
BARRIERS OF USING FINANCIAL ANALYSIS AT THE LEVEL OF MUNICIPALITIES: CASE STUDY OF THE TREŇČÍN REGION

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Abstract

The aim of this paper is to find out about the current situation in the use of financial analysis at the level of territorial self-governments of the Slovak Republic, namely in the Trenčín self-governing region. Two key research questions were formulated in the context of the main objective. Do municipalities of the Trenčín self-governing region use the methods of financial analysis? What are the main reasons for not using the methods of financial analysis in the municipalities of the Trenčín self-governing region? In order to fulfil the aim of the paper, an empirical survey based on a questionnaire survey was carried out with the aim of answering three research questions. The whole basic set of municipalities in the Trenčín self-governing region was addressed with a return of 35.14%. The results of the survey showed that the methods of financial analysis are not applied by Slovak municipalities. The main reason is the size of municipalities. Other important factors include the absence of qualified staff or expertise. Interesting is the main reason that led territorial self-governments to use these methods, which was the simplicity of the methods and their not being time-consuming.

Keywords: municipalities, financial analysis, Slovak Republic, Trenčín self-governing region

JEL Classification: H72, M21, P43

Introduction

Financial management and its diagnostic tool of financial analysis are becoming increasingly important for the long-term perspective and effective operation of individual market players in the current dynamically changing environment. Mastered financial management creates a prerequisite for long-term financial stability, the fulfilment of partial financial objectives and the achievement of the optimal creation of the monetary mass, its allocation to assets and the generation of the resulting effect of the given activity (Hladlovský & Král, 2014). For this reason, the importance of financial analysis in business activities is increasing. Some authors (Jegers, 2011; Michalski, 2016; Gavúrová & Koróny, 2016) report that management decisions in local governments and non-profit organizations do not differ significantly from management decisions made in companies. Michalski (2016) specifically focused on liquidity management decisions, namely net working capital. Gavúrová & Koróny (2016) pointed out the possibility of using decision trees in the case of managerial decisions in the area of one-day healthcare. The authors point to the fact that non-profit organizations and municipalities can be considered as a very important part of social policy, because thanks to them, there are various objectives implemented and fulfilled in the field of education, health, etc. Regarding the fulfilment of objectives in territorial self-government, a financial analysis using financial information as a significant source, can play an important role in territorial self-government. In local governments and municipalities financial reporting is used to make economic, social, and political decisions and to assess accountability primarily by comparing actual financial results with a legally adopted budget; assessing financial conditions and the results of operations; assisting in determining compliance with finance-related laws, rules, and regulations; and assisting in evaluating efficiency and effectiveness. Moreover, the budget is an expression of the public policy and financial intent as well as a management tool and a method of providing control over operations (Brusca & Montesinos, 2010). However, the question remains, what is the importance of financial analysis at the level of territorial self-government of the Slovak Republic? What do they consider to be primary barriers and motives for using financial analysis methods? This paper aims to answer the above questions.

The aim of this paper is to find out the current situation in the use of financial analysis at the level of territorial self-governments of the Slovak Republic while focusing on the Trenčín self-governing region consisting of 276 municipalities. The questionnaires were sent to all municipalities in the Trenčín self-governing region of the Slovak Republic, whereas a similar type of research has not been carried out in the Slovak Republic so far. The paper consists of four parts. In the first part, we present the theoretical background of the researched issue, focusing mainly on the specifics of financial analysis in territorial self-government compared to financial analysis in businesses. The next part presents the methodology of the survey. The key part of the paper is the presentation of the results of the empirical survey and the subsequent discussion. At the end of the paper, we present the main findings of our research.

Theoretical background

Financial analysis in the public sector should particularly consider a different principle of funding, compared to the private sector. While some indicators of financial analysis can be used in public non-profit organizations (including municipalities) without almost any modifications, the use of some is not suitable for this sector (e.g.

profitability indicators) or they should be adapted (indicators of indebtedness). Financial analysis also offers specific indicators directly for the non-profit sector, e.g. autarky indicators. Using different indicator types (not only financial ones but also performance indicators) is desirable for territorial self-governments and for organizations established by them, especially because the results provide feedback to elected representatives (the management) on a more effective way of managing these organizations.

Given that the object of our research is municipalities of the Slovak Republic, we consider it necessary to provide some brief theoretical background on them. According to the authors, a municipality is an independent self-governing territorial unit that unifies citizens with permanent residence on its territory, it is actually the level of local self-governments. According to Act No. 369/1990 Coll. the Act of the National Council of the Slovak Republic on Municipal Establishment, a municipality (town) is a legal entity, which under the conditions provided by law, independently manages its property and its income. The municipality (town) finances its needs mainly from its own revenues as well as from state subsidies. The main role of municipalities (town) in the exercising of self-government is to care for the general development of its territory and the needs of inhabitants. The state may intervene in the activities of a municipality only in the manner provided by law. The municipality (town) in the exercise of self-government can be imposed obligations and restrictions only by the law and under an international treaty. In the matters of territorial self-government and in order to ensure the tasks arising for the self-government by law, the municipality (town) may issue generally binding regulations. The execution of assigned tasks of local governments may be transferred to the municipality (town) by the law. The costs of state administration execution transferred this way shall be paid by the state. During its administration, a municipality (town) may issue generally binding regulations within its territorial competence based on an authorization provided by law and within its limits.

In terms of territorial self-governments, the Slovak Republic is divided into self-governing regions, while a self-governing region represents the highest territorial unit. By Act No. 302/2001 Coll. on Self-Government of Higher Territorial Units, eight self-governing regions were established in the territory of the Slovak Republic (Bratislava, Trnava, Nitra, Trenčín, Banská Bystrica, Žilina, Prešov and Košice self-governing region), which are identical with the previous territorial-administrative division. In this paper, we will focus on the Trenčín self-governing region, which consists of a total of 276 municipalities, of which there are 18 towns and 258 rural municipalities. The Trenčín self-governing region is divided into 9 districts.

Material and methods

The aim of this paper is to determine the current situation in the use of financial analysis at the level of territorial self-government of the Slovak Republic (similarly to Vavrek, Pukala, 2019). When elaborating this paper, two research questions were identified:

Q1: Do municipalities of the Trenčín self-governing region use the methods of financial analysis?

Q2: What are the main reasons for not using the methods of financial analysis in municipalities of the Trenčín self-governing region?

To obtain the necessary data in order to fulfil the stated objective and answer the research questions, we decided to carry out a questionnaire survey, which was

conducted from 19 September 2019 to 4 October 2019. The questionnaire survey was carried out in two phases in order to ensure the maximum possible return rate of the questionnaire. The questionnaire was developed using the Google Docs tool and consisted of 7 closed-ended questions and 5 identification questions (see Appendix 1). We decided to use the closed-ended questions due to the fact that in the case of open-ended questions we often see that respondents are unwilling to answer the questions. We addressed the whole basic set of 276 municipalities of the Trenčín self-governing region. We tried to address the questionnaires electronically directly to the mayors of the given municipalities, as we assumed that they have the most knowledge and competence in the analyzed area of financial analysis. We obtained the information about the mayors' e-mail addresses directly from the municipal websites. In terms of citizens' awareness these days, the municipality website and contact details can be taken for granted. This fact was also evident from the results of Mohelská & Sokolová's research (2017), according to which 99% of Czech municipalities publish a contact e-mail address on their website, the contact is often directly to the mayor. Scott (2006) states that websites provide the most basic public services and citizens are therefore more connected with the government. Web content and its usage requirements are constantly increasing. Municipalities must monitor and enhance the quality of their websites regularly, in order to attract and satisfy users. On the Slovak municipality website it is also possible to find some information on the financial situation of municipalities. 97 full questionnaire replies, out of 276 questionnaires that were sent, were received, i.e. the return rate is 35.14%. The following table shows the division of the selected sample and the basic set (all municipalities located in the Trenčín self-governing region) based on the criteria of the district.

Table 1 Classification of the selected sample by districts

District	base sample		research sample	
Bánovce nad Bebravou	43	15.58%	20	20.62%
Ilava	21	7.61%	11	11.34%
Myjava	17	6.16%	8	8.25%
Nové Mesto nad Váhom	34	12.32%	11	11.34%
Partizánske	23	8.33%	7	7.22%
Považská Bystrica	28	10.14%	10	10.31%
Prievidza	52	18.84%	16	16.49%
Púchov	21	7.61%	5	5.15%
Trenčín	37	13.41%	9	9.28%
Total	276	100.00%	97	100.00%

Source: Own processing

Table 1 shows that the largest number of municipalities in the sample comes from the districts of Bánovce nad Bebravou (20.62%) and Prievidza (16.49%). The average population of 97 municipalities in the sample is 1,502 and the current mayor has held his office for less than 7 years on average, i.e. for fewer than two terms of office.

Descriptive statistics was used to verify the survey, including selected moment characteristics, which were graphically supplemented by ANOM analysis (see also Vavrek et al., 2021). Using the Kendall coefficient of rank correlation, we observed a linear relationship between the frequency of use of financial analysis methods and the motives for its implementation, or rather the frequency of use of financial analysis methods and the use of specific methods of financial analysis. All analyses were developed in MS Excel, Statistica 13.4, Statgraphics XVIII.

Results and discussion

In this part of the paper, the results of the survey are presented. First, municipalities that do not carry out a financial analysis will be described with a focus on identifying the primary barriers to the use of methods of financial analysis at the level of territorial self-governments. Then we present the second group of municipalities that use the methods of financial analysis. We aimed to find out about the main motives for the use of the methods, as well as about which specific methods or groups of indicators of financial analysis are the most important at the level of municipalities.

The first question in the questionnaire was a classification question and divided the sample into two groups. Municipalities were asked to indicate whether they are currently using one of the methods of financial analysis. The results showed that financial analysis is not used at the level of self-government, as up to 72 municipalities (74.33%) replied that they are not. To assess their financial situation, only 25 municipalities (25.77%) carry out financial analysis. This trend can be evaluated as an unfavourable one. In this case, it is questionable whether the respondents knew what financial analysis is and what are parts of it is. Under the Act on Accounting No. 431/2002 Coll. as amended, municipalities use the double-entry bookkeeping system. If e.g. municipalities monitor the development of their economic results or the development of other financial indicators, we can claim that they are already using the method of financial analysis (in this case, specifically horizontal analysis. By utilizing financial analysis methods, municipalities could identify the occurrence of unfavourable situations well in advance and if corrective (remedial) actions are taken, they could prevent negative situations or minimize their consequences. The results of a financial analysis also help identify the weaknesses and strengths of the municipality, which are also important in terms of strategic management and decision-making for a longer period.

Municipalities not using the methods of financial analysis

In the case of 72 municipalities (74.33%) that did not use financial analyses, we were interested in the main reasons for not using them, with the possibility to mention more than one reason. Table 2 shows the order of barriers to the use of financial analysis in the municipalities of the Trenčín self-governing region.

Table 2 Barriers to the use of financial analysis Classification of the selected sample by districts

barriers to the use of financial analysis	percentage
Size of the municipality	66.67%
Lack of qualified staff	34.72%
Absence of financial analysis knowledge	20.83%
Unnecessary use of financial analysis	18.06%
Financial analysis is associated with higher costs	12.05%
Absence of technical equipment	4.17%
Reluctance of the municipality management to carry out one	1.39%

Source: Own processing

From the above-presented results we can see that the primary barrier to municipalities carrying out a financial analysis is the size of the municipality (66.67%), i.e. the municipality is too small. In the case of small municipalities, there are no members of staff who would be primarily responsible for evaluating the financial situation of the municipality.

This finding is very closely related to the following two barriers, which are the lack of qualified employees (34.72%) and the lack of knowledge of financial analysis (20.83%). In our opinion, it is possible to apply the methods of financial analysis in all size categories of municipalities, since there is a rich apparatus of simpler and more complicated methods of financial analysis and in most cases, it is possible to adapt these methods directly to the needs and requirements of a municipality. This is due to the fact that the methodology of financial analysis does not strictly stipulate the method of construction of indicators and the application of individual methods, i.e. they can be tailored to the needs of the user, in this case, a smaller municipality. The lack of qualified employees and of necessary knowledge in financial matters is conditioned mainly by the fact that municipality managements often a priori refuse university graduates (the argument is their lack of experience). It is necessary to realize, however, that it is graduates who have the necessary theoretical knowledge of modern methods of financial analysis, which can also be used at the level of local governments. In this case, it would be necessary to foster greater coherence and cooperation between the territorial self-governments of the Slovak Republic and universities.

Within the group of 72 municipalities, we then focused on whether they are planning to use any of the methods of financial analysis in the future. The replies were similarly unfavorable, as up to 81.94% of the 72 (which do not currently assess their financial situation), are not planning to change the situation in this respect. At present, 8.33% of respondents were unable to answer the question, which we can again consider as a negative signal that they do not deal with financial analysis at all. Only three municipalities would like to undertake a financial analysis within a one-year time frame, one of which even indicated a time horizon of application within six months.

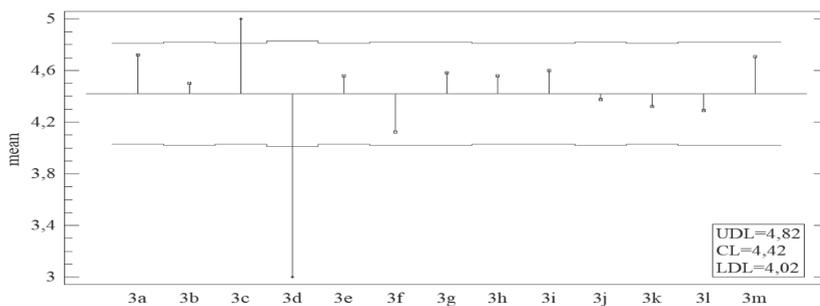
Municipalities using financial analysis methods

In this part of the paper, we focus in more detail on 25 municipalities (25.77%), which use financial analysis, and we were interested in the frequency of this activity. We believe that the methods of financial analysis and the assessment of the financial

situation should be carried out regularly and continuously, only then it is possible to exploit the strengths resulting from carrying out financial analyses. Otrusínová & Kulleová (2019) focused on financial analysis in the Czech municipalities, which showed that only 6.5% of municipalities are regularly analyzed at the level of Czech municipalities, which we consider to be a very low proportion. In this case, the Czech respondents argued that they do not currently have a problem with financial health and therefore do not consider it necessary to evaluate it regularly. We do not agree with this statement, since municipalities should not start to carry out a financial analysis only when problems have occurred, since then it will no longer be possible to take a remedial action in advance. We evaluate the results of our survey positively because the largest number of municipalities (in relative terms 40% of the respondents) stated that they use some of the methods of financial analysis quarterly. We consider this time interval to be very effective, as it is the period during which the municipality can flexibly react to the changes and irregularities and can come up with possible recovery measures. 20% of respondents reported that they use a financial analysis method once a year. In this case, we can assume that it is at the time of drawing up financial statements, or rather at the time of preparing the annual budget of the municipality. The selected sample includes 12% of municipalities using a financial analysis method on a semi-annual basis and 16% of municipalities using financial analysis monthly. In terms of using financial analysis methods weekly and daily, the situation was the same, as only 4% of the respondents indicated these options.

In the following question, we asked what the main motives for municipalities to conduct financial analysis are. We consider this question to be one of the key questions. The respondents were to assign significance to the motives based on a Likert scale. The responses are presented in Figure 1.

Figure 1 Differences in motives for using financial analysis



** note: The designation of the individual motives (a-m) corresponds to the designation of the motives listed in the annex.*

Source: Own processing.

The survey results show that drawing up the budget is the most important motive for municipalities, as all 25 respondents rated the motive as very significant. We consider this fact logical because from the point of view of a municipality its budget is the basic instrument of financial management in the respective budget year. In terms of time, the budget of the municipality is consistent with the calendar year and includes financial revenues and expenditures. In the case of Slovak municipalities, we see a multi-

annual budget, which is prepared for a period of three years (so in this case we can talk about a medium-term time horizon) with the budget prepared for the corresponding financial year (short-term time horizon). Here we can see the difference between the financial analyses of companies and the financial analyses of municipalities. In the case of enterprises, the primary motives for financial analysis are finding out about the current situation of the enterprise and monitoring the current situation/development of the economic results (Šrámeková, 2019). For 20 respondents it is very important to find out about the current situation of the municipality. 18 municipalities stated that a very important motive for carrying out a financial analysis is the identification of costs, which is very closely related to the most important and primary motive and that is the drawing up of a budget. The above figure shows that at the level of territorial self-governments financial analysis is not compiled in order to determine the position of the municipality on the market in comparison with other municipalities (for 10 respondents the given motive is not significant and insignificant either, and three respondents have labelled it even insignificant). We also think that it is necessary to find out their position in the area also from the point of view of municipalities because in this way it is possible to uncover the hidden reserves of municipalities.

Subsequently, we also focused on the identification of associations in the use of the methods of financial analysis and its motives, which are shown in Table 3.

Table 3 Rank correlation of the frequency of using financial analysis methods and motives for their implementation

item in the questionnaire	rank correlation
3a	
3b	
3c	
3d	
3e	
3f	0,321*
3g	0,391*
3h	
3i	
3j	
3k	
3l	0,308*
3m	

** significant at significance level $\alpha < 0.05$*

Source: Own processing

The results of the questionnaire showed that in most cases it is not possible to identify a linear correlation in the frequency of using the methods of financial analysis with the motive for which these methods are used in practice. The exception confirming the rule is the identification of strengths and weaknesses (3f), decisions on future financial activities of the municipality (3g) and the motive of strategic decision-making and the formulation of goals (3l), whose importance increases with

the frequency of application of some methods of financial analysis. We can evaluate the results we found positively, as we see the link between financial analysis and motives of its implementation, especially strategic analysis and the strategic management of municipalities, as financial analysis is important in the context of strategic planning. Financial analysis should provide information for future decision-making, allow for analysis and evaluation of the future scenario and select the most appropriate option from the future scenarios. Municipality representatives can use financial analysis to determine whether the fulfilment of expectations will improve the financial situation and, where appropriate, can identify undesirable differences between the current and planned developments in the financial plan. At the municipal level, an indicative financial plan is important, summarizing the amount of the funding needed to implement individual activities and projects. The drawing up of a financial plan is linked to the motives identified above.

Conclusion

In the current environment, we can observe that increasing competitiveness and effectiveness is becoming more significant while this fact is valid in both the private as well the public sector. We agree with Papcunová (2013) who claims that one of the opportunities to increase the effectiveness of municipalities lies just in the use of financial analyses and finding out about the financial condition of municipalities. As it results from the questionnaire survey, the municipalities located in the Trenčín self-governing region in the Slovak Republic do not use the methods of financial analysis (74.32%), arguing that their municipality is too small and there are no qualified employees who would have knowledge and experience in the financial area. At this point, we can see compliance with Daniels et al. (2018), according to which liquidity and its indicators are extremely important in the municipal sector. The results of their survey showed that using higher quality financial advisors may lead to greater liquidity. We agree with the statement of Otrusínová & Kulleová (2019) that each municipality can therefore determine the mutual relationships among components of short-term assets and short-term liabilities according to their own conditions and limitations, e.g. when handling specific and flow transfers, money in funds, or tax income and expenses. A greater problem among municipalities, however, may be operational liquidity management and the cash flow of individual projects. The sample size could be considered as a limitation of the survey, on the other hand, all possible steps (sending the questionnaires in two waves, addressing mayors/mayors of municipalities of the whole basic sample) were taken to make the sample as large as possible.

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