

# Study on the Factors Affecting the Assessment of Internal Audit in the Public Sector

**Plamena G. Nedyalkova**  
Department of Accounting  
Faculty of Finance and Accounting  
University of Economics-Varna  
Varna, Bulgaria

## Abstract

*The assessment as a practical activity never remains isolated from the influence of a number of external and internal factors for the organization itself in the public sector. The uncertain conditions under which the entire evaluation process is developed are prerequisites for the change of assessment methods, assessment criteria and the assessment basis. In control practice, the change of the assessment process is a prerequisite for changing the relationship between internal and external audit. Responsibility for the interaction between internal and external auditors is both the Head of Internal Audit, but also the Audit Committee and the management of public sector organizations.*

**Keywords:** factors, assessment, internal audit, public sector

## 1. Introduction

When changing assessment activity under the influence of various factors, the possibility of overduplication of internal and external assessment activities should be observed and eliminated. Part of the assessment audit procedures cannot be reperformed by internal auditors. Practice does not exclude cases where such repeated actions shall be performed, but they should be minimized. Otherwise, additional resources are spent and additional time commitment of the auditors in the evaluation process is required. This is a reason to assume that, on the one hand, the scope of the audit activity is not properly defined and, on the other hand, the assessment method is not appropriate. In the case of duplication of assessment activity, it might not be possible to investigate and analyze other objects and issues that are not considered by the internal audit. By examining the content of each particular factor, the prerequisites for its occurrence and its impact on the assessment process and evaluation as a whole have been reached. Ignoring a factor means enabling an appropriate adaptation of a problem in the control environment of public sector organizations.

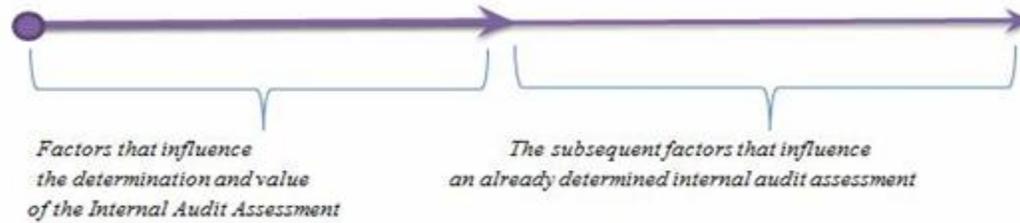
## 2. Material and methods

This article is part of a larger study addressing the assessment of the quality and condition of internal audit in the public sector of the Republic of Bulgaria. The survey was conducted in 25 municipalities in Bulgaria (Aytos, Vratsa, Varna, Vidin, Dobrich, Ispereh, Kavarna, Kardzhali, Lom, Mezdra, Momchilgrad, Montana, Nesebar, Popovo, Samokov, Sandanski, Sozopol, Stara Zagora, Straldzha, Simitli, Troyan, Targovishte, Ruse, Razgrad and Shumen, where internal audit units have been established). For the purpose of this article, the author has used information based on various sources and sociological, documentary and statistical methods have been applied. EXCEL has been used to graph out the results.

## 3. Theory/calculation

Because of the nature of the factors, it is necessary to make a significant distinction between factors that influence the internal audit (as a process) and those that influence the assessment process itself. We assume that the factors influencing the assessment process itself are all those conditions, considerations, prerequisites, and events that have an impact from moment of the assignment of the assessment process until the elaboration of the final assessment of the internal audit quality.

On the other hand, there are also subsequent factors that influence the already determined assessment of the condition of the internal audit, namely all those prerequisites, conditions, events, facts, etc., which have had an impact from the date of approval of the Audit assessment to the date of its official disclosure. Fig. 1 represents the Stage and the sequence of impact of the factors mentioned, namely



**Fig.1 Consequence of the influence of the factors on the value and determination of the internal audit assessment**

According to St. Ilyichovski (2013), factors influencing the overall assessment process are grouped into micro- and macroeconomic factors. Macroeconomic factors include: social factors (the demographic structure in which the enterprise develops, etc.); political factors and events (change in the legal framework, change in the political situation in the country, change in established standards and other events which directly or indirectly affect the development of the whole enterprise) and economic factors (the solvency of the population, the increased intercompany indebtedness, etc.). Microeconomic factors include all those events, conditions and prerequisites that relate to and are specific only for the organization (enterprise) concerned. The microeconomic factors that influence the assessment process for determination of the quality of the control include: the organizational structure of the enterprise; the adopted internal control system (in non-public sector enterprises) and the financial management and control system (in the public sector); the risks that exist or may arise for the enterprise itself; the professional qualities of the employees; the existence of an audit committee, etc.

The factors influencing the final internal audit assessment are regarded as subsequent factors. Their impact is observed from the time of the assessment until its official publication. In the public sector, the publication of the formal assessment of the internal audit condition is the responsibility of the Minister of Finance and a Consolidated Annual Report on Internal Control in the Public Sector will be prepared. The report is annual, according to Art. 20 of the Law on Financial Management and Control in the Public Sector in Bulgaria (2016). The Report on the Internal Audit Condition is part (an element) of the Consolidated Annual Report on Internal Control in the Public Sector. The stages of approval of the final assessment concerning the condition of the internal audit in the public sector follow the steps of the adoption and official publication of the Consolidated Annual Report on Internal Control in the Public Sector, namely:

1. The Minister of Finance will prepare and submit to the Council of Ministers, the Consolidated Annual Report on Internal Control in the Public Sector before 31 May of the following calendar year.
2. Once the Consolidated Report has been adopted by the Council of Ministers (as there is an option: the consolidated report may not be approved and may be returned to the Ministry of Finance, in the case of remarks for the correction of irregularities and inaccuracies are found), it will be presented to the National Assembly and the National Audit Office.
3. The National Audit Office will submit a report on the condition of the financial management and control and internal audit to the National Assembly, as well as an opinion on the Consolidated Report prepared by the Minister of Finance on the condition of financial management and control in the public sector by June 30-Th.

The consolidated annual report on internal control in the public sector in Bulgaria provides summarized information and assessment of the condition of the public sector organizations. This is achieved by observing the requirements of Art. 40, Para. 5 of the Public Sector Internal Audit Act in Bulgaria (2016); more specifically, the heads of public sector organizations are required to submit an annual report on the internal audit activity. The Internal Audit Activity report summarizes the status information of all internal audit units that are within the organization itself.

When the organization consists of several spenders of budget appropriations (e.g. first-level and second-level), the information on the status of the internal audit follows the hierarchical organizational structure. The administrations of the second-level spenders of budget appropriations for which Internal Audit Units have been set up will provide the report on the status of internal audit to the first-level spender of budget appropriations by 31 January of the following year. Then, the administration of the first-level spender of budget appropriations will summarize the information taken from the report of the second-level spender of budget appropriations and will prepare a report by 20 February. Providing a summary assessment of the internal audit of the whole organization (both for the first-level and second level spenders of budget appropriations). The information is provided to the head of the organization. It is his responsibility to review the report and, by 28 February, to submit a summary annual report on the condition of the organization's internal audit to the Minister of Finance.

The timeframe from the preparation of the Consolidated Report to its adoption by the Council of Ministers as well as the deadline (until 30 June) for the National Audit Office to provide an opinion, represent a risk in terms of allowing external intervention in the work of institutions and manipulation of information. It is precisely within the timeframe mentioned when the factors influencing the assessment of the condition of the internal audit have an impact. These factors are of a different nature, both external and internal for Bulgaria. External factors can regard both EU regulatory requirements and regulations, as well as various opinions and critical remarks from European observers on the state of financial control in the country, such as the European Commission, the European Anti-Fraud Office (OLAF), the International Monetary Fund, etc. The internal factors include political developments in the country, the development of scientific and technological progress and the introduction of new industrial technologies in the country, social relations, changes in legal and regulatory provisions, labour productivity, change in important economic indicators such as GNP (gross national product) and GDP (Gross domestic product), change in the basic interest rate, etc.

The assessment made on the basis of a consolidated annual report on the condition of internal audit in the public sector can be very good, good, satisfactory or unsatisfactory. The methodology for determining relevant ratings is presented in the next part of this paper. The factors that influence the assessment are:

1. Having sufficient resources to achieve the organization's strategic goals.
2. Changes in staff numbers and quality.
3. Updating of the risk management strategy.
4. Identifying the risks.
5. The provision of information and the established communication between the different units.
6. Achieving the independence of the internal audit.
7. Properly defined strategic and operational control objectives, as well as sub targets.
8. The audit approach applied.
9. Implementation of an ERM system that ensures the efficiency of managing the individual processes in the organization.
10. Achieving independence and objectivity as key factors of the internal audit to add value.

#### 4. Discussion

Audrey A. Gramling (2012) of Kennesaw State University presented in 2012 an in-depth study on the influence of factors (internal and external) on the internal audit work. The results for the surveyed countries - Turkey and the USA - are compared. The study aims to determine the influence of factors that have a positive impact on the internal audit function for qualitative financial reporting and the management of the organization as well as to achieve its added value. A. Gramling assumes that the positive factors influencing the internal audit in the USA are competence, control over audit activity and assurance of audit work. Positive factors influencing the internal audit in Turkey are competence and control over audit activity. The common understanding between both countries, namely that they take into account internal audit risk, is an important factor influencing audit activity. To examine the influence of factors, Audrey A. Gramling (2012) offers the following regression model (regression model):

$$\text{Dependent Variable} = \beta_0 + \beta_1 \text{Assurance} + \beta_2 \text{Consulting} + \beta_3 \text{WorksOnRisk} + \beta_4 \text{WorksOnControl} + \beta_5 \text{WorksOnGovernance} + \text{Competence} + \text{Objectivity} + \text{Public} + \varepsilon$$

**Where:**

Dependent Variable – dependent variable;

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  – regression coefficients expressing the variation of the mean of the dependent variable, per unit of variation of the corresponding variable, provided that the remaining variables of the equation remain unchanged. In order to make qualitative conclusions about the variation of the mean of the dependent variable, it is necessary to estimate the dispersion  $\sigma^2$  and find the standard deviation  $\sigma$ . Assurance –assurance activity; Consulting –consulting activity; WorksOnRisk –works on risk;WorksOnControl – control work; WorksOnGovernance – governance work; Competence – competence; Objectivity – objectivity; Public – public.The study of the influence of factors on the internal audit in Turkey and the US undergoes a number of computational and analytical actions.

The final results of the applied model of Audrey A. Gramling (2012) are given in Table 1:

**Table 1:** Examination of the impact of internal and external factors on the internal audit process in organizations in the United States and Turkey

**A: Responses from USA**

		Reporting Quality		GovernanceQuality		Adds Value			
Variable	Predictions	Estimate	t-value	Estimate	t-value	Estimate	t-value		
Intercept	-/+	-0.549	-1.26	0.244	1.44	0.953	3.60		
Assurance	+	0.057	1.30	0.035	2.07	-0.059	-2.23		
Consulting	+	0.033	1.05	0.012	1.00	0.046	2.43		
WorksOnRisk	+	0.023	0.51	0.009	0.53	0.076	2.79		
WorksOnControl	+	0.129	1.79	0.040	1.44	0.076	1.75		
WorksOnGovernance	+	0.034	0.81	0.099	6.08	0.032	1.27		
Competence	+	0.073	2.20	0.040	3.11	0.012	0.62		
Objectivity	+	-0.026	-0.95	-0.010	-0.92	-0.021	-1.28		
Public )+		0.133	1.61	0.084	2.61	-0.095	-1.91		
<b>Adjusted R<sup>2</sup></b>		<b>0.210</b>		<b>0.608</b>		<b>0.303</b>			
<b>Observations</b>		<b>85</b>		<b>87</b>		<b>87</b>			
<b>B: Responses from Turkey</b>									
Variable	Predictions	Estimate t-value		Estimate t-value		Estimate	t-value		
Intercept	-/+	1.076	2.01	0.730	2.72	0.846	3.53		
Assurance	+	-0.006	-0.10	0.019	0.62	0.011	0.39		
Consulting	+	-0.020	-0.70	-0.017	-1.22	0.012	0.91		
WorksOnRisk	+	-0.008	-0.13	0.039	1.23	0.053	1.87		
WorksOnControl	+	-0.007	-0.11	0.015	0.48	0.062	2.26		
WorksOnGovernance	+	0.116	2.47	0.095	4.03	0.020	0.96		
Competence	+	0.111	2.07	0.037	1.38	-0.021	-0.87		
Objectivity	+	0.079	-1.54	-0.023	-0.91	0.015	0.67		
<b>Adjusted R<sup>2</sup></b>		<b>0.132</b>		<b>0.355</b>		<b>0.194</b>			
<b>Observations</b>		<b>59</b>		<b>59</b>		<b>59</b>			

The data in Table 1 is summarized on the basis of the three critical criteria examined, for an assessment of the state of the internal audit. These criteria are the quality of the governance (control), the quality of the reporting process and the added value of the organization (the company). The research conducted is aimed at a developed economy like the United States and a developing economy like Turkey. The countries selected for the research differ significantly in terms of the structure and organization of the state power, the established state apparatus, the inequality in the capital markets and the distinct historical stages in the development of the internal audit.

From the data presented, it can be concluded that the applied model for the study of the influence of the factors on the internal audit in the USA confirms the dependence between the factors and the measures of impact. Regarding the quality of internal audit, respondents in the US survey indicated that assurance ( $p < 0.10$ ), WorksOnControl ( $p < 0.10$ ) and competence ( $p < 0.05$ ) were positively dependent on the reporting quality of the internal Audit. For Turkey, it is established that the reporting quality of the internal audit process depends and is determined by the influence of several factors, namely: WorksOnGovernance ( $p < 0.01$ ); Auditors' competence ( $p < 0.05$ ), consulting ( $p < 0.03$ ) and inherent risk ( $p < 0.10$ ). In the examination of survey responses, the respondents have indicated that one of the main weaknesses of Turkey's internal audit is the insufficient competence of internal auditors, unlike the United States. In the US, internal audit is geared towards achieving quality management and quality financial reporting rather than adding value to the organization. In Turkey, perhaps because of the economic and political state of the country, organizations are focused on generating added value. According to statistics, added value (GDP) in Turkey for 2014 is \$ 126.34 billion.

### 5. Results for Bulgaria

According to data of the National Statistics Institute in the Republic of Bulgaria (2014), there are 264 municipalities. Sofia, due to its size, is categorized as an administrative-territorial unit, having the status of a district.

According to data of the Ministry of Finance, as at 31.12.2014, **170 organizations from the public sector** (without enterprises and commercial companies) have internal audit units, as follows:

- 15 ministries;
- 20 first-level spenders of budget appropriations, including the National Audit Office and the Supreme Judicial Council;
- 13 second-level spenders of budget appropriations;
- 122 municipalities, of which:
  - 99 with a budget of over 10 million BGN that are required to set up an internal audit;
  - 12 with a budget of less than BGN 10 million, without the obligation to set up an internal audit unless so decided by the Minister of Finance;
  - 11 with a budget of less than BGN 10 million, without the obligation to set up an internal audit and not subject to a decision of the Minister of Finance to set up an internal audit unit.

In order to implement the model of Audrey A. Gramling, we suggest the following procedure:

1. To determine the arguments (descriptors) of the regression model.
2. To evaluate the parameters in order to prevent material misstatements and errors.
3. To measure dispersion and standard deviation.
4. To determine the standard model error.
5. To examine the significance of coefficients in the regression equation and examine the adequacy of the selected regression model.
6. To perform multivariate testing of the impact of factors on the internal audit and the impact of the audit on added value.

We shall note here that the established control practice in the internal audit in the public sector of the United States and Turkey differs significantly from that in Bulgaria, which is a prerequisite for a number of clarifications on the adaptability of the model to our practice. Differences occur in:

**1. Government Structure** - In the US, the Office of Management and Budget (OMB) is included within the Executive Bureau of the President. It is one of the offices of the Executive Bureau of the President. The main purpose is to produce the President's budget. The Office of Federal Financial Management (OFFM) is one of its components. The President is personally empowered to appoint and dismiss the OFFM's chief officer. The mission and purpose of the OFFM is to promote effective and transparent use of the federal financial resources. The responsibilities of the OFFM include implementing the financial management priorities of the President, establishing government-wide financial management policies of executive agencies and carrying out the financial management functions in accordance with the Chief Financial Officers Act of 1990.

The Office of Federal Financial Management in Bulgaria is divided into two distinct structures, namely Management Controls and Assistance, and Accountability, Performance and Reporting. In Bulgaria, the powers of the Head of State are considerably more limited and determined by the basic law of the country.

From the perspective of our neighboring country - Turkey, the structure of the state power does not differ significantly from that established in Bulgaria. In Turkey, there is also a Central Harmonization Unit for Financial Management and Control at the Ministry of Finance (Mali Yönetim in Kontrol Merkezi Uyumlaştırma Birimi (Maliye Bakanlığı, (2015)).

**2. Regulatory Requirements** - It is stipulated by the laws of the United States that all enterprises (organizations) utilizing federal funds or funds allocated for certain projects and programs shall carry out internal audit. In our practice, only public sector organizations have an obligation to carry out an internal audit, while companies involved in certain operational projects and programs are obliged to keep their accounts accurate and strictly according to the requirements of law. Exceptions are made for the banking institutions, which must comply with the requirements of the Basel Agreements and with Ordinance No. 10 of the Bulgarian National Bank on Internal Control in Banks.

**3. Economic, social, demographic, resources and any other differences between countries.** It can be assumed that these differences are due, on the one hand, to the geopolitical situation, historical breakthroughs and events and, on the other hand, to the peer-psychology. Despite these differences, we accept that public sector organizations for all three countries target:

- Effectiveness and efficiency of their activities, i.e. to achieve the target level of performance of predetermined objectives and tasks.
  - To achieve the reliability of the financial information presented in the financial statements.
  - Compliance with applicable legislation.
  - Protection of assets and state property.

It is precisely because of the above-mentioned similarities between public-sector organizations in Turkey, the USA and Bulgaria that we believe *Audrey A. Gramling's* model can be applied as a model to study the impact of factors on the internal audit process and on the subsequent assessment of the internal audit. However, we recognize that, due to the above-mentioned differences between the surveyed countries, the application of the model as a research approach requires adaptation to our practice. This requires, firstly, the inclusion in the questionnaires that we have prepared for the municipalities participating in the survey of the two independent variables – competence and objectivity, based on two independent scales for self-assessment, which use an 11-point scale from (0) - very low level to ten (10) – very high level. Due to the scarce information available in the Consolidated Internal Control Reports in the public sector, clarification questions are included in the questionnaires to determine the status of the independent variables, such as:

- Level of Competence in Performing the Consulting Service;
- Level of Competence in Performing Assurance Activities;
- Overall Level of Competence;
- Level of Objectivity in Performing the Consulting Service;
- Level of Objectivity in Performing Assurance Activities;
- Overall Level of Objectivity.

To determine the status of the remaining independent variables such as risk work, governance work, determination of the public importance of internal audit, etc., a scale of seven (7) points is applied, where zero (0) is very low level and the maximum level is six (6) points.

The results obtained from the 25 questionnaires of the municipalities: Shumen, Varna, Kavarna, Targovishte, Troyan, Rousse, Popovo, Razgrad, Sozopol, Stara Zagora, Mezdra, Momchilgrad, Dobrich, Sandanski, Samokov, Sredets, Vratsa, Kardzhali, Straldzha, Simitli, Nessebar, Aytos, Lom, Vidin and Ispirih, regarding the independent variables - competence and objectivity are as follows:

**Table 2: Results of the weighting of the independent variables "competence" and "objectivity", according to a study conducted in 25 municipalities**

Indicators	0	1	2	3	4	5	6	7	8	9	10	Total
Level of Competence in Performing the Consulting Service	1	3	2	4	1	1	4	4	2	1	1	25
Level of Competence in Performing Assurance Activities	2	5	3	2	3	2	2	2	1	1	1	25
Overall Level of Competence	-	-	-	2	5	6	4	4	1	1	1	25
Level of Objectivity in Performing the Consulting Service	4	4	3	2	2	2	2	2	2	2	1	25
Level of Objectivity in Performing Assurance Activities	4	5	4	2	3	1	1	2	1	1	-	25
Overall Level of Objectivity	2	2	3	4	2	3	2	2	2	1	1	25

The data in Table 2 represent the opinion of 25 respondents working in an Internal Audit department (unit) of the surveyed municipalities. In terms of the competence for specific consulting services, one of the respondents has determined that the level of such services is very poor. Three of the respondents gave one (1) point and two respondents rated this type of internal audit activity as weak (2). Four have rated it as satisfactory for this type of service, one gave a good assessment to the opportunity to provide specific types of consulting services related to internal audit. The excellent results are in the Municipality of Varna - 10 points. The recipient of the Ruse Municipality has rated the provision of specific internal audit consulting services with nine (9) points. The municipalities of Kardzhali and Sandanski are rated 8 points. The municipalities of Troyan, Samokov, Sozopol and Shumen are assessed with seven points for the provision of specific consulting services. Information about the standard deviation of the studied variables can be derived from the data presented in Table 2. The calculated results are summarized and presented in Table 3 below:

**Table 3: The importance of the independent variable "competence" on the internal audit of the 25 Bulgarian municipalities surveyed**

	Results for Bulgaria:	Results for USA	Results for Turkey	t-stat for comparison between Bulgaria and USA	t-stat for comparison between Bulgaria and Turkey	z-stat for comparison between Bulgaria and USA	z-stat for comparison between Bulgaria and Turkey
	Mean – μ;(standard deviation) [minimum, maximum] N	Mean – μ;(standard deviation) [minimum, maximum] N	Mean – μ;(standard deviation) [minimum, maximum] N				
Level of Competence in Performing the Consulting Service	μ 4,8 (σ = 2,8) [0,10] N =25	μ 7,4(σ=1.9) [2,10] N=85	μ 8,0 (σ=1.8) [4, 10] N=59	-4.5911	-6.1014	-4.2794	-5.1803
Level of Competence in Performing Assurance Services	μ 3,8 (σ = 2,9) [0,10] N =25	μ 8,0 (σ =1.6) [2, 10] N=86	μ 8,5 (σ =1.6) [3,10] N=60	-7.632	-9.249	-6.8116	-7.4964
Overall Level of Competence	μ 5,6 (σ = 1,8) [0,10] N =25	μ 8,0 (σ =1,4) [2, 10] N=87	μ 8,5 (σ =1,5) [4, 10] N=59	-4.3589	-6.3381	-6.0469	-6.9696

The *t* and *z* test compares the results obtained on the level of internal audit competence in the 25 Bulgarian municipalities surveyed using the same indicator for Turkey and the USA. The *Z* test is applicable when the sample size is large and the data is presumed as coming from the normal population from which the variance is known. The *T* test is aimed at assessing hypotheses regarding the equality of the sample medium and the general population. The significance of this method is also revealed in its ability to test hypotheses.

It is statistically valid that the null hypothesis is always the correct hypothesis, while the alternative hypotheses are statements to be proven in a given study. Unlike the *z test*, the *t test* is performed only on the assumption that the probable distribution of the base population is close to normal. Both tests are applied simultaneously in the study due to the fact that there are studies of significant sample size for the United States and Turkey and a less extensive study of a less significant size for Bulgaria. In smaller studies, the confidence interval is constructed in a way similar to large (significant) samples, but instead of the magnitude *z*, the *t* value is examined.

From the data presented in Table 3 it is found that the impact of the competence factor on the internal audit for the United States and Turkey differs from the impact on the internal audit in the public sector for Bulgaria. A significant proportion (48%) of respondents stated that the level of competence of internal auditors was low. Another portion (32%) rated the level of competence of the internal audit in the municipalities as good. Only 20% rate the level of internal auditors as competent and excellent. The *z* and *t* tests confirm the differences between the results obtained in the surveyed countries. The *Z* test is applied to actually test whether the competence of internal auditors in Bulgaria is lower than that of internal auditors in Turkey and the United States. The results are conclusive: *z* - values are - 6.0469 for Bulgaria versus the US and - 6.9696 for Bulgaria versus Turkey. By comparison, the estimate of Turkey's total competence over the US is -2.07. In other words, Bulgaria's overall level of competence is considerably lower (- 3.9769) than that of Turkey compared to the United States. We believe that this data is due to the following facts and circumstances:

1. The surveys for Bulgaria are conducted among the internal auditors of the respective 25 municipalities. The survey is not aimed at external users of the information (National Audit Office, Ministry of Finance, Council of Ministers, etc.) on the state of internal audit for the analyzed municipalities. We consider that the internal auditors, by the answers provided, make a serious self-criticism of their internal work and the state of internal audit.
2. The survey is based on the data provided by 25 municipalities, one of which is based on the minimum number of internal auditors required by the Public Sector Internal Audit Act, namely at least two internal auditors, including the Head of Internal Audit.
3. The survey method reveals the moment and current state of the examined object. It is very difficult to capture past states or to establish future trends in the development of the observed object by this method.

In terms of respondents' perceptions of the impact of the other factors (objectivity, control work, governance work, publicity and assurance) the information is systematized by the questionnaires, based on the mean values of the standard deviation, in order to establish the standard distribution of the factors studied. The information is presented in the following Table 4:

**Table 4: The mean values and the standard deviation of the variables examined**

Variable	Bulgaria		USA		Turkey		t-stat Bulgaria and USA	z-stat Bulgaria and USA	t-stat Bulgaria and Turkey	z-stat Bulgaria and Turkey
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev				
<b>Impact</b>										
ReportingQuality	3.96	2.79	5.08	1.45	5.86	1.27	-2.6656	-1.8964	-4.4163	-3.2155
GovernanceQuality	4.29	2.64	5.47	1.08	6.00	1.04	-3.0062	-2.1403	-4.4077	-3.086
AddsValue	4.42	2.32	6.39	1.00	6.21	0.83	-6.1373	-4.0561	-5.3948	-3.6935
<b>Activities</b>										
Assurance	5.17	2.78	6.41	0.95	6.56	0.69	-3.4993	-2.1504	-3.7616	-2.4221
Consulting	5.04	2.66	5.25	1.31	5.87	1.46	-0.5381	-0.3743	-1.8739	-1.4501
<b>Work areas</b>										
Works onRisk	5.83	2.26	5.87	1.10	6.51	0.68	-0.1213	-0.084	-2.1897	-1.45
Works onControl	6.27	1.77	6.53	0.64	6.50	0.72	-1.1322	-0.7068	-0.8755	-0.618
WorksOnGovernance	5.50	1.47	5.72	1.12	5.93	0.92	-0.7921	-0.6802	-1.6476	-1.3394
<b>Objectivity</b>	6.33	2.24	8.5	1.8	9.1	1.4	-4.9414	-4.3686	-6.9701	-5.6634
<b>Other</b>										
Public	1.99	0.1	0.30	0.46	1.00	0.10	7.2209	11.8369	-0.363	-0.3027

On the basis of the data presented, the following correlation between the observed factors can be indicated:

**Table 5: Correlations of the variables examined**

Variable	Correlations (Spreadsheet14)											
	Marked correlations are significant at $p < .05000N=25$ (Casewise deletion of missing data)											
	Mean s	Std Dev	Var 1	Var 2	Var3	Var4	Var5	Var6	Var 7	Var8	Var 9	Var1 0
Var1	3.666667	2.598773	1.000000	0.969723	0.968574	0.978093	0.952189	0.976788	0.972148	0.933705	0.983042	0.923741
Var2	4.291667	2.645409	0.969723	1.000000	0.970977	0.975648	0.963531	0.975385	0.953947	0.965541	0.985287	0.932663
Var3	4.416667	2.320357	0.968574	0.970977	1.000000	0.987482	0.964575	0.976778	0.984600	0.957101	0.976018	0.938785
Var4	5.166667	2.776715	0.978093	0.975648	0.987482	1.000000	0.966835	0.982003	0.978695	0.950184	0.979724	0.944595
Var5	4.916667	2.483277	0.952189	0.963531	0.964575	0.966835	1.000000	0.963244	0.960758	0.969602	0.953691	0.948802
Var6	5.666667	2.078182	0.976788	0.975385	0.976778	0.982003	0.963244	1.000000	0.977590	0.951675	0.970148	0.941226
Var7	6.541667	1.933215	0.972148	0.953947	0.984600	0.978695	0.960758	0.977590	1.000000	0.937606	0.962537	0.931322
Var8	5.791667	1.744037	0.933705	0.965541	0.957101	0.950184	0.969602	0.951675	0.937606	1.000000	0.948175	0.904893
Var9	6.166667	2.098999	0.983042	0.985287	0.976018	0.979724	0.953691	0.970148	0.962537	0.948175	1.000000	0.931891
Var1 0	1.500000	0.978019	0.923741	0.932663	0.938785	0.944595	0.948802	0.941226	0.931322	0.904893	0.931891	1.000000

Based on the study conducted, it was found that when one of the variables changes, the others also tend to change. Linear correlation is observed, which determines the causal relationship between the factors influencing the internal audit. A correlation coefficient  $r$  ( $-1 \leq r \leq 1$ ) is used to construct the relationship between the factors. It is statistically assumed that "the closer the absolute value of the coefficient is to 1, the stronger the dependence between the dependent and the independent variables" [8]. In correlation dependencies, one more validated fact, which does not need to be proven, but is accepted as an axiom, should be taken into account, namely that when  $r > 0$  and the x dependent variable increases, y increases as well. Conversely, when  $r < 0$  and the x dependent variable decreases, y also decreases.

**6. Conclusions**

Therefore, taking into account all of the above, the following main conclusions and recommendations can be made:

1. Each factor involved in the overall dependence within the determination and assessment of the state of internal audit has its own impact and effect.
2. Their influence on the internal audit is determined by the variables, the ability to measure factors by different measurement units, the predetermined criteria of adequacy of the model, the predetermined standard error of measurement and the coefficient of multiple correlation.
3. The model presented and its testing for application in our practice confirmed the initial hypothesis that there is a strong dependence of the internal audit based on the influence of internal and external factors. The six factors examined (objectivity, competence, control activity, publicity, risk activity and consulting activity) have a linear relationship, with the points of the correlation field grouped around a straight line.
4. There is a positive correlation because the r values are greater than zero (0), i.e. the dependence between the variables is positive. This means that when objectivity,

competence, consultancy, publicity and risk activity are positive, this impact affects the positive development of the internal audit. Conversely, when these factors evolve in a negative direction, this negatively affects the internal audit. The lack of a personnel development policy engaged in audit activity, the favorable opportunities for corruption, the lack of planned development of the organization, frequent structural changes, incorrectly defined responsibilities, inadequate compliance with the consistency of certain regulated procedures - are still circumstances that lead to the negative impact of these factors.

4. Factors influencing the internal audit both in the public and non-public (private) sectors vary by type and specificity. Their diversity is determined, on the one hand, by the specifics of the sector itself, in which the respective organizations (enterprises) are developing. On the other hand, the variety of factors is determined by the particular features of the organization (enterprise) itself.
5. Factors should be considered and examined from two aspects, namely: factors that influence the control process itself and factors that influence the assessment process and the assessment itself (from its determination to the official publication and presentation).
6. Factors affect not only the assessment process, but influence the whole internal audit system as well. The internal audit system changes when the company grows, i.e. new departments are set up, new jobs are created, new technologies are introduced, etc. It is likely that all newly created structural units will not be covered by the current control system. In this case, it is necessary to update the overall internal control system, including the internal audit system and other subcontrol systems.

## **7. Acknowledgments**

The author expresses his gratitude to the Ministry of Finance of the Republic of Bulgaria for the opportunity provided and the information given for carrying out the research. The author also appreciates and expressed his thank to the learned referees for their valuable comments.

## **References**

- Gramling, A. A Descriptive Study of Factors Associated with the Internal Audit Function Having an Impact: Comparisons between Organizations in a Developed and an Emerging Economy, <http://ssrn.com/abstract=1947393>
- Hadzhiev, V., 2003. Economic Statistics, Slavena, p.97
- Ilyichovski, St., 2013, Business Evaluation, S.A "D. Tsenov", p. 25
- Law on Financial Management and Control in the Public Sector - Prom. SG. No 21, of 10 March 2006, amend. SG. No. 42 of 5 June 2009, ..... amend. SG, No 15 of 15 February, 2013, amend. SG. No. 43 of 7 June 2016, amend. SG. No. 95 of 29 November 2016
- Mali Yönetim ve Kontrol Merkezi Uyumlaştırma Birimi (Maliye Bakanlığı) - <http://kontrol.bumko.gov.tr/TR,2182/merkezi-uyumlastirma.html>
- National Statistics Institute in the Republic of Bulgaria - <http://www.nsi.bg>
- Office of Federal Financial Management in Bulgaria - [www.whitehouse.gov/omb/financial\\_fin\\_single\\_audit](http://www.whitehouse.gov/omb/financial_fin_single_audit)
- Public Sector Internal Audit Act in the Republic of Bulgaria, 2015 The Internal Audit Act in the Public Sector - Prom. SG. No 27 of 31 March 2006 ..... amend. SG. No. 43 of 7 June 2016, amend. SG. No. 51 of 5 July 2016, amend. SG. No. 95 of 29 November 2016