

Comparison of the effectiveness of municipal police activities in two municipalities

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Abstract

Research background: Security and protection of public order should be a priority in every municipality. Just as residents protect their homes, so municipality should protect regional self-government buildings, public places such as, squares, parks and playgrounds. Currently, the COVID-19 pandemic is reducing the budget of the municipality, which also it should reduced the budget for the activities of municipal police.

Purpose of the article: The study deals with the analysis of municipal police budget for the last 5 years and the analysis of municipal police interventions in each of these years. Subsequently, a correlation will be created between the annual budget of the municipal police and the number of interventions in the relevant year. The main objective will be to assess whether the number of municipal police interventions in one year depends on the annual budget.

Methods: The mentioned analysis of publicly available sources and correlation to determine the dependence between two variables will be used to prepare the article. Synthesis, induction and deduction will also be used..

Findings & Value added: The result of the study can be used by municipalities to create a municipal budget and determine the amount of the municipal police budget so that its activities are as effective as possible. The study will also provide an overview of municipal police interventions in recent years, from which it is possible to predict the number of interventions in the coming period.

Keywords: *regional safety; municipalities; municipal police*

JEL Classification: *F52; H55; R51*

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1 Introduction

Tanveer and Jeffrey (2015) say that, municipalities are form by state through a charter or other means to provide general government for a defined area with certain characteristics, such as urbanized and high population density. Municipalities are integrated into a relatively stable set of formal rules, informal practices and resource structures, and are therefore limited and enabled by them (Kronsell and Mukhtar-Landgren, 2018). Slovakia, the Czech Republic and France are among the European countries with the highest number of municipalities (Spac, 2020). During the socialist regime, the number of municipalities decreased from 3344 to 2698 in the Slovak Republic (Sebova and Petrikova, 2015). The Velvet Revolution of 1989 represented a fundamental change in the country's development, including its approach to the role of local government. The principle of subordination of municipalities to the central government was removed and the idea of local self-government was introduced (Spac and Sloboda, 2014). There are currently 2 891 municipalities. Examples of municipalities include cities, villages, or neighborhoods (Sebova and Petrikova, 2015). Svetlik et al. (2016) sayed that municipality in the Slovak Republic is a legal entity. Head of the municipality is mayor, which is responsible for the administration of the municipality's property (Kutaj and Boros, 2017). Head of the municipal police is Chief. He is considered the most influential figures in policy formation and overall implementation (Gustafson, 2013). There are large defferences between municipalities as regards to population, economic situation and rates of crime and poverty that do not relate directly to the organizational nature of the law enforcement agency or municipal government (Goh 2020). Globalization has brought a greater role for municipalities in the provision of public safety, public goods and services. The reason is that local governments are closer to their citizens and know their needs better than the central government (Birskyte, 2019). Paananen et al. (2021) is inclined to the view that municipalities have and need wide-ranging local decision-making power

According to Mukhtar-Landgren et al. (2018), municipalities have diverse roles in the functioning and management of the lives of inhabitants. Management activities help to focus specially on the acquisition, storage, sharing and use of knowledge in many areas such as for example problem solving, planning, decision making etc. (Stofkova et al., 2014). Municipalities can play important but diverse roles in the wider transition process of urban sustainability (Mukhtar-Landgren et al., 2018) Whereas the central role of the state is to ensure public security, it is therefore necessary for municipality to be involved (Ang, 2020). Bergh et al. (2021) argue that municipalities delegate their tasks to their own municipal corporations. Some describe this development as a rational response to the challenges of austerity measures and emphasize cost-effectiveness. It is difficult to delegate the task of ensuring the security of the population and public order in the municipalities (Polorecka et al. 2021). Therefore, this task is performed by the self-government itself, through the municipal police. The municipal police is a law enforcement department operating in ensuring general matters of public order, environmental protection in the municipality and performing tasks arising from generally binding regulations of the municipality, resolutions of the municipal council and decisions of the mayor (Act 564/1991). Soltes et al. (2021) says, that municipal police are among the non-state security forces. In the Slovak Republic, the competence of the municipal police is regulated by Act 564/1991. According to the relevant law, the municipal police is established and abolished by the municipal. In 2019, there are 217 municipal police in Slovakia, which employed 2,547 members (Soltes et al., 2021). It is also very necessary for police officers to be qualified and suitable for their position. In that case, it is up to the Chief to choose the appropriate positions based on the qualities and abilities of the police officer (Erdogan et al. 2018). In order for police officers to be prepared and qualified for their function, they must be trained in law as well bodily training (Sventekova et al., 2021). It helps them develop physical fitness and self-control, which serves to demonstrate necessary to keep the body in shape to perform certain task

(Courpasson and Monties, 2016). Bodily training and physical fitness of police officers is necessary, because primary responsibility for using of coercive control and the overall to use force, including deadly force, to protect citizens and officers from the dangerous people (Holmes et al., 2019).

2 Methods

To evaluate the effective use of municipal funds for the activities of the municipal police, our research simple is represented by statistical data from Reports on the activities of the municipal police for the years 2016-2020. We decided to compare the activities of the municipal police in the city of Zilina and in the city of Presov, because Matusiak (2019) claims that the number of police officers depends on the number of inhabitants, territorial size of the jurisdiction and demography. As there is unequal form of recording the detected offenses and the resolution of the offenses, it is possible to observe large differences between the two cities, even if they have a comparable population. Therefore, we will focus on data such as budget, population and number of offenses per police officer. We will also focus on the correlation between the individual data.

3 Results

The first part of this research results consists of an analysis of the activities of the municipal police in the town of Zilina and in the town of Presov, as well as their material equipment, vehicle fleet and financial budget. In the second part, the individual items were compared with respect to the number of members, the number of inhabitants and the size of the city. The following table contains the basic statistical data for the municipal police of the city of Zilina for the 2016 - 2020.

Items Year	Budget	Number of police officers	Number of inhabitans	Number of offenses
2016	1,938,487	83	81,094	19,635
2017	2,046,097	80	83,298	22,449
2018	2,252,500	80	82,931	20,554
2019	2,444,775	79	82,867	17,756
2020	2,802,690	86	82,494	15,778

Table 1. Statistical data of Zilina's municipal police.

Source: Reports on the activities of the Zilina's municipal police (2016-2020)

Then, a correlation table was prepared, in which the individual data were correlated with each other.

Table 2. Zilina's municipal police data correlation.

	Budget	Number of police officers	Number of inhabitans	Number of offenses
Budget	1			
Number of police officers	0.458098875	1		
Number of inhabitans	0.286043136	-0.498599848	1	

Number of offenses	-0.844232653	-0.610334749	0.233211566	1
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Source: Authors (2021)

Table 2 contains the correlation between any data of the municipal police in the city of Zilina. The results of the correlation show that there is a strong positive correlation between the budget and the number of crimes. Conversely, the highest negative correlation is surprisingly between the number of police officers and the number of offenses. It is also worth mentioning the medium positive correlation between the budget and the number of police officers. The medium correlation but negative is between the number of police officers and the number of inhabitants. As in the previous case, a table was compiled during the activities of the Zilina City Police, which contains basic statistical data of Presov's municipal police. These statistics will be needed to compare the effectiveness of the city police in both cities.

Table 3. Statistical data of Presov's municipal police.

Items	Budget	Number of police officers	Number of inhabitants	Number of offenses
Year				
2016	1,763,267	77	86,872	9,141
2017	1,862,404	77	86,314	9,478
2018	2,135,803	76	85,736	10,468
2019	2,369,746	78	85,476	8,906
2020	2,955,968	78	84,847	6,939

Source: Reports on the activities of the Presov's municipal police (2016-2020)

A correlation table was also compiled for data from Presov's municipal police.

Table 4. Presov's municipal police data correlation.

	Budget	Number of police officers	Number of inhabitants	Number of offenses
Budget	1			
Number of police officers	0.610026913	1		
Number of inhabitants	-0.956589563	-0.484945895	1	
Number of offenses	-0.768793628	-0.835893214	0.573309412	1

Source: Authors (2021)

When comparing the effectiveness of municipal police in both cities, we will focus on comparing individual parameters for one police officer. We will first focus on the share of the budget per police officer. As with Zilina's municipal police, the medium negative correlation is between by the number of police officers and the number of offenses. Strong negative correlation is between budget and number of offenses in both cities. After processing the correlation between the individual data at both city police stations, we proceed to compare

the data to one police officer. The firstly, we were the processing of a comparison of the budget per police officer in both city police.

Table 5. Comparison of the size of the budget per police officer.

	2016	2017	2018	2019	2020
Zilina	23,355	25,576	28,156	30,946	32,589
Presov	22,899	24,187	28,102	30,281	37,897

Source: Authors (2021)

As can be seen, the budget per police officer increased equally in both cities. However, in 2020, the difference in the amount of the budget for one police officer in the city of Presov is higher by approximately € 5,000. This difference was due to the fact that although the budgets in both cities are almost the same, the difference is in the number of police officers. There are 8 more members of the city police in the Zilina than in the Presov. The table also shows that the COVID-19 pandemic did not reduce or stop budget growth either. Another comparison will be how many inhabitants of the city per police officer.

Table 6. Comparison between inhabitants of the city per police officer.

	2016	2017	2018	2019	2020
Zilina	977	1,041	1,036	1,048	959
Presov	1,128	1,120	1,128	1,095	1,087

Source: Authors (2021)

In the town of Zilina, the proportion of the population per police officer is lower each year than in Presov. This is due to the fact that every year Zilina has a fewer population but a more police officers than Presov. The third and final comparison will be a comparison of how many offenses per one police officer. In this comparison, differences between cities are expected.

Table 7. Comparison between offenses per one police officer

	2016	2017	2018	2019	2020
Zilina	236	280	256	224	183
Presov	118	123	137	114	88

Source: Authors (2021)

The table shows that the municipal police in Zilina dealt with more offenses in 2016-2020. Each year, the difference is approximately 100 resolved offenses. It is possible that the reason is that there are more police officers in Zilina. But we are more inclined to believe that this is due to the unequal form of recording offenses. Because the difference in the number of police officers is not drastic.

4 Discussion

Based on the results obtained by correlation, it can be said, that the correlation between the individual data is comparable in both cities. This result corresponds to the fact that the individual data do not change so much and are approximately the same in both cities. We got the same results when comparing individual data in terms of one police officer. Except for comparison in the number of offenses per police officer. Because unequal is a way of writing and counting the number of offenses. Therefore, it is necessary to develop a methodology for recording and counting offenses.

5 Conclusion

The article focuses on assessing and comparing the effectiveness of city police in two municipalities. The city police in Zilina and the city police in Presov were selected. Because both cities have the same population, and this is one of the conditions that determines the number of police officers. The article made a comparison between the individual data for each municipal police separately. The result of the correlation was that in both cities there was a strong positive correlation between the budget and the number of police officers. There was also about the same negative correlation in both cities between the number of police officers and the number of inhabitants and between budget and number of offenses. Subsequently, the individual data were compared, which were converted per into one police officer. These comparisons were approximately the same in all cases compared, except for the comparison between offenses per one police officer. Zilina's municipal police data indicate that many more offenses per police officer have been dealt with than in Presov. This is due to unequal form of recording the detected offenses. It should be added that the COVID-19 pandemic did not affect the financing of the municipal police either.

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