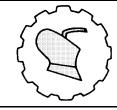
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# THE IMPORTANCE OF THE APPLICATION OF INTERNAL CONTROL IN THE PROCESSES OF SECURE FINANCIAL AND GENERAL MANAGEMENT IN AGRICULTURAL ENTERPRISES IN REPUBLIC OF SERBIA

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**Summary:** A country in transition, like the Republic of Serbia, needs to create conditions in which it will be possible to structurally improve the management process in a large number of heterogeneous companies. In this study, the authors emphasized the importance of encouraging the improvement of management through the practical application of internal control in agricultural enterprises. Comparative comparisons were made between two forms of established internal control in agricultural enterprises with the aim of discovering differences on that basis. Then they performed an additional analysis of the form of internal control in relation to the three levels of introduced internal control based on the intensity of introduced internal control in the regular business processes of the mentioned companies.

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The third and largest contribution of the author in the study stems from the observation of the mentioned introduced internal control and the achieved business results in the form of realized income at the end of the business year.

The results obtained by the authors of the study are such that the obtained value of the Chi-square test is 6.281, i.e. p<.05, which proved that the use of the form of internal control by intensity affects the amount of income achieved in agricultural enterprises, i.e. the establishment of internal control is important for making valid management decisions by top management.

Keywords: internal control, management, income generation.

#### INTRODUCTION

Internal control in the organization of agricultural production has a role that increasingly takes the place of an assistant in terms of strengthening the decisions made by the top management of the company.

This type of organization in companies includes the complete business where the internal control function is apart from the management function and with elements of advisory activity, primarily top management, but also other management structures in the company [1-5].

Internal control includes the control of all parts of the company, it is essentially determined to create and contribute to raising liquidity, business efficiency, raising the success of factors such as productivity, efficiency and effectiveness as well as maximizing business efficiency [6-8].

Internal control can contribute to increasing work safety for small and growing businesses, but what is even more important for the work and business of agricultural enterprises [9-10].

Through the work of internal control, there is a significant increase in security in business and the establishment of controls and monitoring of the results of business activities. In this way, the overall security of the operations of the mentioned companies is achieved, which is the key to successful operations [11-13].

In addition, the reporting that management receives on a daily, weekly or monthly basis contributes to making better business decisions, and it is fundamentally based on valid business documentation [14-15].

### APPLICATIONS OF INTERNAL CONTROL MECHANISMS IN AGRICULTURAL ENTERPRISES IN THE REPUBLIC OF SERBIA

After the decision of the top management to introduce an internal control mechanism into the regular operations of the company, it is possible to analyze the application of internal control mechanisms in agricultural companies in the Republic of Serbia, with the aim of strengthening the views of the validity of introducing it into the regular operations of the company.

## APPLICATION OF LARGE AND SMALL INTERNAL CONTROLS IN AGRICULTURAL ENTERPRISES

The research was conducted in 278 surveyed internal controls, namely: 54 large internal controls in companies that are primarily engaged in agricultural production and 224 medium internal controls. Large internal controls included 4 controls during 2022, while medium internal controls included 2 controls during one calendar year. The form of internal control included three levels: low, medium and high level of internal control in companies.

The authors provided an overview of performed and unperformed large and medium internal controls in agricultural enterprises in Table 1 and Table 2.

Table 1. Overview of completed and uncompleted long internal controls in agricultural enterprises

A form of internal control by intensity	Apply internal control mechanisms		Failure of internal control mechanisms		Total	
	No.	%	No.	%	No.	%
Low level of performed internal control	4	25	12	75	16	100
Medium level of performed internal control	10	76,92	3	23,08	13	100
High level of performed internal control	20	80	5	20	25	100
Total	34	62,96	20	37,04	54	100

Source: Authors' calculations

Table 2. Overview of performed and not performed Intermediate internal controls in agricultural enterprises

A form of internal control by intensity	Apply internal control mechanisms			of internal echanisms	Total		
	No.	%	No.	%	No.	%	
Low level of performed internal control	12	13,65	76	86,35	88	100	
Medium level of performed internal control	68	80,95	16	19,05	84	100	
High level of performed internal control	16	30,77	36	69,23	52	100	
Total	96	42,86	128	57,14	224	100	

Source: Authors' calculations

## TESTING THE RELATIONSHIP OF THE FORMS OF INTERNAL CONTROL ACCORDING TO THE INTENSITY OF THE ESTABLISHED INTERNAL CONTROL MECHANISMS IN AGRICULTURAL ENTERPRISES AND THE AMOUNT OF INCOME ACHIEVED

The relationship between the form of internal control and the intensity of established internal control mechanisms in agricultural enterprises and the amount of income achieved can be determined based on the testing done by the authors using the Chi-square test.

After the test, the authors presented the test results in Table 3. The results were presented in order to determine the relationship between the form of internal control by the intensity of the established internal control mechanisms in agricultural enterprises and the different amounts of income they achieve.

Table 3. Results of the Chi-square test, the realization of the use of forms of internal control according to the intensity of established internal control mechanisms

in agricultural enterprises and the amount of income

Obtained results	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.065a	1	.008	(2 sided)	(1 sided)
Continuity Correction <sup>b</sup>	6.281	1	.012		
Likelihood Ratio	7.092	1	.008		
Fisher's Exact Test				.010	.006
Linear-by-Linear Association	7.040	1	.008		
N of Valid Cases	278				

Source: Authors' calculations

#### **DISCUSSION**

The results obtained are such that one can see the existence of a clear difference in the number of implemented large internal controls in agricultural enterprises. Namely, 34 internal controls were implemented, which is about 63% compared to 20 that were not implemented, or about 37%.

There are also differences in medium internal controls in agricultural enterprises, which can be seen from the existence of a clear difference in the number of implemented large internal controls in agricultural enterprises. Namely, 96 internal controls were implemented, which is about 43% compared to 128 that were not implemented, or about 57%.

Based on the values in the Chi-square tests, the obtained value is 6.281, essentially p<.05. In other words, the realization of the use of forms of internal control by the intensity of established internal control mechanisms in agricultural enterprises and the amount of income is considerable.

The results show that there is a great dependence between the relationship between the established form of the degree of internal control and the realization of the income realized in the agricultural enterprise.

#### CONCLUSION

The research done by the authors of the study indicates that there are three important conclusions. The first is that there are significant differences in the number of implemented internal controls in agricultural enterprises. Pronounced deviations in the number of performed internal controls are visible both in large and medium-sized internal controls that are carried out in the operations of agricultural enterprises. Large internal controls are essentially small 4 regular process controls in contrast to medium ones which are small 2 controls during one calendar year. The second conclusion is that there are three forms of application of internal control that included three levels of control, namely: low, medium and high level of implementation of internal control in agricultural enterprises. The third conclusion would be that the authors discovered that there is a connection between the form of the established form of the level of internal control and the income generated by agricultural enterprises. Based on the obtained values of the Chi-square test, where the obtained value was 6.281, p<.05, it was confirmed that the use of forms of internal control according to the intensity of established internal control mechanisms in agricultural enterprises and the amount of income is significant, that is, it is important for making valid management decisions top management.

#### REFERENCES

- [1] Popović S. 2015. Implementacija heterogenih rizika u radu interne revizije, Revizor 69/2015. Popović, S., Novaković, S., Đuranović, D., Mijić, R., Grublješić, Ž, Aničić, J. & Majstorović, A. (2017). Application of international accounting standard-16 in a public company with predominantly agricultural activities, Economic Research-Ekonomska Istraživanja, 30(1): pp.1850–1864.
- [2] Radović, M., Vitomir, J., Laban, B., Jovin, S., Nastić, S., Popović, V. & Popović S. 2019. Management of joint stock companies and farms by using fair value of agricultural equipment in financial statements on the example of IMT 533 Tractor, Economics of Agriculture 1. pp.35-50
- [3] Popović, S., Tošković, J., Majstorović, A., Brkanlić, S. & Katić, A. 2015. The importance of continuous audit of financial statements of the company of countries joining the EU, Annals of the "Constantin Brâncuşi" University of Târgu Jiu, Economy Series, Special Issue, pp. 241-246.
- [4] Williams, C. 2011. Principi menadžmenta, Data Status, pp.1-372, Beograd.
- [5] Radović, M., Vitomir, J. & Popović, S. 2021. Impact of internal control in enterprises founded by local self government units: the case of Republic of Serbia, Inzinerine Ekonomika-Engineering Economics, 32(1): pp. 82–90.

- [6] Cantino, V. 2009. Korporativno upravjanje, merenje performansi i normativna usaglašenost sistema internih kontrola, Beograd, Data Status.
- [7] Bojović, R., Popović, V., Ikanović, J., Živanović, Lj., Rakaščan, N., Popović, S., Ugrenović, V. & Simić, D. 2019. Morphological characterization of sweet sorghum genotypes across environments, The Journal of Anim.Plant Sciences, 29 (3): pp.721-729.
- [8] Terzić, D., Popović, V., Malić, N, Ikanović, J., Rajičić, V., Popović, S., Lončar, M. & Lončarević. V. 2019. Effects of long-term fertilization on yield of siderates and organic matter content of soil in the process of recultivation, The Journal of Anim. Plant Sciences. 29 (3): pp.790-795.
- [9] Ugrenović, V., Popović, V., Ugrinović, M., Filipović, V., Mačkić, K., Ljubičić, N., Popović, S. & Lakić, Ž. 2021. Black Oat (Avena strigosa Schreb.) Ontogenesis and Agronomic Performance in Organic Cropping System and Pannonian Environments, Agriculture 2021, 11(1): p.55.
- [10] Topcu, M. & Serap Çoban, S. 2017. Financial development and firm growth in Turkish manufacturing industry: evidence from heterogeneous panel based non-causality test. Economic Research-Ekonomska Istraživanja, 30(1): pp.1758-1769.
- [11] Rodriguez, M., Miguel, Sanchez, L., Cejudo, E. & Antonio, C. 2019) Variety in local development strategies and employment: LEADER programmers in Andalusia. Agric. Econ. Czech, 65: pp.43-50.
- [12] Endaya, K. & Hanefah, M. 2013. Internal Audit Effectiveness: An Approach Proposition to Develop the Theoretical Framework. Research J. of Finance and Accounting, 4(10): pp.92-102.
- [13] Cantino, V. 2009. Korporativno upravjanje, merenje performansi i normativna usaglašenost sistema internih kontrola, Beograd, Data Status.
- [14] Arnautović Ivan, Davidov Tatjana, Nastić Sanda, Popović Slobodan. 2022. Značaj donošenja racionalne poslovne odluke top menadžmenta u poljoprivrednim preduzećima u Republici Srbiji, Poljoprivredna tehnika No.3., str. 1-8.
- [15] Arnautović Ivan, Davidov Tatjana, Nastić Sanda, Popović Slobodan. 2022. Značaj poslovnog odlučivanja top menadžmenta u poljoprivrednom preduzeću koja koriste praktičnu primenu novih pristupa softverskih rešenja it sektora u Republici Srbiji, Poljoprivredna tehnika, No.2., str. 51-57.

#### ZNAČAJ PRIMENE INTERNE KONTROLE U PROCESIMA SIGURNOG FINANSIJSKOG I OPŠTEG UPRAVLJANJA U POLJOPRIVREDNIM PREDUZEĆIMA U REPUBLICI SRBIJI

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*Sažetak:* Zemlja u tranziciji, poput Republike Srbije, treba da stvori uslove u kojima će moći izvršiti strukturalno unapređenje procesa upravljanja u velikom broju heterogenih preduzeća. U ovoj studiji autori su istakli značaj podsticanja unapređenja upravljanja putem praktične primene interne kontrole u poljoprivrednim preduzećima.

Urađena su komparativna poređenja između dva oblika uspostavljene interne kontrole u poljoprivrednim preduzećima sa ciljem otkrivanja razlika po tom osnovu. Potom su autori uradili dodatno analiziranje oblika interne kontrole u odnosu na tri nivoa uvedene interne kontrole po osnovu intenziteta uvedene interne kontrole u procese redovnog poslovanja pomenutih preduzeća.

Najveći doprinos Autora u ovoj studiji proizilazi iz posmatranja pomenute uvedene interne kontrole i ostvarenih rezultata poslovanja u vidu ostvarenog dohotka na kraju poslovne godine.

Rezultati do kojih su došli autori studije su takvi da dobijena vrednost Hi-kvadrat testa iznosi 6,281, odnosno p<.05., čime su dokazali da upotreba oblika interne kontrole po intenzitetu utiče na visinu ostvarenog dohotka u poljoprivrednim preduzećima, odnosno uspostavljanje interne kontrole je bitno za donošenje validnih upravljačkih odluka od strane top menadžmenta.

Ključne reči: interna kontrola, upravljanje, ostvarenje dohotka.

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