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**CUSTOMER TRANSPORT PREFERENCES IN SERVICES  
OFFERED BY THE REGIONAL OLSZTYN-MAZURY  
AIRPORT IN SZYMANY**

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**INTRODUCTION**

Air travelling requires air lanes and ground infrastructure. Until recently, the infrastructure was provided by central airports. The appearance of regional airports with international connections encumbers central ports. The regional airports are usually used by low-budget airlines, whose manner of operating and favourable prices support the demand for air transport. The airports and airlines are forced to meet required standards. Constantly increasing competition requires the demand for and destinations of air transport to be researched. One regional airport in Poland is the Szymany airport, close to Szczytno in Warmińsko-Mazurskie voivodship. The airport was opened in January 2016. Signing contracts for destinations of connections and transport services required research and analyses to be conducted in order to make the range of services safe and fulfil the expectations of potential travellers and guarantee that the investment costs would be repaid.

**AIM AND METHODS**

The subject matter of the research was demand for services offered by Szymany Airport. Our aim was to determine the demand for destinations and extra services offered by the airport. The research sample was made up of students and employees of the Faculty of Economics at University of Warmia and Mazury in Olsztyn. The information gathered from them was the primary data, which concerned the respondents' characteristics, their destinations, demand for air transport services, accompanying services, and the infrastructure supporting air traffic. The research was conducted during the first quarter



of 2015, with respondents directly answering questions on a paper-based questionnaire. From 1,136 correctly filled questionnaires data were transferred to a Microsoft Excel spreadsheet. The results are presented here in graphic and descriptive form.

## DEVELOPMENT OF POLISH AIR TRANSPORT

The development of air transport in Poland took place in the period between WW I and WW II. It began with Poland joining the International Convention Organizing Air Transport (Międzynarodowa Konwencja Urządzająca Żeglugę Powietrzną), which happened on 13 November 1919 [Drzazga 2015 after Litwiński 2008]. Civilian air transport began at the end of 1919, on a military air transport (back then still German) initiative, under the name Air Transport Station Lawica in Poznan (Stacja Lotnicza Ławica w Poznaniu). This was followed by Cracow – Rakowice, Warsaw on Pola Mokotowskie and Lviv – Lewandowka. In 1929 the LOT Polish Airlines (PLL LOT) were established to execute transport activity to five inland airports: Gdańsk, Poznań, Lwów, Katowice and Cracow, and two international ones: Brno and Vienna [Drzazga 2015 after Litwiński 2008].

Until the end of the 1980s, the air transport market in Poland was centralized. Almost 80% of air transport operations was performed by Warsaw Chopin Airport. Regional airports played a supplementary role, providing flights to and from the central airport. Only some of the regional airports offered European connections to Munich, London and Frankfurt. The leading air company was the PLL LOT and a small number of flights was also provided by foreign air transport companies [Drzazga 2015 after Rekowski 2011].

The infrastructure of the regional airports languished, as a result of high ticket prices and an insufficient number of connections. Only when Poland became a member of the European Union did changes in the air transport services market take place. In 2011, the regional airports Cracow – Balice, Gdańsk – Rebiechowo, Katowice – Pyrzowice eclipsed 10% participation in passenger service [Drzazga 2015 after Rekowski 2011].

Today the Polish airports consist of one central port complemented by regional ports, unequally deployed. Three regions: podlaski, opolski i świętokrzyski, have no airport. Private airports (for exclusive use) constitute 71% of all Polish civil airports, including: 31 exclusive airports governed by the Polish Aeroclub (Aeroklub Polski). Of the 58 civil airports, 41 are exclusive, 13 public and 4 have limited certification. Public airports constitute 22%, and airports with limited certification 7% [Piórkowski 2015 after Rokicki 2014].

## MARKET FOR AIR SERVICES

The advantages of air transport are that large spaces can be quickly covered. Drawbacks include relatively low accessibility and high prices. Demand for air transport services is the intention to buy disclosed. With supply comes the ability to satisfy demand [Drzazga 2015 after Hawlena 2012]. Constant coordination is required if an air transport market is to function properly. The air transport market is a dynamic one. Airports and air

transport companies offering services, work in constantly changing conditions and must make decisions about, consulting cost-effectiveness. Transport possibilities, quantity of procurements, uneven demand for services in time and costs all have special meaning.

For air transport companies, what's important is that the services they provide be cost-effective. Supply growth depends on innovation and access to potential buyers, while a fall can cause organisational constraints (e.g. licensing). Supply is also contingent on the cooperation of transport companies, cooperating companies and transport policy.

## **AIR CARRIERS**

According to article 2, point 16 of Aviation law (2002) an air transport company is recognised as “an entity licensed to conduct air transport transit on the basis of a concession (in the case of Polish companies) or on the basis of the appropriate act of another country (for non-Polish airlines)”. Polish airports are serviced by both domestic and foreign airlines. Polish air transport companies are: LOT Polish Airlines + EuroLOT SA, EuroLOT SA, and Sprint Air. In 2014 Polish air transport companies handled only 27.2% of total passenger flights originating in or arriving in Poland, while more than 70% of flights was handled by other air transport companies, including 50% by low-budget companies like Ryanair and WizzAir [Rokicki 2014].

Data from 2014 show an increasing tendency to use non-Polish companies (mainly LOT Polish Airlines – EuroLOT SA) in favour of low-budget airlines. Involvement of national air transport companies decreased by 5.08% while one low-budget airline increased by 5.97%. The increasing involvement of low-budget airlines in passenger services can be attributed to the increasing stature of regional ports. Between 1993 and 2010 involvement of regional ports in passenger services increased from 15 to 58% [Drzazga 2015 after Haderek-Głapska 2011].

Regional air transport and low-budget airlines now play a large role in air transport in Poland. All in all, that means air transport is becoming more popular.

## **THE HISTORY OF SZYMAN Y AIRPORT**

In 1933 Germany began building airports close to its border with Poland. They were intended to be used later on for armed aggression. One such airport was in Szymany, which at the time was located barely 10 km from Poland's border. To make space for the airport, forest land was cleared, but it remained well hidden by the surrounding forest. The infrastructure was not developed. Apart from a landing field, a few wooden barracks were built for storage purposes and offices. In 1939, the airport was used in attacks against II Rzeczpospolita. In 1945, the Soviet Army took the airport over but abandoned it in the same year, after which it sat idle until the 1950s (because of the potential of war) the USSR ordered armed forces to develop in the PRL (Polish People's Republic). The airport in Szymany was picked as a base for a regiment of the Air Force. In the 1960s and 70s the airport was expanded to include a paved runway and concrete barracks. In the 1990s the army stopped using the airport [Drzazga 2015, Piórkowski 2015].

On 15 November 1966 the Voivode of Olsztyn launched Mazury-Szczytno Airport (Port Lotniczy Mazury-Szczytno) to take over passenger flights. The first PLL LOT aircraft landed at the airport on 2 June 1996 and on 10 October 2001 it was added to the list of airports offering international flights. On 14 April 2003 Mazury-Szczytno Airport partnership obtained a certificate for passengers, luggage, aircraft and transport between terminals and aircraft services. However, there was little interest, leading PLL LOT to suspend flights in 2003. In 2005, Ryanair airlines expressed interest in launching flights to Szymany airport, provided the terminal was expanded and the runway improved. Unfortunately, the partnership running the airport lacked the financing. Only with the help of European Regional Development Fund within the Regional Operation Program Warmia and Mazury 2007–2013 and with additional help from the state budget did the expansion of the airport as an object of the Regional Airport Olsztyn-Mazury begin. The process was completed in 2015 and the airport obtained the necessary certificates. The first connections were Szymany – Berlin and Szymany – Cracow, launched in January 2016, and were handled by Sprint Air.

## LOCATION AND FACILITIES OF THE AIRPORT IN SZYMANY

The Regional Airport Olsztyn-Mazury is located 10 km from Szczytno, 58 km north of Olsztyn. The terminal accessible to the passengers is around 7,000 m<sup>2</sup>, is air-conditioned, and has separate sections for arriving and departing passengers. The check-in section in both arrivals and departures, is divided into two directions: service of passengers within the Schengen zone (S) and service for passengers leaving the zone (NS). Average day-capacity is around 830 passengers, jumping to 1,250 during the peak hours. The airport has Airport Rescue – Fire Forces, which is responsible for safety and intended for single rescue. The fire unit (together with vehicles, crew and equipment) secures immediate reaction in emergency situations [Piórkowski 2015].

## CHARACTERISTICS OF THE RESPONDENTS

The respondents' gender, age, occupation and gross income per family member were considered. The results are presented in a form of charts. Figure 1 shows that a substantial majority of the interviewees were women (73.9%) and minority the men (26.1%). Women display a greater willingness to study and to educate themselves, a fact also observed at the UMW and the WNE. Men show a greater desire to become employed after finishing high school, which can interfere with studying.

Figure 2 presents the division of the interviewees by the age groups suggested by Regional Olsztyn-Mazury Airport in Szymany. The majority of interviewees were young people (88%) up to 29 years of age because in the WNE society students make up 95.56% of the population. Other age groups included: people aged 30–45 (8.6%), people 46–67 (2.7%) and a small number of people above 67 (0.6%). No one less than 16 years old was interviewed.

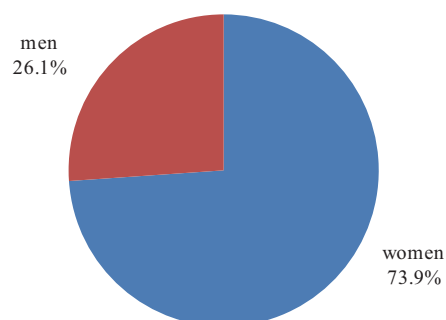


FIG. 1. Interviewees by gender

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

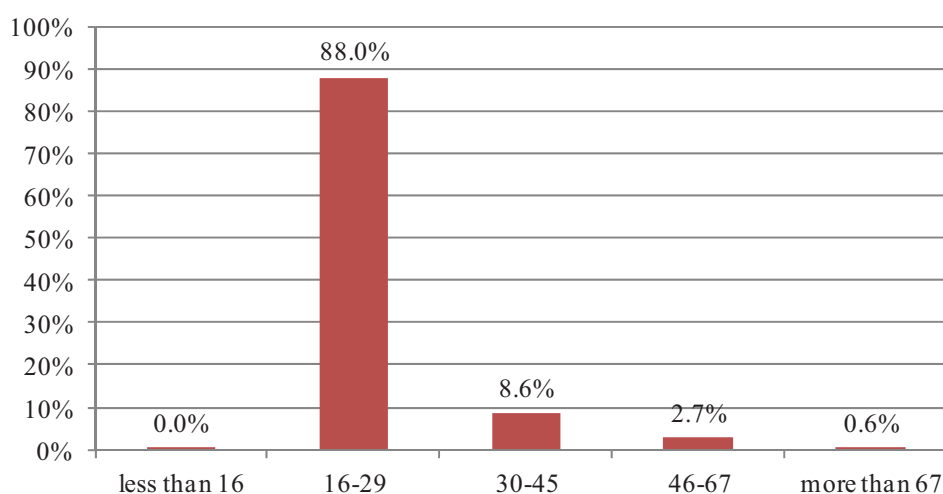


FIG. 2. Interviewees by age (division into age groups according to coordination with Regional Olsztyn-Mazury Airport in Szymany)

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

Figure 3 presents the interviewees' permanent place of residence. Among the interviewees the majority consisted of urban residents, while rural residents constituted only 37.4% of the sample. 22.6% of the interviewees were from cities with populations of up to 25,000 residents were 14.5% were from cities with a population greater than 150,000 while 13.1% were from cities with a population of 50,000 to 150,000 and 12.4% were, from cities with a population of 25,000 to 50,000 .

Figure 4 displays the interviewees' occupations. The largest share of respondents (71.7%) was students who did not work. Those employed worked as administration employees (15.6%), physical workers (4.1%), businessmen (2.6%), directors (2.5%). Other occupation groups (less than 1%) included: paramedics, farmers, researchers and lecturers. Figure 5 presents a view of gross income per family member.

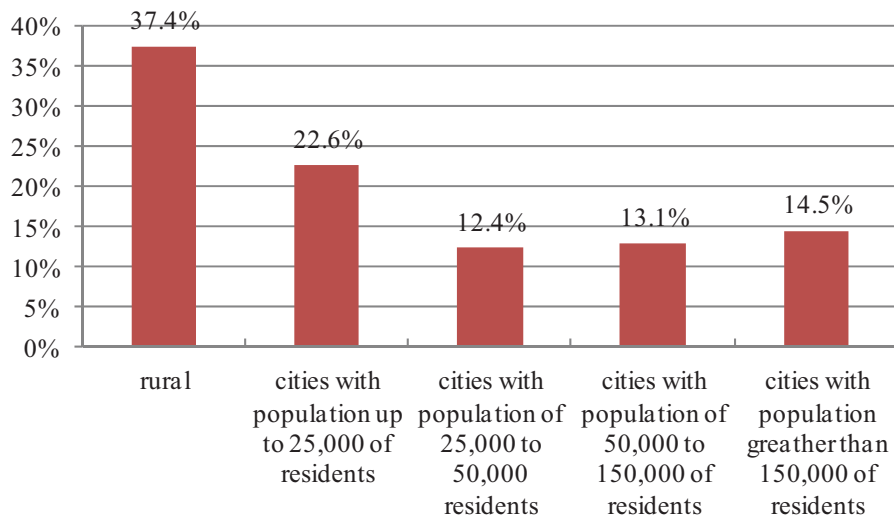


FIG. 3. Interviewees by place of residence

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

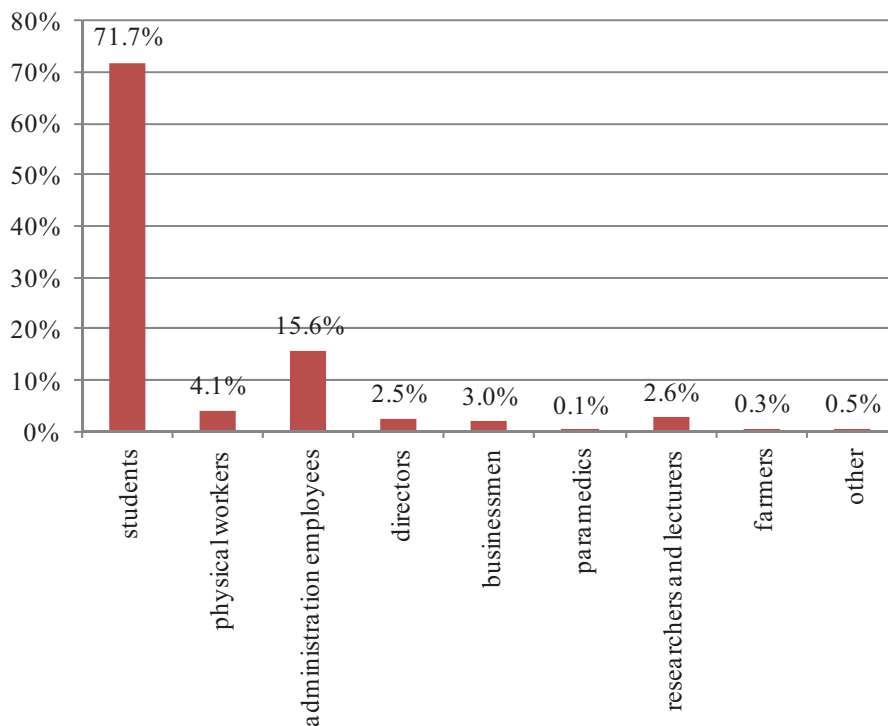


FIG. 4. The interviewees' occupations

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

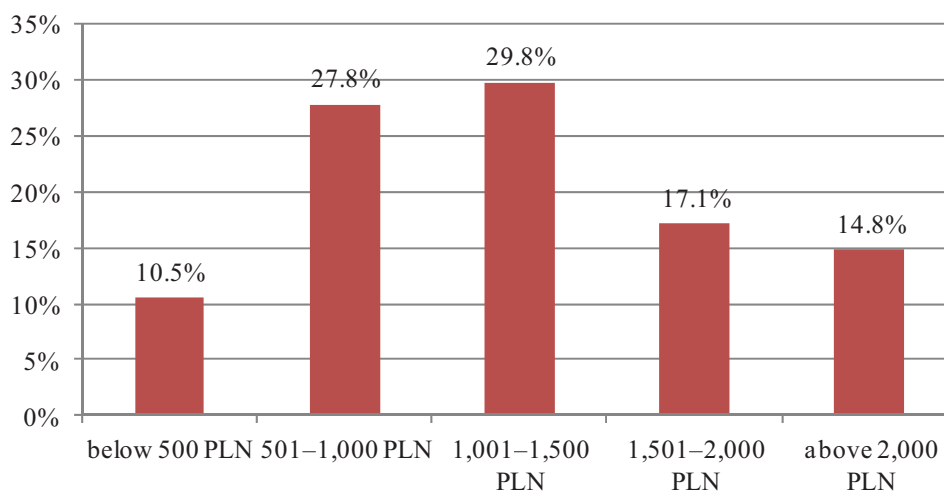


FIG. 5. Gross income per family member

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

The largest share of interviewees (29.8%) described their gross income per family member as 1,001–1,500 PLN. 27.8% chose 501–1,000 PLN. 13.1% indicated 1,50–2,000 PLN, 14.8% said their income exceeded 2000 PLN per family member while 10.5% said their family's income was below 500 PLN per person. Income on that level can limit air travel affordability.

### ANALYSIS OF THE INTERVIEWEES' PREFERENCES CONCERNING SERVICES OFFERED BY THE AIRPORT

The interviewees' level of demand for the flights offered was low. More than half (62.4%) did not intend to fly while only 37.6% planned to use air transport including: 18.9% once a year, 12.9% twice a year, and 3.9% a few times a year. Only 1.1% of the interviewees intended to use air transport a few times a month. Figure 6 displays intended frequency of travel.

Figure 7 presents the respondents' destination preferences. The respondents that go to London probably do so for economic or family reasons, while respondents that travel to Paris likely go as tourists. Other frequently mentioned connections include Rome, Berlin, New York and Croatia.

The next question was why people fly. Figure 8 provides the answers. The greatest share of those interviewed – 44.7% – indicated they fly as tourists. Exactly 22.6% fly to visit family and friends, 13.5% for work abroad, and 6% for business purposes. These results stand in contrast to views commonly presented in the media about the mass emigration of young people, especially students, with the aim of looking for new job opportunities. Exactly 36.8% of the interviewees do not intend to use the services of Szymany Airport for the reasons listed in the questionnaire.

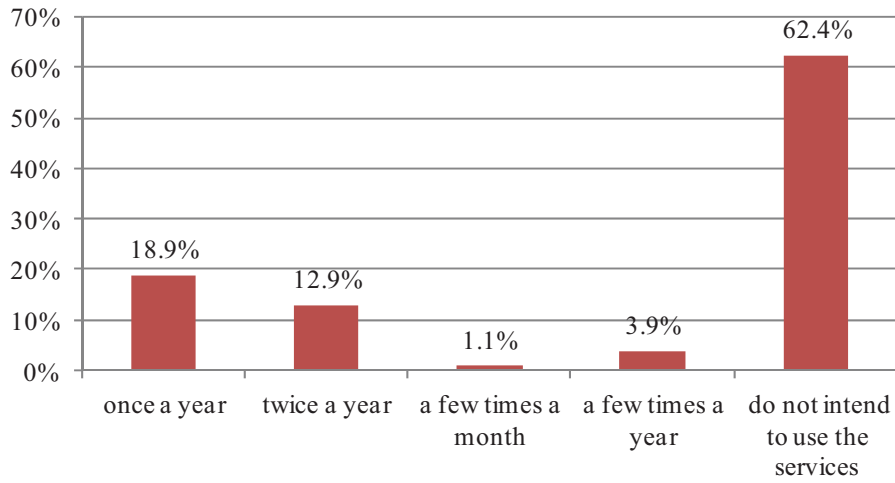


FIG. 6. The frequency of air travel

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

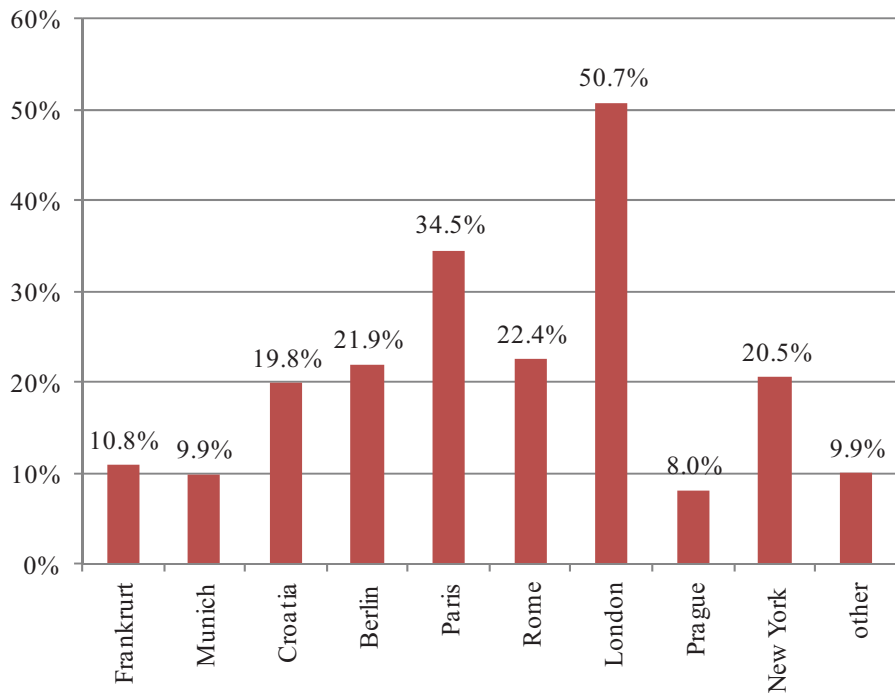


FIG. 7. Preferred destinations

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

The interviewees were also asked what factors would encourage them to use the services for inland and international travels. They were asked to choose the most important factor. The price of the tickets was the most decisive factor in encouraging 45.5% of interviewees to fly. For 20.7% of interviewees the availability of connections was impor-



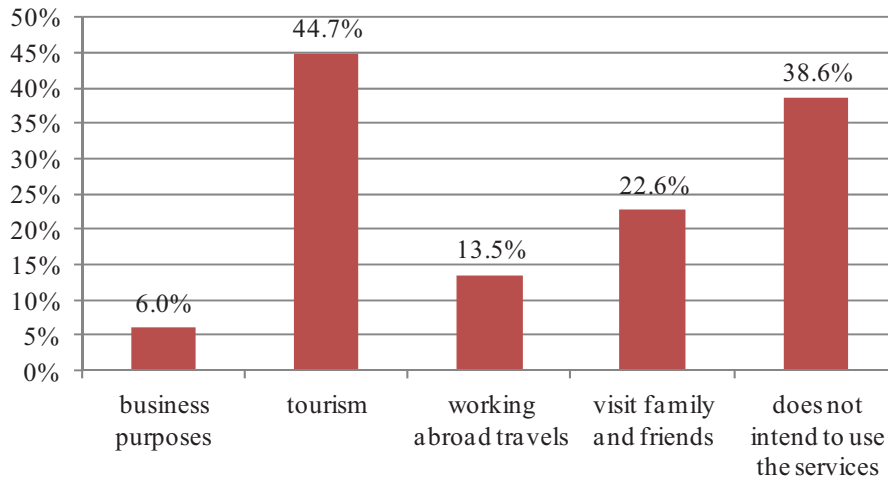


FIG. 8. The reasons for using air transport

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

tant, while 13% of them valued the most short flight times. For 9.5%, fast transport to the airport is important and for 8.37% comfort was the most important consideration. A small number (2.9%) revealed that nothing could encourage them to travel by plane (Fig. 9).

Answers to the question about factors encouraging plane travel within the country were very similar. The data are presented in Figure 10. The results presented by Figures 9 and 10 show that low-budget airlines are preferred for both inland and international flights.

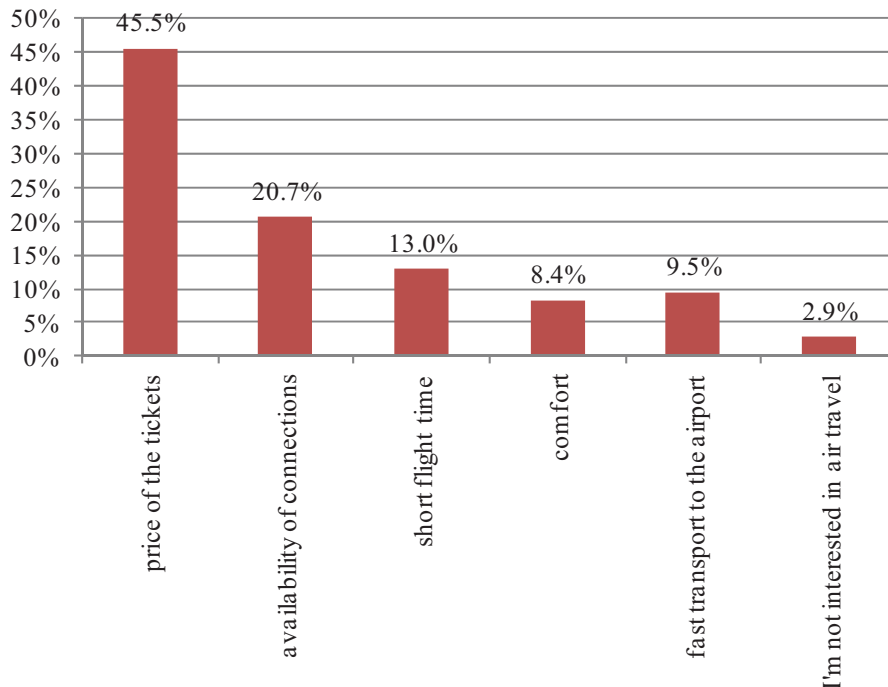


FIG. 9. The factors encouraging people to fly internationally

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.



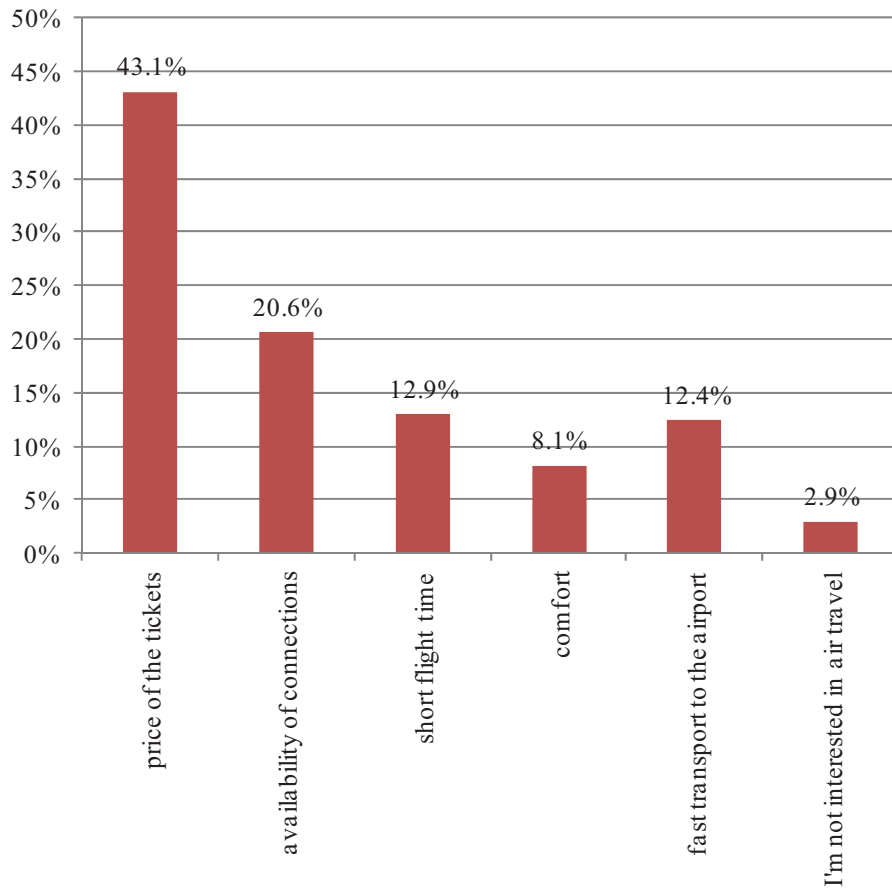


FIG. 10. The factors encouraging inland plane travel

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

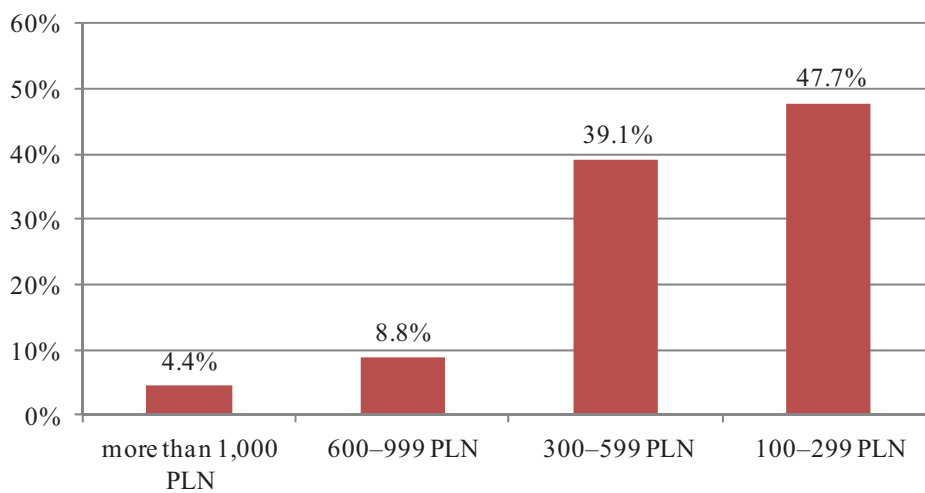


FIG. 11. Preferred ticket price

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

Figure 11 presents responses to questions concerning the cost of tickets. The largest share of interviewees (47.72%) is willing to pay between 100 and 299 PLN for a ticket. 30.08% would pay 300–599 PLN, while a price between 600 and 999 PLN would be achievable for 8.80%, and only 4.40% could spend more than 1,000 PLN. Preferred ticket prices are for the preferred destinations presented in Figure 7. These answers correspond to the results displayed in Figures 9 and 10.

Figure 12 presents answers to the question about additional services, including special offers and additional perks, which would encourage individuals to fly.

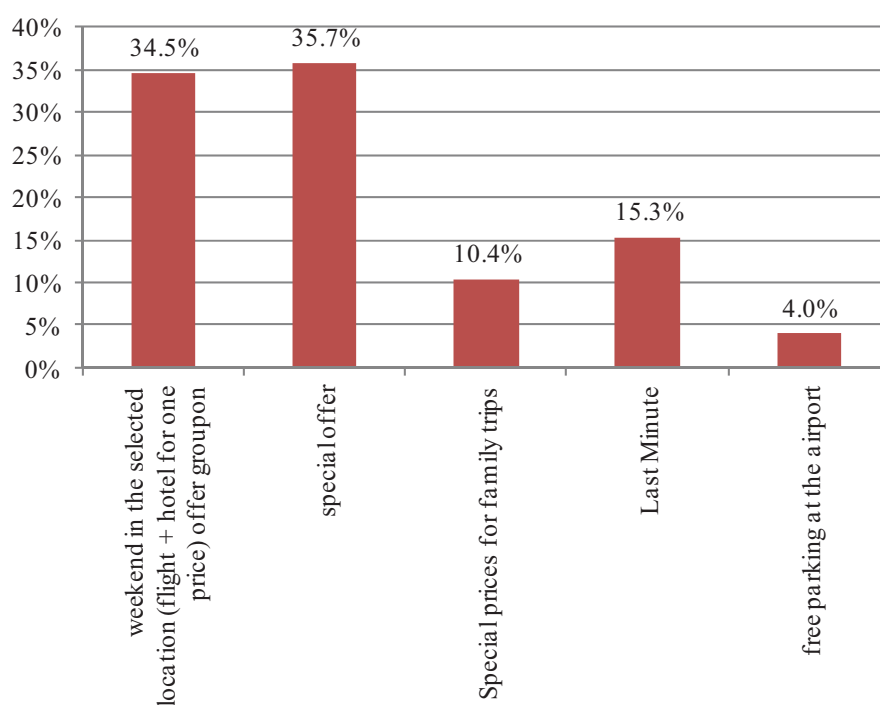


FIG. 12. Additional services encouraging air travel

Source: Pawelec et al. [2015] on the basis of personal questionnaire research.

As the research shows, the most encouraging factor would be reduced price tickets thanks to special offers and promotions: 35.73% of the interviewees indicated as much, 34.50% would be willing to use special offer like Groupon. 10.41% also indicated they would be motivated by special prices for family trips. The “last minute” option was chosen by 15.31% of the interviewees. Free parking by the airport would convince 3.99% of people to use the airport’s services.

## CONCLUSIONS

The development of regional air transport in Poland, with the engagement of low-budget airlines, has encumbered central airports and wider access to services. The modernisation and opening, in January 2016, of the Regional Olsztyn-Mazury Airport in

Szymany necessitated a way to establish the preferences of future passengers concerning destinations and other aspects of transport services. The most popular destination was London, followed by Paris, Rome, New York, Berlin, Munich, Frankfurt, Croatia, Prague, Madrid, Toronto, Warsaw, Barcelona, Copenhagen, Glasgow, Switzerland and China. Our research shows that higher gross income per family member translates into greater intention to use the services.

To increase the demand for air transport services, it seems legitimate to offer special ticket prices. This strategy is used by low-budget airlines and others. The lack of interest among those interviewed in services offered by the airport in Szymany is attributable foremost to their low incomes. The majority indicated they would be encouraged by ticket price, availability of connections, fast transport to the airport, comfort and safety.

Another important issue is the reasons people travel. Those interviewed for this research indicated tourism, social (family) visits, and to a smaller degree business purposes and looking for new job opportunities (13.7%).

To sum up, the results of the research may constitute a foundation the administrators of the airport in Szymany could use to create offer of air transport services. The research was conducted primarily among young people showing a great interest in travelling. Similar research should be conducted among other age groups.

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**Summary.** The aim of the study was to research, analyse and evaluate preferences concerning the services offered by the Regional Olsztyn-Mazury Airport in Szymany. A questionnaire was used as the research tool. The researched groups were students and employees of the Faculty of Economics of Warminsko-Mazurski University in Olsztyn. Number of 1,136 people, accounting for 38.77% of the student body and employees, responded. Thus they were statistically representative. The theoretical part of the paper discusses air transport in Poland. Definitions and features of the air transport market are presented, as are the relationship between supply and demand for passenger transport services. Information about Polish airports is presented along with development trends of the airports and the role of the regional airports. The empirical section presents the characteristics of Regional Olsztyn-Mazury Airport in Szymany. Questionnaire respondents were described by gender, age, occupation and income. The preferences of the interviewees concerning transport services offered by the airport are presented. The research shows that a significant number of respondents would be unwilling to use the services, though there are factors that could encourage them (lower prices and more services). The article also examines demand for a list of frequently visited destinations, the reasons for travelling, and the need to adjust transport services to demand.

**Key words:** air transport, regional airport, air transport offer, additional services, studying preferences

**JEL:** R41, R42, Z32

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