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Audit in Small Municipalities

Evidence from the Slovak Republic

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Abstract: All municipalities in the Slovak Republic are legally required to audit their financial statements. This study examines the auditing of financial statements in small municipalities over a five-year period, between 2020 and 2024. We inquired whether there are municipalities that fail to fulfil their statutory audit obligation and whether municipalities publish annual reports and auditors' reports. Furthermore, we examined whether the municipalities' financial statements provide a true and fair view, whether there are any gender-based differences in attitudes towards audited financial statements, and the varying approaches of individual auditors and auditing firms in the opinion sections of audit reports. The analysis utilises audit report data from small municipalities in all eight self-governing regions of the Slovak Republic, based on a statistically significant sample, and the hypotheses were tested through Pearson's chi-square test of independence. The overall rating of municipalities regarding compliance with their obligations was conducted using Min-Max normalisation, and we found that there are statistically significant differences between regions in all the areas examined.

Keywords: annual report, auditor's report, modified auditor's opinion, financial statements

1. Introduction

The territory of the Slovak Republic is divided into eight self-governing regions, comprising a total of 2,890 municipalities, including cities. Municipal audits in the Slovak Republic are governed mainly by three laws, namely, the Municipal Administration Act (1990),¹ the Accounting Act (2002),² and the Statutory Audit Act (2015).³

The Municipal Administration Act imposes on municipalities the obligation to have their financial statements audited. This obligation applies to every municipality, regardless of its size. Municipalities must prepare an annual report, and an auditor must also verify that the annual report complies with the financial statements. The Accounting Act constitutes the principal legal framework regulating entities subject to mandatory audits. In addition to commercial companies, certain entities, such as municipalities, are also obligated to undergo audits, although municipalities prepare their accounts in accordance with specialised statutory regulations. Since 2008, these accounting regulations have integrated elements of the International Public Sector Accounting Standards (IPSAS). Notably, the accrual principle is among the core standards incorporated into national legislation. Consequently, the accounting practices of public administration have become increasingly aligned with those applied to business entities.

Audits of municipalities are carried out by auditors affiliated with the professional organisation, the Slovak Chamber of Auditors. This chamber protects the legitimate interests of its members, organises educational activities, and provides methodological guidance. State oversight of audit performance and quality is provided by the Auditing Oversight Authority. This office maintains lists of auditors, organises auditor examinations, and verifies the quality of audit performance. By audit, “the accumulation and evaluation of evidence about information to determine and report on the degree of correspondence between the information and established criteria” is being meant (Arens et al., 2012, p. 18). A municipal audit is specific in so far as it applies a systematic approach to improving financial management efficiency. In addition, the municipal audit verifies and evaluates the municipality’s risk management system and assesses risks linked to its financial management.

It is also worth noting that the auditing profession generally adheres to standards promulgated by the International Federation of Accountants (IFAC), through its International Auditing and Assurance Standards Board (IAASB). The IAASB has established the International Standards on Auditing (ISAs) and other relevant guidance documents, which inform audit procedures for financial statements. Pursuant to ISA 700 (IAASB, 2015a), auditors express their professional opinion on the financial statements via an audit report, and this report affirms that the audit was conducted in accordance with the ISAs and provides an opinion on whether the financial statements materially comply with generally accepted accounting principles, specifically the Slovak national accounting standards.

¹ Act No. 369/1990 Coll. on Municipal Administration.

² Act No. 431/2002 Coll. on Accounting.

³ Act No. 423/2015 Coll. on Statutory Audit.

The auditor's opinion may be unmodified or modified. An unmodified opinion is given when the auditor concludes that the financial statements are prepared, in all material respects, in accordance with the applicable financial reporting framework. Alternatively, such statements give a true and fair view (IAASB, 2015a). The type of modified opinion depends on the reason for modification and the degree of impact of the misstatement. Under ISA 705 (IAASB, 2015b), there are three types of modified auditor's opinions: qualified, adverse and disclaimer of opinion. If the impact on financial statements is material but not pervasive, the auditor issues a qualified opinion. The adverse opinion applies to financial statements with misstatements that have a material and pervasive impact. If sufficient appropriate evidence cannot be obtained, the auditor disclaims an opinion. ISA 705 also allows a modified report with an unmodified opinion when an emphasised fact does not affect the auditor's opinion.

This article focuses on the mandatory audit of municipal financial statements and the assessment of audit opinions regarding those statements. It does not aim to evaluate the financial oversight conducted by the Supreme Audit Office (SAO). The primary difference between a financial statement audit performed by an external auditor and an SAO audit lies in their purpose, legislative framework and scope. While an external auditor verifies the accuracy and truthfulness of the financial statements, the SAO examines a broader context: specifically the legality, economy, efficiency, expediency and efficacy of the use of public funds. According to the classification of the Statistical Office of the Slovak Republic, small municipalities are defined as having a population of up to 2,000 inhabitants. This article examines Slovak municipal audit reports from small municipalities, focusing on compliance, report publication, financial accuracy, gender differences and auditor type in opinion reports. The analysis is particularly interesting in the case of small municipalities because a smaller workforce and limited professional capacity can increase the risk of shortcomings in financial management and accounting. At the same time, a financial problem in a small municipality can have a relatively greater impact, as the municipality often has fewer options to offset it.

The present article is structured in three parts: a review of relevant literature; a description of the data, methodology, research questions and hypotheses; and an analysis and discussion of the results and findings.

Few studies (e.g., Batzilis, 2019; Cohen & Leventis, 2013; Sargiacomo et al., 2024; Lopes et al., 2023) have examined municipal auditing in Europe; therefore, this research addresses a gap in the literature by offering insights into the small Slovak municipalities.

2. Theoretical background

For the purposes of this article, we present an overview of the views and study results of researchers focusing on the mandatory audit of municipal financial statements conducted by external auditors. Auditing plays a significant role in ensuring the transparency of public financial statements and promoting fairness (Lopes et al., 2023). Audit results serve as a tool for assessing the financial health of municipalities and the efficiency of their management (Nevhutanda, 2026).

2.1. A review of public sector auditing literature

The findings in public sector auditing are particularly significant. Batzilis (2019), for example, demonstrates that political and electoral competition correlates with reduced corruption, as indicated by auditors' identification of cancelled government expenses in the Court of Audit of Greece. Beck and Stone (2017) attribute local government financial failures to financial distress, bankruptcy, or unfulfilled electoral commitments, and emphasise the necessity for municipal auditors to comply with the "going concern" disclosure principle. Cohen and Leventis (2013) analyse the effects of municipality-, political- and audit-related variables on audit delays in Greek municipalities, identifying multiple determinants, while Payne and Jensen (2002) examine the audit and auditor characteristics that influence municipal audit delays. Factors fostering timely reporting include management incentives, a city manager government structure and bonded indebtedness, while factors contributing to prolonged delays encompass a qualified auditor's opinion, municipality size, and state regulations governing procurement audit processes.

Moreover, Fitzgerald and Giroux (2024) found that audit committees in large municipalities can strengthen financial performance. However, they did not find a statistically significant relationship among financial reporting quality, audit quality and the presence of an audit committee. The literature review of reflections and tasks on accounting procedures, audit, and accountability in the management of the urban food system was conducted by Kaur and D'Andreamatteo (2025). However, these tools for planning, operation, and performance evaluation were found to be inadequately documented in the literature. Leixnering et al. (2025) addressed public sector auditing and delegated administration. They confirmed the hypothesis that performance and coordination issues in service provision identified through public sector audits are positively associated with control measures in central government units. Li et al. (2023) examined the distinction between fiscal and audit offices at the provincial level in China with respect to the quality of fiscal disclosures. The research confirmed the hypothesis that this distinction leads to higher-quality fiscal reporting. At the same time, the audit office's higher political rank than the fiscal office leads to a similar conclusion.

Lino et al. (2022) pointed out the specificities of public sector audit organisations in Brazil. They found that existing schemes at the highest levels of government do not prevent corruption. The authors emphasised that improved auditing practices should make corruption more visible. Paananen et al. (2021) hypothesised that weak economic performance, high decision-making decentralisation, and intense political competition in municipalities are associated with a higher number of modified audit reports. The hypotheses were confirmed, and the authors found that up to one-third of audit reports were modified. Sargiacomo et al. (2024) examined the definitions of fraud and corruption from the perspective of public interest auditing. Using the Italian national healthcare system as an example and content analysis, they identified the most frequently occurring fraudulent and corrupt activities. Wang and Vasarhelyi (2024) addressed a system of continuous monitoring and audit for medication procurement in the public sector. They proposed analytical audit applications that visualise purchasing patterns. Finally, Zamboni and Litschig (2018) examined the

role of audit risk in local governments in rent extraction in procurement, health services and money transfer areas. Research has confirmed a reduction in procurement corruption due to increased awareness of audit risk.

2.2. Audit research in a broader context

A wider review of the literature on audit matters research points in the second direction. Battaglini et al. (2025) presented a more modern approach to tax auditing using machine learning to make administration more efficient. Gender research on female and male auditors auditing public administration entities has not shown significant differences in the audit opinions stated in auditor reports (Carrera & Mareque, 2023). But Maličká (2024) states that the share of women in decision-making positions must reach a certain level in order to observe an inverse relationship between the number of women and corruption. An increased sense of competence leads to increased motivation and effort (De la O et al., 2023). The authors found that voluntary audits improve the motivation and performance of specific activities in the public sector. Deng et al. (2023) examined the relationship between audit quality and ties to auditors' home environments. The authors demonstrated that such contracts have reduced quality due to local ties.

Additionally, McLelland and Giroux (2000) examined factors affecting the timeliness of audit report issuance. They confirmed the hypothesis that large cities have longer times to issue audit reports. Using the example of a high-speed train connection between an auditor's headquarters and his client, Pan et al. (2023) pointed to increased market competition in auditing. They proved that competition reduces audit quality, reduces professional scepticism, and increases the incidence of violations of accounting principles. The role of government audit in enhancing financial innovation of high-quality business development firms was examined and confirmed by Wei et al. (2023). The research was conducted on Chinese manufacturing companies listed on the financial market. Finally, Wu et al. (2024) examined whether audit firms have incentives to reduce engagement risk. They demonstrated that audit firms assign auditors who are experts in taxation, legal matters, and asset valuation risks to clients with higher engagement risk, confirming that dedicating human resources reduces the risk of future litigation and ensures audit quality.

3. Research methodology and design

This study focuses on the auditing of financial statements in small municipalities. Municipalities in the Slovak Republic are obliged to have their financial statements audited by an auditor, an obligation arising from several legal regulations.⁴

⁴ Act No. 369/1990 Coll. on Municipal Administration (Section 9, paragraph 4) explicitly stipulates that "an auditor shall verify the annual financial statements of a municipality". Act No. 431/2002 Coll. on Accounting (Section 19, paragraph 1, letter c) states that the obligation to audit also applies to accounting units for which this obligation is established by a special regulation (in the case of municipalities, the aforementioned Act on Municipal Administration). Act No. 583/2004 Coll. on Budgetary Rules of Local Government, also regulates municipalities' obligations regarding audits.

Unlike commercial companies, for which criteria apply (amount of assets, net turnover, number of employees), there is no size limit for municipalities under Slovak law: the audit obligation applies to municipalities regardless of their size or income and expenditure levels. As such, the legislator wishes to secure, through the audit of a municipality's financial statements, that they provide a true and fair view of the municipality's management and comply with applicable legal regulations and accounting standards.

The auditor's report, which contains their opinion on the financial statements, is subsequently published on the Register of Financial Statements website (www.registeruz.sk) or, voluntarily, on the municipality's website.

The territory of the Slovak Republic is divided into eight self-governing regions, namely: Košice, Prešov, Banská Bystrica, Žilina, Nitra, Trenčín, Trnava and Bratislava. Small municipalities in the Slovak Republic were included in the analytical set, and approximately 84.7% of municipalities in Slovakia fall within that category, indicating a predominance of small municipalities. For greater detail, the total number of municipalities was divided by region, resulting in a statistically significant sample. Table 1 presents the total number of small municipalities (up to 2,000 inhabitants) in each region, along with the selected sample, with a 50% sample size, a 5% error rate and a 95% confidence level.

Table 1
Number of small municipalities in the Slovak Republic by region and selected samples

Regions in the Slovak Republic	Total population (number of all small municipalities in the region)	Statistically significant sample
Košice region	393	195
Prešov region	597	234
Banská Bystrica region	471	212
Žilina region	248	151
Nitra region	293	167
Trenčín region	230	145
Trnava region	186	126
Bratislava region	36	33
Total	2,454	1,263

Source: Compiled by the authors.

The necessary data for the analysis were collected from the publicly accessible Register of Financial Statements and from information published on municipal websites.

In designing the study, we have formulated and intended to address the following research questions:

RQ1: Do municipalities publish their annual report and auditor's report on their websites?

RQ2: Do the financial statements of municipalities provide a true and fair view of the financial situation and financial performance?

RQ3: Is there a difference between the number of modified reports issued by female auditors and male auditors?

RQ4: Do auditing companies issue more modified opinions than individual auditors?

RQ5: Are there cases of municipalities that do not comply with the obligation to conduct an audit?

In doing so, we have developed the following hypotheses:

H1: There is a statistically significant association between the municipality's regional affiliation and the publication of the annual report and auditor's report on the municipality's website.

H2: There is a statistically significant association between the municipality's regional affiliation and the audit opinion.

H3: The proportion of modified reports differs significantly between female auditors and male auditors.

H4: There is a statistically significant association between the form of the auditor (individual auditors or auditing companies) and the occurrence of a modified opinion.

H5: There are no significant differences between regions in the characteristics examined.

To test hypotheses H1–H4, we used Pearson's chi-square test of independence. To test the hypothesis H5, ranking indices for individual regions were calculated for the five-year monitoring period (2020–2024). Four variables were used for each year: V1 – the number of municipalities in the region without audited financial statements; V2 – the number of municipalities not publishing the annual report and auditor's report on their website; V3 – the number of municipalities with a modified audit report; V4 – the number of municipalities with a modified report issued by an audit company rather than an individual auditor. For comparability, variable data were normalised using Min-Max normalisation, converting all original values to a 0–1 scale, where 0 represents the best value and 1 the worst. The index was calculated using the arithmetic mean for each year, yielding annual regional rankings. The overall ranking for the five-year period was obtained by averaging the annual indices.

4. Results and findings

Municipalities in the Slovak Republic are legally required to have their financial statements audited. The audited financial statements include the balance sheet as of 31 December of the year under audit, the profit and loss statement for the year then ended, and notes that summarise significant accounting policies and methods. The financial statements for most municipalities have been audited.

Table 2
Number of municipalities by region in which the financial statements were audited

Region		Audit was carried out					Audit was not carried out				
		2024	2023	2022	2021	2020	2024	2023	2022	2021	2020
Košice	Number	190	190	190	190	190	5	5	5	5	5
	%	97.44	97.44	97.44	97.44	97.44	2.56	2.56	2.56	2.56	2.56
Prešov	Number	204	204	216	210	228	30	30	18	24	6
	%	87.18	87.18	92.31	89.74	97.44	12.82	12.82	7.69	10.26	2.56
Banská Bystrica	Number	170	170	191	191	191	42	42	21	21	21
	%	80.19	80.19	90.09	90.09	90.09	19.81	19.81	9.91	9.91	9.91
Žilina	Number	146	146	141	141	141	5	5	10	10	10
	%	96.69	96.69	93.38	93.38	93.38	3.31	3.31	6.62	6.62	6.62
Nitra	Number	153	153	160	160	160	14	14	7	7	7
	%	91.62	91.62	95.81	95.81	95.81	8.38	8.38	4.19	4.19	4.19
Trenčín	Number	143	143	143	143	140	2	2	2	2	5
	%	98.62	98.62	98.62	98.62	96.55	1.38	1.38	1.38	1.38	3.45
Trnava	Number	114	108	108	114	114	12	18	18	12	12
	%	90.48	85.71	85.71	90.48	90.48	9.52	14.29	14.29	9.52	9.52
Bratislava	Number	30	30	33	33	33	3	3	0	0	0
	%	90.91	90.91	100.00	100.00	100.00	9.09	9.09	0.00	0.00	0.00

Source: Compiled by the authors.

According to the collected data presented in Table 2, in almost all regions, over 90% of municipalities have audited financial statements. The analysis aimed to determine whether any municipalities do not comply with the audit obligation and to identify such cases. The highest proportions of small municipalities that do not fulfil the legal obligation to have their financial statements audited are in the Banská Bystrica region (almost 20%) and the Prešov region (almost 13%). Both regions recorded a significant increase in the number of such municipalities during the monitored period. An increase was also observed in the Bratislava region, while the Žilina and Trnava regions experienced a slight decrease in non-compliance (Figure 1).

We investigated whether small municipalities publish information about their management on their websites, with particular focus on the publication of the annual report and the auditor's report. The annual report of a municipality in the Slovak Republic is a document that summarises the municipality's activities for the past calendar year.

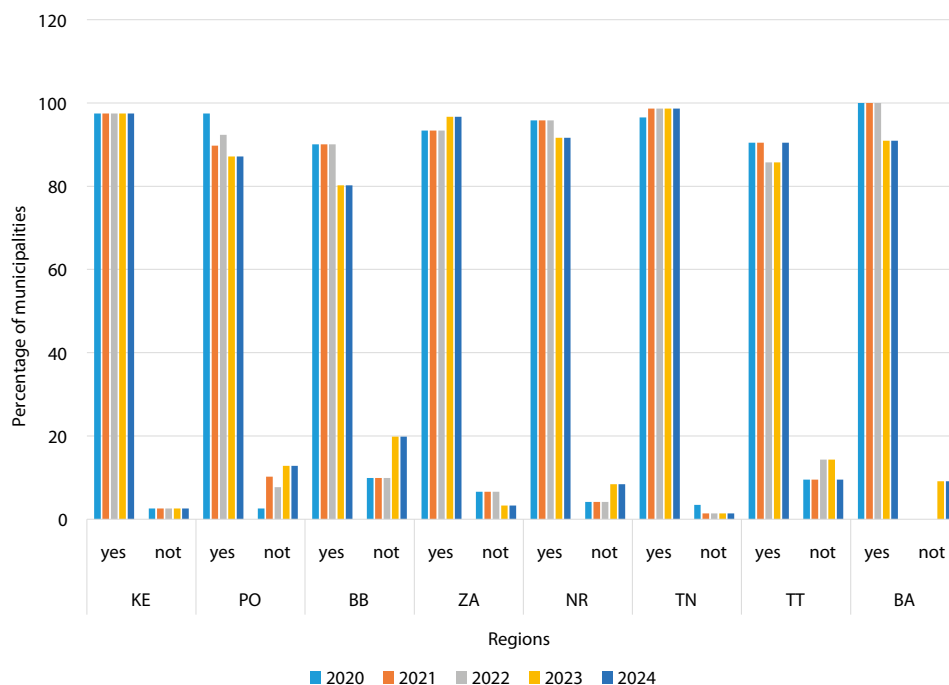


Figure 1

Percentage of municipalities by regions that do and do not comply with the legal obligation to conduct an audit

Note: Košice region KE, Prešov region PO, Banská Bystrica region BB, Žilina region ZA, Nitra region NR, Trenčín region TN, Trnava region TT, Bratislava region BA.

Yes = audit was carried out; Not = audit was not carried out.

Source: Compiled by the authors.

Though under Slovak law there is no mandatory form for this report, there are certain parts and documents that are prescribed by law. Also, municipalities are not compelled to publish this report, but they often do so to promote transparency and inform their citizens. Our study showed that small municipalities mostly do not publish either the annual reports or the auditors' reports (Table 3 and Table 4).

In the Bratislava region, up to 90% of municipalities do not publish annual reports and auditor reports on their websites. Municipalities in other regions exhibit similar practices, with the best results observed in the Trenčín region, where 69% of municipalities do not publish these documents.

Municipalities that have decided to publish these documents on their websites mainly publish only the annual reports. The highest number of such municipalities is in the Trenčín region, accounting for over 31%. The smallest number of such municipalities is in the Žilina region, at only 6.62% (Figure 2). We also found several municipalities that publish audit results in addition to annual reports. A minimal number of municipalities publish this way, mainly in the Prešov region.

Table 3
Disclosure of annual reports and auditors' reports on the website of municipalities by region

Region	Disclosure	The auditor's report and the annual report were disclosed on the municipality's website				
		2024	2023	2022	2021	2020
Košice	Annual report with auditor's report	5	5	5	5	5
	Annual report without auditor's report	35	35	35	35	40
Prešov	Annual report with auditor's report	12	6	6	6	6
	Annual report without auditor's report	42	48	48	48	48
Banská Bystrica	Annual report with auditor's report	7	7	7	7	7
	Annual report without auditor's report	21	21	21	21	21
Žilina	Annual report with auditor's report	5	5	5	5	5
	Annual report without auditor's report	5	5	5	5	5
Nitra	Annual report with auditor's report	0	0	0	0	0
	Annual report without auditor's report	7	7	7	7	7
Trenčín	Annual report with auditor's report	5	5	5	5	5
	Annual report without auditor's report	40	40	40	40	40
Trnava	Annual report with auditor's report	6	6	6	6	6
	Annual report without auditor's report	24	24	24	24	24
Bratislava	Annual report with auditor's report	0	0	0	0	0
	Annual report without auditor's report	3	3	3	3	3

Source: Compiled by the authors.

Table 4
Non-disclosure of annual reports and auditor's reports on the website of municipalities by region

Region	The auditor's report and annual report were not disclosed on the municipality's website					Non-disclosure percentage
	2024	2023	2022	2021	2020	
Košice	155	155	155	155	150	79.49
Prešov	180	180	180	180	180	76.92
Banská Bystrica	184	184	184	184	184	86.79
Žilina	141	141	141	141	141	93.38
Nitra	14 municipalities do not have their own website					87.43
	146	146	146	146	146	
Trenčín	100	100	100	100	100	68.97
Trnava	96	96	96	96	96	76.19
Bratislava	30	30	30	30	30	90.91

Source: Compiled by the authors.

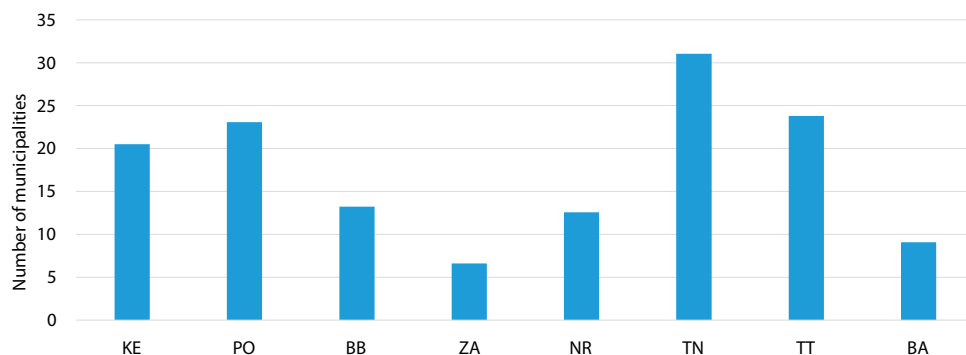


Figure 2

Number of municipalities by region that disclose annual reports on the municipality's website

Note: Košice region KE, Prešov region PO, Banská Bystrica region BB, Žilina region ZA, Nitra region NR, Trenčín region TN, Trnava region TT, Bratislava region BA.

Source: Compiled by the authors.

Subsequently, a more detailed evaluation of the audit results for the financial statements of small municipalities was conducted (Table 5). For the vast majority of municipalities, auditors issued an unqualified report.

Table 5
Evaluation of auditors' reports by region

Region		Unmodified audit opinion					Modified audit opinion									
							Qualified audit opinion					Adverse audit opinion				
		2024	2023	2022	2021	2020	2024	2023	2022	2021	2020	2024	2023	2022	2021	2020
Košice	Number	160	160	165	163	165	30	30	25	27	25	0	0	0	0	0
	%	84.21	84.21	86.84	85.79	86.84	15.79	15.79	13.16	14.21	13.16					
Prešov	Number	180	168	192	186	210	24	36	24	24	18	0	0	0	0	0
	%	88.24	82.35	88.89	88.57	92.11	11.76	17.65	11.11	11.43	7.89	–	–	–	–	–
Banská Bystrica	Number	128	128	149	149	149	42	42	42	42	42	0	0	0	0	0
	%	75.29	75.29	78.01	78.01	78.01	24.71	24.71	21.99	21.99	21.99	–	–	–	–	–
Žilina	Number	131	131	136	126	126	15	15	5	15	15	0	0	0	0	0
	%	89.73	89.73	96.45	89.36	89.36	10.27	10.27	3.55	10.64	10.64	–	–	–	–	–
Nitra	Number	139	139	153	153	157	14	14	6	6	3	0	0	1	1	0
	%	90.85	90.85	95.63	95.63	98.13	9.15	9.15	3.75	3.75	1.88	–	–	0.63	0.63	–
Trenčín	Number	128	133	128	128	135	13	10	14	10	5	2	0	1	5	0
	%	89.51	93.01	89.51	89.51	96.43	9.09	6.99	9.79	6.99	3.57	1.40	–	0.70	3.50	–
Trnava	Number	90	78	84	90	108	24	30	24	24	6	0	0	0	0	0
	%	78.95	72.22	77.78	78.95	94.74	21.05	27.78	22.22	21.05	5.26	–	–	–	–	–
Bratislava	Number	30	27	30	33	30	0	3	3	0	3	0	0	0	0	0
	%	100.00	90.00	90.91	100.00	90.91	0.00	10.00	9.09	0.00	9.09	–	–	–	–	–

Source: Compiled by the authors.

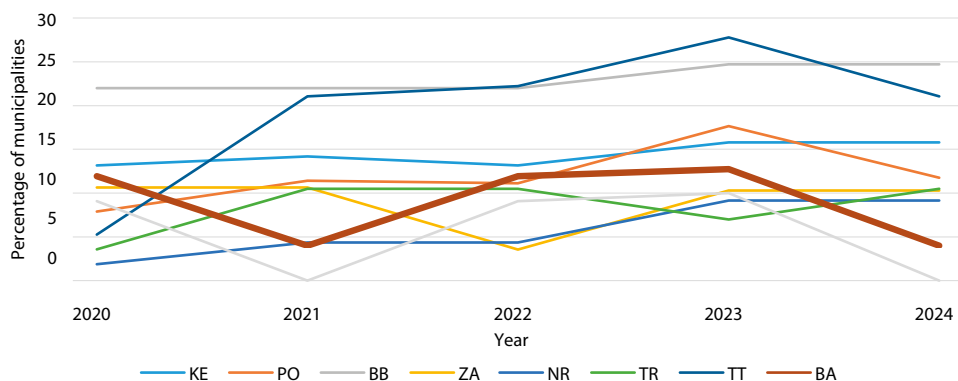


Figure 3

Percentage of municipalities that were issued a modified auditor's report by region

Note: Košice region KE, Prešov region PO, Banská Bystrica region BB, Žilina region ZA, Nitra region NR, Trenčín region TN, Trnava region TT, Bratislava region BA.

Source: Compiled by the authors.

Auditors generally state that the submitted financial statements provide a true and fair view of the municipality's financial situation and management results, in accordance with the Accounting Act. On average, 86% of municipalities received such audit results (with the highest proportion in the Bratislava region at almost 100% and the lowest in the Banská Bystrica region at around 75%). On average, 13% of all municipalities received an auditor's report with a reservation, with the highest proportions in the Banská Bystrica and Trnava regions (over 20%, Figure 3). Some municipalities also received an adverse auditor's opinion (one in the Nitra region and five in the Trenčín region).

The most frequently identified deficiencies described in the audit reports were as follows: 1. incorrect valuation and classification of assets and liabilities; 2. incorrect accounting and classification of bank loans; 3. violation of accounting procedures; 4. discrepancy between the real estate register and recorded assets; 5. incorrect accounting of capital and current transfers.

Further analysis examined whether female auditors are more conservative in the substantive part of the report than male auditors. Since small municipalities are audited by smaller audit firms, we assumed that the signatory was responsible for conducting the audit, thus distinguishing between female and male auditors. In terms of the absolute number of all reports issued, female auditors issued more modified reports than male auditors (Table 6). This trend was most pronounced in the Bratislava region, where all modified reports were issued by female auditors. Only in the Žilina region did male auditors issue a predominance of modified audit reports (Figure 4).

The fourth research question addressed whether auditing companies issued more modified opinions than individual auditors. More modified reports were issued by auditing companies than by individual auditors in six monitored regions (Table 7). In the Bratislava region, all modified reports were issued exclusively by auditing companies, whereas in the Nitra region, all modified reports were issued by individual auditors (Figure 5).

Table 6
Perception of audit risk among female and male auditors by region

Region	Number of all audits performed over the 5-year monitoring period	of which the total number of audits with reservations (% of all audits)	
		of which female auditors (% of all qualified audits)	of which male auditors (% of all qualified audits)
Košice	950	137 (14.42%)	
		95 (69.34%)	42 (30.66%)
Prešov	1,062	126 (11.86%)	
		66 (52.38%)	60 (47.62%)
Banská Bystrica	913	210 (23.00%)	
		107 (50.95%)	103 (49.05%)
Žilina	715	65 (9.09%)	
		20 (30.77%)	45 (69.23%)
Nitra	786	43 qualified (5.47%) + 2 adverse	
		22 (51.16%) + 2 adverse	21 (48.84%)
Trenčín	712	52 (7.30%) qualified + 8 adverse	
		40 (76.92%) + 8 adverse	12 (23.08%)
Trnava	558	108 (19.35%)	
		78 (72.22%)	30 (27.78%)
Bratislava	159	9 (5.66%)	
		9 (100%)	0

Source: Compiled by the authors.

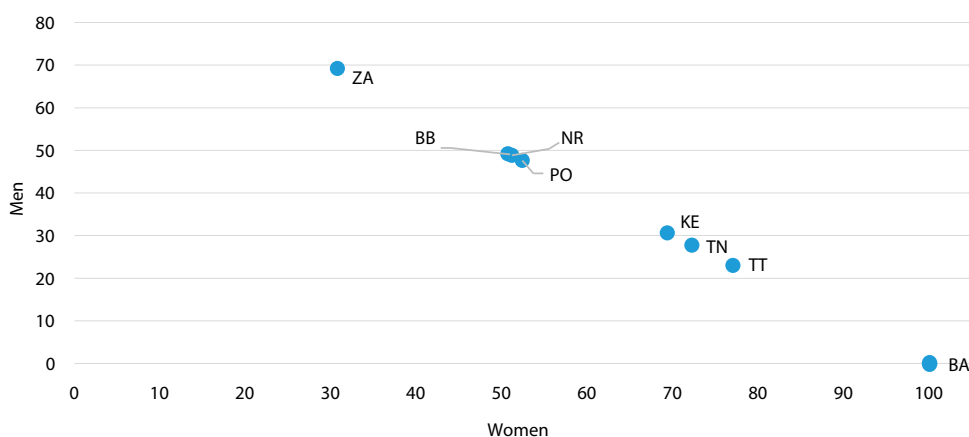


Figure 4

Modified auditor's reports issued by male and female auditors by region in percentages

Note: Košice region KE, Prešov region PO, Banská Bystrica region BB, Žilina region ZA, Nitra region NR, Trenčín region TN, Trnava region TT, Bratislava region BA.

Source: Compiled by the authors.

Table 7
Modified opinions issued by auditing companies versus individual auditors by region

Region	Number of all audits performed over the 5-year monitoring period	of which the total number of audits with reservations (% of all audits)	
		of which audit performed by individual auditors (% of all qualified audits)	of which an audit performed by an auditing company (% of all audits with reservations)
Košice	950	137 (14.42%)	
		57 (41.61%)	80 (58.39%)
Prešov	1,062	126 (11.86%)	
		84 (66.67%)	42 (33.33%)
Banská Bystrica	913	210 (23.00%)	
		84 (40.00%)	126 (60%)
Žilina	715	65 (9.09%)	
		20 (30.77%)	45 (69.23%)
Nitra	786	43 qualified (5.47%) + 2 adverse	
		43 qualified (100%) + 2 adverse	0
Trenčín	712	52 (7.30%) qualified + 8 adverse	
		18 (34.62%)	35 qualified (65.38%) + 8 adverse
Trnava	558	108 (19.35%)	
		42 (38.89%)	66 (61.11%)
Bratislava	159	9 (5.66%)	
		0	9 (100%)

Source: Compiled by the authors.

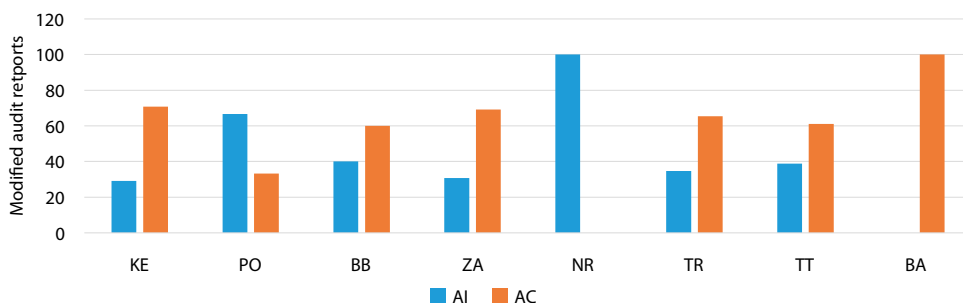


Figure 5

Modified audit reports issued by individual auditors and auditing companies in percentage by region

Note: Košice region KE, Prešov region PO, Banská Bystrica region BB, Žilina region ZA, Nitra region NR, Trenčín region TN, Trnava region TT, Bratislava region BA, AC – Audit companies, AI – Audit individuals.

Source: Compiled by the authors.

5. Discussion

We used Pearson's chi-square test of independence to verify Hypothesis 1. The aim of the test was to determine whether a statistically significant association exists between the municipality's region and the publication of the documents in question on its website (Table 8). The results demonstrated a statistically significant association between the region in which the municipality is located and the publication of the annual report and auditor's report on the municipality's website. The findings also highlight differences in the rate of publication of these documents across the various regions. The highest proportion of published documents was recorded in the Trenčín Region (31.0%), while the lowest proportion was recorded in the Nitra Region (4.2%) (Table 9).

Based on the results of the chi-square test, it can be concluded that the publication of the annual report and auditor's report on municipal websites is not uniform across the regions within the observed sample, and that a statistically significant association exists between the variables under study, thus confirming our first hypothesis.

To test Hypothesis 2, we also used Pearson's chi-square test of independence to determine whether a statistically significant association exists between a municipality's region and the outcome of the financial statement audit, specifically, whether the financial statements received an unmodified opinion or a modified opinion (Table 8). Out of a total of 5,855 financial statements analysed, 5,095 (87.0%) received an unmodified opinion, while 760 (13.0%) received a modified opinion. The proportion of unmodified opinions ranged from 77.0% in the Banská Bystrica Region to 94.3% in the Bratislava and Nitra Regions (Table 9).

Based on the results, it can be concluded that there is a statistically significant association between a municipality's geographic region and the audit opinion on its financial statements. Within the sample analysed, unmodified opinions constituted the majority in all regions. However, the statistically significant difference observed between regions indicates that the prevalence of unmodified opinions varies across the regions.

Table 8
Pearson's chi-square test of independence

	Pearson's χ^2	χ^2 critical value	df	Decision
H1	332.221	14.067	7	H1 was confirmed
H2	170.970	14.067	7	H2 was confirmed
H3	101.824	3.841	1	H3 was confirmed
H4	686.920	3.841	1	H4 was confirmed

Note: Pearson's chi-square test was calculated at a significance level of $\alpha = 0.05$; p-value < 0.001; df: degrees of freedom.

Source: Compiled by the authors.

Table 9
Share of municipalities with published and unmodified auditor's reports

Region	Share of municipalities that had auditor's reports published	Share of municipalities with unmodified auditor's reports
Košice	21.0 %	85.6 %
Prešov	23.1 %	88.1 %
Banská Bystrica	13.2 %	77.0 %
Žilina	6.6 %	90.9 %
Nitra	4.2 %	94.3 %
Trenčín	31.0 %	91.6 %
Trnava	23.8 %	80.6 %
Bratislava	9.1 %	94.3 %
Total	17.26 %	87.0 %

Source: Compiled by the authors.

With the third hypothesis, we aimed to verify whether the proportion of modified audit reports differs statistically significantly based on the auditor's gender (Table 8). A total of 5,855 audit reports were recorded in the sample: 4,301 issued by female auditors and 1,554 issued by male auditors. Of the total reports issued by female, 437 were modified, representing 10.16%. Among male, 313 of the 1,554 reports were modified, representing 20.14% (Table 10).

Based on the results, it can be concluded that there is a statistically significant association in the sample between the auditor's gender and the occurrence of a modified audit report; a higher proportion was observed among male compared to female auditors.

With Hypothesis 4, we tested whether there is a statistically significant association between the form of the auditor and the occurrence of a modified audit opinion (Table 8). A total of 5,855 audit reports were recorded in the sample under study. Individual auditors issued 855 reports, of which 349 were modified, representing 40.82%. Auditing companies issued a total of 5,000 reports, of which 411 were modified, representing 8.22% (Table 10).

Thus, there is a statistically significant association between the type of auditor and the occurrence of a modified audit opinion. In the sample under study, the proportion of modified reports was significantly higher among individual auditors compared to auditing companies.

Table 10
Share of modified auditor's reports

	Modified reports	All reports	Share of modified reports
Female auditors	437	4,301	10.16 %
Male auditors	313	1,554	20.14 %
Individual auditors	349	855	40.82 %
Auditing companies	411	5,000	8.22 %

Source: Compiled by the authors.

Finally, the fifth hypothesis was tested by using Min-Max normalisation. For the purpose of comparing regions, four variables were established, with lower values considered favourable: the number of municipalities in the region without audited financial statements; the number not publishing the annual report and auditor's report on their website; the number with a modified audit report; and the number with a modified report issued by an audit company rather than an individual auditor. Indices were calculated for each year in the monitored five-year period (Table 11). A region is considered better when its index value is closer to zero. The ranking of regions is based on the average of five-year indices. The index values by region are exhibited in Figure 6.

Table 11
Ranking of regions by indices

Region	Index 2020	Index 2021	Index 2022	Index 2023	Index 2024	Average	Rank
Bratislava	0.03	0	0.03	0.04	0.01	0.02	1
Trenčín	0.23	0.34	0.30	0.22	0.32	0.28	2
Nitra	0.27	0.30	0.30	0.33	0.35	0.31	3
Žilina	0.47	0.46	0.36	0.39	0.41	0.42	4
Trnava	0.32	0.48	0.56	0.59	0.53	0.50	5
Košice	0.53	0.59	0.54	0.57	0.58	0.56	6
Prešov	0.46	0.69	0.65	0.77	0.70	0.66	7
Banská Bystrica	1	0.97	1	1	1	0.99	8

Source: Compiled by the authors.

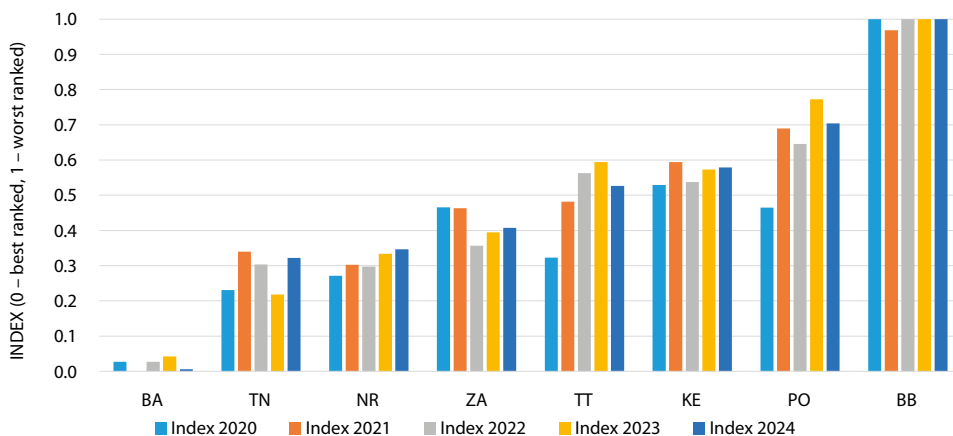


Figure 6
Ranking of regions by indices

Note: Košice region KE, Prešov region PO, Banská Bystrica region BB, Žilina region ZA, Nitra region NR, Trenčín region TN, Trnava region TT, Bratislava region BA.

Source: Compiled by the authors.

The Bratislava region received the highest rating in the audit of small municipalities, with consistently favourable index values. The Trenčín region ranked second, with fluctuating index development. In the Nitra region, index values slightly deteriorated each year. The Žilina region ranked fourth, with indices decreasing over the five-year period, indicating improvement. The Trnava region's index values deteriorated over time but improved in 2024. The Košice region ranked sixth, with little change in index values over time. The Prešov region experienced the highest deterioration over five years. The Banská Bystrica region ranked last, with the worst indices over five years; its index value was almost always close to 1.

As such, Hypothesis 5 was not confirmed, indicating that differences in audit performance exist among regions.

6. Conclusion and limitations

The study examined the auditing and transparency of small municipalities in the Slovak Republic, focusing on compliance with the legal obligation to have financial statements audited, the publication of financial information, and differences in audit outcomes across regions. Overall, more than 90% of municipalities in almost all regions had audited financial statements. However, non-compliance was most common in the Banská Bystrica and Prešov regions, where the proportion of small municipalities without audited financial statements reached almost 20% and 13%, respectively. The study also found that most municipalities do not publish annual reports or auditors' reports on their websites. Publication rates differed significantly between regions, with the highest level in the Trenčín region and the lowest in the Nitra region.

Regarding audit outcomes, most financial statements received unmodified audit opinions. Out of 5,855 reports, 5,095 (87%) were unmodified, and 760 (13%) were modified. Modified opinions were most common in the Banská Bystrica and Trnava regions. The study also proves the existence of statistically significant differences according to the gender and type of the auditor. Although female auditors issued more modified reports in absolute numbers, the proportion of modified reports was higher among male auditors (20.14% compared with 10.16%). Individual auditors also issued a substantially higher proportion of modified reports than auditing companies (40.82% compared with 8.22%).

The statistical testing confirmed the study's first four hypotheses and disproved its fifth hypothesis. Based on the five-year regional indices, the Bratislava region showed the most favourable results, followed by Trenčín, while Banská Bystrica showed the least favourable results. Prešov also experienced a substantial deterioration during the observed period. Overall, the findings indicate significant regional differences in municipal auditing and financial transparency. While most municipalities comply with auditing requirements and receive unmodified opinions, the relatively low publication of financial and audit information suggests room for improvement in transparency and public accountability.

Given that there are only a few scholarly reflections on municipal financial statement audits (cf. Kaur & D'Andreanmatteo, 2025), this study partially addresses this gap in the

research on mandatory auditing for small municipalities. That being said, the study has several limitations that should be considered when interpreting its findings.

First, the analysis relies primarily on publicly available data, which limits the possibility of examining the underlying reasons for differences in audit outcomes and disclosure practices. Second, the study focuses on small municipalities, and therefore its findings cannot necessarily be generalised to municipalities of all sizes. Third, regional differences identified in the analysis do not explain the underlying causal mechanisms, which may be related to municipal financial conditions, administrative capacity, accounting practices, or auditor characteristics. Furthermore, an audit opinion represents only one indicator of audit outcomes and may not fully capture the overall quality of the audit process. The five-year observation period and the selected variables used for the regional index also limit the scope of the conclusions.

Future research could therefore focus on identifying the determinants of audit opinions by incorporating additional municipal, financial, institutional and auditor-related characteristics. Further research could also examine the actual content and quality of published financial and audit information rather than focusing only on whether the documents are published. Extending the analysis to municipalities of different sizes, using a longer observation period, and conducting international comparisons could further improve the generalisability of the findings. Finally, future studies could investigate whether greater transparency and higher audit quality are associated with better financial performance, lower indebtedness, and fewer deficiencies in municipal management.

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