

# CAPITAL EXPENDITURES OF LOCAL SELF-GOVERNMENTS IN CRISIS

## Kapitálové výdavky miestnych samospráv v krízových obdobiach

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### Annotation

Despite the fiscal decentralization, local self-governments in Slovak and Czech Republic are dependent on state budget revenues and are therefore very sensitive and responsive to any changes at the national level. The financial crisis, as well as the COVID-19 pandemic, have significantly affected the financial management of local self-governments. Most articles deal with the impact of crises on the current budget of municipalities. The aim of the paper is to analyze capital expenditures in two crisis periods - the global financial crisis and the COVID-19 pandemic at the level of local self-governments in Slovak and Czech Republic. From the point of view of the financial crisis, we analyze time period 2007-2012 and from the point of view of the COVID-19 pandemic, we analyze the period 2017-2020. As a base we used the data from the evaluation of the results of budget management of municipalities in Slovak Republic and data from Slovak and Czech Statistical Office. The analysis showed that the financial crisis did not have a significant impact on municipal capital expenditures, but the COVID-19 pandemic caused them to decline. In terms of structure, the biggest share was accounted for by capital expenditures associated with investment purchases (Slovak Republic on average 94%, Czech Republic 88%).

### Key words

capital expenditures, local self-government, investment purchases, global financial crisis, pandemic COVID-19

### Anotácia

Napriek uskutočnenej fiškálnej decentralizácii sú miestne samosprávy na Slovensku aj v Čechách závislé na príjmoch zo štátneho rozpočtu a preto veľmi citlivo vnímajú a reagujú na akékoľvek zmeny na národnej úrovni. Finančná kríza, ale aj pandémie COVID-19 výrazným spôsobom ovplyvnili aj finančné hospodárenie miestnych samospráv. Väčšina článkov sa venuje dopadu kríz na bežný rozpočet obcí. Cieľom príspevku je analýza kapitálových výdavkov v dvoch krízových obdobiach – finančná kríza a pandémie COVID-19 na úrovni miestnych samospráv v Slovenskej a Českej republike. Z pohľadu finančnej krízy je analyzované obdobie rokov 2007-2012 a z pohľadu pandémie COVID-19 analyzujeme obdobie rokov 2017-2020. Ako podklad sme použili údaje z hodnotenia výsledkov rozpočtového hospodárenia obcí SR a údaje Štatistického úradu SR a Českého štatistického úradu. Analýza ukázala, že finančná kríza nemala výrazný dopad na kapitálové výdavky obcí, avšak pandémie COVID-19 spôsobila ich pokles. Z hľadiska štruktúry najväčší podiel tvorili v oboch krízových obdobiach kapitálové výdavky spojené s investičnými nákupmi (v SR v priemere 94%, v ČR 88%).

### Kľúčové slová

kapitálové výdavky, miestna samospráva, investičné nákupy, globálna finančná kríza, pandémie COVID-19

**JEL Classification:** H72, H83, R50

## 1. Introduction

Local self-governments carry out operational activities (provide short-term benefits) and investment activities (have long-term benefits). These activities are followed by financial management, which is reflected in the final account of the municipality, which is compiled, audited and published annually. In the final account, short-term beneficial activities are reflected in operating expenditures, while long-term beneficial activities are reflected in capital expenditures (Sutopo and Siddi, 2018). Every investment decision should be preceded by an audit of the municipality's financial situation (Vavrek and Adamisin, 2018). This supports the rationalization of public spending. In justified cases, it is necessary to limit investment activities in strategic documents of municipalities, such as development strategies, local territorial development plans and long-term financial forecasts (Wasilewska, 2013, Hornyak Greganova and Orszaghova, 2019). Chung (2018) adds that investment in long-term capital projects is playing an increasingly important role in improving the quality of many public services as well as supporting the economic development of local self-governments, with more investment in capital projects often expected when more financial resources are available. Investments at the municipal level are also closely related to the financial independence of municipalities, resp. their dependence on funding from the state budget. This is also confirmed by the results of research by Polish municipalities, which showed that small municipalities were characterized by lower financial independence, but due to the level of debt and operating surplus, they had relatively greater opportunities to create new liabilities for investment activities (Czupich, 2020). However (Patrick and Trussel, 2011) based on research in Pennsylvania municipalities found that 31.7% of municipalities reduced public services between 1998 and 2008, with the most important predictor of public service reductions being a high level of capital expenditures relative to total bond incomes in the year preceding the reduction. One of the reasons for such a reduction in public service expenditure and at the same time progress in municipal investment projects is that capital projects are usually planned and financed over several years and are paid with bond yields, not annual tax revenues (Rivenbark et al., 2009). In the conditions of Slovak and Czech municipalities, however, the situation is diametrically different, because capital revenues are formed by revenues from the sale of municipal property or capital transfers coming from the state, which are earmarked.

A common fiscal behaviour that exacerbates underinvestment in capital projects is that local self-governments often postpone or limit capital expenditures during an economic downturn (Ho, 2008). This is also confirmed by Marlowe (2012), who adds that the economic downturn may reduce investment in capital projects as the tax base of the state or local self-government, such as incomes or property value, declines and state or federal governments often cut aid to lower levels of government. Managers thus often reduce or delay spending on capital projects during an economic downturn. Significant crisis periods that affected the investment activities of municipalities were the global financial crisis and the current pandemic COVID-19. The global financial crisis that erupted in the United States in 2007-2008 and the Eurozone crisis affecting EU Member States in 2009-2010 encouraged European countries to reconsider the role of central and local authorities (Bolgherini, 2014). In general, local self-governments have been able to feel the effects of the global financial crisis at four levels: (1) the level of incomes, which has fallen sharply, (2) expenditures, which has risen as a result of the economic slowdown and the corresponding rise in unemployment, (3) the financial capacity shrink due to difficulties in obtaining loans and rising money costs; and (4) foreign investment, which has declined; ongoing operations, which in many cases have been suspended; and projects that have been either cancelled or delayed. (Paulais, 2009). Besides that Cohen (2011) notes that a 2009 survey found that in addition to declining revenues, local self-government in the United States saw a decline in property values during the financial crisis. Some local self-governments invested in hedge funds in banks that went bankrupt during the crisis. According to Fábíán (2017) the financial crisis has hit Hungarian local self-governments much more severely than other OECD members. Before 2008, it also turned out that the amount of state support, together with other municipal revenues, was not sufficient to finance the tasks. The dramatic increase in the volume of local self-government debt began in 2006 and was mainly due to the issue of local self-government bonds. At the same time, subsidies provided by the state were frozen, which was one of the reasons why the municipality used external resources to finance its day-to-day operations and capital expenditures. Buček (2010) notes that the main accompanying phenomenon of the global financial crisis at the level of Slovak local self-governments was mainly the decline in budget revenues and the subsequent financial difficulties. Although the situation was partially alleviated by the additional transfer of funds from the state budget, it could not compensate for the lack of funds for all planned activities. In addition to the loss of incomes from personal income tax, the deteriorating economic situation was reflected in a general decline in property incomes. Such developments have significantly affected investment in local self-government development projects. Nevertheless, the importance of local self-governments for the European economy has proved to be important at this time, as 62.4% of direct public investment in this period has been supported by local authorities, accounting for only 8.4% of public debt in the EU27 (Meneguzzo et al., 2013). In addition, during the crisis, local self-governments contributed to the economic recovery by maintaining the level of public investment and public services, as well as launching new projects when private investment was slow (Dusek, 2017, Korenkova and

Urbanikova, 2014). Internal reorganization, ceilings on personnel costs or public employment were the answer to the crisis, which mainly caused revenues shortfalls at the level of local self-governments due to the reduction of economic growth of countries (Holubek et al., 2014) privatization and contracting in and / or public services, halting quantification and focusing on improving debt and property management. Besides that Sancino (2010) adds that one of the most important opportunities of the economic crisis is the rediscovery of the paradigm of community governance, both in terms of regulation and concrete implementation. At the same time, competitive local self-governments have begun to build, using their unique property to address the structural changes resulting from a globalized and digital economy (Beresecka and Petrasova, 2015, Románová and Červená, 2017). The financial crisis and subsequent crisis management have strengthened the concept of rules-based budgeting, which has increasingly been promoted at local self-government level. The most common response to the crisis has been to strengthen the concept of rules-based budgeting. In addition to numerical fiscal rules and regulations, fiscal procedures and accounting methodologies have been strengthened. Many European countries have introduced accounting changes, local self-government rules (eg Belgium, Denmark, France, Romania and the United Kingdom have switched to accrual accounting) or adopted a "golden rule" (eg Poland) or strengthened central control of local financial processes (Slovenia, United Kingdom) (Bethlendi et al., 2020). However, the "golden rule" approach is not restrictive enough in some cases. It allows for investments that do not have sufficient economic and social returns. The local self-government can also bend the rule by listing some items of operating costs as investments (Dafflon, 2010). In 2020, the world entered another global crisis that was not caused by the failure of banks and the economic system, but by a global pandemic COVID-19 (Soltes et al., 2021, Dvořák et al., 2020). The COVID-19 pandemic hit the world's national economies hard, which also negatively affected local self-government revenues. Klimovský & Nemeč (2021) note that the fiscal impacts of the COVID-19 pandemics on sub-national finance in the Czech Republic and Slovakia at least slightly differed from the situation in other countries, where drops in revenues and increases in expenditures were more visible. They also confirm this Piotrowski and Piotrowska (2021) state that the poor state of the Polish economy was reflected in a decline in tax revenues in 2020. This fact is important for local self-governments, as earmarked subsidies and subsidies from the central budget are an important source of financing their activities. The amount of the general subsidy for local self-governments in 2020 was approximately PLN 67 billion, while the state budget for 2021 envisages an amount of over PLN 70 billion. The Italian local self-government is in a similar situation, with COVID-19 having a significant negative impact on local self-government fiscal revenues, with the reduction in mobility and connectivity caused by lock - down being more pronounced in municipalities with stronger fiscal capacity. At the same time, there is an unprecedented fiscal challenge, which on the one hand has reduced central and local fiscal revenues for municipalities, but on the other hand it is necessary to provide additional resources to maintain the normal operation of municipalities (Bonaccorsi et al., 2020). Some parts of England have two-tiers of local self-government: lower-tier shire districts; and upper-tier shire counties – with the latter responsible for the costliest services like schools, social care and public health. Lower-tier shire districts forecast non-tax income pressures that amount to a much larger share of their pre-crisis expenditures than other types of councils, particularly compared with upper-tier shire counties. For example, while almost one-in-three councils forecast non-tax incomes losses equivalent to less than 5% of their pre-crisis expenditures, another one-in-six forecast pressures of at least 20% (Phillips and Ogden, 2020). Rising spending reflects a combination of additional costs, growing demand and new obligations. For example, the need to provide personal protective equipment and social security requirements have increased the cost of providing a number of existing services. These were expenses mainly in social facilities, in the provision of accommodation for positive citizens, respectively citizens in quarantine, expenditures associated with testing the population, etc. (Phillips and Ogden, 2020). Nemeč and Špaček (2020) add that many municipalities, for example, have decided to disinfect not only their premises but also public spaces. They also provided specific services to people in need, such as the supply of food and goods to the elderly and other vulnerable groups. Municipalities have also voluntarily delayed the payment of local taxes from citizens and granted companies several tax exemptions. This has had a significant impact on the revenue and expenditure side of their budgets. Nevertheless, according to Valaskova et al. (2021) however, the impact of the COVID-19 pandemic on local self-government is only minimally addressed by experts, while municipalities as the basic unit of territorial self-government can be considered as entities most affected by the COVID-19 pandemic, but state measures to help these entities can be considered minimal.

## 2. Objectives and methods

The aim of the paper is to characterize the changes of capital expenditures of the local self-government in the Slovak and Czech Republic and at the same time to analyze the structure of individual groups of capital expenditures in the time period 2007-2020.

We analyze capital expenditures in the period of two crises - global financial crisis and pandemic COVID - 19. The global financial crisis began in the world in 2008, in Slovakia and the Czech Republic manifested itself in

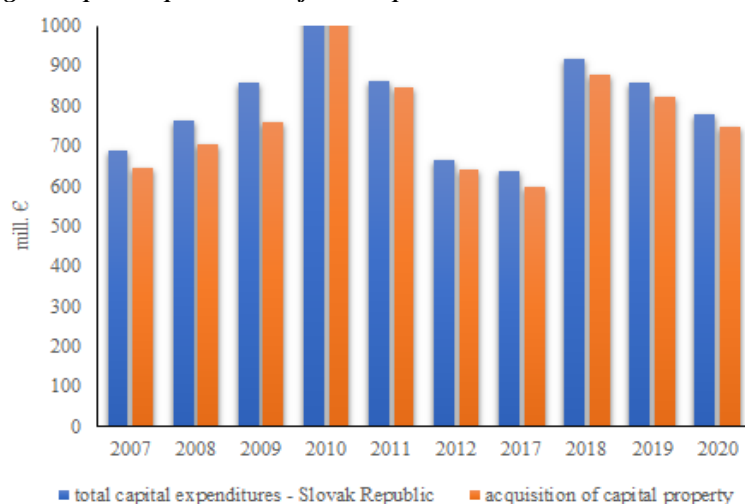
2009-2010. In this context, we analyze the time period 2007-2012 (two years before the global financial crisis and two years after this crisis). The COVID - 19 pandemic appeared worldwide in 2019. The first cases occurred in Slovakia and the Czech Republic in 2020. In this context, we analyze the time period 2017-2020. Capital expenditures of municipalities present important factor in the development of municipalities and to include expenditures related to property appreciation and capital transfers. In this article, we analyze a group of expenditures associated with property appreciation, as capital transfers are obtained by municipalities from the state budget through individual budget chapters. In addition to the structure of capital expenditures, we also analyzed: capital expenditures per inhabitant (in €) and capital assets on capital expenditures (in %).

Article evaluate all of the municipalities in Slovak Republic and in Czech Republic (we used the cumulative data). As a base we used the data from the evaluation of the results of budget management of municipalities in Slovak Republic from Ministry of Finance of Slovak Republic and data from Slovak and Czech Statistical Office. For the purpose of comparison, we converted the data for Czech Republic to € on the basis of the CZK and € exchange rate according to the National bank of Slovak Republic exchange rate for the relevant year.

### 3. Results

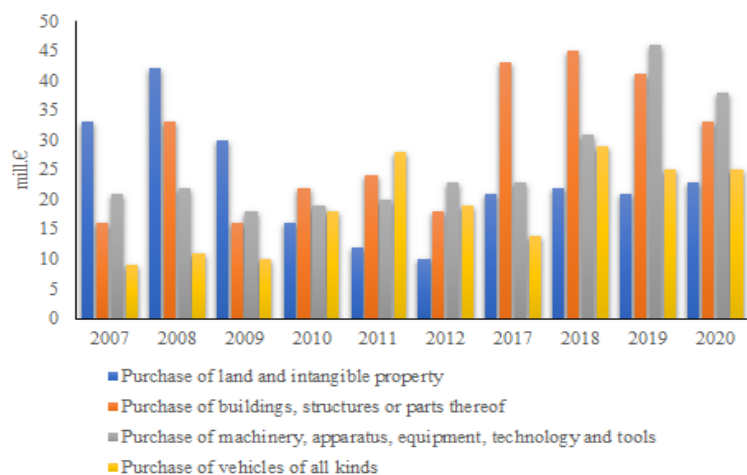
Capital expenditures increased every year before and during the financial crisis. Compared to 2007 and 2010, the volume of capital expenditures increased by 60%. Kožiak and Bolcárová (2013) they note that in 2010 the relative share of municipal current incomes decreased and this decrease was offset by growth in capital incomes and increased financial operations. According to the authors, this indicates a possible risk of "overeating" one-off capital incomes from selling property, or receiving credit resources, despite the fact that the law does not allow the use of investment resources for operation. Nemeč and Špaček (2020) note that as a consequence of Covid-19, municipalities have to face problems on both the revenues and expenditures sides of their budgets. According to the existing data, the expenditures increase because of the need to finance specific anti-pandemic measures on the local level is less problematic. In the next two years, the capital expenditures of the municipalities decreased. In 2012, the capital expenditures of Slovak municipalities were by 24 mill. € lower than in 2007 (fig.1). Žárska (2021) states that 2017 was the last year of significantly successful economic growth in Slovak economy, which was also reflected in the tax revenues allocated to municipalities (personal income tax), but nevertheless in 2018, capital expenditures increased by 280 mill. € (which represented an increase of 44%). In the pandemic year 2020, there was a decrease in capital expenditures. It follows from the above that the financial crisis did not have a significant impact on the capital expenditures of municipalities, but the pandemic caused their decline. This is mainly due to the fact that the pandemic caused municipalities unexpected expenditures associated with anti-pandemic measures.

**Fig.1: Capital expenditures of municipalities in Slovakia in selected time period**



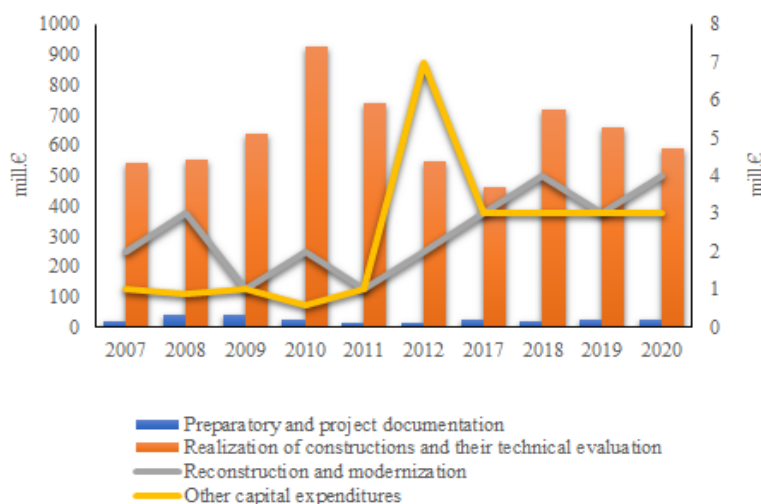
Source: own processing on the Ministry of Finance of the Slovak Republic (2022)

Municipal capital expenditures consist of expenditures associated with the acquisition of capital property and transfers. The decrease in total capital expenditures was caused by a decrease in expenditures associated with the acquisition of capital property. These expenditures make up on average 94% of the total capital expenditures of municipalities (fig.1).

**Fig.2: Structure of investment purchases of municipalities in Slovakia in selected time period**

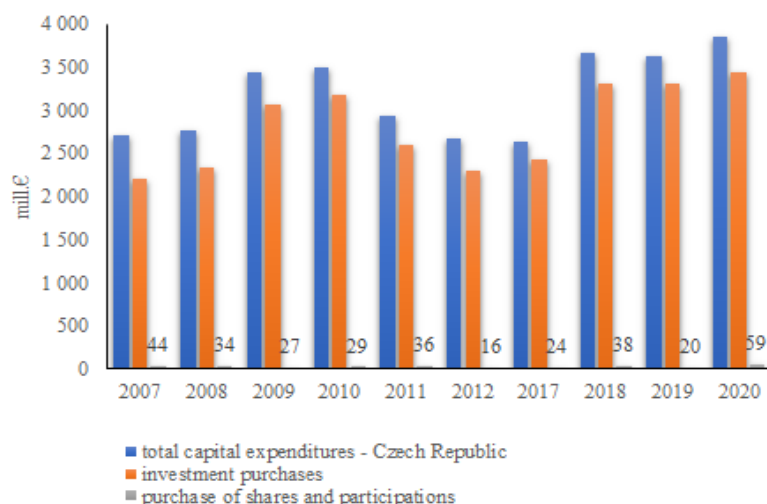
Source: own processing on the Ministry of Finance of the Slovak Republic (2022)

Within the total capital expenditures, the biggest share on average is 78% of expenditures related to realization of constructions and their technical evaluation. From the point of view of further development of municipalities, such progress is desirable because on the one hand it increases the value of property and on the other hand it improves the quality of provided services for the inhabitants. This is also confirmed by Šebová and Petříková (2015), who state that the low value of assets significantly affects the possibility for municipalities to finance any development activities, such as the possibility of obtaining other advantageous loans, income from business activities performed with municipal property, etc. More than 3% of the total capital expenditures consists of purchase of buildings, structures or parts thereof and purchase of machinery, apparatus, equipment, technology and tools. Purchase of land and intangible property makes up 2.92% and purchase of all kinds of vehicles makes up 2.92% of total capital expenditures. Capital expenditures on investment purchases increased in the time period before the financial crisis. In 2009, all categories of these expenditure decreased (fig.2). In 2010, the decrease in these expenditures continued, with the exception of expenditures related to Purchase of land and intangible property. This development continued in the pandemic year 2020.

**Fig.3: Structure of acquisition of capital assets of municipalities in Slovakia in selected time period**

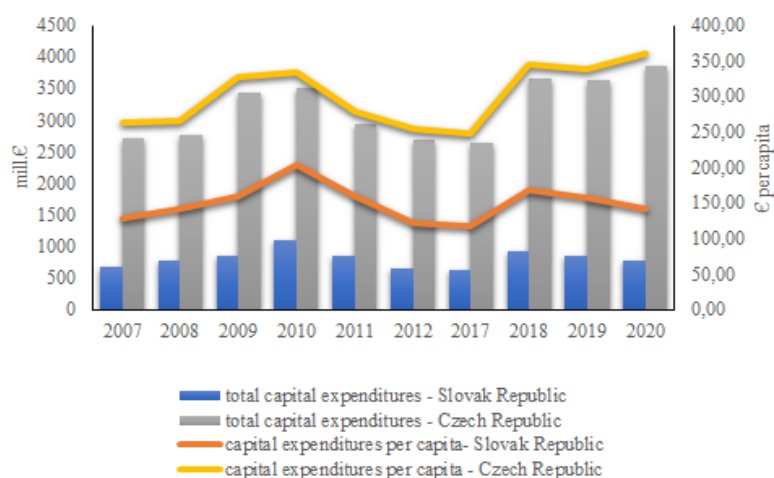
Source: own processing on Ministry of Finance of the Slovak Republic (2022)

Other capital expenditures and reconstruction and modernization expenditures account for less than 0.5% of total capital expenditures. Expenditures associated with preparatory and project documentation average 3.17%. The growing trend of capital expenditures associated with the realization of constructions and their technical evaluation was not stopped even by the global financial crisis. The decrease in these expenditures occurred only in the period from 2011 to 2017. The increase in these expenditures by 54.5% occurred in 2018 compared to the previous year, but the pandemic caused a slight decrease in these expenditures (fig.3).

**Fig.4: Capital expenditures of municipalities in Czech Republic in selected time period**

Source: own processing on the base of Czech Statistical Office (2022)

The total capital expenditures of Czech municipalities in both crisis years (2010 and 2020) increased in comparison with previous years. The decrease in capital expenditures occurred only in the period after the global financial crisis, resp. in the pre-pandemic time period. As in the case of Slovak municipalities, the Czech municipalities also spends the most financial resources on capital purchases within the framework of capital expenditures. These purchases account for an average of 88% of total capital expenditures. Expenditures related to purchase of shares and participations copied the development of total capital expenditures (fig.4).

**Fig.5: Total capital expenditures of municipalities in Slovak and Czech Republic in selected time period**

Source: own processing on the base of Czech Statistical Office and Ministry of Finance of the Slovak Republic (2022)

The development of total capital expenditures at the level of Slovak and Czech municipalities had the same trend during the crisis periods, except for the pandemic year. In 2010, capital expenditures at the level of Slovak and Czech municipalities increased compared to the previous year (in the Slovak Republic by 28.48% and in the Czech Republic by 2%). The change occurred in the pandemic year 2020, when at the level of Slovak municipalities total capital expenditures decreased by 9.1% and at the level of Czech municipalities, on the contrary, capital expenditures increased by 6.1%. A similar development was recorded in capital expenditures per capita (fig.5).

## Conclusion

Crisis periods teach municipalities to take rationalization measures and at the same time look for ways to ensure the standard quality of services provided, despite the unfavourable period. Fiscal decentralization has been a significant milestone since the establishment of municipalities in 2005, which significantly affected their financial management. Other significant periods that affected financial management were the global financial crisis and the current COVID-19 pandemic. The analysis of capital expenditures in the period of two crises - global financial crisis and pandemic COVID - 19 showed that the global financial crisis did not have a significant impact on

municipal capital expenditures, but the COVID-19 pandemic caused them to decline. In terms of structure, the biggest share was accounted for by capital expenditures associated with investment purchases (Slovak Republic on average 94%, Czech Republic 88%). Investment activities in the context of a well-designed and implemented property policy can help municipalities in the future to increase their financial self-sufficiency and independence, which could be one of the ways to successfully manage crisis periods.

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***This article is a part of the solution of the project VEGA 1/0517/22 Mapping of processes and financial impacts at the level of local self-governments in the conditions of the COVID-19 pandemic.***