correlation between the proportion of owned land in the agricultural enterprise, and “place of residence”, plus a negative correspondence of this feature to the rationale described as “profitability”, confirm the influence of the form of property management on business goals. Purchasing the land is a strategic decision from the economic point of view since it binds the purchaser to this sector and this way of earning a living. It is even more so for entities with a smaller scope of activity (farms managed by natural persons), which operate within restricted investment options. It is also important because of the choice of living and working environment, as it results in a firmer link between the owner and a given place.

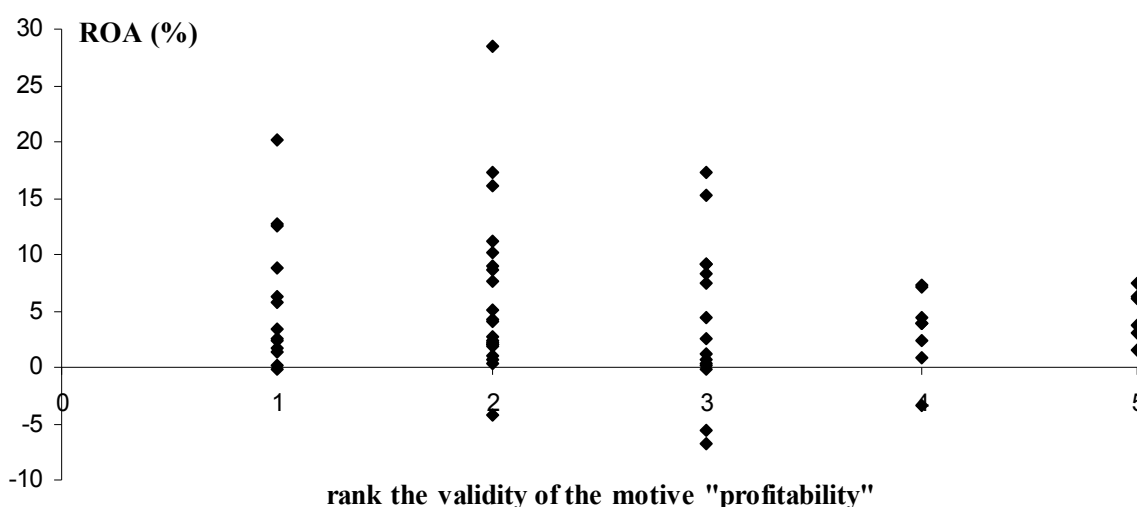
“Independence”, being the objective of farm-owners expressed as pursuing a particular lifestyle and breadwinning, was positively connected with the number of years worked in a given holding. Therefore, this factor is valued i.a. by the former employees of state-owned farms who took advantage of the privatisation process to engage in independent business activity. It is a rationale connected with the owners’ personal traits and their life experience.

Among the motives of a business-economic nature, only “property advantages” exhibited a positive correlation with all financial efficiency indicators, although the correlation was weak. A negative correspondence was found between this factor and the owners’ age and their job seniority in the enterprise. Younger farm-owners tend to be oriented towards long-term goals. With the prospect of longer work at a farm, they were more often willing to postpone the economic profits in time. On the other hand, no statistically relevant link between the “profitability” factor and the remaining financial indicators could have been established,

except for ROE. The rationale behind such a situation is that “profitability”, as an important motivation for conducting business activity, is an insufficient driver for obtaining more favourable financial results. Factors other than the conscious pursuit of “profitability” impact on unit efficiency, and the crucial elements include business environment, access to scarce resources (e.g. good-quality agricultural land), and owners’ orientation towards long-term goals.

During the period of the study, i.e. in 2009, there existed favourable external conditions for agricultural activity, stabilised i.a. with the financial support for farms under the Common Agricultural Policy. The financial results of businesses were substantially impacted on by the ability to obtain various subsidies and extra payments, as a certain stream of income. Agricultural enterprises, as a whole, achieved positive financial results, and only five holdings (7.9% of the community) recorded a loss, which is reflected in their negative ROA (Figure 3).

Figure 3: The value of ROA conflicted with the preference for “profitability” as a justification for conducting activity in the form of agricultural enterprise



Source: own study

The obtained results provided a conclusion that not only the proportion of owned land but also the legal form of farm organisation remains in a statistically relevant correlation with the motive for conducting activity described as “place of residence” (Table 6).

Table 6: The degree of correlation between the legal and ownership status of an agricultural holding and its owner’s motives

| Ownership and legal status | Residence | Work | Independence | Profitability | Financial gains |
|--|-----------|--------|--------------|---------------|-----------------|
| Farms with purchased property managed by natural persons | 0.242*** | 0.044 | 0.116 | 0.045 | 0.187** |
| Farms with leased property managed by natural persons | -0.253*** | -0.009 | -0.108 | 0.206** | -0.004 |
| Private companies with purchased property | 0.058 | -0.083 | -0.078 | 0.052 | 0.171* |
| Private companies with leased property | -0.091 | 0.032 | 0.041 | 0.324*** | -0.155* |

Source and marking as in Table 5.

The survey results indicate that for the owners of companies, with both leased and purchased property, the place of residence does not play an important role, and more importance in respect of the decision to undertake business activity was attached to business considerations. The

companies with leased property, being the largest entities, valued more the perception of the agricultural enterprise as a good option for capital investment, with the impact of this rationale being greater compared with the group of natural persons managing leased property.

6. CONCLUSIONS

The studied economic motives, examined as both current benefits (“profitability”) and those put off over time (“property advantages”) were high in the hierarchy of significance of the reasons for running agricultural activities by the owners of agricultural enterprises. Their actions were consciously driven by economic effectiveness, but with the recognition of other benefits resulting from the fact of being a large farm owner. The sense of independence resulting from self-employment and enterprise management and the possibility of residing and working in a specific environment are the most important declared benefits to the owners of agricultural enterprises.

The conducted study did not conclude that the research hypothesis was false. Thus, the assumption that the increasing the value of ownership is a conscious function of the enterprise goal falls under the category of possible solutions. It is a significant criterion of the evaluation of activities’ results, although it is not the only target of the entrepreneurs, and a motive for running large agricultural holdings. Thus, the multiplication of ownership value should not be examined as maximisation, but in suboptimal categories, i.e. the search for certain desired levels. The owners are ready to give up some economic benefits in favour of other benefits of an emotional or social nature. Due to this, the economic research evaluation of the implementation of the goal defined as increase the value of ownership should rather be examined as the fulfilment of a certain marginal condition, not the search for a system to ensure the highest-possible financial gain and property advantages growth.

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