Socio-economic impact of Low Cost Carriers on the Central-Eastern European market.

Exemplification of Poland.

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Abstract

With enlargement the European Union in 2004 the new Member States from Central-East Europe was obliged among other to adapt air transport legislation to Union standards. Successful liberalization of the air transport industry in Western Europe enhance air transport carriers to expand their operations into the new Member States market. The emergence of new entrants and business models in Central–East European states has dramatically changed the market. Low Cost Carriers have brought benefits in many areas. The air traffic has exploded, having been stifled for years due to the lack of competition. The national carriers being the leaders on the market was forced to compete for the first time. The major beneficiaries of liberalization of air transport were consumers in terms of reduced air fares and greater choice of destination as well as air carriers. Emergence of low cost carriers stimulates the growth of underserved regional and secondary airports and enables to use their potential. Direct connections between the European regions lead to regional integration and development, increase inward investment, stimulates tourism and related employment. The Central-East European state, where the benefits from liberalization of air transport are clearly seen due to the potential of market - is Poland.

Key Words: Low Cost Carriers, Liberalization, Regional Development, Air Transport

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1. Introduction

For the very beginning civil aviation has faced high degree of legal regulation and state interference. In many countries air transport was nationalized and the management of airports and air carriers was passed on to the state authorities. Nevertheless more and more countries started to perceive the need for more liberalized approach towards aviation market. Deregulation in Europe in the mid-1980’s created the conditions for the emergence carriers with strategy based on low operating costs. Liberalization of air transport in Central-Eastern European countries took place in 2004 with the moment of accession to European Union and adapting air transport regulation to Union standards.

Direct results of creation the single market for air transport in Europe was the freedom obtained by carriers to choose their airports routes, capacity, schedules and fares. Airlines that took advantage most form the new opportunities were low cost carriers. The growth of new entrances to aviation sector has increased the competition on the air transport market. Commercial considerations started to shape the industry and the decision of opening or closing new routes, adding or reducing capacity, increasing or lowering fares was based on market rules. Since liberalization of air transport in Central-East European countries air traffic has stared to increase with dynamic annual growth rate. Being stifled by decisions taken at national level regional airports have begun to take advantage of their potential and increasing their market share. Number of new point-to-point routes has been developed, incomes of airports has increased, new investments in airports infrastructure has been made the air transport sector has grown as a whole. However not only airports benefit from air transport regulation and emergence of Low Cost Carriers. There is high evident impact of Low Cost Carriers on customers as far as their increasing choice and lower fares are concerned and effect on regional development especially in the aspect of creating employment and stimulating tourism.

2. Socio-economic impact of Low Cost Carriers

Air transport plays a vital role in facilitating economic growth of regions. Low cost carriers by stimulating the air traffic are conducting the benefits in many areas. These impact go far beyond the direct effect of an airport’s operation on its neighbors to the wider benefits that air service accessibility brings to regional business interests and to consumers.

2.1. Stimulation of air traffic

Entrance of Low Cost Carriers has increased the competition in the market. The national airlines in Central-East European countries like LOT in Poland, Malev in Hungary, CSA in Czech Republic, Estonian in Estonia and Air Baltic in Latvia were not enthusiastic about new competitive environment. Strong government protectionism in highly regulated market did not require the market orientation. The change has come with the opportunities given by liberalization. Low Cost Carrier dynamically entered new Central-East European region achieving strong position on the air transport market. Despite the fact that liberalization of air transport has quite short history in Central-East European Countries – only four years since 2004 - Low Cost Carriers have penetrated the Central-East European market even more deeply than in West European countries. The share of Low Cost Airline carriage in New European Union Member States in some cases is even greater than in West European Countries. The market share of Low Cost Carriers in Europe reached 19,5% of IFR flights in the first months of 2007. Together the Low Cost Airlines were responsible for 69% of all net additional flight. Excluding overflight in 2007 year there were 7 countries with LCC share above 20% among Ireland, United Kingdom, Spain, Germany and Luxembourg there were Poland and Slovakia.[1]

Poland is very good example of a country with high air transport potential which was stifled by national regulations. Thanks to liberalization of air market and emergence of Low Cost Carriers Poland has one of the biggest in the world air traffic growth rate. For the first time in 2007 more than 50% of all passengers in Poland traveling by plane in regular flights were carried by Low Cost Airlines. One can assume that if it has not been for Low Cost Airlines the air transport in Poland would develop with the annual growth rate of 10% per year (average growth rate 1995-2003). In 2006 the annual regular air traffic has increased by 33% according to previous year and it was one of the highest dynamic rate in whole world.

[1] EUROCONTROL, STATFOR/Doc257/v1.0 Low Cost Carrier Market Update, June 2007, p. 6

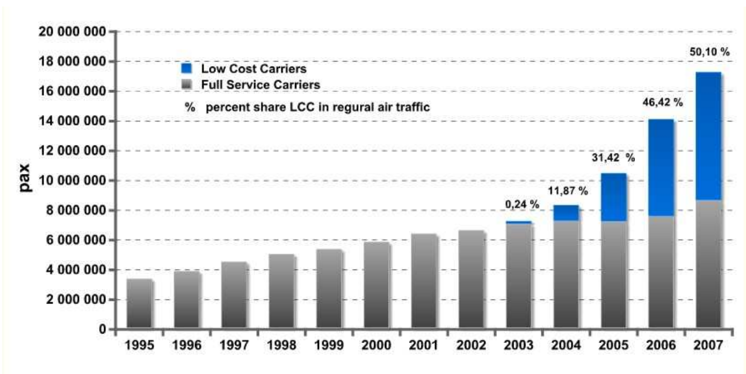

Figure 1. Regular air traffic and Low Cost Carriers market share in Poland
(source: Compiled by author from Polish Civil Aviation Authority)

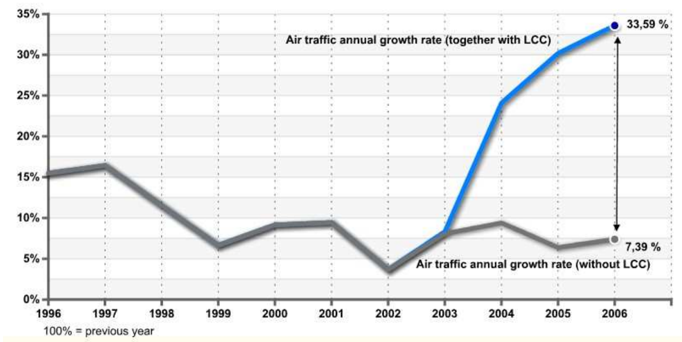

Figure 2. Air traffic annual growth rate in Poland
(source: Compiled by author from Polish Civil Aviation Authority)

Low Cost Carriers that have the greatest market share in Poland are WizzAir (32% of low cost flight in Poland; 16% of all flight in Poland), Ryanair (27%; 13%) and Centralwings (15%; 7%). Those three carriers are responsible for almost 75% of all low cost flight in Poland. Leader carrier on the polish aviation market is still national airline LOT which with 5,4 mln carried passenger in 2007. After the entrance of Low Cost Carriers the market share of polish national airline LOT has decreased from 91% in 1990 to 32% in 2007. Trying to compete with low cost airlines management of LOT decided to launch in 2005 subsidiary-Centralwings that would act in a low cost market and would took over the charter flights.

Emergence of Low Cost Carrier has not only stimulated the air traffic in Poland and other Central-East European countries but also has changed the structure of the market dominated by flag carriers.

2.2. Developing potential of regional airports

The foundation of low cost model is high efficiency in every aspect of its business. One of the strategy assumption of Low Cost Carriers is operating from uncongested secondary and regional airports where charges are lower, delays are rare and turnaround of aircraft can be achieved much more quickly than at the central airport. The expansion of Low Cost Carriers has significant effect on the development of airports. Advantage of dynamic passenger traffic stimulated by Low Cost Carriers take mainly regional airports whose potential was unfulfilled. Growing air traffic has led to increase airports incomes, acceleration of investment and generation of employment.

Network of airports in Poland consist of one central airport located in capital city – Warsaw and eleven regional airports. The number of served passenger and the ownership character differentiate airports. Until mid-1990's air traffic in Poland was centralized which means that more than 80% of flight in Poland were realized from central Warsaw airport. Air traffic in regional airports was concentrated on flights to central airport and other hub airports in Europe like Frankfurt, Munich or London. However domestic flights to central airport dominated flight schedule of regional airports. Main airline that was offering services in regional airports was national carrier – LOT. In 1999 LOT was responsible for 64% air traffic at Gdansk airport, another flights were offered by SAS and British Airways. Another example is Katowice airport where flights were offered by LOT and German flag carrier- Lufthansa.

The domination of flag carriers in regional airports, high fares and lack of opening new direct connection with other European airports were the reason of low dynamics of air traffic development in regional airports. After liberalization in air transport regional airports began to receive low fares services. As there are generally no slot constraints at the regional airports and the cost of operating are relatively low airlines have a freedom of choice over which airports they could operate services into. In fact airports have been forced to change their way of conducting business and compete with each other in attracting airlines. Emergence of Low Cost Carriers has changed regulated air transport where state owned both airport and airlines were operating in an inefficient way and passed these on to the customer in the form of high fares. Low Cost Carriers started to negotiate lower operating cost from regional airports in exchange for opening new connection and guaranteeing passenger flow.

The effect of Low Cost Carrier is seen especial in the passenger traffic growth at the regional airports in Poland. Until 2004 year and the emergence of new airlines entrance at the air transport market regional airports were underutilized and their market share did not exceed 25%. After liberalization in air transport situation has changed. Low Cost Carriers started to operate from regional airports and the traffic has dynamically increased. In 2007 regional airports share in air transport market in Poland has exceeded 50%. The regional airports traffic growth rate in 2006 was three times higher than in central Warsaw airport.

Liberalization effect in air transport was clearly seen in the Bydgoszcz, Katowice, Krakow, Poznan and Gdansk airports traffic volume. Record-breaking result in traffic growth rate was Katowice airport. In 2004 the passenger traffic increased of 141,33% comparing to previous year. The main reason such good results was dynamic activity Hungarian Low Cost Carrier – Wizzair which build a base in Katowice airport and decided to open international route to Athens, Dortmund, London, Milan, Paris, Rome, Budapest and Frankfurt Hahn. Due to low cost operation Katowice started to strengthen their position on the air transport market. At the beginning of 1990’s Katowice airport was at the sixth position as far as passenger traffic is concerned and now it is after Warsaw and Krakow the third biggest airport in Poland. The share of Low Cost Carrier flights is more than 80% of all air traffic in Katowice airport and what is more LCC were responsible for generating almost 95% net flights. One can assume that if it had not been for the low cost flights the air traffic would be at the stage of 300 thousand in state of 1 500 thousand in 2007 at Katowice airport.

Similar situation is with other regional airports in Poland that have increased their passenger traffic thanks to Low Cost Carriers. The share of low cost flights in Gdansk airport is more than 64%.

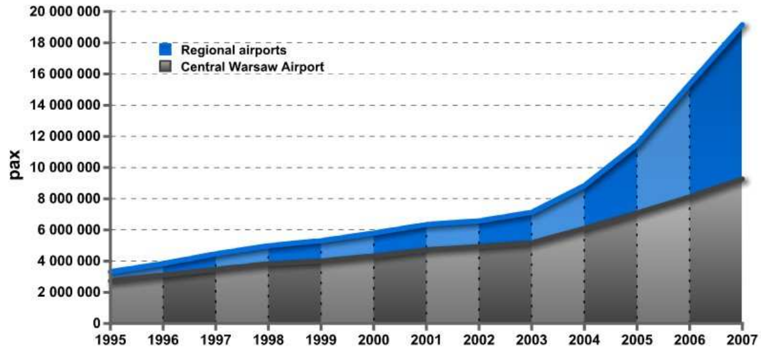

Figure 3. Regular air traffic in central and regional airports in Poland
(source: Compiled by author from Polish Civil Aviation Authority)

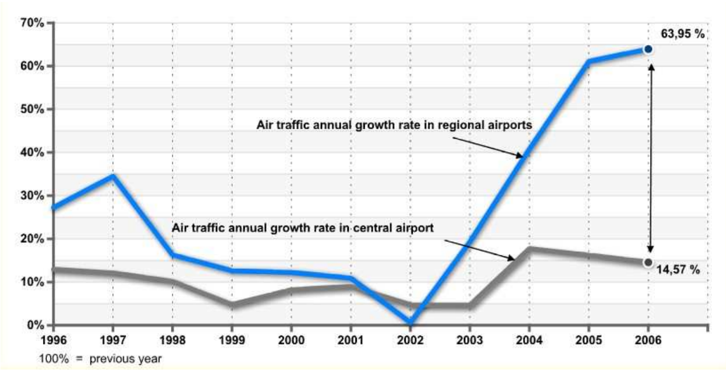

Figure 4. Air traffic annual growth rate in central and regional airports in Poland
(source: Compiled by author from Polish Civil Aviation Authority)

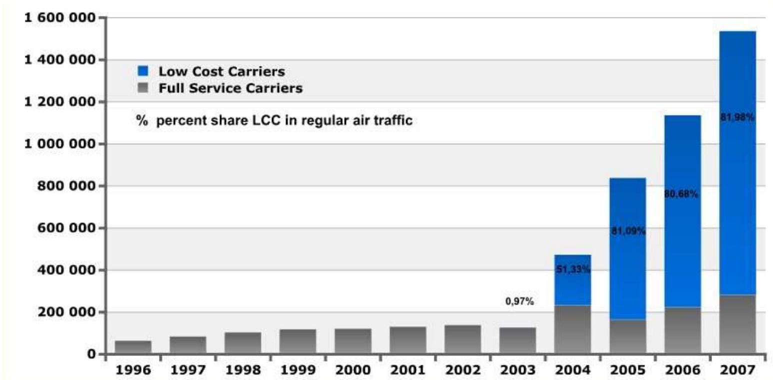

Figure 5. Regular air traffic in Katowice Airport including type of airlines
(source: Compiled by author from Katowice Airport)

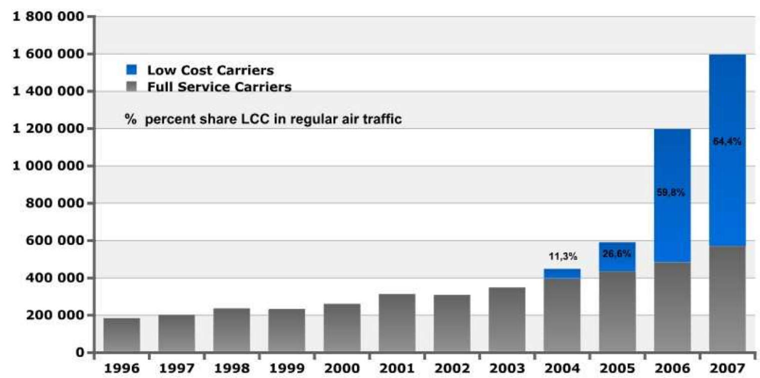

Figure 6. Regular air traffic in Gdansk Airport including type of airlines
(source: Compiled by author from Gdansk Airport)

Traffic growth in regional airports is not the only effect of the Low Cost Carriers activity. Indirect consequences of increased passenger flow in airport is growth in both aeronautical and non-aeronautical revenues and higher profitability. Regional airports due to the high level of fixed cost have interest in maximizing their passenger volume in order to cover these cost. Break-even point for regional airport is approximately 500 thousand passenger.[2] Before liberalization in air transport only one regional airport - Krakow served more than 500 thousand passenger per year another ten regional airports in Poland had the passenger traffic below 300 thousand. Due to Low Cost Carrier activity traffic in regional airports has dynamically increased and in 2007 Krakow airport had passenger traffic more than 3 million, Katowice 1,9 million, Gdansk 1,7 million, Wroclaw 1,2 million and Poznan 0,8 million.

Proportionally with the increase in passenger number increase commercial revenue of an airport. Business like shops, restaurants, bars, car rentals etc. locate at the shopping area of terminals with high passenger volumes and airport collects rental and concession fees from these business. Increasing revenues per passenger through non-aviation channels such as retail and parking is a key driver of growth and profitability especially for airports that depend on Low Cost Carriers. Love Field airport that is a base for the first low cost airline – Southwest is a case in point: Its non—avation revenues are three times higher than aviation revenues. Its parking revenues alone were five times larger than its landing fees.[3] Airports in Poland have just started to develop their business but one can assume that this growing tendency will traced European and American airports. Examples start to emergence and airports perceive the benefits form non-aviation activity. Due to growing passenger traffic Katowice airport has doubled its car park from 530 to 1095 parking space. Being located some distance from the Silesia Metropolis center Katowice airport offer also regular surface transportation which is one of the source of non-aviation revenue.

Increase in air traffic requires expenditure on airport infrastructure. Unfulfilled potential of regional airport has turned to be not enough to cope with growing passenger traffic generated by Low Cost Airlines. Since 2007 almost all regional airports in Poland have been in progress of new investment. More than 207 million EUR both from Infrastructure Ministry in Poland and European Union Founds source are allocated on development of regional airports infrastructure. Investment related to modernization and development airport infrastructure has been accelerated through international authorities decision of organization

[2] Doganis R., The airport business, Routlege, New York 1992, p 49
[3] Airports Dawn of a New Era. Preparing for one of the industry's biggest shake-ups, Boston Consulting Group, 2004, p 29

Euro 2012 in Poland and Ukraine. Airport as an important communication junction play an important role in international transport.

2.3. Benefits for customers

The major beneficiaries of air transport liberalization has been consumers. The emergence of Low Cost Carriers gave passenger greater choice of destination and service providers. The reduced fares offered both by Low Cost Airlines and Flag Carriers increased the number of passenger who can afford to travel by plane. The air mobility index has increased and profile of typical passenger has changed.

a. Savings from lower fares

The low cost operating model allowed airlines to offer fares at unimagined low level which could even compete with other means of transport like bus or train. Emergence of Low Cost Airlines force flag carriers to compete for the first time. As a result the level of airfares has dropped in a whole air transport market what has brought enormous savings to the customer travel budget. Good example is Warsaw - London route where in 2002 flight were offered only by national carrier LOT and customers had two flight class to chose from – business and economy. The situation has changed after air transport liberalization in 2004 and entry of Low Cost Carriers. In 2007 passenger who want to fly from Warsaw to London had five service providers to choose from – two flag carriers and three low cost airline. The cheapest fare was almost four time lower than the expensive one offered in similar flight class[4] by flag carrier.

Table 1. Airfares on Warsaw-London route before and after air transport liberalization

Air carrier	Flight class	From	To	Ticket price (EUR)*	
				2002	2007
PLL LOT	business	Warsaw (T1)	London (Heathrow)	1 016	843
	economy	Warsaw (T1)	London (Heathrow)	271	261
British Airways	business	Warsaw (T1)	London (Heathrow)		903
	economy	Warsaw (T1)	London (Heathrow)		114
Centralwings		Warsaw (T1)	London (Stansed)		118
		Warsaw (T1)	London (Gatwick)		118
easyJet		Warsaw (Etiuda)	London (Luton)		96
Wizz Air		Warsaw (Etiuda)	London (Luton)		69

*Final price, ticket one way, booked online one month before departure.

source: Compiled by author from airlines website and Grzegrzółka K. Wniebowzięci klienci - samolotem taniej niż pociągiem, Wprost, 28.07.2002, s. 45-48

[4] Economy flight class offered by flag carriers is similar to low cost service

Passenger response to the Low Cost Airlines offer has proved that low fares was what customers has expected. Fast increasing air transport is the result of Low Cost Carriers wide activity and their pressure on low fares level in aviation market. On some route were operate both flag carriers and low cost airlines the fares are dropping but if there is lack of Low Cost Carriers competition fares remain at high level. Low Cost Carriers often flight to secondary airports that are located nearby European hubs served by flag carriers. for example Hahn airport situated not far from Frankfurt hub, Lubeca airport near Hamburg hub, Torp near Oslo airport etc. In this cases competition between airlines is not so fierce. Services of flag carriers are chosen by transit passenger or business customers who find quality of flight and getting to the center of the metropolis important. Low Cost Carriers passenger mainly point out the cost of flight. The transparency of fare structure is very important. With the emergence of Low Cost Carriers customers were enhanced to book their flight online. This procedure gives passenger convenience and simplicity of ticket reservation. Passenger survey in polish airports[5] indicate that almost 92% of all Low Cost Carrier customers have booked their ticked online. What is more for 63% passenger price was the most important factor in choosing the airline and flight.

In the 2005 so one year after air transport liberalization large portion of people flying with low fares airlines have never flown before. In Gdansk airport in 2005 more than 34% of all low cost airlines passenger was the first time flyer and the reason of choice air transport was low fare. This newly created demand for air services is based on low fares. People who start traveling by plane tend to continue using that means of transport in the future. During second research in Gdansk airport the percentage of first time flyer was not so high but simultaneously the number of people traveling by plane two or three times per year has grown which means that passenger who started flying after air transport liberalization continue to travel with Low Cost Airlines.

b. The growth of mobility

Increase in flight connection and low fares which are the result of Low Cost Carriers activity have the impact on people air transport mobility. Low Cost Airlines enable traveling by plane passenger who could not afford using the services of flag carriers. The index of air transport mobility in Poland has grown.

[5] Research in polish airports has been conducing since 2005. Author of this article was the student team leader supervised by professor Marek Rekowski form Poznan University of Economics

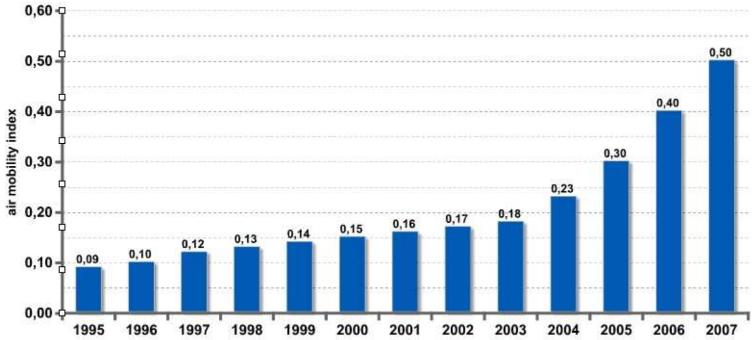

Figure 7. Air transport mobility index in Poland
(source: Compiled by author from Polish Civil Aviation Authority)

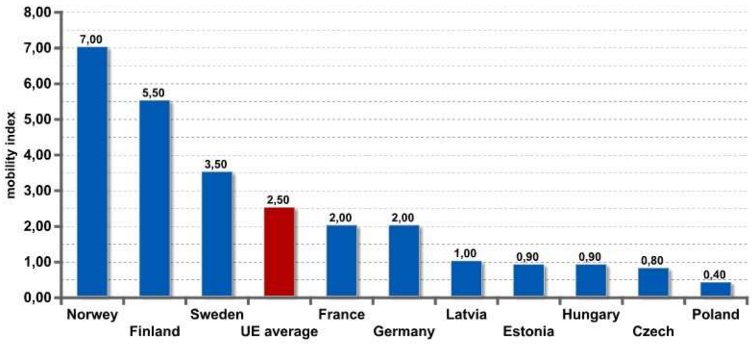

Figure 8. Air transport mobility index in Poland comparing to other European countries in 2006
(source: Compiled by author from Polish Civil Aviation Authority and Liwiński J., Krajowe porty lotnicze 2006, Przegląd Komunikacyjny, 2007 nr 3, p 35)

In the mid-1990's the air transport mobility of Polish society was 0,09 which means that there was statistically 0,09 air travel per year on one citizen. Until 2004 and the emergence of Low Cost Carriers the mobility index did not exceed 0,2. After air transport liberalization the growth of air transport mobility in Poland is clearly seen. In 2006 the mobility index has doubled comparing to 2004 and appear to be relatively fast growing.

Although the mobility index is increasing the rank of Poland among other European countries is very low which means that there is great potential of Polish market. Citizen of other countries from Central-East European block as Czech Republic, Latvia, Estonia has mobility index in air transport between 0,8 and 1,0; only Romania and Slovakia have the mobility index lower than Poland. Citizen from West European countries travel by plane more often. France and Germany have the mobility index 2,0 and Scandinavian countries up to 7,0.[6]

However there are some difference in mobility index among one country. Regions with high activity of an airport have the mobility index higher than remote and with low accessibility areas. In Poland the highest mobility index – 1,57 is in Mazowsze region where central airport is located afterwards Malopolska region with Krakow airport – 0,72 and Pomorze with Gdansk airport – 0,57. Comparing this results with European average 2,0 it is clearly seen that there is high potential of polish air travel market.

Many factors contribute to the growth of mobility index. Opening new destination and low fares offered by Low Cost Carriers are important elements that stimulate passenger willingness to travel but are not the only one. Enlargement of European Union and free flow of capital, goods and people enhance European citizen to move. Great Britain and Ireland have opened their labor market what together with high unemployment rate in Poland cause great flow of workers. Low Cost Carriers have response to the need of relatively cheap travel to British Isles. Before the willingness to travel will be realized the need to travel must be supported by purchase power. Only then passenger will be able to buy the product or service. Fundamental incentive that contribute to the growth of travel needs is increase in disposable income of society which is connected with country economic growth. Share of expenses on transport in household budget has increased from 7,5% in 1999 to 8,9% in 2007 in Poland.[7]

[6] Source: Liwiński J., Krajowe porty lotnicze 2006, Przegląd Komunikacyjny, 2007 nr 3, p.35
[7] Source: Polish Central Statistical Office

c. Increased consumer choice

Emergence of Low Cost Carriers has given consumers a greater choice of schedules, frequencies, airlines and airports to fly from. As the liberalization removed the barriers for new entrance the number of airlines has dramatically increased. Before deregulation in air transport market mainly national carrier was permitted to operate in Poland. Until late 1990's LOT had the share of 93% in polish air traffic. Airport which offer a wide range of European connection was Central Warsaw Airport. Typical hub-and-spoke air transport system dominated polish market. Passenger were brought from regional airport to central one where they change flight to another European airport. There were almost no or only a few direct European connection from regional airports in Poland mainly to other European hubs in Frankfurt, Munich or London.

The situation has change after air transport liberalization. The structure of air connection has shifted from hub-and-spoke to point-to-point connection. Since 2004 Low Cost Carriers started to open new direct destination from regional airports. The number of international air route in Poland has increased from 57 in 2002 to 138 in 2007.[8] In 1999 from Katowice airport passenger could fly with LOT only to Warsaw, Frankfurt and Munich. About 112 thousand passenger were departed in 1999 from Katowice airport. By the 2008 the destination and airline choice has increased dramatically. Apart from LOT offering flight to Warsaw, Frankfurt and Munich there are three Low Cost Airlines Wizzair, Ryanair and Germanwings that operate from Katowice to 27 airports in a whole Europe. Citizen of Silesia Metropolis do not have to use the services of central airport in order to fly to Europe, they can fly directly from the one located in their region. Greater choice of destination in Katowice airport was the reason of increasing air traffic. In 2007 more than 1 529 thousand passenger were departed form Katowice airport. Another example is Gdansk airport where in 2000 flights to European hubs in Frankfurt, Munich, Hamburg, London and Copenhagen were offered by three flag carriers LOT, British Airways and SAS. In 2207 apart from flag carriers flights from Gdansk airports offer easyJet, Ryanair, Wizzair, Centralwings, Bmi, Norewgian and Germanwings to 26 airports in Europe. The air traffic has increased from 261 thousand in 2000 to 1 980 thousand in 2007.

Consumer choice has been increased not only by opening new destination but also by introducing new connection by another airlines on the same route.

[8] Source: Polish Central Statistical Office

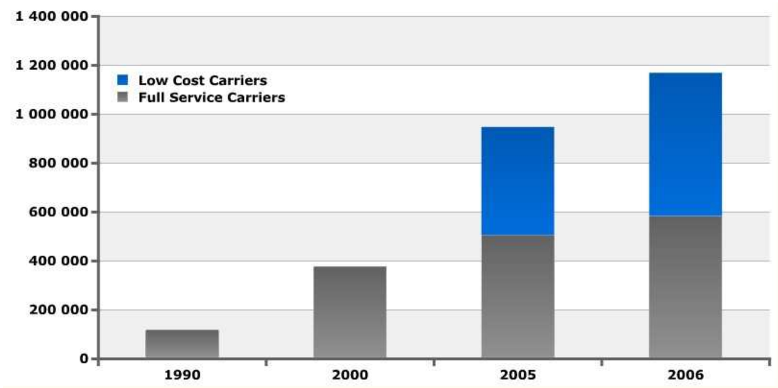

Figure 9. Traffic increase on the Poland-Germany routes following the entry of Low Cost Carriers (source: Compiled by author from Geverbliher Lutfverkehr 2006 Statistiches Bundesamt, Wirtschaft und Statistic 4/2007, p. 4)

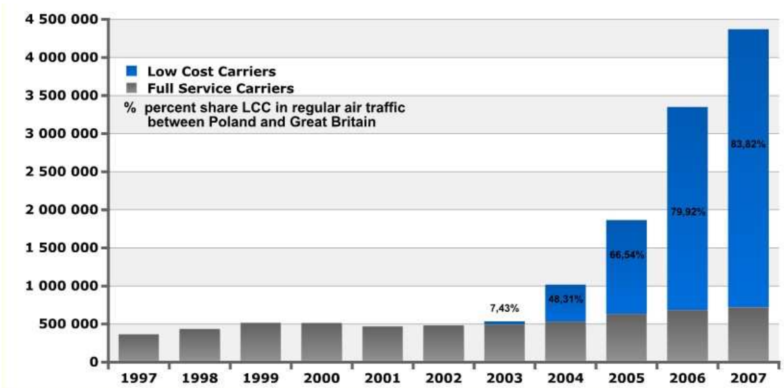

Figure 10. Traffic increase on the Poland-Germany routes following the entry of Low Cost Carriers (source: Compiled by author from United Kingdom Civil Aviation Authority, 2007)

Above there are two examples of traffic increase following an entry of a low fares airline on an Poland-German and Poland-Great Britain route. On international markets the low fares introduced by low cost carriers have had a great stimulatory impact even on well established and relatively mature markets.

There were five route from Poland to Great Britain in 2000, three from Warsaw airport, one from Gdansk and one from Krakow airport. All this flight were offered by flag carriers LOT and British Airways. Situation has changed seven years later after emergence of Low Cost Carriers. In 2007 there were 47 connection from 11 airports in Poland to one of the 18 British airports offered by one of the eight carriers. In 2007 Low Cost Carriers created 131 additional flight in the week schedule, what constitute almost 80% of all flights to Great Britain offered from Poland.

d. Change in passenger profile

Due to high cost of ticket air transport has been regarded as luxury service available only for selected segment of customers. Typical passenger of air transport was middle age man traveling in business purpose more than six times per year.

Low fares and wide range of connections has change the typical passenger profile. Drop of airfares has boosted the range of potential customer who have not travel by plane due to high travel cost. Passengers who were forced to use other means of transport than plane after liberalization of air transport and using the services of Low Cost Carriers save money and time. The mobility index is increasing and more and more tourists travel by plane. Among airlines customers the share of passenger traveling for personal reason is also increasing. In Gdansk airport the percentage of passenger traveling for personal reason (visiting friends and relatives) has increased form 25% in 2004 to 36% in 2008. In the customer structure of Low Cost Carriers the percentage of people traveling for the first time by plane is relatively high. The average age of passenger has also changed. More than 40% of all Low Cost Carriers customers in Poland are young people in the age of 20-30 years. They are mobile, eager to travel, well educated and price sensitive.

The passenger structure of Low Cost Carriers is more differentiated than the structure of flag airlines customers. The main features that differentiate low cost passenger are socio-economic group, work profile, average age, travel purpose and travel frequency.

Low Cost Carriers customer have also other expectation toward service. The essential element is safety and low fares. Important is price transparency, direct flight, flexible and competent staff and good connectivity of an airport. Things that are unnecessary are paper ticket, executive lounge and in-flight magazine.

2.4. Contribution to regional development

Direct link between European region boost tourism and enhance doing international business. Low fares services play an essential role in contributing to regional development.

Increasing passenger numbers and destination offered from regional airport have the impact on tourist influx, employment growth and on attracting business to the region. Improved access, low labor cost and facilities encourage location of new investment in the region.

Growing air traffic generated by Low Cost Carriers stimulate the airport development and have impact on regional economy. The influence of an air transport can be measured in three aspect: direct, indirect and catalytic impact. [9]

The direct impact of an airport is estimated by considering the economic value of the activities of companies operating on-site at the airport or businesses whose operation directly support on-site activity. Increasingly airports contribute to national and regional economy through tax revenues. The study of the impact of airport at Katowice airport on regional economy estimated taxes paid to federal state and local authorities at 4,76 million EUR in 2007. Katowice airport almost fully rely on Low Cost Carrier operation (82% of all traffic) so the direct impact of an airport is result of the presence of the Low Cost Airlines. Direct impact of an airport include also employment at the airport. Gdansk airport employ 172 workers and the direct impact of personal income of 4,25 million EUR in 2006 is an economic output.

Indirect income for the region is generated among others by passengers who visited the region. Low Cost Carriers have stimulated air traffic and enhance tourists influx. Incoming passenger through their expenditure are conducting to economic development of the region. Gdansk and Pomorze region has visited in 2006 283 thousand low fares passenger – nonresidents. Most of them came to Gdansk in business but also for leisure and personal purpose. During one year nonresident have generated 114 million EUR of indirect income to the region. Average incoming passenger expenditure in the region amounted to 377,2 EUR

[9] Creating Employment and Prosperity in Europe – a study by ACI Europe of the social and economic impact of airports – 1998, Airports Council International ACI Europe

per trip. Nonresident passenger stay in regional hotels, eat locally visit tourist attraction, use local communication and they support tourism-related business and increase employment.

The effect of air services is similar in all of the regional airports in Poland where Low Cost Carriers are present. Table 2 present the indirect income generated to the region through Low Cost passenger in Gdansk, Katowice and Wroclaw in 2006.

Table 2. Indirect income generated to the region through low cost passenger in Gdansk, Katowice and Wroclaw airport in 2006.

Airport	Regular air traffic in 2007 (million)	Percentage of Low Cost passenger in regular traffic	Percentage of non-residential passenger	Average expenditure of non-residential passenger	Average length of stay (in days)	Indirect income to the region
Gdańsk	1,589	64,4%	63,9%	82 EUR	4,6 day	114 million EUR
Wrocław	1,137	59,1%	71,3%	109 EUR	3,7 day	95 million EUR
Katowice	1,529	81,9%	56,1%	140 EUR	2,6 day	123 million EUR

Source: Compiled by author from own research in Polish airports in 2005-2008 supervised by Professor Marek Rekowski from Poznan University of Economics.

a. Stimulation of tourism

Lack of air access to the region was serious barrier in developing tourism. Low Cost Carriers by connecting European region have revolutionized European tourism. Prior to liberalization only few consumers could afford to travel by air and the journey through hub airports was time consuming as well as expensive.

The main advantage of Low Cost Carriers activity was increasing number of new tourist destination accessible by air. In other words traveling started to be simple and relatively cheap task comparing to situation before liberalization. Citizen have easier access to many European region. Passenger traveling on holiday or visiting friends and relatives are reluctant to travel by air if it does not involve connecting through congested airport.

Low Cost Carriers have developed many additional connections as far as popular tourism destination are concerned. Wizz Air for example offer flight to Barcelona, Milan or Crete from Katowice in the summer schedule.

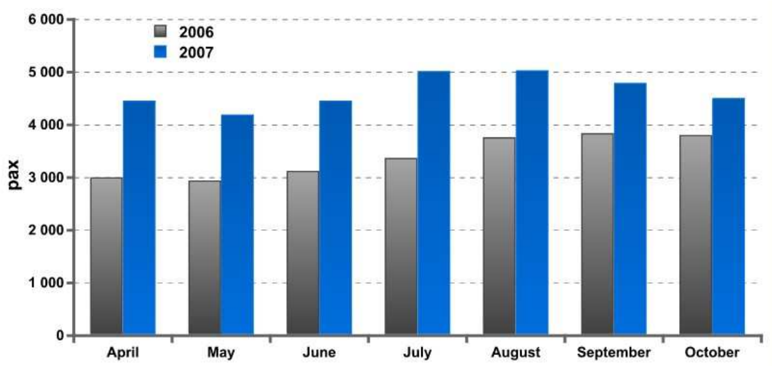

Figure 11. Increased in passenger traffic on the route Gdansk-Dublin in summer schedule after introducing promotion campaign.

Source: Compiled by author form Gdansk Airport Passenger Statistic.

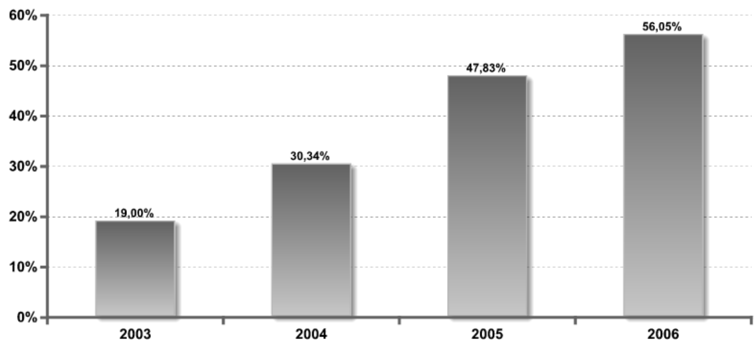

Figure 12. Share of foreign tourists coming to Krakow by plane in the general amount of foreign tourists in the period 2003-2006

Source: Compiled by author from Badanie ruchu turystycznego w Krakowie w roku 2006, raport końcowy, kierownik projektu dr Borkowski K., Małopolska Organizacja Turystyczna, Kraków 2006

Additional Low Cost Carriers cooperate with city authorities and promote new connection and attract potential customers. For example Centralwings airlines work together with Gdansk authorities in order to promote the flights to Ireland and Scotland. Promotion campaign was spread over whole Great Britain market. This project was aimed at target citizens of Great Britain and Ireland as well as polish workers living on British Island. Within the confines of promotion campaign city Gdansk was promoted on billboards in television, press and Internet. The aim of promotion campaign was attracting tourist by portraying city as a place full of sculptures and historical monument as well as modern attraction. Lot of emphasis was put on development of weekend tourism. Information abut cultural events in Gdansk was available on the Centralwings website in polish and English. Airlines also promote region during Saint Patrick Days in Dublin. The result of cooperation between region and Low Cost Airlines is increasing passenger flow on the route Gdansk-Dublin (see figure 11.)

Expanded connection network enhanced passenger short trips. Weekend journey became popular among young people. The example of the city which tourist potential is developing thanks to dynamic activity of Low Cost Carriers is Krakow. In this regional airports low cost flight are offered by six Low Cost Airline. According to data from Polish Tourism Organization in 2006 more than half of foreign tourist visiting Krakow came to the city by plane (see figure 12). In 2006 more than 2 million foreign tourist has visited Krakow and half of them came to the region by plane. The Low Cost Share at the Krakow airport is approximately about 62% which means that Low Cost Airlines have brought more than 700 thousand foreign tourist to Krakow from Great Britain, Ireland, Germany, France or Italy.

It is very important that Low Cost Carriers offer flight to popular tourist destination through the whole year. Charter airlines concentrate their flights during summer months. Thanks to Low Cost Airlines activity the tourist traffic is spread throughout the year what brings benefit not only to customer but also secure steady income to hotels, restaurants, museums and other tourist-related business.

b. Creating employment

Apart from boosting the traffic and stimulating tourism Low Cost Carriers also conduct to creating employment. There are three areas of employment generated by Low Cost Airlines.

First type of employment generated by Low Cost Carriers is the one within airlines. Carriers through extension of their business generate jobs like pilots, cabin crew, engineers and administrative staff. Wizzair airlines has three base in polish airports in Katowice, Gdańsk, Warszawa the new one is opening in Poznan airport. In 2006 airlines employed more than 250 workers in Poland and this figure has increased 2,5 times comparing to previous year.

Second type of employment generated by Low Cost Carriers is the one at the airport. The development of the airport stimulated by activity of Low Cost Airlines means not only growth of revenue and development of infrastructure but also growth in employment at the airport and ancillary activities. Direct employment generated by Low Cost Airlines is closely related to the passenger traffic. Increasing passenger flow generate employment almost in every field of airport activity. Indirect employment is also connected with air traffic. Passenger are great group of potential customers. The more passenger in airport the more shops, bars, car rentals etc. at the terminals. Katowice airport which are developing thanks to Low Cost activity has doubled the number of businesses on-site from 24 in 2003 to 47 in 2007.

The third type of employment is generated in region. Low Cost Carriers stimulate the tourism industry and attract the new business to the region.

Katowice airport that rely mainly on Low Cost Carrier activity has created more than 2 556 work place. In 2006 direct employment created on airport was 304 jobs and on-site employment was estimated at 1330 jobs.

3. Conclusions

Liberalization in air transport and emergence of Low Cost Carrier has dramatically changed the market in Central-Eastern European Union. Polish aviation market is good example of benefits brought by Low Cost Carrier activity in many areas. The national carrier LOT being the leader on the market was forced to compete for the first time. The major beneficiaries of the change in the aviation market were consumers in terms of reduced air fares and greater choice of destination as well as air carriers. Since liberalization in air transport Low Cost Carriers have carried more than 20 million passenger in Poland and grate share of them were first time flyer. Underserved airports could use their potential thanks to activity of Low Cost Carrier. The traffic growth rate in regional airport was estimated on 61% in 2007. Direct connections between European regions lead to regional integration and development, increase inward investment, stimulates tourism and related employment. In order to benefit more from Low Cost Carrier activity national government must stop supporting their national airlines. Legislation and policies must promote competition in the interest of consumers.

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