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Tatiana REMENCOVÁ*, **Alena NOVÁK SEDLÁČKOVÁ**

University of Žilina, Faculty of Operation and Economics of Transport and Communications,
Air Transport Department

Univerzitná 1, 010 26 Žilina, Slovakia

**Corresponding author.* E-mail: tatiana.remencova@stud.uniza.sk

POSITION OF CENTRAL EUROPEAN REGIONAL AIRPORTS

Summary. This article focuses on the position of regional airports in the countries of Central Europe, with a focus on the airports of the Visegrád Group, especially the airports in Slovakia and the Czech Republic. The authors explain the financing of the airports and provision of state aid to these entities according to European legislation. This article reports differences in the national implementation processes of the same European rules in the V4 Member State and compares the regime of financing of the regional airports. Subsequently, we analyse the economic situation of regional airports and their state based on financial indicators. In general, the current COVID-19 pandemic has exacerbated their situation. Many countries still adhere to strict regulations or international travel bans so as not to spread the virus. The sharp decline in the number of passengers and flights has begun to have an impact on the financial viability of regional airports; therefore, financial assistance for regional airports will be more than necessary in the coming years.

1. INTRODUCTION

Regional airports contribute to development of international economic relations. It is possible to consider them mainly from the point of view of their dense network, but also the connection of the remote cities or regions of the world. In the year 2020 the situation on the air transport market was changed. The ongoing Covid-19 pandemic has caused a decrease in passengers, especially on international routes in all regions of the world, bankruptcy of many airlines and the closure of airports. It is expected that recovery of the sector of air transport will take several years and the rate of recovery will depend on the approach of the organizations involved, airport owners, but also on the state of the world economy [1]. Therefore, it is more than necessary to provide government assistance to airports because the situation that arose was not due to their fault. The approach of individual countries to this situation is diametrically different. The financial situation of regional airports was not sound before the crisis caused by the spread of COVID-19; there is no universal key and conditions for provision of aid in the EU either. In general, the main problem with regional airports is the high fixed operating costs that result from international, European and national aviation legislation and airport management conditions. Therefore, it is all the more important now to demonstrate the economic importance of regional airports and their real benefits [2]. The possibilities for granting state aid to these types of airports are set out in the EU legislative framework, specifically in Communication from the Commission 2014/C 99/03 -Guidelines on State aid to airports and airlines of 4 April 2014, Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union of 19 July 2016 (2016/C262/01) and Commission Regulation (EU) 2017/1084 of 14 June 2017 amending Regulation (EU) No 182/2011 651/2014 as regards aid to port and airport infrastructure. This article describes the methods of financing and supporting regional airports, with a focus on analysing the state of airports within the Visegrad Group (V4), which was established in 1993

as a community of four Central European countries: the Slovak Republic, the Czech Republic, Poland and Hungary. The analysis yields the most suitable and effective way of financing regional airports in Central Europe, with a focus on V4.

2. LITERATURE REVIEW

The sustainability, operation and financing of regional airports have recently become even more urgent issues after the outbreak of the COVID-19 pandemic. The research from 2018 dealt with the issue of airport financing, in particular, in subsidies provided to airports. The authors claim that distortions of competition in state aid to airports and airlines will continue after the end of the transitional period in 2024. If government authorities are willing to subsidize air transport, it is likely that the ban on state aid for loss-making regional airports will not have a significant impact on the European airports [3]. Further research was conducted by Bilotkach in 2018, which dealt with political factors that influence the allocation of subsidies to airports according to US law. The results showed that the country's elections have a strong impact on the allocation of subsidies to airports. The award of grants is also influenced by interested and non-interested persons who are members of the US Transportation Senate [4]. The research from 2021 examined the benefits and impacts of airport subsidies on the development of tourism in China. The results showed that the increase in subsidies to airports had an impact on the number of passengers and indirectly brought more tourists to the places where the airports are located. The study confirmed that the government's subsidy system for small- and medium-sized airports effectively supports the development of aviation and tourism [5]. Researchers' studies highlighted the importance of the smart technologies at the airports, especially for passengers of regional airports, which makes these airports more attractive for them [6, 7].

Airport efficiency and performance is also an important parameter, which is necessary to monitor. In this way, it is possible to better identify the state of the airport, especially in terms of efficiency of management or even financial health of the airport as a company. In 2021, Wu and Qi focused on subsidies provided to small- and medium-sized airports in China. The authors focused on evaluating the performance of 79 subsidized small- and medium-sized airports in 2014-2016. The analysis showed that the effectiveness of subsidies is closely linked to airport development strategies, subsidy distribution and airport emission pollution [8]. In 2017, Zuidberg examined the financial performance and profitability of individual airports in Europe. According to the results, the profitability of small regional airports is significantly affected by the economic performance of the region where the airport is located [9]. Efficiency of Spanish airports in the period 2009-2013 was examined in the study by Ripoll-Zarraga et al. in 2021. Through the DEA analysis, the authors found that airports show large differences in the monitored values, where the total airport capacities are not used because of the economic crisis. The largest changes in airport efficiency were recorded in 2009 and 2010; after that, there was a slow return to the pre-crisis situation. The analysis showed the strengths and weaknesses of the airports [10]. The research from 2013 used regression analysis at small regional airports and found that airports would behave efficiently if they could cover their annual operating costs, requiring at least 166,000 passengers per year [11]. The study by Novák Sedláčková and Švecová from 2019 was focused on an ex-post financial analysis that examined the financial health of airports in the Slovak Republic. Based on the research results, they found that airports in the Slovak Republic had satisfactory financial health during the period of 2013-2017 [12]. However, when the ex-ante method of financial analysis of liquidity and the ability of self-financing indicators of airports in the Slovak Republic were used, the study by Tomová et al. in 2019 found "that in the long run most Slovak airports are loss-making entities, with the exception of the partially privatized Košice airport and Sliač airport with mixed operations, which is, however, mainly financed by the Ministry of Defence of the Slovak Republic [13]."

The airport ownership also has a significant effect on the financing of the airport. A survey of Italian airports in 2014 showed that most regional publicly owned airports tend to make more use of public budgets, mainly to compensate for the losses incurred [14]. Airport ownership and financing of the airports in the United Kingdom were examined in the study by Budd and Ison in 2021. According to the results, the trend of full ownership of airports in the private sector has changed as local authorities

have started to invest more in airports in partnership with private consortia [15]. The ownership of Italian airports and their financial results were also examined in 2014. The authors found that privately owned companies mostly outperformed publicly owned companies, mainly in terms of financial indicators related to operating income [16].

3. LEGAL FRAMEWORK GOVERNING THE STATUS AND FINANCING OF REGIONAL AIRPORTS IN THE EU

As we mentioned in the introduction, the fundamental legal norms of the EU set out the basic conditions and criteria for the provision of state aid to airports and airlines in the EU. The European Commission is responsible for assessing and approving proposed forms of state aid to entities. Based on the assessment of the fulfilled conditions, it decides whether the provision of financial support is in accordance with the legislation and conditions of the EU. The main objective of the European Commission is to ensure fair competition for all [17]. According to these legal standards, various types of state aid can be granted in the field of air transport, namely, investment aid, operating aid, start-up aid to airlines and state aid in the form of public service compensation [18].

Investment aid is a form of public aid to finance investments at airports. The basic idea of investment aid is that public money should be used primarily to finance the construction of viable airports that meet market needs, which means that there is a demand for the services of such airports, whether from the passengers or from airlines' point of view. The maximum intensity of investment aid that is considered permissible has also been set. It ranges from 25% to 75% and is directly related to the size of the airport [19].

Operating aid is intended to cover funding gaps, either in the form of advance payments or in the form of regular instalments to cover expected operating costs. The amount of this aid is again decided by the Commission, which is interested, *inter alia*, in the extent to which the airport can cover its operating costs. Also based on these data, the Commission will determine the amount of aid that should not exceed the amount required to cover operating losses, and therefore, the amount of aid is often limited to the minimum necessary. The Commission believes that operating aid should have an incentive effect and should be proportionate. A key element for the Commission's assessment of operating aid is the airport's *ex-ante* business plan, which will ensure that the company managing the airport is able to cover all operating costs at the end of the 10-year transition period [17].

In certain cases, the legal framework also allows state aid to be granted to air carriers in the form of a start-up grant. However, the air carrier must meet conditions that include e.g. a business plan where it sufficiently declares the viability of the planned route in the future [17].

State aid in the form of compensation for services of general interest may be granted, for example, to those airports that serve areas that are very remote or isolated from the EU, provided that the distance prevents the development of the area where the airport is located [20].

In general, state aid for small regional airports at the EU level has been simplified since 14 June 2017, when the last European Commission Regulation (EU) 2017/1084 entered into force. Simplified rules for very small airports set a limit at 200,000 passengers a year. The European Commission's new regulatory framework includes, for example, additional requirements regarding investment aid.

One of them is that the airport should be open to all potential users. In the event of a physical capacity constraint, the allocation shall be made based on relevant, objective, transparent and non-discriminatory criteria. Aid should not be granted for the relocation of existing airports or for the creation of a new airport, including the conversion of an existing airport into a passenger airport. The investment in question should not exceed what is necessary to satisfy the medium-term expected operation based on reasonable operating forecasts.

The regulation also states that, in the case of very small airports, the amount of investment aid may not exceed the difference between the eligible costs and the operating profit of the investment. Thus, operating profit is deducted from eligible costs *ex-ante* based on reasonable forecasts or through a recovery mechanism. However, to better process and manage aid to airports, the ministry would need

to prepare new guidelines on state aid. At the same time, a political decision is needed to agree on support for small airports.

Despite all EU regulations, the Commission's guidelines have a degree of flexibility. They never question the existence of regional airports, quite the contrary. The Commission states that regional airports may prove important for local development and the accessibility of certain regions. In addition, the Commission states in its guidelines that the categorization of State aid to regional airports is justified, with a view to developing new services and contributing to better accessibility and economic development. It also counts on the fact that, if these guidelines are strictly adhered to, they may be a major obstacle to the financing of regional airports in the coming years. Competent regional aiding authorities will need to ensure in the future that the airports they support will be able to recover a significant part of their capital costs as well as cover their operating costs in the long term. In addition, it may be necessary to reduce charges for airlines, attract new airlines as well as customers, use new and alternative sources of revenue and/or introduce rationalization measures. Although such measures have the potential to improve the economic situation at smaller airports, uncertain and/or negative aviation prospects at many airports could nevertheless reduce the willingness of their owners to provide (further) assistance [21].

4. APPLIED RESEARCH METHODOLOGY OF ADDRESSED AREA

Several methods were applied for a thorough analysis of the situation at selected regional airports. Research was carried out using all the available sources of professional and scientific literature, with emphasis on basic operational and financial indicators from the annual reports of airports in Slovakia and the Czech Republic, where data on the number of carried passengers, number of movements, total revenues, total costs, transported cargo and number of employees were collected. We compared and evaluated these data with other databases such as the Finstat database in Slovakia and justice.cz in Czech Republic, which was very useful for cross check analysis. Subsequently, we have analysed selected indicators. The aim of the research was to create an overview of the current situation of regional airports in the V4 region, with a focus on airports in Slovakia and the Czech Republic. Based on the conclusions of the research, possible airport financing proposals were formulated.

For basic research, we chose selected regional airports from Slovakia and the Czech Republic, which we evaluate in the context of their position within the V4. In general, we can say that each of the four countries is adequately represented by the number of airports, even though the size of each country varies. Therefore, we have selected several airports (representatives of the industry) for each member state, which meet the stated condition of a regional airport of up to 3 million passengers carried per year and a set value of 166,000 handled passengers according to Adler et al. (2013).

We have selected 6 airports from the Slovak Republic: M.R. Štefánik Airport in Bratislava, Košice Airport, Poprad-Tatry Airport, Sliač Airport, Piešťany Airport and Žilina Airport.

From the Czech Republic, we have chosen Brno - Tuřany Airport, Leoš Janáček Airport Ostrava, Pardubice Airport and Karlovy Vary Airport.

Poland is a country with an area of 312,683 km². This is why there are a higher overall number of regional airports than in any other V4 country. For Poland, we have chosen Solidarity Szczecin - Goleniów Airport, Bydgoszcz Ignacy Jan Paderewski, Poznan - Lawica Henryk Wienawski Airport, Zielona Góra Airport, Lodz Wladyslaw Reymont Airport and Lublin Airport. The last V4 country is Hungary. For this country, we have chosen Debrecen International Airport, Hévíz-Balaton Airport, Győr-Pér International Airport, Pécs-Pogány Airport, Nyíregyháza Airport and Szombathely Airport.

Table 1 presents the basic indicators, thanks to which we can better assess the economic situation of airports in the Czech Republic. We were unable to obtain the missing revenues and costs values for Brno Airport. After contacting the airport directly, we were told by the airport management that they were not obliged to provide them. Despite the missing data, it can be deduced that the values of costs are higher than the values of revenues. The only exception is Brno Airport, which generated profit during the period under review. Other airports can be considered loss-making. In terms of passenger numbers, these airports maintain a relatively stable position. The number of passengers varies from year to year,

only slightly increasing or slightly decreasing. All airports with the exception of Karlovy Vary Airport are mostly cargo oriented. According to the listed values, we can consider Ostrava Airport to be a leader in cargo transport. It reaches the highest values of all airports, which were increasing during the observed period. If we evaluate the number of movements, then Brno Airport clearly reaches the highest value and Pardubice Airport reaches the lowest value.

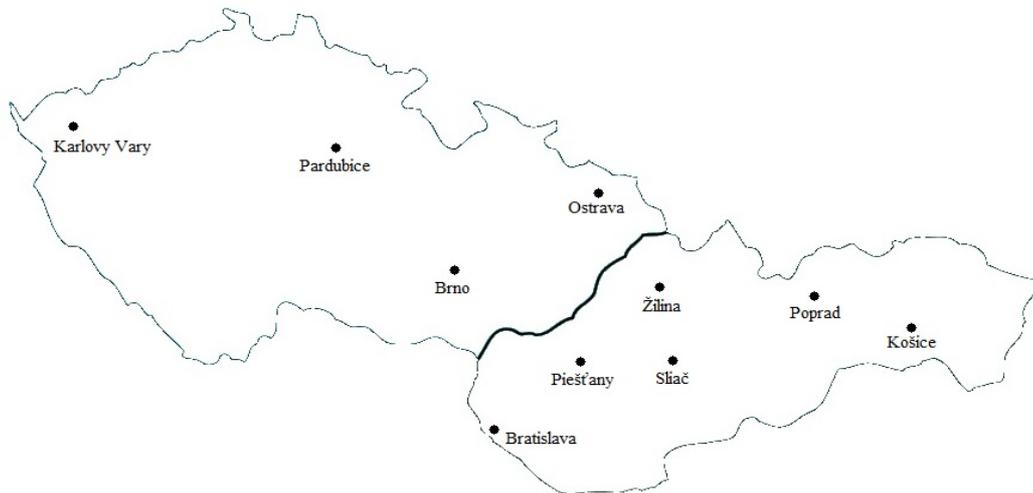


Fig. 1. Map of selected regional airports in the Slovak Republic and the Czech Republic



Fig. 2. Selected regional airports in Poland

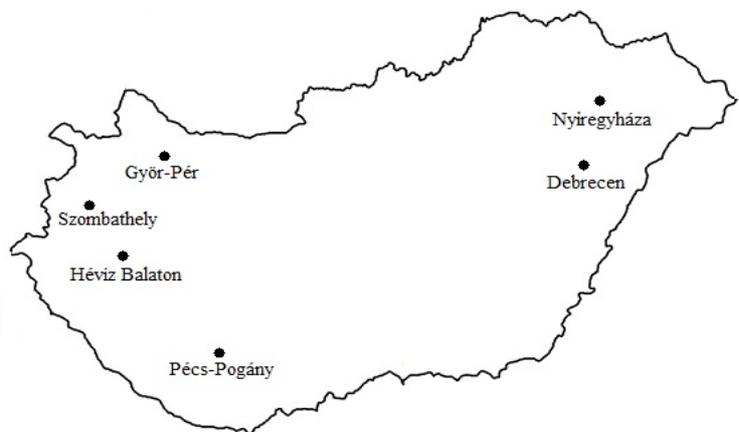


Fig. 3. Selected regional airports in Hungary

Table 2 shows selected indicators of regional airports in the Slovak Republic. If we look at the values of costs and revenues, we can say that Slovak airports usually have higher costs than revenues. In general, it can be stated that airports generate losses. The only exceptions are Košice Airport and Sliac Airport, which generate profits; however, since 2020, Sliac Airport ceased to provide services for commercial air transport and focused mainly on development for the needs of the Ministry of Defence of the Slovak Republic. In the case of Košice Airport, the situation is significantly affected by the ownership of the airport, when a foreign investor became the majority owner. If we compare the number of transported passengers, all airports are doing relatively favourably, except for the airport in Žilina. The number of transported passengers is barely in the hundreds, despite the fact that the number of movements is equal to that at Poprad Airport. The reason is the presence of the University of Žilina and its flight school, which has been using this airport for pilot training since the 1970s. The situation of the airport is caused by the process of changing ownership rights, which was very lengthy (lasting almost 3

years), when, due to the impossible prediction of the outcome, the creation of a long-term strategic plan was complicated. The conceptual development of airports and the strategic plan for the development of civil aviation in the Slovak Republic do not exist yet. That also causes a high sensitivity on the "political scene's" changes. In terms of the number of movements, the best airports are in Bratislava and Košice. On the contrary, the airports in Piešťany and Sliach have the lowest values. Cargo transportation is widespread at all airports.

Table 1

Selected airport indicators in the Czech Republic

	Reviewed period	Brno	Ostrava	Pardubice	Karlovy Vary
Number of handled passengers	2018	500,727	377,936	147,064	45,003
	2017	470,285	324,116	88,490	21,404
	2016	417,725	258,223	31,174	25,235
	2015	466,046	308,933	59,260	51,780
	2014	486,134	297,691	150,056	85,596
Number of movements	2018	41,172	23,942	1665	5480
	2017	44,294	20,639	1687	5,702
	2016	40,073	20,746	1234	5,008
	2015	38,264	19,002	1374	5,816
	2014	32,216	15069	2188	5824
Total revenues in CZK	2018	*	270,553,000	99,007,000	43,300,600
	2017	*	243,124,000	73,068,000	29,534,200
	2016	186,762,000	221,809,000	48,218,000	30,767,500
	2015	207,940,000	208,009,000	46,338,000	44,323,000
	2014	203,242,000	204,590,000	108,714,000	63,560,300
Total costs in CZK	2018	*	278,735,000	114,918,000	52,431,200
	2017	*	258,360,000	78,288,000	44,902,000
	2016	173,181,000	310,548,000	58,886,000	45,702,000
	2015	184,053,000	229,451,000	61,009,000	50,104,800
	2014	199,227,000	227,332,000	101,910,000	56,435,000
Cargo transported (tons)	2018	3750	5448	183	*
	2017	3893	5363	265	*
	2016	4150	4152	142	*
	2015	4613	6469	159	*
	2014	4530	5180	101	*
Number of employees	2018	159	176	38	45
	2017	143	182	32	48
	2016	143	182	29	51
	2015	150	176	35	52
	2014	158	172	35	60

(*) – Unpublished data

If we compare Košice Airport and Brno Airport, we can see that the number of transported passengers is between 400,000 and 500,000 per year. During the period under review, the values change. At the airport in Košice, we can see a regular increase in passengers from year to year, whereas Brno Airport recorded a decrease in 2014-2016, and only in 2017 and 2018 did it record an increase. In terms of the

number of movements, Brno airport wins, with the number of movements being in thousands. Brno again leads in terms of the cargo transported; however, in terms of the number of employees, the values are approximately the same at both airports.

Table 2

Selected indicators of airports in the Slovak Republic

	Reviewed period	Bratislava	Košice	Piešťany	Sliac	Žilina	Poprad - Tatry
Number of handled passengers	2018	2,292,712	542,026	768	41,866	523	88,387
	2017	1,942,069	496,708	1294	34,827	421	80,140
	2016	1,756,808	436,696	912	22,511	286	84,030
	2015	1,564,311	410,449	2030	35,682	888	85,100
	2014	1,355,625	356,750	1956	23,663	245	31,209
Number of movements	2018	30,366	16,956	1862	1355	9881	7130
	2017	27,322	11,408	1371	1,557	8,911	6,925
	2016	25,699	10,040	1217	1,442	7,451	8,260
	2015	24,622	9,020	2007	1,470	7,832	6,953
	2014	21,481	8115	1989	1016	6311	6202
Total revenues in €	2018	32,190,000	13,345,853	886,188	2,344,409	815,861	2,785,600
	2017	28,481,000	11,401,873	659,533	2,420,191	712,116	2,529,400
	2016	24,834,000	9,121,438	502,530	2,152,734	707,441	2,275,500
	2015	24,734,000	9,625,512	783,110	2,143,522	918,099	2,651,100
	2014	25,192,000	9,048,089	592,664	2,041,975	1,324,607	2,277,800
Total costs in €	2018	33,355,000	10,068,424	1,229,560	2,317,236	860,476	3,007,000
	2017	32,453,000	9,045,861	980,746	2,312,855	856,287	2,745,700
	2016	33,159,000	7,202,546	1,132,655	2,242,142	844,631	2,795,600
	2015	32,021,000	7,081,841	1,172,618	2,017,821	1,067,890	2,735,200
	2014	31,913,000	7,155,604	1,031,871	1,972,055	955,681	2,494,800
Cargo transported (tonnes)	2018	24,458.02	32.00	8.68	73.922	0.434	0
	2017	26,246.07	106.36	36.517	485.286	0.526	0.61
	2016	22,895.36	88.359	5.512	592.2	1.2	5.512
	2015	21,098.12	251.80	42.947	116.501	1.252	42.947
	2014	19,448.17	82.783	68.52	296	2.852	68.52
Number of employees	2018	608	147	26	38	19	62
	2017	617	139	27	40	19	60
	2016	612	134	30	37	19	62
	2015	561	128	30	37	19	64
	2014	538	129	32	37	18	59

What we can evaluate as positive is that both airports generate profit. However, the issue of ownership of these airports, which can have a major impact on the operation and financing of the airport, needs to be recalled. The airport in Košice was successfully privatized in 2006. Currently, the airport is owned by KSC HOLDING, a.s., with 66% of shares, and the Ministry of Transport and Construction of the Slovak Republic, with 34% of shares. This fact has significantly changed the view of this airport. Currently, the airport is progressing very well and is also positively evaluated abroad. It offers a very good connection, thanks to which it has become the second most popular airport in the Slovak Republic [22]. At the same time, it should be noted that this position is due to its geographic location. It has a

geographical monopoly in the eastern part of the Slovak Republic also with respect to the surrounding countries, which means that none of the airports in its vicinity of up to about 100 km is able to provide services at the same level and scope as Košice Airport. On the contrary, Brno Airport, solely owned by the South Moravian Region since 1 July 2004 and operated by Brno Airport a.s. [23], has a couple of competitors in terms of geographical location including Bratislava, Vienna and Ostrava airports.

For further comparison, we have chosen the Poprad and Pardubice airports. In terms of the number of passengers, airports differ significantly. Poprad Airport is located in an area that is very attractive for tourists, which is why it records a regular increase in the number of passengers, with only a slight drop in 2017. In Pardubice, the situation is more interesting, when in 2014 they recorded a high number of passengers, and the following 2 years, the numbers decreased and then incurred loss again. The reason was the ongoing reconstruction of the new terminal. The number of movements at the given airports also varies. Poprad Airport reaches a higher value by several thousand. Running costs are higher than revenues in both cases, so airports generate a loss. The exception is 2014, when the airport in Pardubice recorded a profit. Both airports focus on freight transport, but in Pardubice, the values are higher. In terms of the number of employees, the airport in Poprad leads. The owner of Poprad Airport is the Ministry of Transport and Construction of the Slovak Republic, with a share of 97.61%, the city of Poprad, with a share of 1.67%, and the city of High Tatras, with a share of 0.72% [24]. In Pardubice, the ownership structure is as follows: the city of Pardubice (66.7%) and the Pardubice Region (33.3%) [25]. Other airports, such as Žilina Airport and Karlovy Vary Airport, can be compared in a similar way.

5. CONCLUSION

Loss generation is one of the biggest problems of regional airports. Based on the performed analysis, we verified that regional airports in the Czech Republic and Slovakia generate a loss and only exceptionally a profit. This problem is known around the world. The EU supports regional airports, but many of them are unable to self-finance after a transitional period. Another problem is that the number of regional airports is really high. Low utilization and the issue of their financing are strategic for individual countries. For the airports to be well used, they need passengers who visit the country, or are interested in the concerned regions; alternatively, they are being used as a “point of connection with the world”. The effect of the development of industry and trade in the given region as well as the support of tourism mentioned above are really important for the regions and consequently for the country. Therefore, it is necessary for individual countries to clarify whether they are interested in supporting the development of regional airports in their country and whether they are of a strategic nature for them. For this reason, we recommend, first and foremost, creating a strategic plan for airport development (which, in the case of Slovakia, has been missing for a long time), which would clearly determine the direction of air transport development in a given country. The government or a region can invest in development of the airports, but the vision and expectations for the future must be clear. As an example, we will mention the Czech Republic, which has a strategic plan for the development of air transport. They developed this concept for the entire aviation sector to be able to implement the goals that they set in the "Transport Policy of the Czech Republic" with prospects for 2050. One of the priorities of the concept is to keep regional airports in operation with regard to their economic results. One of the measures is to strengthen the importance of regional airports within the relevant catchment areas by supporting their ability to obtain scheduled or non-scheduled flights by Slovak and foreign air carriers using an extended access policy (e.g. by removing geographical restrictions or by declaring the possibility to exercise rights of fifth freedom of air agreements) [28].

Of the V4 countries, the development of airports in the Czech Republic and Poland has so far been the most supported. For example, the development of Brno, Ostrava and Pardubice airports was supported by EU projects. In Poland, the situation with regional airports has been very poor in the past. Research has shown that only larger airports (Warsaw, Krakow, Katowice, Gdansk, Wroclaw, Poznan) generate profits, which, with respect to ownership structures, also support the loss-making operation of smaller airports. According to the latest studies, airports in Poland can already compete very well and their development is advancing. The individual airports are trying to make the most of their potential,

which is why the situation in Poland is much better than in the past. The development of airports in this country takes place in the form of a nationwide program through the so-called structural funds. For example, airports in Łódź, Gdańsk, Katowice, Krakow and other smaller cities have received EU support [26]. The development of regional airports in Hungary has been ongoing since 2006. However, the situation has not been easy, as most airports in Hungary belong to local governments, which have been forced to finance them. The EU has also made little effort in this case and has financially supported some of Hungary's airports. They provided subsidies so that the airports could remain in operation and be able to create a balanced budget again. It can be said that the airports have bottomed out, but now, the outbreak of the pandemic has caused them to fall again. Subsidies that are publicly known and notified to the EU have been received mainly by Debrecen Airport [27]. Airports in the Slovak Republic are also supported, but not enough to significantly improve their situation. Airports currently have a mixed form of ownership, which is why the issue of their financing is difficult. Currently, the world is struggling with the COVID-19 pandemic, which caused a temporary stagnation, or more precisely, a significant decline almost to "0" in the air transport market. The situation escalated to the point that many airlines went bankrupt, and some airports remained completely closed to the public. It is therefore clear that the financial situation of countries, airports and airlines has deteriorated to such an extent that the EU should consider a way to support aviation companies, which were the most affected by the pandemic. This article dealt with the situation of regional airports in the V4 countries, with a closer focus on regional airports in the Slovak Republic and the Czech Republic. There is an opportunity to extend this research to other indicators in the future, which will better demonstrate the current state of regional airports. It is also possible to extend the sample to other airports and then compare their similarities and differences. Subsequently, based on a more detailed analysis and further research, it will be possible to design an effective business model for regional airports.

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