

The scope and limitations of external audit in detecting frauds in company's operations

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Abstract

Purpose – This study aims to investigate what are the capabilities and limits of external audit in detecting frauds in companies operating in the territory of the Republics: Serbia, Croatia, Macedonia and Bosnia and Herzegovina.

Design/methodology/approach – In total, 51 certified auditors from Serbia, Croatia, Macedonia and Bosnia and Herzegovina were surveyed to analyze what are the most frequent warning signals of the existence of the frauds auditors encounter during the verification of company's financial statements.

Findings – The study indicated that the auditors of the Republic of Serbia more often encountered groundless overstatement of revenues compared with other countries, while regarding manipulative representation of inventories, the largest mean value and median are still among the auditors of the Republic of Serbia.

Practical implications – Based on the research results, it can be concluded that it is necessary to expand the legal obligation and power of external auditors when, in financial statement auditing, they come to clear findings that indicate fraud. Expansion of external auditors' powers would reduce their current limitations and expand the domain of action.

Originality/value – Limitations in external auditors' work prevent the processing of frauds. However, auditors' analysis of financial statements and pointing to potential irregularities can be a good manner for the early detection and prevention of frauds in company's operations.

Keywords Fraud, Financial statements, External audit, Early signals

Paper type Research paper

1. Introduction

Financial statements contain information used by a number of external and internal stakeholders for making many business decisions. For this reason, financial statements must be true and objective and need to show the real picture of financial situation and earning power of a company. However, due to various manipulations in practice, distorting



of financial statement quality is not rare. Responsibility for the preparation and quality of financial statements belongs to the company's managers and persons responsible for the preparation and presentation of financial statements. To increase customer confidence in the quality of financial statements, it is necessary that independent, external persons, review the statements and give an opinion on their quality. This is precisely the role and task of the external audit. The main objective of financial statement audit is the expression of an auditor's opinion on whether the statements are properly prepared in all material respects, that is to say whether they are true and objective. To express an opinion on the accuracy of financial statements, it is necessary that the auditor is satisfied as to the accuracy of all balance sheet items in financial statements and in the disclosure of other relevant information by the management (Jovković, 2014). As auditors do not check all transactions, but use sampling methods, they cannot provide absolute assurance that financial statements are free of material misstatement (Jovković, 2009). The responsibility of the auditor for the prevention, detection and reporting of fraud, other illegal acts and errors is one of the most controversial aspects of auditing (Gay *et al.*, 1997). First responders are the team that comes into action when a crisis situation is unfolding or is expected to take place. It may seem strange to consider auditors as first responders. As first responders, auditors must take the appropriate actions to identify the fraud, stabilize the situation and prevent continuing resource losses for their client (Smith, 2012).

Manipulations significantly reduce the quality of the information contained in financial statements; therefore, the subject of the research in the paper is the analysis of most common types of manipulations in balance sheets and income statements auditors encountered in the Republics: Serbia, Croatia, Macedonia and Bosnia and Herzegovina during the conduct of the audit process, as well as the types of tests they found most helpful in detecting irregularities. Detecting in which balance sheet and income statement items auditors most often discovered manipulations is an important source of information that can help, not only to facilitate the detection of manipulation, but also to prevent them in the future. The main objective of the research is to investigate what are the capabilities and limits of external audit in detecting manipulations in companies operating in the territory of the Republics: Serbia, Croatia, Macedonia and Bosnia and Herzegovina, as well as acquiring basic knowledge about the types and methods of manipulation in financial statements auditors face in their work.

2. Literature review

The concept of manipulation was dealt with by many authors. "Manipulation is intentional misstatement or concealment of material fact" (Carmichael *et al.*, 1996, p. 72). One of the first to deal with responsibility for manipulation in financial statements was Emile Woolf, citing:

[. . .] the attitude adopted in SAS-140 quite reasonably addresses the responsibility for detecting manipulation to auditors, if they are material to financial statements and therefore directly impact the auditor's report on the truthfulness and fairness of financial statements. It can be argued that manipulation, if any, significantly impacts account balances – which are certainly important for true presentation of financial statements as a whole Woolf (1997, pp. 385-386).

Financial statement manipulation (FSF) is costly for investors and can damage the credibility of the audit profession. To prevent and detect manipulation, it is helpful to know its causes (Wuerges and Borba, 2014). There are various methods for performing manipulation in financial statements: manipulation, falsification, concealment and alteration of accounting records or supporting documents from which financial statements are prepared, misrepresentation in or intentional omission from the financial statements of

events, transactions or other significant information, misapplication of accounting principles and inappropriate classification or disclosure in balance sheet items (Ljubisavljević, 2013).

An important place in the literature, in the field of audit, refers to the question of who are the perpetrators of manipulations in accounting. Obtaining the answer to this question is significant, as efforts toward the prevention and detection of manipulation could be more effective if they were focused on a specific area, i.e. hierarchical position in the company. In other words, the internal control of financial reporting should be directed particularly toward the employees who are prone to manipulation. Many manipulations that have been investigated by the SEC – Securities and Exchange Commission – in the USA were performed by the top management (Jovković, 2013). Under the patronage of the COSO – The Committee of Sponsoring Organizations of the Treadway Commission, a research on the perpetrators of the manipulation “False Financial Reporting: 1987-1997” and “False Financial Reporting: 1998-2007” was carried out. According to the first research, managing directors and chief financial officers (CFOs) were mentioned as perpetrators of accounting manipulations in 83 per cent of cases considered, and in 89 per cent in the second research. False financial reporting was directed to improper revenue recognition (in 50 per cent of cases in the first and 60 per cent in the second research), overstatement of assets and improper capitalization of expenses. The first research included 294, and the second 347 cases of manipulation under investigation by the SEC (Beasley *et al.*, 2010). The importance of truthful financial reporting and the absence of manipulation in companies are emphasized by persons interested in the general state of company’s operations, by current and potential investors. Their interest in quality financial statements is primary in relation to the other users of audited financial statements (Gackowski, 2017).

However, when it comes to manipulations, audit is not the main verification activity. Authors Klikovac and Tušek explored the possibility of a new discipline – forensic audit in manipulation investigation. They defined forensic audit as:

[...] an extensive investigation of accounting and other records conducted by an independent and qualified persons in order to detect manipulation or remove suspicion of the occurrence of manipulation, wherein the evidence is collected, usable in the court case and presented to the court by an examiner if necessary (Tušek and Klikovac, 2013, p. 104).

The quality of financial statements and capabilities of audit to meet the expectations and requirements of both the profession and users were significantly wavered by numerous finance scandals that have escalated at the end of the past and at the beginning of this century. There are many authors who have talked about the major accounting scandals in the past decade. An auditor’s role and responsibility for the discovery of manipulation in financial statements, with the adoption of SOX Act of 2000, was aimed at reducing manipulation in the future (Albrecht *et al.*, 2008). To detect manipulation, a research was carried out on a sample of 76 Greek companies by calculating more than ten financial indicators. The results of the work indicated that the analysis of financial indicators, obtained as a ratio between the items (indebtedness, inventory turnover, net income/revenue, etc.), can be useful for identifying falsified financial statements and the like (Spathis *et al.*, 2002).

The initial failure in detecting manipulation, or difficulties in detecting it, is due to not applying auditor skepticism, stressed Pomeranz. “Detecting manipulation in balance sheet items requires an optimal level of auditors’ professional scepticism” (Pomeranz, 1995, p. 17). Managers are responsible for the prevention and detection of manipulation, but can also be the primary perpetrators of it. The author states that it cannot be expected to provide

absolute assurance that the auditor discovered and identified all material errors. Tort (2008) In addition, the auditors themselves deviate from the requirements of International Standards on Auditing 700-701 in their audit reports, from formal and substantive aspects. The author's research leads to the conclusion that continuing education and practice development of auditors are necessary (Šapina and Ibrahimagić, 2011).

3. Methodology and hypotheses

The research was conducted on a sample of 51 respondents from four countries, namely, the Republics: Serbia, Croatia, Macedonia and Bosnia and Herzegovina. The data were collected by questionnaires. Survey is sent to certify external auditors employed in registered auditing agencies, and they were contacted via e-mail. We contacted more than 200 external audits in the above-mentioned Republics. All respondents are persons who have been performing auditing activities in different positions for a number of years.

Because of the large amount of data in the paper, statistical program IBM SPSS Statistics was used. Descriptive analysis was performed using the SPSS, and as for the tests, we carried out analysis using the *Kruskal–Wallis test* as a non-parametric test, while one-way analysis of variance was used as a parametric test. To collect data, survey method was performed in the paper. The survey contained 16 questions, of which the first two are open-ended questions, while 13 are closed-ended questions in which we used five-point Likert scale (from 1 – hardly ever to 5 – very often). In the last question, the respondents were asked to indicate which of the tests were the most helpful in disclosing irregularities in financial statements. η^2 , which is one of the most frequently used indicators of effect size, shall be calculated for the obtained statistically significant results. In some cases, especially when a sample is large, even small differences observed within a group could be statistically significant. Therefore, by calculating η^2 , the actual effect of differences between groups can be seen. Based on defined goals and subjects of the research in the paper, the following hypotheses of which the research starts are set:

- H1. External audit of company's financial statements, as an independent form of examination, does not lead to successful and constant detection and prevention of manipulations in a company's operations.
- H2. The appropriate use of in-depth tests of transactions is an important method for detecting irregularities in a company's financial statements.

4. Research results

The survey is composed of three parts; the first part that examines whether the auditors in general have encountered some irregularities, and if these irregularities were of material or fundamental significance. The second part of the survey considers whether auditors in their work encountered an unreasonable overestimation, underestimation or manipulation of various balance sheet items (income, expense, assets, liabilities, receivables, cash, inventories and cash flows). The last question in the survey is about the tests that most often helped auditors discover irregularities in financial statements. Table I shows the number of respondents by countries and percentage structure of the total number of surveyed auditors.

Responses to the questions regarding responsibilities of surveyed auditors in a team and their years of work experience have shown that in all the countries, surveyed auditors are mostly in managerial positions in a team and that an auditor's average work experience is approximately 16 years.

Analyzing the responses to the first question: “How often do you encounter irregularities in the process of financial statement auditing?” according to the data obtained, we found that the largest number of respondents (47.06 per cent) said that they often encountered certain irregularities in the performance of the audit process. The rest of the respondents said: occasionally 27.45 per cent, very often 21.57 per cent, while only 3.92 per cent said rarely and hardly ever, as shown in [Table II](#).

The next two questions are to enable the analysis of whether the irregularities, which surveyed auditors noticed in their work, are of material or fundamental significance. Omissions or misstatements of items are material (significant) if they could, individually or together, impact economic decisions that users make on the basis of financial statements ([International Accounting Standard \[IAS\] 8, 2009](#)). Fundamental errors (after revising IAS 8, this concept was replaced with “prior period errors”) are omitted or misstated data from an entity’s financial statements for one or more periods arising from non-use or misuse of reliable information ([International Accounting Standard \(IAS\) 8, 2009](#)). Most of respondents said that they occasionally encountered both materially and fundamentally significant irregularities. In terms of percentage, 52.94 per cent of the respondents gave this response. There are differences in the responses of other respondents. By calculating the arithmetic mean, it was concluded that larger number of respondents more often encountered irregularities that were materially significant, rather than of fundamental significance, as shown in [Table III](#).

Manipulations can be achieved using many elements of financial statements, but the practice has shown that the manipulations of revenues and expenses in income statements are most frequently used in the realization of manipulations in financial statements ([Dimitrijević, 2013](#)).

The next four questions analyzed the situations in which auditors encountered certain irregularities regarding income statement items, i.e. whether they encountered groundless overstatement/understatement of revenues item and/or groundless overstatement/understatement of expenses item. The survey showed that 43.10 per cent of the respondents

Table I.
Structure of
respondents by the
country of origin

Country	No. of respondents	% of the respondents
Republic of Serbia	32	62.75
Republic of Croatia	13	25.49
Republic of Bosnia and Herzegovina	4	7.84
Republic of Macedonia	2	3.92
Total	51	100

Source: Authors

Table II.
Structure of
respondents
according to the
frequency of
irregularities
encountered in the
auditing process

	No. of respondents	(%)	Cumulative (%)
1 – very rarely	1	1.96	1.96
2 – rarely	1	1.96	3.92
3 – sometimes	14	27.45	31.37
4 – often	24	47.06	78.43
5 – very often	11	21.57	100

Source: Authors

stated that they occasionally encountered groundless overstatement of revenues, and 33.30 per cent said rarely. On the other hand, 35.30 per cent of the respondents said they rarely or occasionally came upon understatement of revenues. By comparing the responses, it can be seen that majority of respondents stated they often encountered manipulative presentation of revenues, i.e. their overstatement. By manipulating expenses, the company's management wants to show the best possible image of company's operations, in other words, to reduce or to cover expenses so that the company would seem more profitable and more liquid (Dimitrijević, 2012). As for the expenses, the respondents more often encountered situations in which there were understatements of expenses. About 41.2 per cent of the respondents said they rarely came upon overstatement of expenses, but 45.10 per cent of the respondents responded that they sometimes or often came across overstatement of expenses. Regarding understatement of expenses, 33 per cent occasionally encountered manipulation of expenses, and when we add the answers of the respondents who often encountered understatement of expenses to this percentage, it amounts to 56.5 per cent of respondents. It must be noted that the respondents more often encountered groundless misrepresentation of expenses item rather than revenue item in the performance of the audit process, which can be seen in obtained arithmetic means. Table IV shows the obtained results for manipulative representation of revenues and expenses.

After analyzing income statement items, there are also questions concerning balance sheet items, specifically whether the auditors during the audit of financial statements

	Materially significant irregularities		Fundamentally significant irregularities	
	No. of respondents	(%)	No. of respondents	(%)
1 – very rarely	1	1.96	5	9.80
2 – rarely	4	7.84	10	19.61
3 – sometimes	27	52.94	27	52.94
4 – often	14	27.45	5	9.80
5 – very often	5	9.80	4	7.84
Arithmetic mean	3.35		2.86	

Source: Authors

Table III.
Structure of respondents according to the evaluation of whether the irregularities they encountered in the auditing process are materially or fundamentally significant

	Manipulative representation of revenue				Manipulative representation of expense			
	Overstatement		Understatements		Overstatement		Understatements	
	No. of respondents	(%)	No. of respondents	(%)	No. of respondents	(%)	No. of respondents	(%)
1 – very rarely	4	7.80	8	15.00	6	11.80	4	7.80
2 – rarely	17	33.30	18	35.30	21	41.20	15	29.40
3 – sometimes	22	43.10	18	35.30	16	31.40	17	33.00
4 – often	6	11.80	6	11.80	17	13.70	12	23.50
5 – very often	2	3.90	1	2.00	1	2.00	3	5.90
Arithmetic mean	2.71		2.49		2.53		2.90	

Source: Authors

Table IV.
Structure of respondents according to the evaluation of manipulative representation of revenue and expense items

encountered misrepresentation (manipulative representation) of assets, liabilities and accounts receivable items. Manipulations in balance sheets are directly or indirectly associated with the manipulations of revenues and expenses in income statements and cash flows in cash flow statements. In other words, it is impossible to manipulate individual elements of balance sheet without affecting expenses and revenues (Dimitrijević, 2015). Of the total respondents, 39.22 per cent occasionally encountered manipulative representation of assets and accounts receivable items, and 47.10 per cent of liabilities. Susceptibility to manipulations related to liabilities is even greater if manipulationulent operations can be transferred to balance sheets and income statements. Different liabilities offer different options for manipulating (Milojević, 2010). Despite this, of the three items, the respondents found least irregularities in the liabilities item, and most in accounts receivable item, as indicated by the obtained arithmetic mean. The reason why most irregularities are found in the accounts receivable item could be associated with manipulative overstatement of revenues. In terms of audit, from the aspect of evidence, entries in accounts receivable item are created on the basis of internally created documents (sales invoices) created by a company – audit client. The documents are kept in the company; therefore, the easiness of performing manipulation seems logical as opposed to the entries in the liabilities item created on the basis of externally created documents (purchase invoices). Practice has shown that fictitious revenues are one of the most common forms of manipulationulent financial reporting, which are usually achieved by entering non-existent revenues, entering sales to non-existent customers or entering false sales to existing customers (Jones, 2011). The obtained results for the three balance sheet items are presented in Table V.

Assets, liabilities and accounts receivable are the most common categories of balance sheets that are the subject of manipulations. On the other hand, the other balance sheet items could also be the subject of manipulations; therefore, the following questions served to analyze the possibilities of misrepresentation (manipulative representation) of cash and inventories, as well as cash flows represented in a separate statement. Numerous cases of manipulation in companies all around the world have indicated that cash, as the most liquid form of company's assets, was the subject of frequent misappropriation. Manipulations with cash imply taking cash from the employer, and according to the statistics of the Association of Certified Manipulation Examiners – ACFE, manipulations with cash prevail in the category of appropriation of funds (Singleton *et al.*, 2006). However, this manipulation is difficult to detect when considering a company's financial statements. For these reasons, even 52.94 per cent of the respondents responded that they hardly ever encountered manipulative representation of these balance sheet items, and 43.14 per cent of respondents said rarely. The audit of inventories is the most complex part of the audit process, especially

Table V.
Structure of
respondents
according to the
evaluation of
manipulative
representation of
assets, liabilities and
accounts receivable
items

	Manipulative representation of assets		Manipulative representation of liabilities		Manipulative representation of accounts receivable	
	No. of respondents	(%)	No. of respondents	(%)	No. of respondents	(%)
1 – very rarely	8	15.69	6	11.76	2	3.92
2 – rarely	8	15.69	13	25.49	10	19.61
3 – sometimes	20	39.22	24	47.10	20	39.22
4 – often	13	25.49	7	13.72	14	27.45
5 – very often	2	3.92	1	1.96	5	9.80
Arithmetic mean	2.86		2.69		3.20	

Source: Authors

due to the occurrence of obsolete inventory. It is necessary to determine whether all inventories are registered and whether all registered inventories actually exist, which is often not possible. It should be noted that, according to the legislation and the International Auditing Standards, auditors are required to observe the inventory count. However, although they are required, the auditors are often not in the company at the time of inventory count, which creates great opportunities for manipulations. The research results indicate that even 47.10 per cent of the respondents occasionally encountered manipulative representation in inventories item. Therefore, although cash is more suitable asset for appropriation, in practice, the inventories item is more often manipulated.

Manipulations performed in cash flow statements are related to the manipulations of operating activities. In the opinion of certain scholars, there are four main methods of cash flow manipulations in companies, such as: transferring an inflow from financial activities to an inflow from operating activities, transferring outflows from operating activities to outflows from investing activities, inflating cash flows from operating activities using acquisitions or selling a part of or the whole company and increasing cash flows from operating activities using additional “auxiliary” activities (Schilit and Perler, 2010). Cash flow manipulations are very rare in practice. This fact may be the result of either being difficult to hide these manipulations or being difficult to detect them in the investigation and control of financial statements. This is exactly what the research results indicated, as even 54.90 per cent of the respondents said that they rarely encountered misrepresentation of cash flow item, and 17.65 per cent of respondents said hardly ever and occasionally. All of the above data on the manipulations with the items of cash, inventories and cash flows are represented in Table VI.

Summarized results for all of the aforementioned questions are given in Figure 1. The results show that respondents most often encountered irregularities regarding accounts receivable and inventories, and least often regarding cash. If we consider the items by statements, it is evident that balance sheet items were more manipulated. However, we should not forget that it is impossible to manipulate a certain item in income statement without directly or indirectly affecting the items in other financial statements.

The last question in the survey is about the tests that most often helped auditors discover irregularities in financial statements. They were offered to circle the following answers: sampling tests, in-depth tests of transactions, the tests of weaknesses in internal control/ selected sample and the tests of auditor’s belief confirmation. After analyzing and processing the responses respondents gave to the last question in the survey, it was concluded that the most effective test for detecting irregularities in financial statements is

	Manipulative representation of cash		Manipulative representation of inventories		Manipulative representation of cash flow	
	No. of respondents	(%)	No. of respondents	(%)	No. of respondents	(%)
1 – very rarely	27	52.94	2	3.92	9	17.65
2 – rarely	22	43.14	13	25.49	28	54.90
3 – sometimes	2	3.92	24	47.10	9	17.65
4 – often	–	–	7	13.72	3	5.88
5 – very often	–	–	5	9.80	2	3.92
Arithmetic mean	1.51		3.00		2.24	

Source: Authors

Table VI.
Structure of respondents according to the evaluation of manipulative representation of cash, inventories and cash flow items

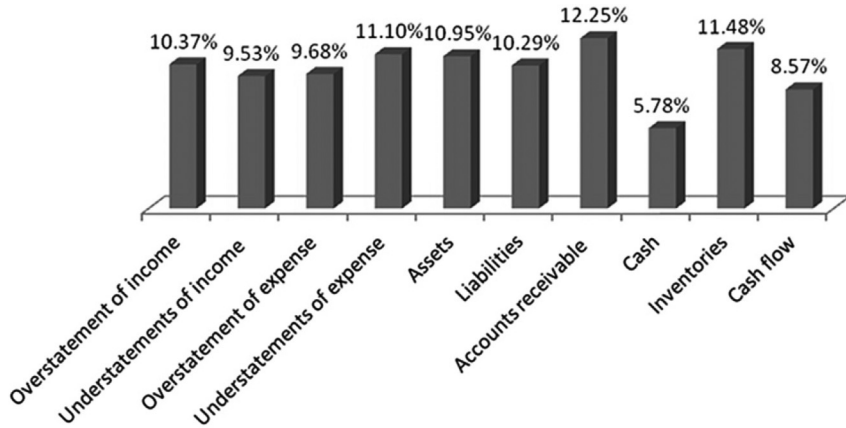


Figure 1.
Percentage share of irregularities by all financial statement items

Source: Authors

the in-depth test of transactions with 44.44 per cent. The tests of transactions deal with the processing of certain transactions in the accounting system, entries or documentation are tested, i.e. whether the transactions are appropriately encompassed, and they are usually conducted before the end of the year, prior to account balance testing (Jovković, 2011). These tests show whether the data is reliable and whether it is necessary to increase or decrease the checks to obtain enough evidence to substantiate auditor's opinion. Sampling tests with 23.61 per cent are the second tests that help detect irregularities in financial statements. Without sampling, auditors would have to check all transactions in the company. Sampling enables the auditor's belief to be founded on sufficient and reliable evidence, which could not be found easy and cost-effective without the selected samples (Jovković, 2010). Figure 2 shows the obtained results for all four tests.

Kruskal–Wallis test was conducted in the research, as a nonparametric test, to examine whether there are differences between different types of manipulations in financial statements that auditors most often encountered when performing the audit process, grouped by countries. This test is used for comparing the results of a continuous variable for three or more groups (Pallant, 2011). As a categorically independent variable, we used a

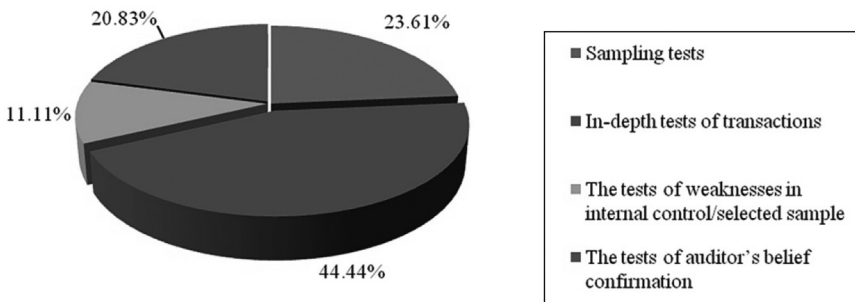


Figure 2.
Frequency of certain tests in detecting irregularities

Source: Authors

country, from which we obtained answers, with its four categories: the Republic of Serbia, the Republic of Croatia, the Republic of Bosnia and Herzegovina and the Republic of Macedonia. As a dependent variable, various types of manipulations were used. Based on these results, the only statistically significant differences are between the types of manipulations between the countries regarding groundless overstatement of revenues and misrepresentation of inventories item. For a statistically significant difference to exist, it is necessary that the significance level is less than or equal to 0.05. The significance level of groundless overstatement of revenues is 0.008, and of misrepresentation of inventories 0.03. This suggests that there are statistically significant differences between countries as concerns these two groups of manipulations. To determine the country in which these kinds of manipulations were carried out most often, it is necessary to compare their mean values of responses ranking and median. The values are presented in [Table VII](#).

Based on the data in [Table VII](#), it can be seen that the highest mean value of ranking, as well as median, is in relation to groundless overstatement of revenues in the Republic of Serbia. This suggests that auditors in the Republic of Serbia often encounter groundless overstatement of revenues compared with other countries. As concerns manipulative representation of inventories item, although there is no large difference between the Republic of Serbia and the Republic of Bosnia and Herzegovina, still, the highest mean and median are among the auditors in the Republic of Serbia.

The same kind of test was repeated, but this time, we used years of experience in auditing as the categories of independent variables. Subsequently, the responses were grouped into three categories. The first group included responses from auditors who have less than ten years' experience in auditing, the second group includes auditors with experience between 10 and 19 years, while the third group consists of auditors with more than 20 years' experience. In this test, the only statistically significant difference was in the responses given by auditors to the question regarding irregularities in inventories item. Concerning misrepresentation of inventories item, the significance level is 0.01. Additional tests were conducted to determine which group of respondents most often encountered irregularities in inventories item, as in the previous case. The test results are shown in [Table VIII](#).

The data in [Table VIII](#) suggest that the group of auditors with experience in auditing of less than ten years most often responded that they encountered misrepresentation of inventories item, in contrast to the auditors of 20 or more years' experience in auditing. There is a possibility that young auditors, with less work experience than other members of the audit team, are mainly responsible for the audit of inventories.

One-way analysis of variance of different groups (ANOVA) was used as a parametric alternative to *Kruskal–Wallis test*. The aim is to show whether there are differences between

Table VII.
Mean values of ranking, average values, and median by different countries regarding responses on groundless overstatement of revenues and misrepresentation of inventories item

Country	Overstatement of revenues		Misrepresentation of inventories	
	Mean values of ranking	Median	Mean values of ranking	Median
Republic of Bosnia and Herzegovina	18.75	2.00	28.25	3.00
Republic of Macedonia	7.75	1.50	5.25	1.50
Republic of Croatia	19.00	2.00	20.15	3.00
Republic of Serbia	30.89	3.00	29.39	3.00

Source: Authors

mean values regarding irregularities in financial statements between countries and to calculate the size of the effect, if there are any statistically significant deviations. This test, as well as the previous one, showed that there are statistically significant deviations of the mean values (at the level of probability $p < 0.05$) between countries regarding questions on irregularities concerning the overstatement of revenues and inventories, but also showed that there are deviations concerning groundless overstatement of expenses.

This test showed that the largest deviations of the mean values regarding groundless overstatement of revenues are between responses given by auditors of the Republic of Serbia and the Republic of Macedonia. As for the misrepresentation of inventories item, there is also a statistically significant difference, and the responses of auditors of the Republic of Macedonia have the largest deviations of mean values in relation to other countries. With a significance level of 0.03, there are also statistically significant differences between countries based on the mean values of auditor's responses to the question of groundless overstatement of expenses. Statistically significant differences regarding groundless overstatement of expenses can also be found between the responses of the auditors from the Republic of Croatia on the one side, and the Republic of Macedonia and Bosnia and Herzegovina on the other. The obtained mean values for all the four countries can be found in [Table IX](#).

To investigate the effect of deviations, it is necessary to calculate η^2 , which is obtained by dividing the sum of the squares of different groups' deviations by the total sum of squares. According to the value of obtained η^2 , the effect size of deviation is determined. [Table X](#) contains data on obtained η^2 for groundless overstatement of revenues, expenses and manipulative representation of inventories item.

By implementing ANOVA of different groups, it was found that there were significant statistical differences within the above-mentioned groups of independent variables. Only after calculating η^2 can it be seen that the real effect of differences between the mean values

Table VIII.
Mean values of ranking and median by different groups of experience in auditing for responses regarding misrepresentation of inventories item

Years of experience in auditing	Misrepresentation of inventories	
	Mean values of ranking	Median
<10	33.07	3.00
10-19	26.35	3.00
20+	18.94	2.00

Source: Authors

Table IX.
Data on mean values by different countries

Country	Mean values of overstatement of revenues	Mean values of overstatement of expenses	Mean values of misrepresentation of inventories
Republic of Bosnia and Herzegovina	2.25	2.00	3.25
Republic of Macedonia	1.50	2.00	1.50
Republic of Croatia	2.31	3.15	2.62
Republic of Serbia	3.00	2.38	3.22

Source: Authors

of the groups is large. Effect sizes of 0.01, 0.06 and 0.14 are termed as small, medium and large, respectively. This confirms that in addition to statistically significant differences, there is also a real large difference between the mean values of the responses of auditors from different countries regarding these three questions.

Practice has shown that the perpetrators of manipulation cannot achieve manipulation unless they manipulate, directly or indirectly, almost all financial statement elements. The easiest to detect are the irregularities concerning revenues and expenses as income statement elements, but practice has shown that all manipulations impact the balance sheet and its elements (assets, liabilities, accounts receivable and capital). All these irregularities do not necessarily mean that a manipulation has been executed, but require further, more detailed control by the competent authority. Therefore, the external audit cannot independently detect manipulations, but can only point to the existence of doubt on manipulation execution. In this way, *H1* "External audit of company's financial statements, as an independent form of examination, does not lead to successful and constant detection and prevention of manipulations in company's operations" is confirmed.

One of the biggest limitations of external audit in the process of detecting manipulations is not being able to thoroughly examine the entire company's operations but doing it on a sample basis. In this way, the external audit cannot give an opinion that will with absolute certainty confirm or deny the existence of manipulation. The research has shown that of the most commonly used tests by auditors in their work (sampling tests, in-depth tests of transactions, the tests of weaknesses in internal control/selected sample, the tests of auditor's belief confirmation) the in-depth test of transactions proved to be the best in detecting irregularities in company's financial statements in all the four countries. In this way, *H2* "The appropriate use of in-depth tests of transactions is an important method for detecting irregularities in company's financial statements" is confirmed. As the survey indicated that auditors in all the four countries faced numerous irregularities in company's financial statements, and that the number of detected and processed manipulations has not decreased for years in all these countries, but in some countries has also increased, it can be concluded that these irregularities, revealed by external audit, are attempted manipulations. For this reason, it is important for the external audit to cooperate very closely with the competent authorities to point out in time to the irregularities that need to be investigated further, which external audit cannot do because of its limitations.

5. Conclusion

Perpetrators of manipulations are capable of numerous methods of manipulations for the achievement of their personal goals. They are always finding new ways to circumvent

	Overstatement of revenues	Overstatement of expenses	Manipulative representation of inventories
(I) Sum of the squares deviations	8.560	7.511	8.204
(II) Total sum of squares	42.588	44.706	48.000
(I)/(II) = η^2	0.20	1.16	0.17

Source: Authors

Table X.
Eta squared for
groundless
overstatement of
revenues, expenses
and manipulative
representation of
inventories item

regulations and various control systems. External auditors are only a part of the total quality control system of financial reporting in addition to internal audit, government bodies and other forms of control (forensic accounting, forensic auditing and manipulation investigators). The biggest problem of the external audit is the scope of their power in work. Although the detection of manipulation is not their priority when analyzing company's operations, upon noticing some irregularities, the auditors do not have legal power to further investigate whether there is a manipulation or it is all a result of unintentional error. However, even pointing out the possibility of certain irregularities to the competent authorities (tax, judicial) is a major responsibility for external auditors in the process of detecting and preventing manipulations in company's operations.

The research revealed that in all four countries, external auditors very often encountered various irregularities when analyzing financial statements, prepared by companies. Analyses indicated that the auditors of the Republic of Serbia more often encountered groundless overstatement of revenues compared with other countries, while regarding manipulative representation of inventories, although there is no significant difference between the Republic of Serbia and the Republic of Bosnia and Herzegovina, the largest mean value and median are still among the auditors of the Republic of Serbia. On the other hand, concerning groundless overstatement of revenues, the largest deviations exist between the mean values of the responses of the auditors of the Republic of Serbia and the Republic of Macedonia. Statistically significant differences regarding groundless overstatement of expenses exist between the responses of the auditors of the Republic of Croatia on the one hand, and the auditors of the Republic of Macedonia and Bosnia and Herzegovina on the other. Also, the analysis indicated that the group of auditors with less than ten years' experience in auditing mostly responded that they encountered misrepresentation of inventories item, unlike the auditors who have 20 or more years' experience in auditing.

Based on the research results, it can be concluded that, in the future, it is necessary to expand the legal obligation and power of external auditors when, in financial statement auditing, they come to clear findings that indicate manipulation. Expansion of external auditors' powers would reduce their current limitations and expand the domain of action. The authors' future research would be directed toward comparative analysis of the effects of changes made after extending the domain of external audit. The contribution of this paper is to show that all of these countries have similar problems in this area, that in the work of external audit there are similar situations that require better legal solutions, with which the external audit and other forms of control will have more authority in detecting manipulations in the company's business.

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