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MANAGEMENT OF FINANCIAL STATEMENTS AUDITING IN THE VISEGRAD GROUP COUNTRIES

Abstract

This paper aims at comparing the management perspectives with the audit conditions in the Visegrad Group (V4) countries (the Czech Republic, the Slovak Republic, Poland, and Hungary) in the following areas: legislation governing the auditing, statutory duty of auditing, mandatory rotation of auditors in public interest entities, requirements on auditors and professional activities, and audit supervision organizations. The paper also tests the hypothesis whether there is a relationship between the size of the accounting entity and the auditor's opinion.

The methodology is based on the statistical analysis of the data using the Chi-square test of independence applied to a sample of 800 randomly selected accounting entities from all V4 countries (200 per each country in question).

The results demonstrated significant differences in the management approaches to financial reporting, especially in the area of the statutory duty of auditing. In addition, quantitative research was conducted to determine whether there is a relationship between the size of the accounting entity and the auditor's opinion. At the 5% significance level, no such dependence has been found for any of the V4 countries, but at the 10% significance level, the dependence has already been proved in case of the Republic of Poland and Hungary.

The practical value of the obtained results is the knowledge of how to manage accounting standards for business entities in the V4 countries, as well as to determine the statutory duty to audit financial statements. These results might be of a special practical importance for business managers, tax authorities, and auditors operating in the EU countries.

Keywords

external audit, management, financial statements, accounting, Visegrad Group countries

JEL Classification

G32, M41, M42

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INTRODUCTION

This paper deals with the management of financial statement auditing in the Visegrad Group (V4) countries. Specifically, it examines the differences in the audit conditions for the V4 countries and studies the dependence of the auditor's opinion on the size of accounting entities. All the V4 countries have been members of the European Union since 2004, which has played an important role in harmonizing their tax-related legislation and had a profound impact on their management aspects (Hejduková & Kureková, 2016; Postula, Klepacki, & Sobolewska, 2018; Rahman, Rozsa, & Cepel, 2018). The harmonization also applies to auditing where the conditions of the auditor's profession are adapted to the EU regulation (Rahman, Tvaronaviciene, Smrcka, & Androniceanu, 2019). One of the

prerequisites that has changed in these countries over the years is the statutory duty of auditing for accounting entities. Thus, some small, medium-sized and all large accounting entities are subject to the statutory audit of financial statements and, hence, should adapt their management of financial reporting accordingly (Stašová, 2019). In most cases, small accounting entities do not have so extensive bookkeeping and many accounting records and assets as large accounting entities. Also, fewer employees are engaged in accounting in small accounting entities and their control system is not so complex. By contrast, a large number of asset items and accounting records and more employees dealing with accounting can be expected in large accounting entities. The control system of large accounting entities is more complex and supported by software tools. Therefore, the question remains whether the auditors' positive statements are more frequent for large or small accounting entities, or whether they do not depend on the size of the accounting entity.

The objective of this paper is to compare the management conditions of financial audit in the Visegrad Group countries (hereinafter referred to as "V4"), i.e. the Czech Republic, the Slovak Republic, Poland, and Hungary, and to statistically verify the hypothesis that there is a relationship between the size of the accounting entity (in terms of Directive 2013/34/48 of the European Parliament and of the Council) and the auditor's opinion.

1. LITERATURE REVIEW

Statutory audit of financial statements (sometimes also called an external audit) constitutes an important element of protection of rights in property (Tene & Quintanilla Castellanos, 2015; Vanstraelen & Schelleman, 2017; Roychowdhury & Srinivasan, 2019). Hinke, Černá, Zborková, and Gezo (2018) examined the benefits of and harm caused by external audit. Based on the questionnaire survey, they have found that the most important benefit for all users is the increase in credibility of financial statements. On the contrary, the most significant weakness is the requirement on audit time, followed by audit costs (Sharma, Tanyi, & Litt, 2016). Bhaskar, Schroeder, and Shepardson (2019) look into the duplication of external audit with internal checks (internal audit) and provide evidence that internal checks are more likely to reveal significant discrepancies. This implies the distinctive main roles of external audit (to increase the reliability of financial statements published by the company management) and internal audit (to ensure the effective functioning of the company based on good organization of work, which is conditional on functional internal organizational structure, economy of operation, property protection, and effective use of funding sources (Kafka, 2009; Naheem, 2016; Raiborn, 2017). The aforementioned types of audit also differ in the user base. While internal audit primarily serves the needs of internal users, external audit is useful to an array of external users – for example, when granting a loan, which is analyzed in

the research of, e.g., Cobo (2017), Asare and Wright (2012), or in donations and when granting subsidies, which is analyzed by Silvestre (2016). However, both types of audits may have an ascertaining or preventive effect against economic crime as is evidenced by the study of Feizizadeh (2018) whose results of multiple regression show that the factor of financial transparency is the most effective. The auditor's duties in detecting and rejecting economic frauds are also addressed by the research of Velentzas, Broni, and Kartalis (2017) whose research is focused on minimizing the risk that the procedures performed by the auditor will not reveal misstatement that exists and that could be serious, either separately or in combination with other misstatements. The quality of audit can be enhanced by using the data analysis. The use of new technologies and software solutions fundamentally changes the attitude to the audit (Tang, Norman, & Vendrzyk, 2017; Boersma, 2018; Frishammar, Richtnér, Brattström, Magnusson, & Björk, 2019). The use of data analysis in auditing is at the beginning, but the near future requires auditors to respond to this trend (Szivos & Orosz, 2014; Zhang, Yang, & Appelbaum, 2015; Ismail, Kiennert, Leneutre, & Chen, 2016; Botez, 2018; Fan, Liao, Li, Zhou, & Zhang, 2019). The opinions of audit firms are dealt with by Yang (2017) who, however, focuses only on listed companies on the Chinese stock exchange. Audit regulation is dealt with by Müllerová and Králíček (2017) who state that in the European Union there are two Directives, which represent the basic tool for audit harmonization: Directive 2014/56/EU and Directive 2013/34/EU.

Although these Directives set out the objectives to be achieved by the member states in auditing, the way how to achieve these objectives is the responsibility of the EU member states. The legislation of the EU member states has thus been evolving within the set limits, which allow for some apparent differences in the conditions of audit activity (Domaracka & Hunyady, 2016; Mendez & Bachtler, 2017; Jindrichovska & Kubickova, 2017). Therefore, further research has focused on the comparison of conditions of auditing activities in the individual V4 countries.

2. THEORETICAL PROVISIONS

Legal regulations and standards, statutory duty of auditing, mandatory rotation of auditors for public-interest entities, requirements on auditors and main activities of professional organizations and audit supervision organizations will be compared.

All information is obtained from public registers and websites of individual accounting entities. Names of public registers and links to them are provided in Table 1.

Table 1. Names of public registers in the V4 countries and links to them

Source: Authors.

State	Name of the register	Link
Czech Republic	Veřejný rejstřík a Sběrka listin Ministerstva spravedlnosti ČR (Public Register and Collection of Documents of the Ministry of Justice of the Czech Republic)	https://www.justice.cz
Slovak Republic	Register účtovných závierok Ministerstva financií Slovenskej republiky (Register of Financial Statements of the Ministry of Finance of the Slovak Republic)	http://www.registeruz.sk
Republic of Poland	Krajowy Rejestr Sądowy (National Court Register administered by the Ministry of Justice of the Republic of Poland)	https://ekrs.ms.gov.pl/rdf/pd/search_df
Hungary	Országos Cégnylvántartó (Company Register administered by the Ministry of Justice of Hungary)	https://www.e-cegjegyzek.hu/?cegkereses

The comparison of the legal regulations and standards governing audit activities in the V4 countries is provided in Table 2, which contains the main (but not the only ones) legal regulations governing the audit activities and the standards and accounting regulations that auditors in all countries must unconditionally know.

Table 2. Comparison of the legal regulations and standards in the V4 countries

Source: Authors.

Country	Legal regulations and standards
Czech Republic	Act No. 93/2009 Coll. on Auditors and amending certain other legislation (the Auditors' Act)
	Act No. 563/1991 Coll. on Accounting
	International Standards on Auditing (including standards of the Chamber of Auditors of the Czech Republic No. 52 and 56)
	Czech Accounting Standards (or International Accounting Standards IAS/IFRS)
Slovak Republic	Act No. 423/2015 Coll. on Statutory Audit and on Amendments and Supplements to Act No. 431/2002 Coll. on Accounting, as amended
	Act No. 431/2002 Coll. on Accounting, as amended
	International Standards on Auditing
	Accounting measures and procedures issued by the Ministry of Finance of the Slovak Republic (or International Accounting Standards IAS/IFRS)
Republic of Poland	the Act of 11 May 2017 on Statutory Auditors, Audit Firms and Public Oversight,
	the Accounting Act of 29 September
	Ministerial decrees
	National Auditing Standards (International Auditing Standards) (+ PIBR standards)
Hungary	National Accounting Standards (or International Accounting Standards IAS/IFRS)
	Act LXXV of 2007 on the Chamber of Hungarian Auditors, the Activities of Auditors, and on the Public Oversight of Auditors
	Act C of 2000 on Accounting
	Hungarian National Auditing Standards (International Auditing Standards)
	Hungarian Accounting Standards (or International Accounting Standards IAS/IFRS)

The main common feature of the V4 legal regulations is the existence of 2 main laws, namely the Auditing Act and the Accounting Act. Greater differences are evident in the statutory duty of auditing (see Table 3).

Table 3. Comparison of the statutory duty of auditing in the V4 countries

Source: Authors.

	Business entity	Total assets	Annual net turnover	Average number of employees	Duty of auditing
Czech Republic	Micro-AE	< CZK 9,000,000	< CZK 18,000,000	< 10	No
	Small AE*	< CZK 100,000,000	< CZK 200,000,000	< 50	Yes
	Medium-sized AE	< CZK 500,000,000	< CZK 1,000,000,000	< 250	Yes
	Large AE**	> CZK 500,000,000	> CZK 1,000,000,000	> 250	Yes
	* Small accounting entities are required to audit financial statements if as at the balance sheet date of the accounting period for which the financial statements are audited and the immediately preceding accounting period they fulfil 2 of the following conditions: assets totalling CZK 40 million; annual net turnover totalling CZK 80 million; the average number of employees is 50 (as for joint stock companies and trust funds, it is sufficient to fulfil 1 condition).				
** Public-interest accounting entities and selected accounting entities are always considered to be large accounting entities.					
Slovak Republic	Business company (cooperative)	> EUR 1,000,000 (CZK 25,750,000)	> EUR 2,000,000 (CZK 51,500,000)	> 30	Yes
	Business company (cooperative) whose securities are traded on a regulated market.				Yes
	Accounting entities for which this duty is imposed by a special regulation (e.g. foundation).				
Accounting entities preparing financial statements under section 17(a) (banks, insurance companies, reinsurance companies, stock exchanges, etc.).					
Republic of Poland	Business company	> EUR 2,500,000 (CZK 64,375,000)	> EUR 5,000,000 (CZK 128,750,000)	> 50	Yes
	Joint stock companies, domestic banks, foreign bank branches, credit-granting institutions, insurance companies, reinsurance companies, pension companies, investment companies, credit unions, payment institutions, brokerage firms.				Yes
Hungary	Companies using double-entry bookkeeping	x	> HUF 300,000,000 (CZK 23,964,000)	> 50	Yes
	Companies using double-entry bookkeeping that do not meet the above-mentioned conditions are exempt from the audit. The exemption does not apply to companies whose tax liabilities that are overdue more than 60 days exceed HUF 10,000,000 (approx. CZK 798,800). The following ones are not exempt from the audit: companies that are subject to statutory audit (e.g credit-granting institutions), credit unions, consolidated companies (parent, subsidiary and joint venture), Hungarian branches of foreign-based companies (not applicable to headquarters in the EU), public-interest entities.				

It is evident from Table 3 that only the Czech Republic has related the conditions of auditing to the categorization of accounting entities under Directive 2013/34/EU. The remaining countries have also taken over the categorization in their legislation but did not relate it to the statutory duty of auditing.

Then, the period for the mandatory replacement of auditors is analyzed, while the basic period for

public-interest entities is based on Regulation No. 537/2014. Member states could keep this basic period and implement it directly in their legislation. Therefore, there was a basic assumption that it would not differ.

It is apparent from Table 4 that all the analyzed V4 countries have chosen the second option from Regulation No. 537/2014, i.e., to implement individually adapted maximum contract duration.

Table 4. Comparison of the mandatory rotation of auditors at public-interest entities

Source: Authors.

V4 country	Basic period	Possibility to extend the period
Czech Republic	10 years	10 years (competitive tendering)
		14 years (joint audit)
Slovak Republic	10 years	10 years (competitive tendering)
		14 years (joint audit)
Republic of Poland	5 years	–
Hungary	8 years – banks, credit-granting institutions, investment companies	–
	10 years – other public-interest entities	

Table 5. Comparison of requirements on auditors in the V4 countries

Source: Authors.

Country	Education	Experience	Examination	Others
Czech Republic	Bachelor's or master's degree	3 years of professional experience as an assistant auditor	12 partial written examinations	Has full legal capacity
				Is of integrity
				Does not carry on any business activity
				Is not in default with any payment due to any office of the Tax Administration and the Customs Administration, or any insurance premiums
Slovak Republic	Master's degree	3 years of professional experience as an assistant auditor (in total 5 years of professional experience in accounting)	3 partial written examinations	Has taken the auditor's oath
				Has full legal capacity
				Is of integrity
				Has no arrears on compulsory health insurance and social insurance contributions for himself/herself and his/her employees
Republic of Poland	Bachelor's or master's degree (not specified)	3 years of professional experience as an assistant auditor (or 2 years as an assistant auditor and 1 year of professional experience in accounting)	Written examination (10 topics) and oral examination	Has no tax arrears
				Has taken the auditor's oath
				Has full legal capacity
				Is of integrity
Hungary	Bachelor's or master's degree (not specified)	1 year of professional experience in accounting	7 partial examinations (both written and oral)	Has a good reputation
				Their Polish is fluent
				Has taken the auditor's oath
				Has full legal capacity
				Is of integrity
				Has completed the training program for auditors

Fewer differences may be found in the requirements on auditors. These are included in the acts on auditing of individual countries, except for the structure and content of the auditor examination, which are determined by internal regulations issued by professional auditor organizations.

Table 5 shows the difference, especially in the structure of auditor examinations. Hungary shows the greatest benevolence in the requirements on auditors, while the Slovak Republic places the highest demands on auditors.

The last analyzed aspect is the main activity of professional organizations and audit supervision organizations. Setting up of professional organizations is a natural process, which occurs in all countries and in most professions. Therefore, professional organizations (chambers) in the V4 countries were already established in the 1990s. These organizations protect the interests of their members and also take care of additional qualification and adherence to quality standards. Chambers of

auditors place great emphasis on control of auditor activity, especially on compliance with auditing standards. By contrast, audit supervision organizations have been established as a result of the adoption and incorporation of Directive 2006/43/EC of the European Parliament and of the Council. Therefore, these organizations have been established after 2008. An overview of basic information on professional and audit supervision organizations is presented in Table 6.

Table 6 demonstrates that the differences among organizations are not only in different years of their establishment, but also in the legal personality that most organizations have (legal persons), only in the Republic of Poland and Hungary, the audit supervision organizations do not have legal personality, as they are part of the Ministry of Finance. Thus, Audit Oversight Commission (Komisja Nadzoru Audytowego) and Auditors' Public Oversight Authority (Könyvvizsgálói Közfelügyeleti Hatóság) are not composed of different bodies, but they consist of several members

Table 6. Basic information about professional organizations and audit supervision organizations in the V4 countries

Source: Authors.

Country	Organization	Year of establishment	Legal personality	Seat
Czech Republic	Chamber of Auditors of the Czech Republic (Komora auditorů CR – KACR in Czech)	1993	Yes	Prague
	Public Audit Oversight Board (PAOB)	2009	Yes	Prague
Slovak Republic	Slovak Chamber of Auditors (Slovenská komora auditorov – SKAU in Slovak)	1992	Yes	Bratislava
	Auditing Oversight Authority (Úrad pre dohľad nad výkonom auditu – UDVA in Slovak)	2008	Yes	Bratislava
Republic of Poland	Polish Chamber of Statutory Auditors (Polska Izba Biegłych Rewidentów – PIBR in Polish)	1992	Yes	Warsaw
	Audit Oversight Commission (Komisja Nadzoru Audytowego – KNA in Polish)	2009	No	–
Hungary	Hungarian Chamber of Auditors (Magyar Könyvvizsgálói Kamara – MKVK in Hungarian)	1997	Yes	Budapest
	Auditors' Public Oversight Authority (Könyvvizsgálói Közfelügyeleti Hatóság – KKH in Hungarian)	2008	No	–

who are appointed by the Minister of Finance.

Furthermore, it should be borne in mind that the audit of public-interest entities (PIE) is usually subject to stricter rules (compared with the audit of other entities), and, therefore, the audit of these accounting entities may show differences in the analyzed countries.

Table 7 clearly shows that all the analyzed countries have a two-tier supervision over auditory activity thanks to the abovementioned Directive. However, there are slight differences in the division of activities between these tiers. The greatest difference is apparent in the division of activities between the organizations of the Slovak Republic. While in the remaining countries, the majority of activities are carried out by a professional organization (the

Chamber), in the Slovak Republic, most of the activities are conducted by the Auditing Oversight Authority. The Slovak Chamber of Auditors provides only continuous education, quality management system, and disciplinary system for other entities. The SKAU has only advisory activities or draws up the proposals for the remaining activities. The Czech Republic, the Republic of Poland, and Hungary have the same division. All other activities for other entities are carried out by professional chambers: from approvals of registrations and administering registries to quality control and disciplinary actions with auditors. For public-interest entities, they only ensure the registration of auditors and audit firms, adopt standards, and provide continuous education. The remaining activities are provided by the audit oversight organizations.

Table 7. Main activities of professional and audit supervision organizations

Source: Authors.

Activities	Czech Republic		Slovak Republic		Republic of Poland		Hungary	
	PIE	Others	PIE	Others	PIE	Others	PIE	Others
Approval and registration of statutory auditors and audit firms	KACR	KACR	UDVA	UDVA	PIBR	PIBR	MKVK	MKVK
Adoption of standards (in addition to regulations of other Member State authorities)	KACR	KACR	UDVA	UDVA	PIBR	PIBR	MKVK	MKVK
Continuous education	KACR	KACR	UDVA	SKAU	PIBR	PIBR	MKVK	MKVK
Quality management system	PAOB	KACR	UDVA	SKAU	KNA	PIBR	KKH	MKVK
Disciplinary system (investigation and administration)	PAOB/KACR	KACR	UDVA	SKAU	KNA	PIBR	KKH	MKVK

3. EMPIRICAL MODEL SETTINGS

In this sub-section, the setting for the empirical model is drawn. The research hypotheses are defined as follows:

H_0 : *There is no dependence between the size of the accounting entity and the auditor's opinion.*

H_1 : *There is dependence between the size of the accounting entity and the auditor's opinion.*

This research is carried out separately for all the V4 countries using the statistical testing of hypotheses. For the research, 200 accounting entities (800 in total) are randomly selected in each country to determine the size of the accounting entity and the resulting auditor's opinion on the financial statements for 2017. Micro-accounting entities will not be included in the sample, as they are usually not subject to the statutory duty of auditing. Directive 2013/34/EU, which has been incorporated into national legislation by the individual countries, will be used for the classification of accounting entities. Only the Slovak Republic does not have the category of medium-sized account-

ing entities, so the original classification provided for in the Directive will be used.

The obtained data are then classified, and a contingency table is created. The data are then tested using the χ^2 – independence test in the combination table. The formula for the Chi-square analysis (G) will be used as test statistics:

$$G = \sum_{i=1}^r \sum_{j=1}^s \frac{(n_{ij} - n'_{ij})^2}{n'_{ij}}, \quad (1)$$

where r is the number of rows, s is the number of columns, n_{ij} is empirical frequency, n'_{ij} is theoretical frequency (Hindls, Hronova, & Seger, 2007).

The symbol for theoretical frequencies can be further broken down into the following formula:

$$n'_{ij} = \frac{n_i n_j}{n}, \quad (2)$$

where n_i is the sum of frequencies in the i row, n_j is the sum of frequencies in the j column, n is the total number of units (Hindls et al., 2007).

In order to draw a conclusion, a critical range is compiled representing the set of all test statistic

Table 8. Categorization of accounting entities and auditor's opinions in the V4 countries

Source: Authors.

Categorization of accounting entities			
Type of accounting entity	Total assets	Annual net turnover	Average number of employees
Micro	< EUR 350,000	< EUR 700,000	< 10
	< CZK 9,012,500	< CZK 18,025,000	
Small	< EUR 4,000,000	< EUR 8,000,000	< 50
	< CZK 103,000,000	< CZK 206,000,000	
Medium-sized	< EUR 20,000,000	< EUR 40,000,000	< 250
	< CZK 515,000,000	< CZK 1,030,000,000	
Large	> EUR 20,000,000	> EUR 40,000,000	> 250
	> CZK 515,000,000	> CZK 1,030,000,000	
Country	Types of auditor's opinion		
Czech Republic	Unqualified opinion	Qualified opinion	Adverse opinion (adverse opinion and disclaimer of opinion)
Slovak Republic	Unqualified opinion	Qualified opinion	Adverse opinion (adverse opinion and disclaimer of opinion)
Republic of Poland	Gives a true and fair view of financial position	Does not give a true and fair view of financial position	x
Hungary	Unqualified opinion	Qualified opinion	Adverse opinion (adverse opinion and disclaimer of opinion)

values for which the null hypothesis is rejected. To do this, it is necessary to select a significance level representing the probability of a type I error occurrence and also to calculate degrees of freedom (ν). This value will be calculated according to the following equation:

$$\nu = (r - 1)(s - 1). \quad (3)$$

To check the correct result, the p -value representing the conformity degree of the random selection with the null hypothesis will also be calculated. The test statistics will be calculated for two different significance levels (5% and 10%) for comparison purposes.

Table 8 describes two characters that have been included in hypotheses testing – categorized groups of accounting entities and auditors' opinions.

4. RESULTS

The results are presented in a series of tables that would follow. Thus, as for the Czech Republic, the first quality character (the accounting entity

size) has 3 variants and the second quality character (the auditor's opinion) has also 3 variants. The degrees of freedom $\nu = 4$ have been identified according to formula (3) and with this value and the significance level, a critical range can be defined using the CHIINV function in MS Excel. The value found is $\chi p^2 = 9.49$. Thus, if the calculated test statistics exceeds this value, the null hypothesis can be rejected. Knowing the critical range and empirical data, the theoretical (expected) values can be calculated according to formula (2), and the last step will be to calculate the value of G . All data for the Czech Republic are presented in Table 9.

The final value of the test statistics is then the sum of all values stated in Table 9. In the case of the Czech Republic, the resulting value of statistic is $G = 5.8037$. The value of the calculated test statistics can now be compared with the value of the critical range. Since the resulting value of the test statistic is less than the critical range value ($5.80 < 9.49$), the null hypothesis is not rejected. Therefore, it cannot be claimed that the resulting auditor's opinion depends on the size of the accounting entity. The p -value can also be compared

Table 9. Contingency table of research values for the Czech Republic

Source: Authors.

Empirical frequencies in the CR				
Size of the accounting entity	Auditor's opinion			In total
	Unqualified	Qualified	Adverse	
Small	56	13	12	81
Medium-sized	44	22	8	74
Large	33	7	5	45
In total	133	42	25	200
Theoretical frequencies in the CR				
Size of the accounting entity	Auditor's opinion			In total
	Unqualified	Qualified	Adverse	
Small	53.87	17.01	10.13	81.00
Medium-sized	49.21	15.54	9.25	74.00
Large	29.93	9.45	5.63	45.00
In total	133.00	42.00	25.00	200.00
Calculated values of G for the Czech Republic				
Size of the accounting entity	Auditor's opinion			
	Unqualified	Qualified	Adverse	
Small	0.0846	0.9453	0.3472	
Medium-sized	0.5516	2.6854	0.1689	
Large	0.3160	0.6352	0.0694	

Table 10. Final testing results for the Czech Republic

Source: Authors.

Significance level (α)	Critical range	Test statistic (G)	p -value	Conclusion	
				According to G	According to p -value
0.05	$< 9.49; \infty$)	5.8037	0.2143	H_0 is not rejected	H_0 is not rejected
0.10	$< 7.78; \infty$)	5.8037	0.2143	H_0 is not rejected	H_0 is not rejected

with the selected significance level α for the control. The p -value can be obtained using the CHIDIST function in MS Excel. The value of calculated statistics and degrees of freedom are completed in this function. Thus, in the case of the Czech Republic, the p -value is 0.2143. The null hypothesis is thus not rejected in this case either, since $\alpha < p$ -value ($0.05 < 0.2143$). If a higher probability of type I error (significance level α) was defined at the beginning of testing, testing would result in different values. Even in such a case, however, the null hypothesis would not be rejected. The values and conclusions for the 5% and 10% significance levels are shown in Table 10.

Even at a higher significance level, the dependence between the tested characters would not be proved. The critical range would be lower (7.78), however, it would still be higher than the test sta-

tistic value. The same is true for the conclusion according to the p -value, where the same p -value as in the original testing (0.2143) would be compared to the value of 0.1 this time. In both cases, the null hypothesis would not be rejected.

Although the Slovak Republic does not use the category of medium-sized accounting entities, it results from the methodology of this research that Directive 2013/34/EU was followed in order to eliminate possible deviations in boundary values of national categorization. Types of opinions in the Slovak Republic are similar to those in the Czech Republic, or more precisely they differ only in terminology (however, in English, the terminology is the same). The following table presents the empirical and theoretical frequencies for the Slovak Republic and the calculation of the G value according to formula (1).

Table 11. Contingency table of research values for the Slovak Republic

Source: Authors.

Empirical frequencies in the SR				
Size of the accounting entity	Auditor's opinion			
	Unqualified	Qualified	Adverse	In total
Small	65	24	10	99
Medium-sized	41	11	8	60
Large	29	5	7	41
In total	135	40	25	200
Theoretical frequencies in the SR				
Size of the accounting entity	Auditor's opinion			
	Unqualified	Qualified	Adverse	In total
Small	66.83	19.80	12.38	99.00
Medium-sized	40.50	12.00	7.50	60.00
Large	27.68	8.20	5.13	41.00
In total	135.00	40.00	25.00	200.00
Calculated values of G for the SR				
Size of the accounting entity	Auditor's opinion			
	Unqualified	Qualified	Adverse	
Small	0.0498	0.8909	0.4558	
Medium-sized	0.0062	0.0833	0.0333	
Large	0.0634	1.2488	0.6860	

Table 12. Final testing results for the Slovak Republic

Source: Authors.

Significance level (α)	Critical range	Test statistic (G)	p -value	Conclusion	
				According to G	According to p -value
0.05	$< 9.49; \infty$)	3.5176	0.4752	H_0 is not rejected	H_0 is not rejected
0.10	$< 7.78; \infty$)	3.5176	0.4752	H_0 is not rejected	H_0 is not rejected

The sum of the values shown in Table 11 is the final result important for deciding on the validity of the null hypothesis. The test statistics value of the Slovak Republic is $G = 3.52$. In order to decide on the validity of the null hypothesis, it is necessary to compare the resulting statistic with the previously calculated critical range. Since the value of the test statistic is less than the boundary value of the critical range ($3.52 < 9.49$), the null hypothesis cannot be rejected. Hence, based on the result, the tested characters (auditor's opinion and size of the accounting entity) cannot be considered dependent. The result can also be substantiated by comparing the p -value with α . As in the case of the Czech Republic, the significance level of 5% has been chosen. The p -value of the Slovak Republic was 0.48. Since $\alpha < p$ -value ($0.05 < 0.48$), the null hypothesis cannot be rejected even in this comparison.

The null hypothesis would not be rejected even if the 10% significance level was set. In this case, the critical range would be in the interval with the lower limit (7.78), but neither this limit is exceeded by the test statistics. Even in this case, the test statistics does not fall into the critical range and the null hypothesis is not rejected.

In the case of the Republic of Poland, the size of the accounting entity has three variants, but the auditor's opinions differ because auditors express either agreement or disagreement with the financial statements and the annual report. The auditor's opinions can thus take only 2 forms – i.e., either gives a true and fair view or not. The data for the Republic of Poland are presented in Table 13.

Table 13. Contingency table of research values for the Republic of Poland

Source: Authors.

Empirical frequencies in the RP			
Size of the accounting entity	Auditor's opinion		
	Gives a true and fair view	Does not give a true and fair view	In total
Small	85	29	114
Medium-sized	35	21	56
Large	25	5	30
In total	145	55	200
Theoretical frequencies in the RP			
Size of the accounting entity	Auditor's opinion		
	Gives a true and fair view	Does not give a true and fair view	In total
Small	82.65	31.35	114.00
Medium-sized	40.60	15.40	56.00
Large	21.75	8.25	30.00
In total	145.00	55.00	200.00
Calculated values of G for the RP			
Size of the accounting entity	Auditor's opinion		
	Gives a true and fair view	Does not give a true and fair view	
Small	0.0668	0.1762	
Medium-sized	0.7724	2.0364	
Large	0.4856	1.2803	

Table 14. Final testing results for the Republic of Poland

Source: Authors.

Significance level (α)	Critical range	Test statistic (G)	p -value	Conclusion	
				According to G	According to p -value
0.05	$< 5.99; \infty$)	4.8177	0.0899	H_0 is not rejected	H_0 is not rejected
0.10	$< 4.61; \infty$)	4.8177	0.0899	H_0 is rejected	H_0 is rejected

The total value of the test statistic can be calculated from Table 13. That is, $G = 4.82$. As in the case of the previous countries, the test statistic for the Republic of Poland is less than the critical range ($4.82 < 5.99$), and, therefore, the null hypothesis cannot be rejected. Thus, in the Republic of Poland, the dependence between the size of the accounting entity and the audit opinion has been proved. The validity of hypotheses can also be proved by comparing the p -value with the selected significance level. The significance level was set at 5% (0.05). Table 14 presents the research results for the Republic of Poland, including the results having a higher probability of type I error.

Table 14 shows how important is setting of the basic research parameters. At the 5% significance level, the null hypothesis is rejected; however, if a higher risk of error were accepted at the beginning of the research – rejection of the null hypothesis despite its truth (i.e., the significance level of

10%), the null hypothesis would be rejected. When comparing the test statistic with the critical range ($\alpha = 10\%$, 2 degrees of freedom), the test statistics is already higher: $4.82 > 4.61$. It is the same when comparing the p -value with the significance level. The p -value in this case is less than the significance level ($0.0899 < 0.10$). The results show that the stricter the conditions are (lower α), the worse it is to prove the dependence.

In the case of Hungary, the number of characters will be the same as in the case of the Czech or Slovak Republic, i.e., the auditor's opinions differ only in titles. Table 15 presents the contingency tables for this V4 country.

In the case of Hungary, the test statistic is: $G = 7.9555$. As in previous cases, the value of the test statistic is less than the value of the critical range, so the null hypothesis cannot be rejected ($7.96 < 9.49$). Therefore, based on the final result, it cannot be claimed that

Table 15. Contingency table of research values for Hungary

Source: Authors.

Empirical frequencies in Hungary				
Size of the accounting entity	Auditor's opinion			
	Unqualified	Qualified	Adverse	In total
Small	75	24	7	106
Medium-sized	36	8	8	52
Large	24	9	9	42
In total	135	41	24	200
Theoretical frequencies in Hungary				
Size of the accounting entity	Auditor's opinion			
	Unqualified	Qualified	Adverse	In total
Small	71.55	21.73	12.72	106.00
Medium-sized	35.10	10.66	6.24	52.00
Large	28.35	8.61	5.04	42.00
In total	135.00	41.00	24.00	200.00
Calculated values of G for Hungary				
Size of the accounting entity	Auditor's opinion			
	Unqualified	Qualified	Adverse	
Small	0.1664	0.2371	2.5722	
Medium-sized	0.0231	0.6638	0.4964	
Large	0.6675	0.0177	3.1114	

Table 16. Final testing results for Hungary

Source: Authors.

Significance level (α)	Critical range	Test statistic (G)	p -value	Conclusion	
				According to G	According to p -value
0.05	$< 9.49; \infty$)	7.9555	0.0932	H_0 is not rejected	H_0 is not rejected
0.10	$< 7.78; \infty$)	7.9555	0.0932	H_0 is rejected	H_0 is rejected

in Hungary, there is a dependence between the size of the Hungarian accounting entities and the audit opinion. The result of hypotheses testing depends on the significance level (occurrence probability of type I error). The test statistics values will not change at a higher (or lower) significance level, but the critical range value will differ and when compared to the p -value, the significance level has a direct effect. The following table compares the calculated values for the original value of 5%, as well as for the higher significance level of 10%.

Thus, even in the case of Hungary, dependence has not been proved in the basic testing. Therefore, it cannot be claimed that large firms, which can afford teams of professionals to ensure the correctness of accounting procedures, are more likely to receive positive opinions (without reservation, i.e., unqualified opinion). Nor can it be claimed that small accounting entities are more likely to receive negative opinions (adverse opinions). However, in comparison with the Czech and Slovak Republics (which have the same critical range), it can be argued that the research data from Hungary are the closest to a situation in which the dependence between characters would be proved.

5. DISCUSSIONS

For all categories of accounting entities in all V4 countries, the predominance of positive opinions (unqualified, without reservation) has been found.

As for small accounting entities, the most positive opinions were in the Republic of Poland (75%). As already mentioned, there are only 2 types of opinions in the Republic of Poland. There are 4 types of opinions in the Czech Republic, the Slovak Republic, and Hungary and they have been adapted into 3 types for research purposes. In the Czech Republic, the Slovak Republic, and Hungary, there are also qualified opinions (with reservation). Most of these opinions were in the Slovak Republic – 24%. On the other hand, Hungary had the fewest adverse opinions (7%) (see Figure 1).

The following chart shows that the situation in medium-sized entities is worse. The proportion of positive (unqualified) opinions in the total number of opinions is below 70% in all middle categories in all countries. In terms of positive opinions, the best results are in the Hungarian accounting entities, with a 69% share. However, in terms of the lowest share of negative opinions, the Czech Republic is in a better situation, with only 11% of adverse opinions or disclaimer of opinion. The Republic of Poland has the worst share of adverse opinions in the category of medium-sized entities (37.5%).

The last chart analyses the situation for large accounting entities of the individual V4 countries.

As for the percentage of positive opinions in the total number of opinions, the category of large

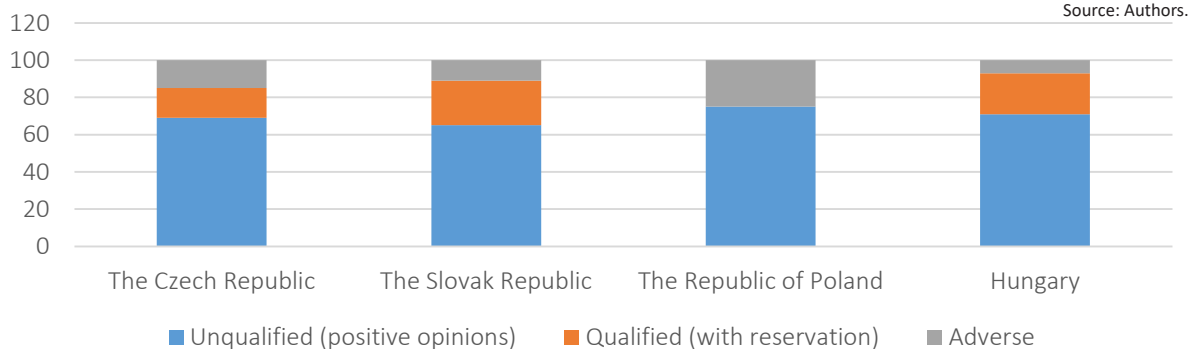


Figure 1. Auditor's opinions on small accounting entities

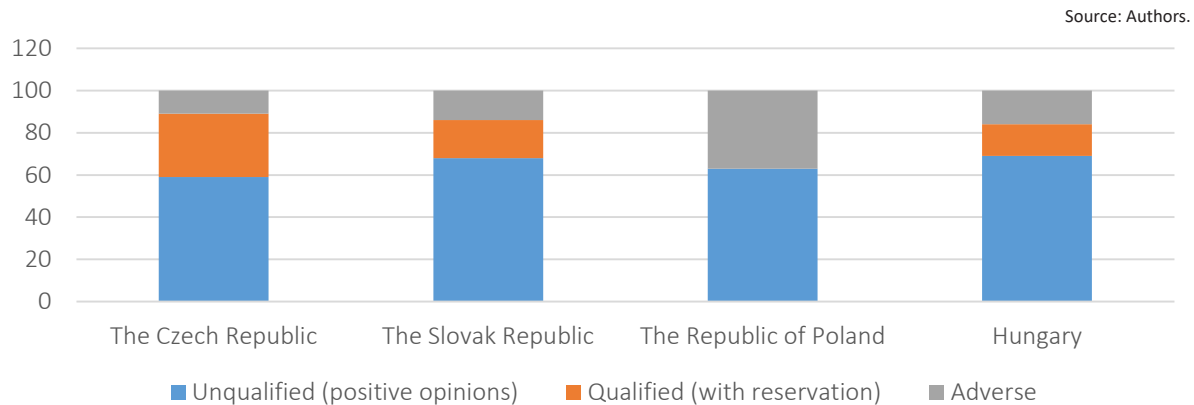


Figure 2. Auditor's opinions on medium-sized accounting entities

accounting entities is doing best. Except for Hungary, the proportion of positive (unqualified) opinions is above 70%; in the case of the Republic of Poland, the proportion is even 83%. The Czech Republic has the smallest proportion of adverse opinions in this category – 11%. On the contrary, Hungary has the worst percentages in this category, both in terms of the smallest number of unqualified opinions (57%) and the largest number of adverse ones (21%).

The auditor activity itself in the V4 countries is regulated by auditor standards. In the case of the Czech Republic, the Republic of Poland, and Hungary, these standards are composed of International Standards on Auditing and standards issued by a professional organization (e.g., Standard 52 in the Czech Republic). The Slovak Republic has also fully adopted the International Standards on Auditing but has not added any standard issued by a professional organization. There are more noticeable differences in the statutory duty of auditing than

in the legislation. Each of the V4 Group countries has chosen its way of how to determine the statutory duty to audit financial statements. In the Czech Republic, this duty is linked to the categorization of accounting entities. The Slovak Republic has more stringent conditions of the statutory duty than the Czech Republic. The Republic of Poland has similar conditions. Compared to the Slovak Republic, however, the Republic of Poland has twice as high the limits of statutory duty, therefore much less strict. Hungary has designed the statutory duty of auditing in a completely different way. The duty of auditing the financial statements is imposed on all organizations that use double-entry bookkeeping. Regulation 537/2014 determined a new condition for auditors, namely for those who carry out audits of public-interest entities. The maximum durations of the contract have been defined for the auditors. The Czech and Slovak Republics have the same contract durations. The Republic of Poland has set down the shortest period of rotation – auditors must ro-

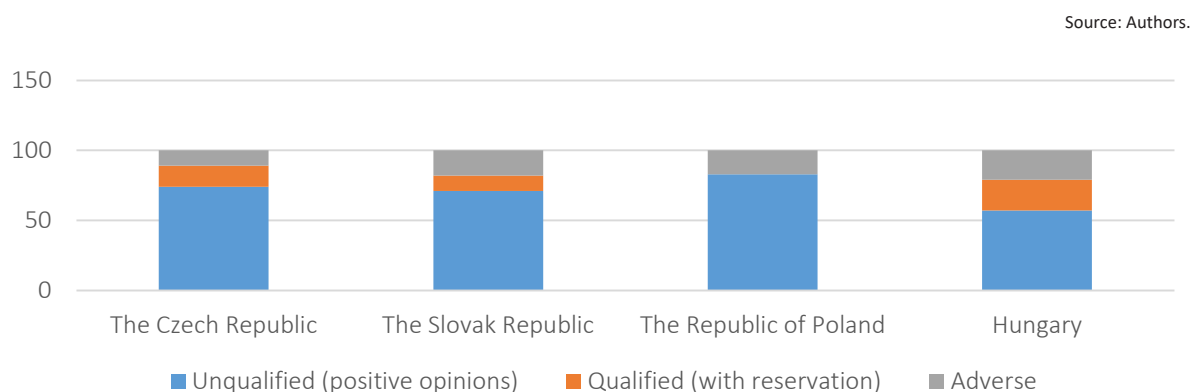


Figure 3. Auditor's opinions on large accounting entities

tate after five years. A similar structure is in place in the EU countries for the performance of auditor activity. The only difference is in the structure of the auditor's examination. The requirement of the Republic of Poland on fluent Polish is interesting (which is missing in other countries). Except for the Slovak Republic, a candidate with a bachelor's degree can become an auditor. In the V4 countries, auditing and the activity of auditors and audit firms are overseen by professional organizations and audit supervision bodies. Thus, all the V4 countries have a two-tier system of audit oversight. While the establishment of professional organizations (in the Czech Republic the Chamber of Auditors of the Czech Republic) took place in parallel with the establishment of the auditor profession in individual countries, the establishment of audit oversight organizations was prompted by the adoption of Directive 2006/43/EC. Therefore, professional organizations (KACR, SKAU, PIBR, MKVK) were established in all the V4 countries already in the 1990s and organizations for audit oversight (PAOB, UDVA, KNA, KKH) in 2008

or 2009. The system of these organizations is similar in the V4 countries, but there are still two significant differences. In the Czech and Slovak Republics, the professional and oversight organizations have their legal personality. Therefore, they are independent organizations acting as legal persons. However, in the Republic of Poland and Hungary, only the professional organizations have their legal personality. The Polish Audit Oversight Commission and the Hungarian Public Audit Oversight Authority do not have legal personality. These bodies are part of the Ministries of Finance and their members are appointed by the Minister of Finance. The second important difference is the division of activities between professional and oversight organizations. Since public-interest entities are subject to stricter legislation, there are slight differences in the division of activities of audit oversight organizations. While in the Czech Republic, the Republic of Poland, and Hungary, most activities are carried out by professional organizations, the opposite is true for the Slovak Republic.

CONCLUSION

This paper compares the audit conditions in the V4 countries in the following areas: legislation governing auditing, statutory duty of auditing, mandatory rotation of auditors in public-interest entities, requirements on auditors, and activities of professional and audit supervision organizations. The legal regulation of auditing financial statements in the V4 countries has one common feature – the basic laws in these countries are the Accounting Act and the Audit Act.

After performing the tests and comparing the results of the test statistic with the critical range, the hypotheses were subsequently decided. At the 5% significance level, the null hypothesis has not been rejected for any of the countries. Hence, no dependence has been proved between the size of the accounting entity and the auditor's opinion in any of the V4 countries. In the case of the Czech Republic, the Slovak Republic, and Hungary, the critical range and calculation procedure were the same due to the same number of characters in the contingency table. Therefore, for V4 countries, Hungary can be said to be the closest to the situation in which the dependence would be proved. The result of the test statistic came closest to the critical range in the calculation for Hungary. However, the Republic of Poland had the smallest difference between the test statistics and the lower limit of the critical range (1.17 point). Nevertheless, Poland had different number of characters due to only two types of auditor's opinion, and thus it also had a different critical range. At the higher significance level (10%), in the case of the Republic of Poland and Hungary, the test statistic was already higher than the lower limit of the critical range. In other words, the null hypothesis would be rejected in these cases and the dependence would be proved.

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