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Development of competition on the airport market in Poland

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Abstract: In the air transport market is intra- and external competition. In the aerospace sector there is competition between carriers, airports and other companies. Airports, although they serve the regional area, are striving to increase the catechment area. This is due to the development of transport infrastructure. The main aim of the article is to present competitive processes at airports in Poland. Examples of airports in Katowice, Kraków, Poznań and Wrocław analyzed the competitive processes. These airports have been selected as some parts of the catchment area coincide. The author did marketing research at Polish airports. Based on the original data, the functioning of the air transport links system was evaluated. On the basis of secondary data, the author analyzes the conditions of operation of airports. The purpose of the article has been proved, the conclusions are outlined in the last part.

Introduction

Functioning and the role of airports in the region depends mainly on the economic potential, influences of the area of gravity. A strong relation exists between the development of the air transport and the development of economy. Air transport enterprises from one side affect the development of the region, from the other side are drawing determined benefits from the development of the region. And so regions care about the development of airports.

In economic literature there exists a diversity of notions concerning competition. It is most often determined as the form of competition between market players in order to achieve market successes (Bernard, Colii, 1994). It is also an extorting factor refinement of services offered, entering new solutions. And so, as a result of conducted competitive operations, air market is developing.

On the air transport services market an intra- and external competition has developed. Air entities representing the supply compete for getting the competitive advantage on markets. The competitive advantage of enterprises and their markets is determined in the purpose of assessing of the competitive position in the sector and studies on this base of the strategy (Kołodziejski, 2012).

Based on above conditioning, an impact assessment of instruments of the competition is a purpose of the article between selected airports in Poland. Making analysis of the presented research problem, the author paid special attention to: role of the air transport in the economy of the region, conditioning of the development of airports in chosen cities of Poland and main plains were shown the competition between analyzed airports. The biggest regional airports in Poland were chosen as an example.

1. Conditions of the regional development of air transport

In the literature on the subject benefits and measures of the influence of the air transport on surrounding have been quoted many times. A strong relation exists between the economic development of a region, a country or world. The influence of the air transport on the economic development is one of the evaluation criteria of the competitiveness of a given state, region, urbanized area or a city. ACI and York Consultancy in Creating Employment and Prosperity in Europe, in their research "an Economic Impact Study of Tails", distinguished four types of influence of the air transport on the economy: direct, indirect, induced and of catalyst (of fueling the economy) (ACI Europe, York Consultancy, 2000; Huderek-Glapska, 2011; Marciszewska, 2009).

The rate of growth of air transports is as a rule about 3–4 percentage points higher than the economic growth rate. Making analysis of the global market of air transport services one should point to close correlation between the GDP and the passenger air traffic. Relation between dynamics of the world trade and dynamics of transports in the class premium and with transit work are presented in Figure 1.

In managing airports, local and self-government regional authorities – public institutions which are co-owners of operators administering the air infrastructure – play an important role. Apart from having shares or the action in airports by public entities, it is possible to rank influences of self-government authorities on functioning and the development of regional airports among the most important direct instruments:

– influencing enlivening the region through: recruiting new air carriers, promotion of the development of the net of connections,
– promotion of the airport as so-called “windows on the world”,
– promotion of the region through the air transport,
– financing and the co-financing of infrastructure investments in airports.

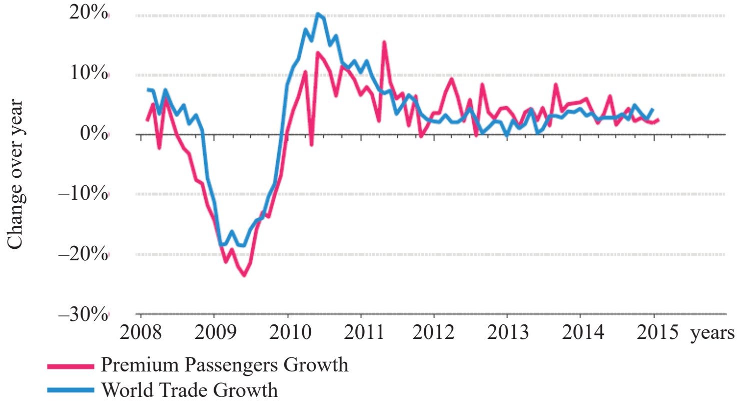

Figure 1. Premium passengers and World Trade Growth

Source: Premium Traffic Monitor, IATA, January 2016.

Besides the capital commitment public institutions are supporting, attraction of the net of air links is affecting the forming. This attraction is the outcome of several factors, such as investment and tourist economic activity of region.

2. Functioning of regional airports in Poland in competitive area

In spite of a yearly increase of the number of served passengers on the Polish market, Poland’s participation in the world arena is marginal. Poland is filling the distant position according to ICAO classification in the ranking of the transit work with the participation on the level of the 0.12% in passenger transports and the 0.11% in transports cargo. Similarly participation of the Polish market air transports in Europe is very limited.

In 2004 the participation of Poland in the structure of European air transports amounted to 0.714% and within 10 years it grew over 300%, achieving the 2.1058% of the market share. In the final year a further growth came about 0.25% up to 2.355%. Such a situation is caused by the decline in prices of the aviation fuel, and consequently with decline in prices of air tickets. Moreover one should indicate for more effective using means of transporting in passenger transports.

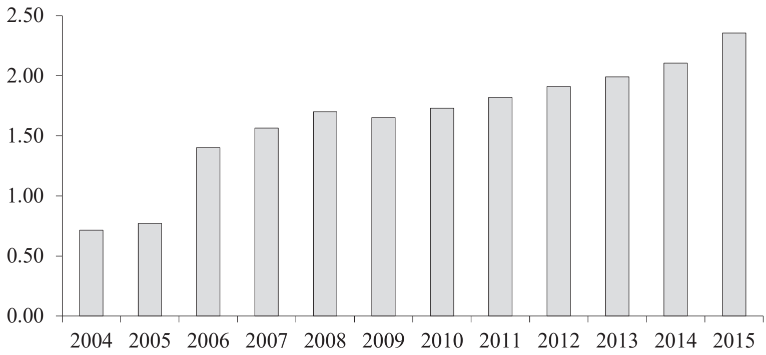

Figure 2. Participation of Poland in the forming of the air market in the European Union (%)
Source: Eurostat.

Carriers and airports and institutions cooperating with the air transport are forced to lead the sequence of operations in increasing the availability of aviation services, of increasing offer of transports, refinement of provided services, conducting the elastic pricing policy being aimed at raising the competitiveness of provided services.

Rivalry between airports is one of the elements of the intra competition, and for their effects are particularly essential for the passenger choosing the air transport. They are main instruments of the competition between airports, among others: held airside and landside, fees for aviation area, airports links, information policy (Tłoczyński, 2016). Implementing these elements will depend on the realized strategy.

On the Polish market over a dozen airports are functioning, between which competitive processes occur. They concern areas of the gravity overlapping each other the most. Such a situation is appearing in case of airports in Kraków and Katowice and of Poznań and Wrocław.

In due course of years the Kraków port increased the service of passengers from 800 thous. to 5 mln passengers, which is marking it beyond the six-times height. Also a number of air operations increased, however dynamics were smaller compared with the passenger traffic, it is attesting to the effectiveness of solutions applied by carriers with reference to the fleet of planes. Along with the height of the air traffic in Kraków we are also observing a growth of the number of direct air links and employing air carriers. In the airport in Katowice, similarly to the Kraków port, it took place from 2004 to 2016, increasing the air traffic also over six-times from 580 thous. in 2004 up to 3.2 mln of passengers in 2016.

In analyzed postages a growth of the number of air direct links came, which resulted in a rapid development of the net of connections, however interest of carriers was diversified in analyzed ports. The supply of aviation services in analyzed ports was described in Table 1.

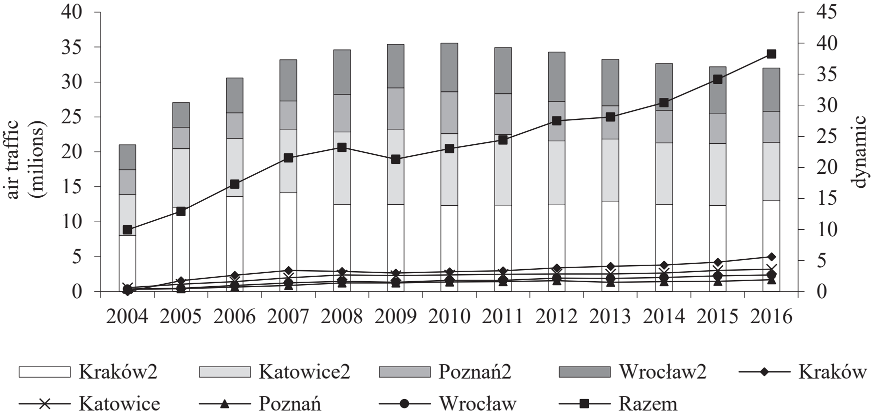

Figure 3. Air traffic in selected Polish airports

Source: ULC.

Table 1. ASK in Polish airports

Airport	Number of network							Weekly numer of network	Weekly ASK
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday		
Katowice	47	29	29	24	29	30	26	214	31,378
Kraków	67	61	57	59	64	54	73	435	65,227
Poznań	19	18	19	18	19	14	16	123	10,868
Wrocław	34	33	26	33	31	33	30	220	31,581

Source: IATA.

Despite the large supply of air services (carriers from regional airports offered 227,000 seats in the third quarter of 2017), there is a need for a systematic development of the market for the extension of the air carrier's offer. Commitment of air carriers to the analyzed airports is presented in Tables 2 and 3.

Table 2. Number of direct connections from Katowice, Kraków, Poznań and Wrocław Airports

Airport	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kraków	9	10	22	51	39	36	41	45	46	43	60	62	65	69	72
Katowice	3	4	16	20	30	30	32	29	32	29	42	35	35	36	46
Poznań	5	6	11	13	17	24	19	22	27	24	25	27	27	29	30
Wrocław	3	4	5	10	19	24	21	30	31	33	36	38	39	34	43

Source: IATA.

Table 3. Number of air carriers functioning in Polish airports

Airport	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kraków	13	16	17	21	24	19	16	16	13	13	15	17	18	19
Katowice	14	6	7	6	7	6	5	4	6	6	7	6	6	5
Poznań	3	10	7	7	5	4	8	8	3	7	6	5	5	5
Wrocław	3	7	8	7	7	3	7	6	3	7	8	6	7	6

Source: IATA.

The increase in the number of connections and the involvement of carriers is a direct result of the region's economic activity. However, demographic and economic factors that are important elements of market analysis need to be pointed out, as they show some general trends in the development of the air transport market. Table 4 shows the characteristics of the selective province.

Table 4. Selective statistical data of voivodships: Małopolskie, Śląskie, Dolnośląskie and Wielkopolskie in comparison with Poland in 2015

Voivodships	People (thous.)	Total revenue of the regions budget per capita (PLN)	Unemployment rate (%)	Share of international migration (%)	Number of people working per 1 th. inhabitants	Number of enterprises according to the REGON register for 10 thous. residents	Average salary in enterprises (PLN)	GDP per capita in (PLN*)	Gross value added per capita (PLN*)
Małopolskie	3,373.0	337	8.3	0.90	1,322.0	363,883.0	3,667.02	39,834	96,043
Śląskie	4,570.8	385	8.2	–1.50	1,672.0	465,779.0	3,969.67	46,499	116,472
Wielkopolskie	3,475.3	321	6.1	–0.03	1,448.4	409,865.0	3,543.24	47,992	106,762
Dolnośląskie	2,904.2	436	8.5	0.30	1,073.0	357,102.0	3,960.48	50,031	125,384
Poland	38,437.2	445	9.7	–0.41	1,4504.3	418,440.9	3,907.85	44,686	109,899

* – in 2014.

Source: Central Statistical Office (2016) and www.wynagrodzenia.pl (15.05.2017).

The economic, social and current cooperation with air carriers, as well as the planned investment processes, with their capital, material and human resources, will be the basis for the implementation of the competitiveness strategy. To this end, ports implement a variety of instruments of competition.

3. Conditions for the development of competition in airports in Poznań, Katowice, Kraków and Wrocław

Airports operating under conditions of competition are striving to achieve their objectives. By competing with other airports, they want to attract new carriers, get the right seats, and have a base for airline operators. The competitive position of airports is largely dependent on the economic potential of the region.

Poznań Airport, Wrocław Airport, Katowice Airport, Kraków Airport are characterized by very similar developmental conditions. In handling the needs of the international market, the ports towards oneself are highly competitive. Competition between ports should be analyzed on two levels.

Table 5. Tools for analysis of competition between airports

From the point of view of air carriers	From the point of view of passengers
– catchment area, – potential demand, – slots – time slots for performing flight operations, – network of air connections, – competition between handling agents, fuel agents, etc., – port charges, – quality of handling (passenger and ground), – the possibility of receiving public aid, subsidies, – basing aircraft carriers, – presence of major aviation competitors and their grid connections, – guaranteed operating time of air carriers, – aviation and non-aviation infrastructure and access to it, – possibility of further development of the port	– destination airports, – frequency and flexibility of the offered connections, – possibility of transfer to other airports, – air transport links efficiency, – duty free area, – costs of transportation to and from the airport – terminal functionality

Source: Kaliński (1998), p. 42; Vogel (2001), p. 7.

Air fares are the instrument that has the least impact on the competition between the analyzed airports. Autonomous airports set fees for standard air services, such as landing/landing charges, aircraft stop, passenger, freight, noise, or airplane protection. They are approved by the Civil Aviation Authority. In addition, the airport manager may charge airport charges for additional services and apply discounts to selected market segments. General guidelines on charges for airports and air navigation services have been regulated by ICAO.

The offered tariffs are not final. Very often, airports negotiate discounts, depending on the time of day, exhaust emissions, but above all from the carrier's involvement in the development of the connection grid.

Table 6. Charges in selected Polish airports in 2016 (PLN)

Airport	Charges								
	passengers		landing			parking		security	noise
	domes-tic	interna-tional	below 2t MTOM	above 2t MTOM	helicopter	feneral fee	hangar		
Kraków	45.00		32.00	32.00	32.00	12.20*		5.50	
Katowice	2.50–30.00		200.00	4.50–43.00	–50%	12.00**			
Poznań	35.00		75.00	50.00	–50%	10.00***			
Wrocław	32.00		80.00	275.00–20,000.00	–50%	6.00**			

These fees are the maximum rates. There is a possibility of negotiating discounts from the listed fees.
* First 2h no charges; ** first 4 h no charges; *** first 3 h no charges.

Source: Dz. Urz. ULC z 31.03.2008 r., nr 2; Dz. Urz. ULC z 31.08.2005 r., nr 9; Dz. Urz. ULC z 14.12.2012 r., poz. 116; Dz. Urz. ULC z 23.11.2011 r., nr 17; Dz. Urz. ULC z 31.05.2013 r., poz. 66; Dz. Urz. ULC z 23.12.2013 r., poz. 117; Dz. Urz. ULC z 10.02.2009 r., nr 2; Dz. Urz. ULC z 10.02.2009 r., nr 2; Dz. Urz. ULC z 2013 r., poz. 77; Dz. Urz. ULC z 23.12.2013 r., poz. 116; Dz. Urz. ULC z 10.08.2009 r., nr 7; Dz. Urz. ULC z 20.12.2013 r., poz. 114; Dz. Urz. ULC z 23.12.2013 r., poz. 118; Dz. Urz. ULC z 17.12.2012 r., poz. 120.

Airports links are also a competitive instrument. The accessibility of the analyzed airports varies widely. The most popular way to get to airports is by car. 83% declared it, 10% took advantage of urban transport and 7% from rail. Public transport, despite the postulate of transport is underestimated means of transport. The assessment of the approach is shown in Figure 4.

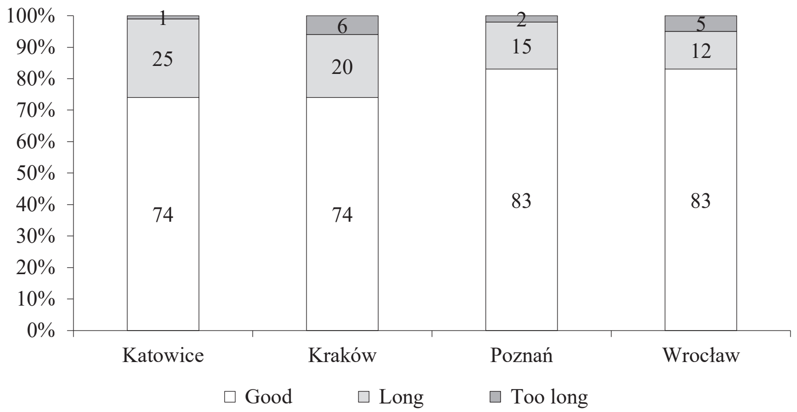

Figure 4. Evaluation of time of arrival at airports

Source: own elaboration.

Airports compete with each other for carriers, for access to specific slots, markets, new technologies. According to Walulik (2013), the key objective of regulating the allocation of already existing operations is to reconcile the rights for slots used by carriers with access rights for new carriers.

Although airports would like to accommodate as many airplanes as possible, there are technical limitations related to the capacity of the infrastructure. Airports do not compete with each other because they have to meet certain requirements and have the necessary certificates for operations.

On the other hand, the parameters of the infrastructure, in particular those related to the ability to handle aircraft and passengers, affect the number and frequency of operations. Undoubtedly, it is necessary to strive to upgrade the classes of relevant infrastructure elements, first of all to be achieved by most ILS cat. II airports (European standard).

Conclusion

As a result of the analysis of competition between analyzed ports in Kraków, Katowice, Poznań and Wrocław, it was found that there are typical instruments of market impact (price and non-price). The main instrument of competition for analyzed airports is the network of air connections offered. In cooperation with local authorities, airports are working to increase the "catchment area" by launching a feeder/return system.

It should be noted that the areas affected by the analyzed airports go beyond the analyzed voivodships. This results in a common gravity region. In this case, the most important instruments of competition are the network of air connections and the airport links.

Although, airports offer the same product. However, it is adjusted to the same market segments. The offered network of connections from airports in Poznań, Wrocław, Kraków and Katowice is very similar.

Technical and operational capacities, infrastructure is a derivative of the air traffic and attractiveness of the region. The airports analyzed belong to the so-called large regional airports. They have a share in the offered supply despite the large variety is suitably adjusted to the needs of the region.

The development of these airports is primarily dependent on further cooperation with the region, from the involvement of the regions in investment activities. The per capita GDP growth prospects are the basis for further growth in passenger services at the airports of Poznań and Wrocław.

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ROZWÓJ PROCESÓW KONKURENCYJNYCH NA RYNKU PORTÓW LOTNICZYCH W POLSCE

Słowa kluczowe: konkurencja, port lotniczy, obszar oddziaływania, dowóz, region

Streszczenie: Na rynku usług transportu lotniczego dochodzi do konkurencji międzygałęziowej oraz wewnątrz gałęzi. Nie tylko przewoźnicy konkurują o pasażera, ale do konkurencji dochodzi również pomiędzy portami lotniczymi. Porty lotnicze, mimo, iż obsługują regionalny obszar, wskutek rozwoju infrastruktury transportowej, powiększają tzw. catechment area. Na przykładzie portów w Katowicach, Krakowie, Poznaniu i Wrocławiu przedstawiono analizę procesów konkurencyjnych. Wybrano te porty, gdyż pewne części obszarów oddziaływania pokrywają się. Na podstawie danych pierwotnych, uzyskanych w trakcie przeprowadzonych badań marketingowych, dokonano oceny funkcjonowania systemu dowozowo-odwozowego do portów lotniczych. Natomiast w oparciu o dane wtórne dokonano analizy uwarunkowań funkcjonowania badanych portów lotniczych. Założony cel pracy został zrealizowany, wnioski zostały przedstawione w ostatniej części artykułu.

Cytowanie

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