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### Control Activity and Monitoring as COSO Framework Elements And Their Impact on the Performance of Entity: Case Study Republic of Kosovo

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research, we have included the measuring instruments used to achieve a realistic and factual result in time for the case of the Republic of Kosovo. For example, in the first dependent variables, we have the "Activity Control" with its instruments such as comprehensive control activity, equality in control activities, and duration of control. Meanwhile, at the second independent variable, we have "Monitoring" with measuring instruments such as the self-assessment questionnaire and verification in the field. Regarding the Activity Control, we have different authors who have researched this variable like (Badara, 2012;, Keasy & Wright,1997;, Tricker, 1994;, Hassan, 2014). As for the Monitoring, like Colbert & Bowen (1996). Hence, the research question is how does Activity Control and Monitoring affect the entity's performance?

To address this research question, we establish the following research hypotheses:

*H<sub>1</sub>: Activity control has an impact on the growth performance in the public sector;*

*H<sub>2</sub>: Monitoring hasn't an impact on the performance of the public sector;*

In order to check the validity of hypotheses, we used primary data through questionnaires where the sample is made up of 400 internal auditors in Republic of Kosovo from the public sector. In addition, we used the instrument variables GMM model, to measure the determinants of performance growth in Kosovo. This study and the results are in accordance with the previous literature from this area. The contribution of this study is threefold: First, this study will have scientific and practical significance for designing more effective policies to increase the efficiency of the work of auditors by identifying key variables. Secondly, the paper will provide evidence and information on the state of auditors in Kosovo. In order to take into consideration some econometrics problem, the study employs a technique IV-GMM model. The evidence provided by this study can be used by policy-makers, leaders, and decision-makers for fair and transparent budget allocation for these Institutions. Third, this research will also be an information tool for each worker and a ground for further research regarding the internal audit in Kosovo. To summarize the econometric result of the IV-GMM model should be summarized as follows: The results show that the activity control, including (comprehensive control activity, equality in control activities and duration of control) have 56% impact on entity performance. Moreover, the results show that Monitoring as a 5th element of the COSO framework, including (the self-assessment questionnaire and verification in the field), in the case of the Republic of Kosovo has an impact 41 % in performance enhancement in public entities. The paper is organized as follows: Section II- Presents the descriptive statistics, Section III-The econometrics modeling, Section IV- the econometrics results and Section V- the Conclusion.

## **Review of literature**

The purpose of this topic it is to measure the impact of two elements of the COSO framework in the case of the Republic of Kosovo also aims to determine the relationship between factors that contribute to the effectiveness of IA works in promoting better transparency and integrity of public and management. This has become interesting topics for study by academics, scholars, and practitioners. Then, all the auditor's characteristics (skills, auditor independence, competencies, professionalism) and others are important because they affect the nature of the audit's assessment both in terms of performance, success, sustainability and auditing survival as a profession. There is a fairly large number of authors who have studied the correlation between these variables that impact the performance of the public sector. Internal Audit effectiveness plays a role in ensuring effective management in public sector Mgbame et al., (2013). Many authors use different methods for estimating the impact of independent variables on dependent variables, different studies have shown different results, which at times are even contradictory. Our research includes two factors that affect the performance growth of public money in Kosovo and six measuring instruments. Such as Activity control and Monitoring. According to

Walker et al., (2003) performance refers to the ability to work efficiently, profitable and respond to environmental and pressure opportunities. In their research audits McCrae & Vada (1997), recommend different ways to improve the subject's performance. That performance is measured by the fact of how effective is the enterprise in using resources to achieve its objectives. But in Kosovo, we do not yet have such research. Vacca, noted that "auditing is an important tool to improve transparency, efficiency and accountability in public administration" (Vacca, 2014: 3). While according to Richard et al., (2001) effectiveness represents the degree to which the internal auditor realizes the intended goals in advance. Van Gansberghe (2005), explains that the effectiveness of internal auditing in the public sector needs to be assessed by the extent to which it contributes to demonstrating efficiency and effectiveness as it sends the demand for improved internal audit and service.

- **Control Activity**

Control activities are policies and procedures that help ensure management directives. They help to take appropriate action to address risks that may hinder the achievement of the entity's objectives. Control activities occur throughout the organization, at all levels and at all functions. Corporate governance is based on a set of attributes, including ensuring accountability for shareholders or stakeholders Keasey & Wright, (1997). Control activities assist and provide the actions needed to address the risks to achieving the objectives of the organization. In line with research conducted by Joseph (2016); Once the control environment and risk assessment within the entity are defined, the next step is control activities, which should not be overestimated by management. We also have Badara's (2012) research which claims to assess the role of internal auditors in ensuring effective financial control at the local government level. The research is based on primary data from 50 questionnaires, and the results of the audit were: Lack of internal staff and inaction by standards, also a low degree of auditor independence.

- **Monitoring**

Internal control systems need to be monitored - a process that assesses the quality of system performance over time. Internal control deficiencies identified through these monitoring activities should be reported upstream and corrective action should be taken to ensure continuous improvement of the Colbert & Bowen system (1996). When it comes to monitoring and evaluation in the case of Kosovo, it is one of the weakest stages of the internal control practice cycle. Monitoring as a process requires continuous and costly effort, expertise, skills, evaluation, and proper leadership management. Monitoring is an ongoing process and requires a qualified administration, as the information received is crucial for the unit / organization. A very important factor in the monitoring phase is information, because it directly affects the motivation of the entities to perform better, as well as to provide qualitative information for the purposes of monitoring and reporting. This is achieved through ongoing monitoring activities, separate assessments or a combination of both. Continuous monitoring is performed during operations. This includes regular management and other actions taken by staff in the performance of their duties. All of the above studies show the factors that affect the performance of the entity, given that different authors have used different models, but for a country like Kosovo, we still do not have one such research. This study will show at one and the same results, almost the same with the countries in the region.

## Descriptive statistics

Command	Rezultat
<i>Breusch-Pagan / Cook-Weisberg test</i>	

<p>Comment: We have the presence of heteroscedasticity, for this fit the IV-GMM model. Because heteroscedasticity measures the variance of independent variables and if variances of these variables are different from each other, then there are elements of heteroscedasticity.</p> <p>Rule: <math>H_0 \neq 0</math> – Homoscedasticity <math>H_1 = 0</math> – Heteroscedasticity</p>	<p>chi2(1) = 3.52* Prob &gt; chi2 = 0.0504 chi2(1) = 1034.66** Prob &gt; chi2 = 0.0000</p>
<p><b>Sargan &amp; Basmann test</b></p> <p>Comment: The instruments used for the IV-GMM model are important and valuable to the model in question.</p> <p>Rule: <math>H_0 \neq 0</math> – Important instrument <math>H_1 = 0</math> – A little important instrument</p>	<p>Sargan,chi2(2)=6.36;(P=0.041)* Basmann chi2(3)=5.22; (P=0.0028) Sargan,chi2(2) =0.5647;(p=0.0452)** Basmann,chi2(3)=0.568;(p=0.0405)</p>
<p><b>Durbin-Wu-Hausman test</b></p> <p>Comment: The instruments in the model are exogenous.</p> <p>Rule: <math>H_0 = 0</math>-Exogenous <math>H_1 \neq 0</math>-Endogenous</p>	<p>Durbin,chi2(1)=2.13;p=0.0235)* Wu-Hausman F(1,332)=1.208(p=0.0229) Durbin,chi2(3)=2.56(p=0.0138)** Wu-Hausman F(1,184)=5.284,(p=0.02)</p>

\* Activity Control, \*\* Monitoring;

Table:1, Source: Author's Calculation

From the table above, testing the above three tests, it is verified that the model used is correct and the results reflect a realistic situation in the Republic of Kosovo. As independent variables used to describe the dependent variable, in our case performance growth include the implementation of Activity Control and Monitoring like elements the COSO framework.

## Econometrics Modelling

Following *Sargan (1958)*, *Davidson & MacKinnon (1993)* and *Greene (2000)* where the econometric model for the performance growth is:

$$PG^1 = \beta_0 + \beta_1 Z_{1+n} + \beta_2 Z_n + \varepsilon_{PKM} \quad (1)$$

Vector  $\beta_0$  contains the variable that is supposed to impact the PG, being it Control Activity and Monitoring. While  $\varepsilon_{PKM}$  is a probabilistic component. Also, we have measured the impact of independent variables along with their instruments in performance growth with the scale of 1 to 5, as a result of the first equation we use the IV-GMM model.

$$PG = \beta_0 + 0.56Z_{1+n} + 0.41Z_{1+2n} + \varepsilon_{PKM} \quad (2)$$

Comprehensive control activity ( $Z_1$ ) = 0.24	The self-assessment questionnaire ( $Z_1$ ) = 0.22
Equality in control activities ( $Z_2$ ) = 0.32	Verification in the field ( $Z_2$ ) = 0.25
Duration of control ( $Z_3$ ) = 0.24	

Table 2, Source: Author's Calculation

<sup>1</sup> The performance growth

$\beta_0$ - Constant;  $\beta_1Z$ - Activity control,  $\beta_2Z$ - Monitoring; Vector  $Z_n$  –contains measuring instruments that are supposed to affect the work of internal control; While  $(\epsilon_{PKM})$  is a probabilistic constituent.

## Econometrics result

In this section, we will see definitive results in increasing performance in the public sector. With the help of the IV-GMM model, we have achieved these results:

Source	SS	Df	MS
Model	313.0	5	62.60
Residual	19.46	396	0.058
Total	332.5	400	0.8717

**Number of Ob = 400**  
**F (1,344) = 1061.44**  
**Prob>F = 0.0000**  
**R-squared = 0.9415**  
**Adj R-squared = 0.9406**

Enhancing Public Sector Performance	Coef.	Std. Err	T	P>  t
Activity control	0.564	0.1453	3.87	0.0021
Monitoring	0.411	0.1912	2.15	0.0120
_cons	0.134	0.7505	4.45	0.0500

Table 3, Source: Author's Calculation

Also, realizing the common regression from the sample (n) = 400, we see that all independent variables have an impact on the dependent variables. All independent variables together have an impact on the dependent variable of about 94%. With 95% confidence level and significance level ( $\alpha$ ) = 0.05 we can say that independent variables are within the permissibility limit. To verify the accuracy of the responses we have, we realized and testing data reliability (Cronbach Alpha), which in our case is a = 0, 77 for more details, can be seen the result as follows:

### Reliability Statistics

Cronbach's Alpha	N of Items
.7714	2

Table 4, Source: Author's Calculation

If we look the resultant of effects ordered IV-GMM model, we see that we have the result of regression with these answers: From the results of independent variables together with the measuring instruments, we observe that in the correlation between these variables is 94%. An important role in these tests has and measuring instruments. How accurate are the measuring instruments, best shows the result from Cronbach's Alpha test with 77% confidence level. Also, to show that the model used (IV-GMM model) is correct and to measure the validity of the instruments, then we have performed three (3) types of tests for each independent variable like Breusch-Pagan test, Sargan & Baumann test, and Hausman test. While the overall impact of the independent variable in our case "Activity control" has an impact on the growth performance in the public sector by about 56% following these measuring instruments: "Comprehensive control activity", has an impact of about 0.24%, being followed by "Equality in control activities" with a 32% impact and "Duration of control" with 24%. Also, in according with the literature review as well the control environment, as defined by the organization's administration, defines the tone of an institution and influences the awareness of its employees Whittington & Pany, (2019).

Corporate governance represents the system by which controlled companies are run Cadbury's (2000). Control from the aspect of corporate governance includes notions of compliance, accountability, and transparency MacMillan .et al., (2004). Auditing affects the importance of reviewing the achievement of effective internal control Armor, (2001). On the other hand, Wallace & Kreutzfeldt, (1991) analyzed the control environment in different companies, as one of the elements of the COSO framework. And they concluded that the companies that paid attention to the control environment were more competitive, more regular, more profitable and more liquid. In their study, Sarens & Abdolmohammadi, (2011) confirmed that the characteristics of the control environment (eg, ethics development, level of awareness of the importance of control, and the existence of risk) are closely related to the role of the internal auditor and influence the scope of responsibilities for risk management. Abdo & Feghali, (2017) attempted to look at the impact of COSO on Lebanese firms. And they came to the conclusion that the COSO framework has a positive impact on internal control in public institutions. The sample consisted of 225 interviewers and the questions were aligned with the Liker scales. The control environment is the basis for all other components of internal control, which gives discipline and structure. It refers to the actions, policies, values, and styles of management that influence and set the tone of the day-to-day activities of organizations. For this in accordance with the revision of the literature and the evidence provided by our statistical data, we accept, Hypothesis 1: Activity control has an impact on the growth performance in the public sector. While the overall impact of the independent variable in our case "Monitoring" has an impact on the growth performance in the public sector by about 41%. Following these measuring instruments: "The self-assessment questionnaire ", has an impact of about 22%, being followed by "Verification in the field " with a 25%. Also, in accord with the literature review like as according to Radcliffe, (1999), risk assessment with the goal of minimizing and controlling also helps the organization to reduce potential losses while improving the quality of an organization's operations and services. While Kaya, (2017) has aimed at analyzing the degree and effectiveness of internal control as well as ERM and exploring their value creation link. It came to the conclusion that, in addition, the Integrated monitoring framework is a feasible and appropriate framework for designing, implementing, conducting and evaluating the effectiveness of internal control and reporting. Theofanis et al. (2011) emphasize that internal audit is vital inefficient risk management and consequently in business survival successfully. For this in accordance with the revision of the literature and the evidence provided by our statistical data, we rejected, Hypothesis 2: Monitoring hasn't an impact on the performance of the public sector an accepted alternative hypothesis. All this is achieved by maintaining the confidence interval at 95%.

## **Conclusions**

The main purpose of this paperwork is to provide empirical research of the COSO framework and its elements in the case of Kosovo. The IV-GMM model was used to evaluate relationships

between performance enhancement and the COSO framework. The data survey of 400 employees as auditors, in the public sector, is used to investigate the work efficiency. Due to the lack of data from the Kosovo Agency of Statistics or other relevant institutions, we conducted a survey that included a questionnaire with employees and included almost the entire country. The econometric result of the IV-GMM model should be summarized as follows: The 3th element of the COSO framework called "Control activity" has an impact on in-creasing public sector performance by about 56% in the Republic of Kosovo. Whereas in terms of measuring instruments, the " Equality in control activities " in the workplace has a higher impact, followed by " Duration of control ". For this we have accepted the first hypothesis. While in relation to the second hypothesis that "Monitoring" doesn't have impact in performance of the entity, the results show that in the case of the Republic of Kosovo in the public sector this indicator is not sufficiently high. It has an impact of only 41% on the overall performance of the entity. And although we have ac-cepted the second hypothesis in our case, we recommend that the competent au-thorities in this field should work harder. These results can be useful for policies in the public sector and for employers at large because the research can be an information tool for each worker and a ground for further research regarding the audit in Kosovo.

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