ESTABLISHMENT OF CONTROLLING MECHANISMS IN ORGANIZATION AND MANAGEMENT PROCESSES BY TOP MANAGEMENT IN AGRICULTURAL ENTERPRISES IN THE REPUBLIC OF SERBIA

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Summary: The establishment of controlling as a mechanism that will contribute to economic support in business decision-making processes and the organization of the management structure established by the top management in agricultural enterprises in the Republic of Serbia is extremely important. The essential improvement of business decisions in agricultural enterprises can be linked to the established controlling mechanisms, which was the focus of the authors of this study. In the study, a correlation analysis was performed, which points to the existence of significance at the level of $p<0.05$, between the size of the organization of the agricultural enterprise and the implementation of controlling. In addition, the authors strengthened the research from the aspect of realistic presentation of the analysis of the obtained business results of the observed large and medium-sized enterprises in relation to the introduced controlling mechanism. It was discovered that there is a different success in the obtained business results of agricultural companies that introduced controlling compared to those that did not introduce controlling in regular operations.

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The value of the obtained Pearson Chi-Square is 11.190a, as well as the fact that p<0.005, which means that we discovered that the introduced form of controlling significantly affects the operations of medium and large agricultural enterprises in the Republic of Serbia.

**Keywords:** controlling, management, income generation.

**INTRODUCTION**

The introduction of controlling in the company's operations should be seen as a continuous process aimed at achieving better business success of the company itself. Top management tries to satisfy its set business goals through the introduced controlling, i.e. those it wants to achieve in the management processes of the companies themselves [1-5].

Controlling should be seen as a process that helps the company's top management to achieve the set or set goals. Controlling as a process can be explained by observing the goals, plans and procedures of control itself, which is carried out in companies.

The basic setting of the problem that is imposed on the top management is the setting and definition of business goals. These are general goals that are imposed in the conditions of existence of control and management in companies [6-9].

The goals that are set before management are usually financial, that is, the achievement of business results that are viewed from a financial point of view [10-12]. In addition to the business goals observed in this way, there may also be non-financial goals set by the top management: markets, processes, people, but also the production organization as a whole [13-15].

The manager of a manufacturing company in particular, and therefore also of an agricultural company, defines goals and priorities in the process of developing business plans. In such conditions, the top management makes a plan on how to achieve the set goal of the company's operations. In the mentioned conditions, it is necessary to introduce a control system, the highest level of which is certainly controlling, which includes control of operations, systems, workers, processes in the company with the aim of achieving the most favorable business results of the company's operations.

In addition, the establishment of a control system in agricultural enterprises should be seen as a system for improving management decision-making by top management, and in order to achieve this, it is necessary to establish business control that is based on real documents, which is of particular importance for the organization of business in agricultural enterprises [16-17].

Controlling is the process of observing how the set goals of top management are achieved. Therefore, controlling is a process that continuously takes place within the observed flow, which is described in three steps (goals, plans and control).
For the purposes of this study, the authors observed two forms of agricultural enterprises in order to discover the basic legalities in the issue of impotence and the establishment of controlling. The research was conducted in 110 large and 198 medium-sized agricultural enterprises in the Republic of Serbia.

Namely, a survey was conducted during January 2023 in the mentioned 308 companies with the aim of top management filling in data on whether they have introduced controlling as a system for establishing control in regular business or not.

The next field of research was to observe the operations of the surveyed 308 companies from the field of agriculture in relation to the achieved results of operations in relation to established controlling as a form of control in agricultural enterprises.

**THE BASIS FOR THE ESTABLISHMENT OF CONTROLLING IN LARGE AND MEDIUM-SIZED AGRICULTURAL ENTERPRISES IN THE REPUBLIC OF SERBIA**

The presentation of the basis that enables the establishment of one of the most important forms of control in the entire operation of an agricultural enterprise depends on the establishment of controlling.

The observation was carried out in relation to two ordinary enterprises, namely large and medium-sized agricultural enterprises in Republic of Serbia.

The authors systematized the presentation of the research results in Table 1.

Table 1. Presentation of the application of controlling in large and medium-sized enterprises in Republic of Serbia

<table>
<thead>
<tr>
<th>The form of organization of an agricultural enterprise</th>
<th>An agricultural company that introduced controlling into regular operations</th>
<th>The agricultural enterprise has not established controlling in its operations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Big companies</td>
<td>82</td>
<td>40</td>
<td>122</td>
</tr>
<tr>
<td>Medium Enterprises</td>
<td>28</td>
<td>158</td>
<td>186</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>198</td>
<td>308</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations
CORRELATION ANALYSIS OF THE RELATIONSHIP OF THE SIZE OF THE AGRICULTURAL ENTERPRISE AND THE INTRODUCED CONTROLLING IN REGULAR BUSINESS BY THE TOP MANAGEMENT

The authors observed the size of the agricultural company and the introduced controlling in the regular operations of top management of the aforementioned companies with the aim of discovering the existence of a statistically significant relationship between the size of the organization and the implementation of controlling in their actual operations.

Correlation was calculated based on the Phi coefficient for dichotomous variables. The test results are shown in Table 2.

<table>
<thead>
<tr>
<th>Description</th>
<th>Variables</th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal</td>
<td>Phi</td>
<td>.159</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>Cramer’s V</td>
<td>.159</td>
<td>.008</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td></td>
<td>308</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ calculations

CHI-SQUARE TESTS AS A REAL ANALYSIS OF THE BUSINESS RESULTS OF OBSERVED LARGE AND MEDIUM-SIZED COMPANIES IN RELATION TO THE INTRODUCED CONTROLLING MECHANISM

The authors performed Square tests with the aim of presenting a realistic analysis of the results that speak about the operations of the observed large and medium-sized companies in relation to the introduced controlling mechanism through the analysis of the realized results of the operations of the mentioned companies.

The obtained research results are presented in Table 3.

Table 3. Presentation of Chi-Square Tests of the achieved results of agricultural enterprises and introduced controlling

<table>
<thead>
<tr>
<th>Used for testing</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>11.190*</td>
<td>2</td>
<td>.004</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>10.486</td>
<td>2</td>
<td>.005</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>6.838</td>
<td>1</td>
<td>.009</td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>308</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ calculations
**DISCUSSION**

After displaying the obtained results in Table 2 and based on the obtained results of the correlation coefficient $\Phi = 0.16$, it can be seen that there is significance at the level of $p<0.05$. Essentially, it can be observed that there is a statistically significant relationship between the size of the agricultural enterprise organization and the implementation of controlling. Essential observation was made between two forms of introduced and non-introduced controlling in the regular operations of large and medium-sized agricultural enterprises.

Based on the obtained results in Table 3, it can be seen that the value of Pearson Chi-Square is 11.190a, as well as that the value is $p<0.005$, which means that the introduced form of controlling influenced the different operations of medium and large agricultural enterprises. Essentially, it can be said that controlling affects at least one of the forms of companies that differ in size, that is, within the analyzed groups.

There is a significant difference in the application of controlling mechanisms in agricultural enterprises, which are different in size. In large companies, controlling is most often applied around 75%, while medium-sized agricultural companies apply controlling with approximately 25%, which can be seen in the presentation of the obtained results in table 3, regardless of the uneven number of surveyed samples.

**CONCLUSION**

The author's research shows that there is great importance in the application of controlling. The introduced controlling can essentially direct the business of an agricultural company in the right direction, that is, it can ensure better business in the future for companies whose top management decided to introduce controlling. The first conclusion reached by the authors of the paper is that the size of the agricultural enterprise affects the implementation of controlling. Another conclusion would be that there is a significant difference in the application of controlling mechanisms in relation to the size of agricultural enterprises. We discovered that controlling is most often applied to large companies and that is about 75%, while medium-sized agricultural companies apply controlling with approximately 25%, which affects the overall operations of the observed companies. Also, as a final conclusion, it can be said that agricultural companies that have introduced controlling in their regular operations achieve better business results.
REFERENCES


USPOSTAVLJANJE MEHANIZMA KONTROLINGA U PROCESIMA ORGANIZACIJE I UPRAVLJANJA OD STRANE TOP MENADŽMENTA U POLJOPRIVREDNIM PREDUZEĆIMA U REPUBLICI SRBIJI

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Sažetak: Uspostavljanje kontrolinga kao mehanizma koji će doprinositi ekonomskoj pratnji u procesima poslovnog odlučivanja i organizaciji upravljavčke strukture koju uspostavlja top menadžment u poljoprivrednim preduzećima u Republici Srbiji je od izuzetne važnosti. Suštinsko unapređenje poslovnih odluka u poljoprivrednim preduzećima može se dovesti u vezu sa uspostavljenim mehanizmima kontrolinga, što je bilo u fokusu autora ove studije.

U studiji je urađena korelaciona analiza koja upućuje na postojanje značajnosti na nivou p<0.05, između veličine organizacija poljoprivrednog preduzeća i implementacije kontrolinga. Osim toga, autori su uradili osnaženje istraživanja sa aspekta realnog prikaza analize dobijenih rezultata poslovanja posmatranih velikih i srednjih poljoprivrednih preduzeća u odnosu na uvedeni mehanizam kontrolinga. Otkriveno je da postoji različita uspešnost u dobijenim rezultatima poslovanja kod poljoprivrednih preduzeća koja su uvela kontroling u odnosu na ona koja nisu uvela kontroling u procese redovnog poslovanja.
Vrednost dobijenog Pearson Chi-Square iznosi 11.190, kao i to da je vrednost p<0,005, što znači da smo potvrdili da uveden oblik kontrolinga bitno utiče na poslovanje srednjih i velikih poljoprivrednih preduzeća u Republici Srbiji.

**Ključne reči:** kontroling, upravljanje, ostvarenje prihoda.