https://doi.org/10.26552/ pas.Z.2022.1.07

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OWNERSHIP STRUCTURES OF REGIONAL AIRPORTS

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Abstract

This paper is focused on regional airports and their ownership structures. The first part defines the basic terms such as airport and regional airport from a legal point of view. It describes airport ownership models in general, focusing on the traditional organizational ownership model, and then it describes processes such as decentralization, corporatization, commercialization and privatization. This part also contains the advantages and disadvantages of privatization. In the second part, it is focused on the current state of the issue, when there are described selected scientific studies that address the issue of ownership models. Attention is also focused on the Covid-19 pandemic, which had a strong impact on the regional airport. The main goal of the paper is to analyse the ownership structures of selected regional airports, which are located in Austria and the Czech Republic. In connection with ownership structures, it also monitors the achieved economic result of regional airports.

Keywords

Ownership structures, Regional airport, Privatization, Decentralization, Austria, Czech Republic

1. INTRODUCTION

Air transport is one of the most important transport sectors. Airports in this sector are indispensable entities that connect even the most remote regions and towns. Today, we would find a lot of airports on the world map, which mainly provide passenger and cargo transport. Regional airports are also part of the global transport system, so it is important that they be mentioned. Regional airports can provide the necessary transport, but unfortunately the benefits in terms of profit are often insufficient. Demands for airports in the form of various innovations and modernization are constantly increasing, so it is very difficult for these airports to keep up with large and advanced airports. Every business requires money, as well as in the case of airport operations. In this case, regional airports have a withdrawn position, as the operation requires considerable funds, but also responsible management. For this reason, it is difficult for these airports to remain in the air transport market at all. When evaluating the business models of these airports, it is difficult to define them, because each airport is unique and has its own business model. Unfortunately, the model is not always successful. One of several aspects of the business model is the ownership structure.

Airport ownership structures have changed over the years. Of course, the changes also affected regional airports. Many of them generated losses, and for the purpose of maximizing profits, a change in ownership structure seemed to be one of the solutions. Some regional airports have started to prosper and the change in ownership structures has brought positive results. At the same time, regional airports began to modernize gradually, and some of them began to prosper.

This article is focused on the ownership structures of regional airports and their development. In the first part, there are described important terms such as airport and regional airport. There is added their importance, and then something about ownership models of the airports.

In the next part, it is described the current condition of this problem. Several scientific studies were selected that focus on the ownership, efficiency, and profitability of regional airports. Covid-19 pandemic was also a topic, which was described.

The aim of the article is to analyse the ownership structures of selected regional airports in two countries, namely the Czech Republic and Austria. In connection with the ownership structure, there are monitored the economic results, and the number of transported passengers at selected regional airports.

In the last part, there are presented the results and evaluated the ownership structures of selected regional airports. This part contains an analysis of the economic results of selected regional airports in connection with their ownership structure. In addition, there is evaluated the development of transported passengers during the reviewed period.

2. AIRPORT OWNERSHIP MODELS

Thanks to the development of air transport, people and cargo can be transported much more efficiently. Air transport has also developed thanks to airports.

2.1. Airports

To better understand the topic, it is necessary to provide a definition of what the term airport means. According to the Civil Aviation Act No. 49/1997 an airport is "a territorially demarcated and appropriately landscaped area, including a set of aeronautical structures and airport facilities, permanently designated for take-offs and landings of aircraft and related aircraft movements" [1]. Airports can also be classified, for example, according to their traffic density, size, function or type of ownership.

The airports can also be classified by density traffic:

- Major Airport - Carries more than 25 million passengers per year.
- National Airport - carries from 10 to 25 million
- passengers per year.
- Large regional airports - carry from 5 to 10 million passengers per year.
- Small regional airports - carry from 1 to 5 million passengers per year.
- Small airports - carry more than 200,000 passengers per year [2].

2.2. Regional airports

We can often find in various publications that a regional airport is defined based on the number of passengers carried per year. In this case, regional airports and small airports are defined by a smaller volume of passenger traffic. When examining the concept of regional airport, it is important to proceed from the current legislation. According to Regulation (EU) 2017/1084 amending the regulation (EU) 651/2014, as regards airport infrastructure, we can define a regional airport as "an airport with average annual traffic of up to three million passengers" [1].

2.3. Meaning of regional airports

According to ACI Europe, regional airports around the world are key, especially in terms of ensuring the accessibility of remote regions that are far from major transport hubs. Regional airports make a significant contribution to economic development, and they are also creating jobs within the regions in which they are located. From another point of view, they provide impulse for the overall development of the landscape within a framework that helps to meet policy objectives in economic and social terms. They are also an extremely important element of the critical infrastructure that is necessary to secure transport in the country and for the citizens in this area. They play a key role in the air rescue service, in fire monitoring and firefighting flights, but also in emergencies (natural and other disasters). Their operation is not easy and they most often focus on charter flights. Some regional airports operate sports and leisure flights. Compared to larger airports, regional airports do not provide passengers with the same standard of service as large international airports, but many passengers choose them for a variety of reasons. Regional airports are popular with passengers mainly due to lower ticket prices and fewer passengers, so they do not have to wait so long for security checks and are checked in faster. Of course, they also provide benefits for airlines. Overall, there are significant benefits due to lower prices for landing fees and other services. Another advantage of these airports is their geographical location, as they are often located in interesting destinations. This way they are closer to passengers. Disadvantages would include a smaller volume of passenger traffic compared to large airports. On the one hand, regional airports try to provide interesting destinations, but the volume of transported passengers or cargo does not bring them a high profit. The biggest problems are caused by high fixed operating costs, which revenues cannot cover. That is why regional airports operate in the traditional airport concept, where they do not have the latest technological conveniences. Financing of the operation is a very complex issue in this case.

If we focus on the disadvantages from the view of passengers, regional airports may not provide the same comfort as at larger airports. The disadvantage for airlines is the small number of paying passengers. Destinations offered by the regional airports may not be attractive. In this case, passengers prefer to depart from a better-connected airport with more attractive destinations. Another disadvantage may be the poor condition and equipment of the airport, because the operator does not have enough funds to constantly modernize the airport. The availability of public transport can also be poor [3].

2.4. Airport ownership structures

In history, airports have often been in public ownership. It was the traditional organizational model, where the main priority was to provide services in the public interest. In this case, the airports were owned by the state government. It was financed from the state budget and all the profits went to the state treasury. Over time, this model began to change for several reasons, mainly due to the rapid development of air transport. New commercial models thus began to emerge thanks to the following processes:

- decentralization of public ownership of the airport, which represents the transfer of central public ownership of the airport to several entities according to the landscape structure;
- corporatization, where the airport has become a company or corporation;
- commercialization, which is the application of airport management style and principles, as is typical of private sector companies;
- privatization, where a private entity became the owner and management of the airport.

3. AIRPORT OWNERSHIP MODELS

Thanks to the development of air transport, people and cargo can be transported much more efficiently. Air transport has also developed thanks to airports.

3.1. Scientific studies dealing with ownership structure

The issue of ownership of regional airports is extensive and also complex. That is why several experts are focused on it. Gillen (2010) solved the overall evolution of airport ownership, the change from a traditional airport to a corporate model, and also if airports should be regulated. According to this author, opinions on regulation can be considered mixed. The results of this study have shown that airport regulation is necessary in Europe, it is necessary precisely for airports to maintain market power [4]. Ison (2011) dealt with the commercialization and privatization of regional airports in the United Kingdom. The first airport was fully privatized here, it was East Midlands Airport. Over the years, successful privatization has taken place here, and many airports have been transferred from state-owned to private. In the UK, they wanted to improve airport business and efficiency. The results have shown that it is important that aviation matters are not predominantly subsidized by taxpayers

[5]. The Graham study (2011) also dealt with the privatization of airports. He takes the situation in the United Kingdom in 1987, when the first airport was 100% privatized, as the beginning of airport privatization. At this time, the privatization of airports was a controversial topic, but it was intended to improve the overall efficiency and management of airports. Research has shown that the structure of the airport industry is increasingly complex and very diverse [6]. Mantin's work (2012) examined whether private ownership of an airport or public ownership of an airport is better. The results showed that if the airport is owned by the state, there may be lower air fares, of course, it also depends on its location. If the airport is owned by a private entity, it will try to for the highest possible profits and set service prices in such a way as to maximize profits [7]. Saldiraner (2013) dealt with regional airport ownership and management in the European Union. According to the author, there are publicly owned airports in almost every state of the European Union, in some of which airports are owned by private entities. Every ownership structure has its pros and cons. There are often mixed ownership structures, where several entities take care of the management of the airport. In conclusion, the author mentioned that in most European countries, private airport management is becoming a more preferred choice [8]. Aulich and Hughes (2013) discussed the privatization of three major airports in Australia and the subsequent owners' arrangement. Until 1996, the major airports in Australia were owned and operated mainly by the government. Then the Minister of Government wanted to improve their financial performance through privatization. The prime minister also said it would be better if the government regulated safety and air traffic control at the airport. In the end, there is a combined model where the state is managed together with a private entity [9]. Kutlu and McCarthy (2016) looked at ownership structures in the United States and the overall efficiency of airports. According to the study, all commercial airports in the United States are public, but they differ in their ownership structure. The authors discuss about the economic efficiency of airports in public ownership and in private ownership. In conclusion, it cannot be said unequivocally that all commercial airports, either public or private, will be equally efficient, or which ownership will have a better impact on the airport's economy. It depends on many aspects that affect the economic situation of the airport [10]. Budd and Ison (2020) solved the evolution of airport ownership over 35 years in the UK. During these 35 years, many airports have been privatized. Since 1986, a total of 22 airports have shifted from public ownership to private or mixed ownership. The authors recommend that changing the ownership structure requires the involvement of the private sector, new practices, innovations and experience from other airports [11]. Lapcin (2021) described the state of airports after privatization in Turkey. It was observed that after privatization and regulation, the airports and their management began to change. The airports began to compete with each other, trying to improve and increase the services they can provide to passengers and airlines as much as possible. Each type of airport has its rivals in its type, so regional airports cannot compete with large international airports. In conclusion, each airport is something specific [12].

3.2. Scientific studies on the efficiency of regional airports

Many studies have looked at the efficiency of regional airports and their profitability depending on ownership structures. Oum discussed the overall efficiency and possible profits of regional airports depending on the ownership structure. (2006). The authors argued that airports, which have a majority-owned private entity in their ownership structure, have higher revenues from non-aviation services [13]. Huderek-Glapska and Nowak (2016) published a study describing the relationship between the airport and low-cost airlines. The work is focused on Poland, where most airports are run under public ownership and are therefore controlled by the state. The authors concluded that the cooperation between low-cost airlines and airports is very important and can be very beneficial not only for large primary airports, but even more so for regional airports [14]. The efficiency of Italian regional airports depending on the ownership structure was examined by Storto (2018). A total of 45 Italian airports were surveyed and compared on the basis of different ownership structures. Efficiency was examined on three perspectives, which were technical efficiency, cost-effectiveness and revenue efficiency. Heterogeneity of ownership has manifested itself as a factor that affects the overall efficiency of the airport. The results showed that publicly owned airports are more efficient [15]. Červinka (2019) dealt with whether regional airports are profitable. The regional airports try to increase profits through various non-aviation activities, such as renting space for various airlines, which may include an aviation school or cargo terminal, or various passenger services. Some regional airports may not be in profit precisely because of the lower number of passengers [16].

3.3. Development of ownership structures of regional airports in the Czech Republic

In this article, we were also interested in the development of ownership structures of regional airports in the Czech Republic. These are the regional airports, which transport up to 3 million passengers a year: airport Brno, airport Ostrava, airport Pardubice and airport Karlovy Vary.

Over time, there have been changes in ownership in the case of Czech regional airports. The original ownership of airports in the Czech Republic was public, where the owner was the state or the ministry. But in 2004, there was a change. It was decentralization at these airports, where it was the transfer of competencies and responsibilities from one state unit to a lower level, which means that ownership of these airports was transferred to self-governing regions or cities. This change was made by Act No. 166/2004 and the airports in Brno, Ostrava, and in Karlovy Vary were transferred to the ownership of self-governing regions. The airport in Pardubice is also owned by the city.

Brno-Tuřany Airport started to operate in 1954, at that time it was a state airport and there was a military operation. Since its decentralization in 2004, the airport is owned by the South Moravian Region. However, from the year 2017, its full operation has been provided by the Accolade investment group, which leases the airport [17] [18]. Ostrava Airport was also owned by the state, and after change in 2004, the Moravian-Silesian Region became the owner. [19].

The history of Pardubice Airport dates back to the beginning of the twentieth century. Until 1994, the airport was exclusively military and state-owned. The airport currently has two shareholders, namely the City of Pardubice, which owns 66% of the shares, and the Pardubice Region, which owns 34% of the

shares. However, the airport still serves as a military backup airport [20].

The airport in Karlovy Vary was state-owned and after a change in 2004. Karlovy Vary region became the owner. [21].

Ownership structures in the Czech Republic have not changed in the last period, but there have not been significant changes anywhere in the world, because the air transport has been facing a crisis for the last 3 years caused by the Covid-19 pandemic. Changes in ownership structures went into the background, and the current situation was focused on the saving air transport. This was the priority for the EU [22].

3.4. Impacts of the Covid-19 pandemic on air transport

The outbreak of the Covid-19 pandemic has become an unprecedented event, not only in air transport. Travel began to be restricted in some way, which had the direct effect of reducing air transport. The pandemic began to spread around the world also thanks to air transport. Governments have begun recommending, that it is not safe to travel to countries affected by the virus. They began to emerge "Lockdowns" and people came abroad, they had to meet various requirements in order to enter a foreign country. All this had an effect on the stagnation of a number of passengers. According to ACI Europe, 73% fewer passengers were handled in Europe by 2020. The aviation industry began to lose profits, especially when it came to passenger transport. The other side of the aviation sector, which was not affected by the restrictions, was growing, and that was transport of freight. Airlines began to increase transport prices as the amount of cargo transported began to rise [23].

According to the statistics, in Africa, passenger numbers fell by 46.5%. In Asia, the decline was 47.9%. In Europe, the decline was lower than in the previous ones, at 40.5%. However, it was 67.2% in North America and 57% in Latin and the Caribbean. In the Middle East, the decline was 34.2%. When we transfer these values to the whole world, the decrease in checked-in passengers was almost half [24].

3.5. Situation in the Czech Republic

If we evaluate the situation in the Czech Republic, the number of transported passengers decreased sharply. If we compare the situation at the regional airports in Ostrava, Brno, Karlovy Vary, and Pardubice from the years 2018 to 2021 we can say, that in 2018, the number of passengers at these airports was 1,070,730 passengers. In the following year, the values decreased to 1,031,593. However, in the year 2020, it was already 170,270 passengers. In the year 2021, the situation began to stabilize, and the number of transported passengers increase to 405,359 [25] [26] [27].

4. METHODOLOGY

The main goal of this article was to analyse the ownership structures of selected regional airports in two countries, in Austria and in the Czech Republic. The ownership structure of the regional airport was chosen as priority data, and at the same time, additional data was selected for this analysis, which was the economic result for the last period and the number of transported passengers. Thanks to the economic result, it is possible to find out whether the regional airport generates a profit or generates a loss. The numbers of transported passengers were added for better information about the regional airport.

The first phase consisted in finding important theoretical data about the ownership structures of airports. It was also important to define the basic terms and analyse scientific studies so that we could better understand the issue. After processing the first phase or theoretical part, we were focused on the analysis of ownership structures of regional airports in Austria, where it was chosen regional airports: Innsbruck Airport, Graz Airport, Linz Airport and Salzburg Airport. In the Czech Republic were selected 4 regional airports: Brno Airport, Ostrava Airport, Pardubice Airport, and Karlovy Vary Airport.

As a limiting element of this analysis, we consider the availability of data. We tried to find the data about ownership structures in the annual reports, but in some cases, it was not available. That's why we decided to contact the management of the individual regional airports directly and requested this information.

5. RESULTS OF WORK

5.1. Regional Airport Innsbruck

The airport is located in Tyrol in the Alps, which are very attractive for lovers of winter sports. According to the table 1, we can see that the airport is publicly owned. It is public because the airport is owned by public shareholders, by the city or region. 51% shares belong to Municipal Services of the city Innsbruck, Tyrol region owns 24.5% shares, and 24.5% shares belongs to city of Innsbruck.

If we focus on the economic result, we can see that the airport is in profit throughout the period. The highest profit of the airport was achieved in 2017, when it was 8,447,000 € and the lowest profit was in 2020, only 638,053 €. It should be noted that this year there were significant restrictions caused by the Covid-19 pandemic. If we are focused on the number of transported passengers, the airport transported the most passengers in 2019, when it handled 1,144,471 passengers, and the following year it was the least, only 487,437 passengers [28] [29] [30] [31].

Table 1: Innsbruck Airport. [28], [29], [30], [31]

Year	Number of passengers	Economic results (in €)	Ownership structure
2016	1 006 738	5 290 141	51 % municipal services of the city Innsbruck 24,5 % Tyrol 24,5 % Innsbruck
2017	1 092 547	8 447 000	
2018	1 119 347	5 678 000	
2019	1 144 471	6 454 274	
2020	487 437	638 053	

5.2. Regional Airport Graz

The airport is located in the southeastern part of Austria. The airport has several shareholders. 93.9% of the shares belong to Holding Graz, 6% of shares belong to MCG Graz and 0.1% of shares belong to the company for strategic investments. MCG Gratz represents private shareholder. Other shareholders are from public side. This regional airport has a combined ownership structure. According to Table 2, we can see that the best economic result of the airport was reached in 2016, it was 8,571,740 €. The lowest economic result of the airport was achieved in 2020, when the airport generated a loss -4,429,000 €. If we are focused on the number of passengers, the best result was in 2019, when they transported a total of 1,036,929 passengers, and the following year 2020, the airport transported only 199,510 passengers [32] [33] [34].

Table 2: Graz Airport. [32], [33], [34]

Year	Number of passengers	Economic results (in €)	Ownership structure
2016	981 884	8 571 740	93,9 % Holding Graz 6 % MCG Graz 0,1 % Strategic investments
2017	959 098	6 566 264	
2018	1 030 929	6 028 199	
2019	1 036 929	6 082 035	
2020	199 510	-4 429 000	

5.3. Regional Airport Salzburg

The airport is located a few kilometers from the German border in the northeastern part of Austria. According to Table 3, we can see that the ownership structure is relatively simple, the largest part is owned by the Salzburg region (75 %), the other 25% shares is owned by the city of Salzburg [35] [36]. In terms of economic results, the most successful year for this airport was 2018, when they generated a profit 6,330,670 € and 2020 was the least successful, when they generated a loss -4,909,905 €. If we are focused on the number of passengers, the best year was 2017, it was 1,890,164 transported passengers. The lowest number of passengers, as usual, was in 2020, only 669,790 transported passengers [37] [38] [39].

Table 3: Salzburg Airport. [35], [36], [37], [38], [39]

Year	Number of passengers	Economic results (in €)	Ownership structure
2016	1 739 288	5 912 029	75 % Salzburg Region 25 % City of Salzburg
2017	1 890 164	5 901 459	
2018	1 844 362	6 330 670	
2019	1 717 991	2 854 125	
2020	669 790	-4 909 905	

5.4. Regional Airport Linz

In the case of this airport were not available annual reports, that is why we present only 3 years. According to Table 4, we can see that the airport has only 2 shareholders, 50% of shares belong to holding city of Linz and 50% of shares belong to the Upper Austrian Transport Company. The most successful year for airport was 2018, when they generated profit 1 551 000 €. The lowest economic result of the airport was in 2016, when their profit was 1 476 000 €. The best year for the airport was 2018, because they transported 465 798 passengers and the worst year was 2016 when they transported 1 476 000 passengers [40].

Table 4: Linz Airport. [40]

Year	Number of passengers	Economic results (in €)	Ownership structure
2016	435 468	1 476 000	50 % Linz city holding 50 % Upper Austrian transport company
2017	402 007	1 530 000	
2018	465 798	1 551 000	

5.5. Regional Airport Brno

The airport is located in the southeastern part of the Czech Republic. Table 5 shows that 100% of the shares are owned by the South Moravian Region, but the airport has been leased from the region to the holding Accolade since 2017, so the airport is in public ownership. The highest profit of the airport was recorded in 2017, when the economic result amounted 168,854,000 CZK. The lowest economic result of the airport was in 2016, when they generated a loss of -72,855,000 CZK. Unfortunately, we did not find or obtain any financial statements or annual report for the year 2020. However, we have complete passenger numbers. The best year was 2019, because they transported 543 633 passengers. In 2020, it was only 86,089 transported passengers [26] [41] [42].

Table 5: Brno Airport. [26], [41], [42]

Year	Number of passengers	Economic result (in CZK)	Ownership structure
2016	417 725	-72 855 000	100 % South Moravian Region lease Accolade holding
2017	470 285	168 854 000	
2018	500 727	49 580 000	
2019	543 633	-5 082 000	
2020	86 089	Nepodloženo	

5.6. Regional Airport Ostrava

The regional Airport Ostrava is located in the northeast of the Czech Republic, which is very industrial. As we can see in Table 6, the airport is owned by Moravian-Silesian region (100%). The airport did not show a positive economic result in any of the years examined. The lowest loss of the airport was in 2019, it was -4,943,000 CZK. The highest loss of the airport was in 2016, when it was -88,739,000 CZK. In terms of the number transported passengers, the airport transported the most passengers in 2018, it was 377,936 passengers. The lowest number of transported passengers was in 2020, only 37,709 passengers [43] [44] [45].

Table 6: Ostrava Airport. [43], [44], [45]

Year	Number of passengers	Economic result (in CZK)	Ownership structure
2016	258 223	-88 739 000	100 % Moravian-Silesian region
2017	324 116	-15 235 000	

2018	377 936	-8 202 000	
2019	323 320	-4 943 000	
2020	37 709	-58 930 000	

5.7. Regional Airport Pardubice

The airport is located in the western part of the Czech Republic. This airport is owned by two shareholders. The city of Pardubice owns 66% of the shares and the remaining 34% of the shares belong to the Pardubice Region. As for the economic result, the airport do not show a positive economic result for even one year as is visible in table 7. In 2017, the airport generated a loss -5,220,000 CZK and the highest loss was generated in 2020, it was -41,064,000 CZK. The airport transported the most passengers in 2018, it was 147,064 passengers and the least in 2016, only 31,174 passengers [24] [46] [47].

Table 7: Pardubice Airport. [24], [46], [47]

Year	Number of passengers	Economic result (in CZK)	Ownership structure
2016	31 174	-10 668 000	66 % City of Pardubice 34 % Pardubice region
2017	88 490	-5 220 000	
2018	147 064	-15 912 000	
2019	102 206	-34 343 000	
2020	32 238	-41 064 000	

5.8. Regional Airport Karlovy Vary

The airport is located in the northwest of the Czech Republic. The owner of the airport is the Karlovy Vary region (100%). Even in this case, a negative economic result is visible throughout the period. It is visible in table 8, the lowest loss was recorded in 2018, when it was 9,131,000 CZK. The worst year for the airport was in 2020, when it was 19,368,000 CZK. The highest number of transported passengers was in 2019, when they transported 62 234 passengers. The lowest number of passengers was in 2020, with only 17,234 passengers [48].

Table 8: Karlovy Vary Airport. [48]

Year	Number of passengers	Economic result (in CZK)	Ownership structure
2016	25 235	-14 935 000	100 % Karlovy Vary region
2017	21 404	-15 368 000	
2018	45 003	-9 131 000	
2019	62 234	-17 857 000	
2020	17 234	-19 368 000	

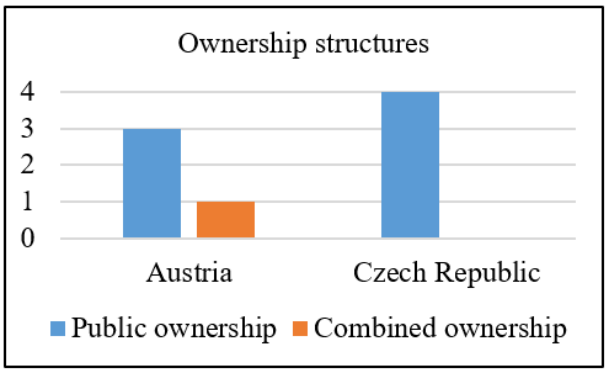
6. ASSESSMENT

Analysis of selected regional airports is focused on Austria and Czech Republic. This section compares their ownership structures and their economic results. The comparison, will determine how many selected regional airports were profitable and how many were loss-making.

6.1. Comparison of ownership structures

In the previous section are analysed the ownership structures of regional airports, and it is possible to compare Austria with the Czech Republic. A report from ACI Europe shows that more than 40% of European airports have at least one private shareholder [49].

According to Graph 1, in both countries are publicly owned airports and airports with combined ownership. In Austria are 3 regional airports in public ownership and one airport in combined ownership. Regional airports with public ownership are Innsbruck Airport, Salzburg Airport and Linz Airport. Graz airport is in combined ownership. In case of the Czech Republic, are all selected regional airports in public ownership. The airports were decentralized, and now they are owned by regions or cities. Brno Airport is taken as a publicly owned airport. This is a specific example of an airport being leased by a private company.

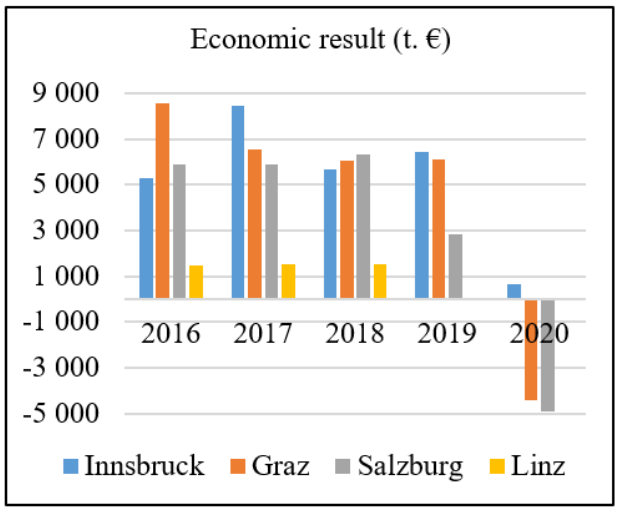


Graph 1: Ownership structures.

6.2. Comparison of economic results

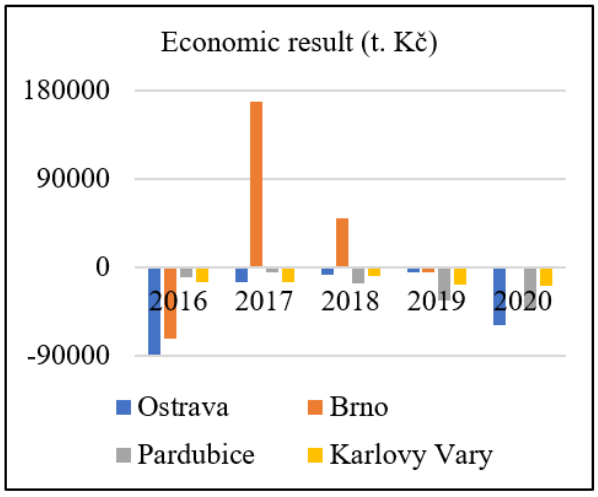
With the obtained data, it is possible to find out which selected regional airports were loss-making or profitable. According to ACI Europe, 42% of European airports are loss-making. As many as 72% of European airports carry less than one million passengers [49].

Only the available and verified data are compared. All economic results from selected regional airports in Austria are compared in Graph 2. In 2016 the highest economic result was achieved by the airport in Graz, followed by the airport in Salzburg. However, the airport in Innsbruck had the best economic results in 2017, but also in 2019 and even in 2020. It is important to mention that Linz Airport had the lowest economic result during 2016 until 2018, but since 2019 their economic results are not publicly available. In 2018 are similar economic results at the airports in Innsbruck, Salzburg and Graz, but the best economic result had Salzburg Airport. Innsbruck Airport has the best economic result in 2019 and the lowest economic result was in Salzburg Airport. However, 2020 was critical year for all selected regional airports, but the only Innsbruck Airport was profitable. Graz and Salzburg airports had a loss of almost 5,000,000 €.



Graph 2: Economic results Austria.

In the Czech Republic are also compared 4 regional airports. In this country are more often loss-making economic results than profitable ones. Graph 3 compares regional airports in Ostrava, Brno, Pardubice and Karlovy Vary. In 2016, the most loss-making airport was Ostrava airport, followed by Brno Airport. However, Brno Airport has the best economic result in 2017. This year, Brno Airport was the only one in profit. The airports in Ostrava, Pardubice and Karlovy Vary had a loss. Even in 2018, only Brno Airport made a profit and the rest of airports had a loss. The year 2019 was unsuccessful for the all selected regional airports. The critical year 2020 was the worst for Ostrava Airport, when they had the second-largest loss after 2016, followed by Pardubice airport. Unfortunately, we do not have the official data from Brno Airport for 2020.



Graph 3: Economic result in Czech Republic.

After comparing our selected regional airports in Table 9, it can be seen that the regional airports in Austria achieved a better economic result. In the Czech Republic, most airports had a negative economic result. For example, regional airports in Ostrava, Pardubice and Karlovy Vary are constantly at a loss. The critical year for both countries was 2020, when only Innsbruck airport was in profit. The most profitable year for the airports was 2017 and 2018, when only three of eight airports were at a loss.

Table 9: Economic Results.

Airport	2016	2017	2018	2019	2020
Innsbruck	Profit	Profit	Profit	Profit	Profit
Salzburg	Profit	Profit	Profit	Profit	Loss
Graz	Profit	Profit	Profit	Profit	Loss
Linz	Profit	Profit	Profit	-	-
Ostrava	Loss	Loss	Loss	Loss	Loss
Brno	Loss	Profit	Profit	Loss	-
Pardubice	Loss	Loss	Loss	Loss	Loss
Karlovy Vary	Loss	Loss	Loss	Loss	Loss

7. CONCLUSION

The aim of the article was to analyse the ownership structures of regional airports in Austria and the Czech Republic with regard to their achieved economic results. There were 4 regional airports in Austria: Innsbruck Airport, Salzburg Airport, Graz Airport and Linz Airport. It dominates public ownership. The regional airports in Innsbruck, Salzburg and Linz are in public ownership, as all entities that own these regional airports ultimately have the city or region as their shareholders. Graz Airport has a combined ownership structure due to the percentage participation of the private shareholder of MCG Graz. According to the information available before the Covid-19 pandemic, none of these regional airports were loss-making, and it was not until 2020 that the regional airports in Graz and Salzburg were loss-making. The only regional airport that was not among the loss-making in 2020 was the airport in Innsbruck, but it still had a lower profit of less than € 6,000,000.

In the Czech Republic, the ownership structures of 4 regional airports were analysed. These were Brno Airport, Ostrava Airport, Pardubice Airport and Karlovy Vary Airport. In this case, all regional airports are in public ownership. The airports are owned by regions or cities. A specific exception is Brno Airport, which is leased by Accolade. According to the results, it can be concluded that the lease of this airport has brought positives, mainly in improving economic results. Here, the specific participation of a private entity helped. Unfortunately, the pandemic affected the economic performance of these regional airports. In the case of the Czech Republic, we can say that the entry of a private sector to ownership structures could help other regional airports, improve their situation.

If we compare the ownership structures in these two countries, we can evaluate that it is different. In Austria there are in ownership structures different companies and corporations that own the airport. The shareholders of these companies and corporations are in fact a city or a region. In the case of ownership structures in the Czech Republic, it is very simple, because the direct owners of regional airports are regions or cities. Austrian regional airports achieved better, and especially positive economic results than Czech regional airports.

We can say that there is a significant difference between the regional airports in Austria and the Czech Republic. It can be said that the Austrian government supports air transport sector much more than the government of Czech Republic supports its air transport. In the Czech Republic, they are trying to help the

region, but unfortunately this help is not enough. Of course, this difference in economic results may also depend on the management and control of the airports concerned, and on the operator. In conclusion, we can say that a clearly defined ownership structure is very important in the case of regional airports. It also depends on the approach of individual owners and the help of the government of the country.

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