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PRICING POLICY ASPECTS IN COMPETITIVE FIGHT BETWEEN LOW-COST AIRLINES ON KOSICE AIRPORT

Abstract: Wizzair was the first low-cost airline to operate at Kosice Airport. From the beginning, it has shown exceptionally good results and the occupancy of its lines has been over 80%. The situation that took place in Vienna forced Wizzair to cancel the base in Kosice and to move the fleet to Vienna. Ryanair takes advantage of this change and enters the market with practically the same line as Wizzair from Kosice to London. The aim of this paper is to describe the situation at Kosice airport. The competitive fight between these two companies is visible from the very first moment when Ryanair introduced its flights at a much better price than Wizzair. The paper also focuses on the comparing these prices and fares as well as the profit over the period under review.

Keywords: Ryanair, Wizzair, competition, fare

1. Introduction

The situation at Slovak airports is currently not very favorable for the operation of scheduled flights on smaller airports. In spite of this fact, there is a situation in Kosice where the two biggest European low-cost companies will be competition. This competitive fight will play an important role for both companies and will show how much are those companies willing to invest in order to keep their customers. Several authors have dealt with the subject and, as an example, the issue can be mentioned How market force and government regulation affect flight fare and safety investment: A microeconomic analysis where authors analyzed microeconomic analysis to explore the impacts of market force and government regulation on airlines' flight fare and safety investment [6]. An empirical evaluation of the effects of European public policies on island airfares where authors estimate

a pricing equation using data, at route and airline levels, for five European countries where a significant proportion of the territory is located on islands; France, Greece, Italy, Portugal and Spain [4]. Evidence of directional price discrimination in the U.S. airline industry where authors explore possible determinants that may affect an airline's decision to charge passengers different roundtrip fares depending on trip origin, a case of directional price discrimination. Such fare differences cannot be the result of differences in cost, as the cost of flying a roundtrip passenger does not significantly differ depending on direction [10]. Modelling air travellers' choice of flight departure and return dates on long holiday weekends where authors said that air travel demand is typically high on long holidays. Understanding factors that influence the choice of air travellers with respect to their departure and return dates on long holidays can help airlines make effective decisions on pricing, ticket sales, and scheduling [13]. An empirical analysis of Delhi - Mumbai sector flight fares where authors mentioned that revenue management is the art and science of making the right product or service available to the right customer at the right time through the right channel at right price. Dynamic pricing plays a crucial role in the implementation of revenue management in passenger airline reservation system [7]. Personalization in airline revenue management - Heuristics for real-time adjustment of availability and fares where authors said that through improvements in information technology and distribution, airlines are increasingly gaining access to detailed information about potential passengers at the time of booking. Airlines could use this passenger information to provide availability or a fare quote that is tailored specifically toward the passenger that is making the request [14]. Price asymmetries in European airfares where authors researched analyses airlines' pricing decisions in response to changes in the market conditions. They estimated the effects of jet fuel price changes on European airfares at airline/route level by discriminating on the grounds of supplied capacity and markets' competitive structure [11]. Optimal pricing and seat allocation for a two-cabin airline revenue management problem where authors considered the single-flight leg two-cabin airline revenue management problem in which there is a flexible partition of the business and economy cabins and determine the optimal cabin partition and the optimal fares for both cabins with both a general and an isoelastic multiplicative price-demand function and three different random demand distributions [9]. Pricing dynamics between airline groups with dual-brand services: The case of the Australian domestic market where authors researched The Australian aviation industry achieved substantial growth after the abolition of the "two-airline-policy" in 1990. With Virgin's purchase of Tiger Airways, a new duopoly between two airlines groups, each consisting of a full-service airline (FSA) and a low-cost carrier (LCC), emerged in the domestic market. In this study, we analyze the pricing

dynamics among the four airlines of the duopoly groups, using panel data of online fares on the four most densely travelled routes in the domestic market [15]. Dynamic capacity allocation for airlines with multi-channel distribution where authors said that Due to fierce competition in markets, recently, many airlines have faced the challenge of reducing channel distribution costs. However, channel distribution decisions are often made separately from inventory allocation decisions in practice [12]. Authors describes the operational economic aspects in civil aviation [3]. This is evidenced by the further experience of scientific work and studies in the selected sectors of critical infrastructure, with emphasis on the Transport sector too etc. [1, 2, 5, 8].

2. Methodology

Wizz Air opened its first line to London, Luton, with its operations at the airport in Košice, where it also opened lines to Doncaster-Scheffel, Bristol, Tel Aviv and German Cologne. In 2018, the company opened its way to an attractive airport, where no other low-cost airline operated, and that is Vienna Schwechat. The company concentrated most of its aircraft right there at the expense of full-service lines that flew from Košice airport. An understandable move was to cancel the base at the airport and leave a single line to Luton operated. Before that, the company flew the Airbus A320-200 aircraft, but after this change deployed the A321-200 aircraft with a capacity higher by 50 seats. After a number of unsuccessful airline negotiations with the airline, where the airport offered more favourable terms of cooperation, Wizz Air did not step in and did not accept the conditions. Preferred terms included discounts on airport charges in large numbers.

Table 1

Destinations from Vienna Airport, which are operated by Wizz Air

Destination	Weekly Frequency	Fares from in EUR
Bari	4	29,99
Bergen	4	29,99
Billund	4	19,99
Dortmund	7	19,99
Gdansk	4	19,99
Kutaisi	3	29,99

table 1 cont.

Destination	Weekly Frequency	Fares from in EUR
Larnaca	4	49,99
Malta	4	29,99
Nis	3	19,99
Ohrid	3	19,99
Rome	7	29,99
Tel Aviv	7	49,99
Tuzla	3	19,99
Tenerife	3	49,99
Thessaloniki	3	29,99
Valencia	4	29,99
Varna	2	29,99

The next step was the successful negotiations with Ryanair, the largest airline in Europe. Destination London is very popular from Kosice and it was no surprise that the company is heading its first line to its new base at Southend Airport. In the public passenger survey, it was clear that Wizz Air did not cover the demand for transport, and that was the ideal step to add capacity. Since the cancellation of the lines and the deployment of a larger aircraft, the demand was still higher than that offered by aircraft capacity for both departures and arrivals at Kosice Airport. The company overbooked over 90-95% of the flights, meaning that airline sold more tickets than the capacity offered. And this shortcoming will be completed by Ryanair from April 2019. This will create a certain competitive battle between low-cost companies where they will have to actively use competitive strategies to keep passengers on their lines. In the ongoing survey, Wizz Air will fly the KSC-LTN line from Monday to Sunday and Ryanair will start at three intervals Tuesday, Thursday and Saturday on the KSC-SEN line.

According to availability, ticket prices are as follows:

- Ryanair 24,99 € - 106,07 € (prices from 2 April - 11 April 2019)
- Wizz Air 79,99 € - 129,49 € (prices from 2 April - 11 April 2019)

Of course, there is an approximate price orientation, since carrier policy is, the sooner the passenger will buy the ticket he will pay less. All prices are from 03.10.2018 for all fares for both airlines.

2.1. Fares

Wizzair fares

- Basic – hand luggage must be checked in at check in counter without any other charges (55x40x23). It's possible to take the luggage with you but with this fare will be collected by employees like hand luggage in hold. This shows fig. 1.
- Wizz Go – hand luggage guaranteed in the cabin, 20 kg checked-in bag, free seat selection, excluding front row and exit seats, priority boarding, online check-in up to 30 days before departure. This shows fig. 2.
- Wizz Plus - hand luggage guaranteed in the cabin, 32 kg checked-in bag, free seat selection, including front row and exit seats, priority boarding, online check-in up to 30 days before departure, free airport check-in and online check-in, refund to wizz account with WIZZ Flex. This shows fig. 3.

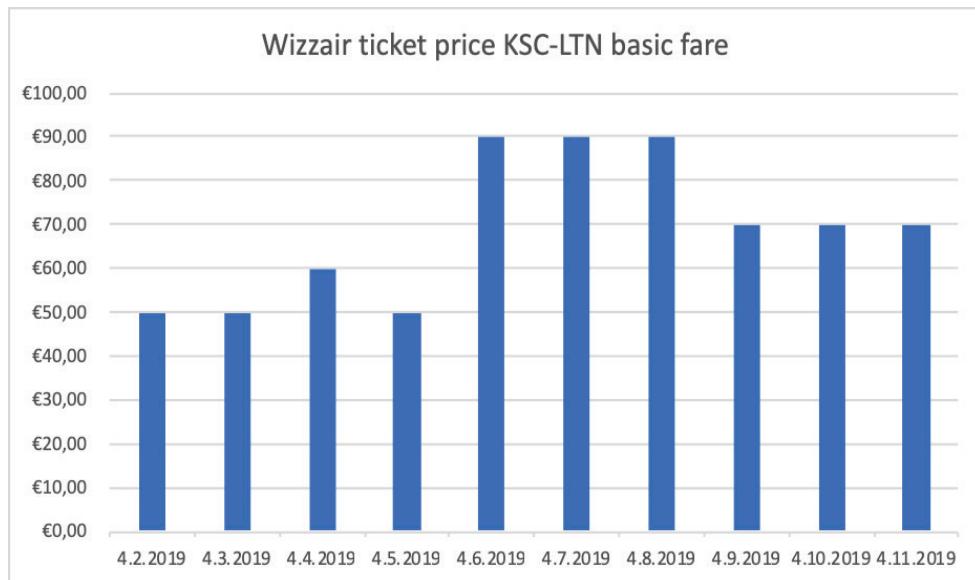


Fig. 1. Wizzair basic fare

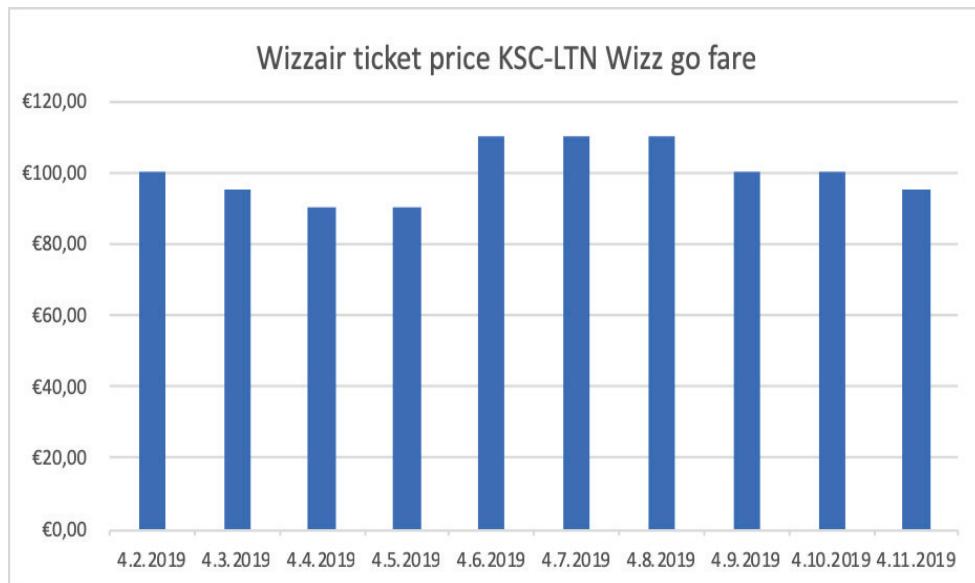


Fig. 2. Wizzair Wizz Go fare

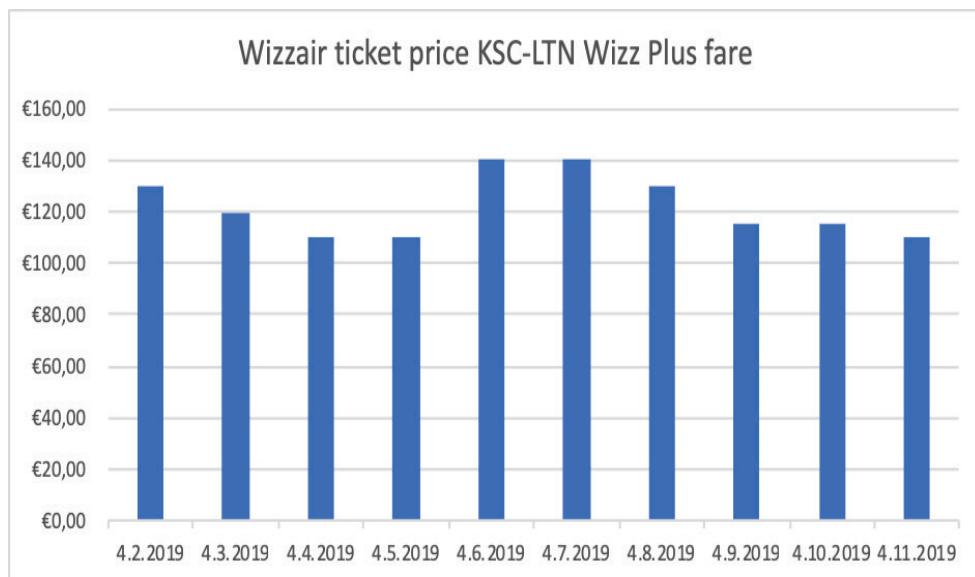


Fig. 3. Wizzair Wizz Plus fare

The problem of low-cost carriers is that if a customer purchases, for example, Wizzair, the basic fare ticket at a price of 79,99 € and does not comply with the

detailed transport terms, he will pay for the service – for example printing of boarding pass. In the case of purchasing services at an airport before departing, prices are higher than the initial purchase of, for example, the plus fare, where the passengers have basically everything covered in the ticket price.

Wizz Air, when purchasing a priority boarding or a comprehensive PASS service, guarantees one large hand baggage and small baggage with him on board. In the case of classic service, a large hand baggage (55x40x23 cm) must be handed over to check-in agent, and only small hand luggage of 40x30x20 cm up to 10 kg may be taken into the aircraft. The current company offers the following types of luggage for delivery (TONE up to 10 kg, BONE up to 20 kg and PONE up to 32 kg). If a passenger purchases a KSC-LTN ticket of € 49.99 in basic fare (small hand luggage 40x30x20 cm up to 10 kg) it is possible that if the detailed transport conditions of an air carrier are not met, it will pay more at the airport as if it had purchased the complete PASS service (1 hand luggage 55x40x23 cm, 1 personal item 40x30x20 cm 10 kg, checked luggage up to 32 kg, Priority boarding).

Ryanair fares

Ryanair also offers three different types of service. These services are divided according to what they contain as a supplement to the main product. This shows fig. 4.

- Ryanair Standard fare – contains only one hand luggage. The cheapest possible connection between Kosice and London-Southend. Total prices in chart are for standard classes (the cheapest option with minimum services). Ryanair offers rates from approximately € 20 to € 43 on the London-Southend line. This shows fig. 5.

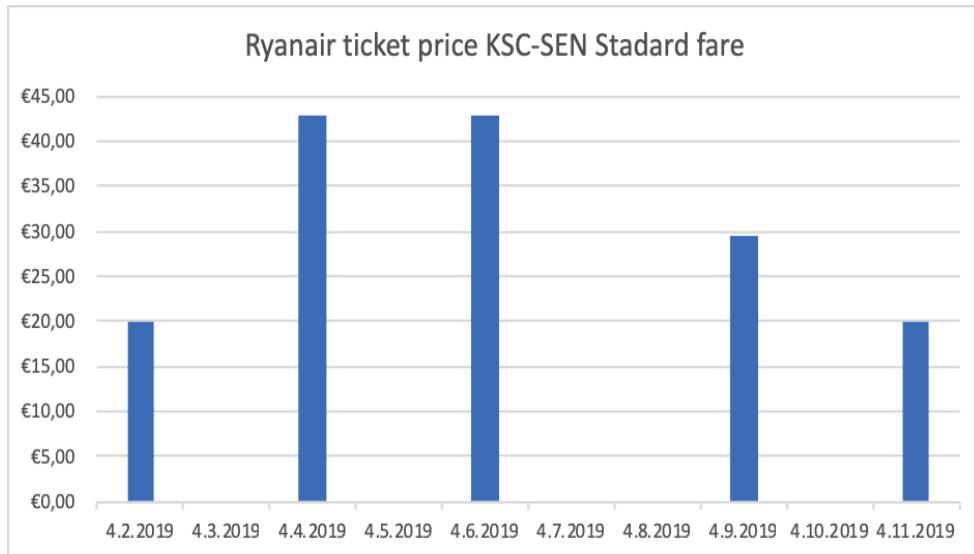


Fig. 4. Ryanair standard fare

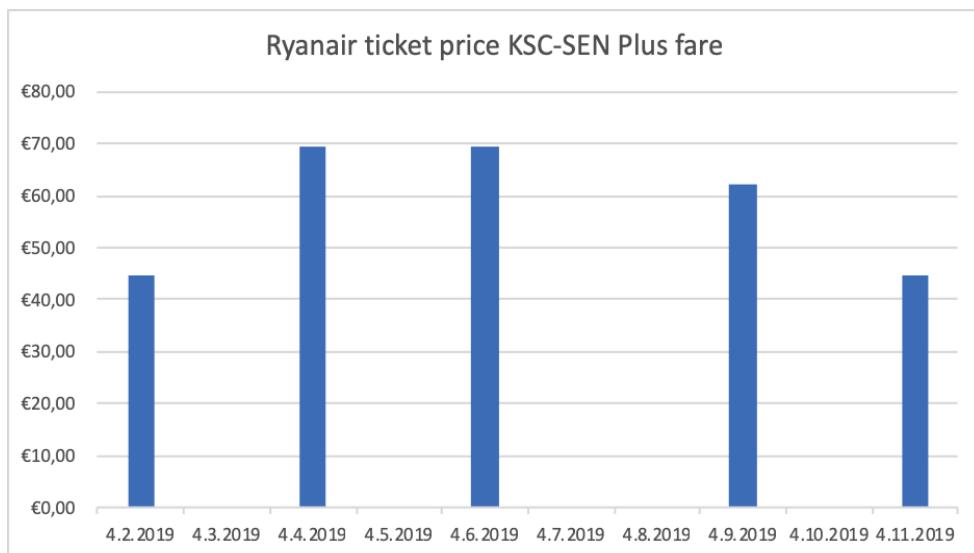


Fig. 5. Ryanair Plus fare

- Ryanair Plus fare – contains priority boarding + 2 cabin bags, reserved standard seats and one 20kg check-in bag. This shows fig. 6.

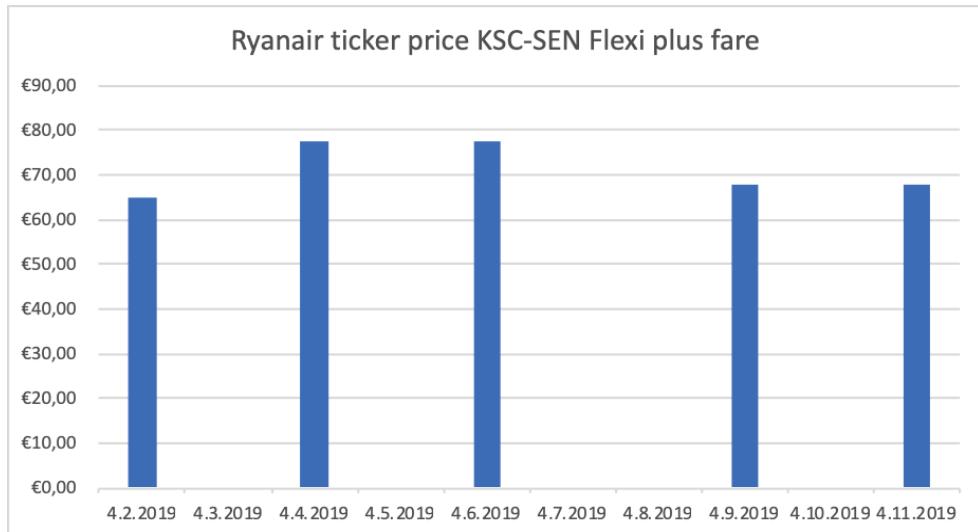


Fig. 6. Ryanair Flexi plus fare

- Ryanair Flexi Plus fare – contains priority boarding + 2 cabin bags, any reserved seat, security fast track, free airport check-in, flexible tickets.

3. Discussion

Revenue in the reference period

Interesting is also the view of revenues over the reference period. We used the following formula to calculate revenues.

Formula:

Reference period x SLF 80% x Average Basic/Standard Fare = Revenue

1. Wizzair revenue

$$10 \times 184 \times 68,99 = 126\,941,60 \text{ €}$$

2. Ryanair revenue

$$5 \times 151 \times 31,04 = 23\,435,20 \text{ €}$$

We used Airbus A321 for Wizzair and Boeing 737-8 for Ryanair for revenue calculations over the reference period. The result is a huge difference of more than € 100,000 over the reference period. It is clear that this difference is due to the fact that Wizzair has been offering this connection for a long time and that is why it has long been used to such an extent that the company has determined its prices for which it is willing to transport passengers. Ryanair enters the market and therefore

exerts the possibility of low prices that are so attractive to the customer that they can cause serious competition to Wizzair. For a long period of time, these prices are unsustainable, but they will meet their purpose and make Ryanair attractive for a short period of time which should be long enough to secure them a sustainable number of passengers on their flights.



Fig. 7. Price comparison

Wizz Air Airlines regularly operates this line at 7x a week. On the other hand, Ryanair begins to fly only three times a week. With a certain prerequisite after testing the line, RYR adds the frequency of flights according to transport demand. Service prices for the selected product (Basic / Standard) are significantly different for Ryanair 43 € and for Wizzair 90 €. It should be noted that Ryanair is starting its operations and needs low prices for attracting clients. The basis for both companies is the introduction of psychological prices with values of € 42.83 or € 89.99. These two low-cost airlines operate in multiple airports, either in the form of competition or supplementation of demand after transport. The response of the airport to cancel flights to Bristol or Doncaster - Sheffield was followed by a meeting with Wizz Air, which wasn't successful, and therefore followed a clear step towards signing the contract with Ryanair. It was necessary to supplement the capacity of flights to England with just such a step as demand clearly exceeded the offer.

4. Conclusion

Wizzair and Ryanair are among the world's largest low-cost air carriers. The situation that occurred for Wizzair, which was forced to cancel their flights from Kosice with a occupancy rate of over 80%, allowed Ryanair to enter the market in Kosice.

The line Kosice - London, which is operated by Wizzair for a long time, does not offer sufficient capacities and therefore demand exceeds the offer. In the public passenger survey, it was clear that Wizzair did not cover the demand for transport, and that was the ideal step to add capacity. Since the cancellation of the lines and the deployment of a larger aircraft didn't fulfil requirements and the demand was still higher than the aircraft capacity offered at both departures and arrivals at Kosice Airport.

In the article, we pointed out that Ryanair had set up an absolute price competition for Wizzair in April 2019, and its only goal in that period will be to get the most possible market share. Service prices for the selected product are significantly different for Ryanair 43 € and for Wizzair 90 €. At the same time, we have pointed out that Ryanair prices are untenable for a long time, and these prices will have to go up too. It is important to note the fact that the demand for this connection is so high that both carriers can have enough customers to stay in the market in Kosice.

5. References

1. Balatka M. et al.: Exposure of the environment and surface water by dangerous liquid - the slop outflow model. In: Proceedings Volume III The 15th World Multi-Conference on Systemics, Cybernetics and Informatics July 19th - July 22nd, 2011 Orlando. Florida, USA. International Institute of Informatics and Systemics, 2011.
2. Dvořák Z. et al.: Enhancing of security on critical accident locations using telematics support. In: ICSIT 2010 = International conference on society and information technologies: proceedings April 6th-9th, 2010 – Orland. Florida, USA: International Institute of Informatics and Systemics, 2010.
3. Džunda M. et al.: Operational economic aspects of warning collision systems for helicopters. In: Transport Means – Proceedings of the International conference, Vol. 2008, October 2018.
4. Fageda X. et al.: An empirical evaluation of the effects of European public policies on island airfares. Transportation research part a-policy and practice, Vol. 106, 2017.
5. Fuchs P. et al.: Simulation of dangerous substances outflows into the environment because of traffic accidents by dangerous substances transport. In: WMSCI 2010: the

- 14th world multi-conference on systemics, cybernetics and informatics: proceedings volume 1: June 29th – July 2nd, 2010 Orlando. Florida, USA: International Institute of Informatics and Systemics, 2010.
6. Gao Y., Liu T.: How market force and government regulation affect flight fare and safety investment: A microeconomic analysis, CICTP 2017: Transportation Reform and Change - Equity, Inclusiveness, Sharing, and Innovation - Proceedings of the 17th COTA International Conference of Transportation Professionals, January 2018.
 7. Godwin T.: An empirical analysis of Delhi - Mumbai sector flight fares International Journal of Business Analytics. Vol. 4, Iss. 4, October-December 2017.
 8. Kelemen M., Blišťanová M.: Logistic Modelling to handle the Threat of Floods - The Bodva River example. In: SGEM 2014: 14th International Multidisciplinary Scientific GeoConference: Conference Proceedings: Vol. III: 17-26 June, 2014. Sofia, Bulgaria: STEF92 Technology, 2014.
 9. Kyparisis G.J., Koulamas C.: Optimal pricing and seat allocation for a two-cabin airline revenue management problem. International Journal of Production Economics, Vol. 201, 2018.
 10. Luttmann A.: Evidence of directional price discrimination in the U.S. airline industry. International Journal of Industrial Organization. 2018.
 11. Scotti D., Volta N.: Price asymmetries in European airfares. Economics of Transportation. Vol. 14, June 2018.
 12. Wang W.D. et al.: Dynamic capacity allocation for airlines with multi-channel distribution. Journal of Air Transport Management, Vol. 69, 2018.
 13. Wen CH., Yeh Y.: Modeling air travelers' choice of flight departure and return dates on long holiday weekends. Journal of Air Transport Management, Vol. 65, 2017.
 14. Wittman MD., Belobaba PP.: Personalization in airline revenue management - Heuristics for real-time adjustment of availability and fares. Journal Of Revenue And Pricing Management, Vol. 16, Iss. 4, 2017.
 15. Zhang Y. et al.: Pricing dynamics between airline groups with dual-brand services: The case of the Australian domestic market. Transportation Research Part A: Policy and Practice. Vol. 112, June 2018.