Ancillary Revenues in Air Transport in the Conditions of Globalization

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Abstract:

**Purpose:** Presentation of the methodology of shaping the mechanism and assessment of the effectiveness of the application of off-ticket income system in air transport.

**Methodology:** In the study of the issues raised, the method of analyzing the available literature, statistical data, modern instruments of competition, rules of the aviation market and the results of empirical research, verified by the conducted audit, interviews with passengers and staff at airports, representatives of airlines, scientists and local administration was used.

**Findings:** In a situation of exhaustion of reserves related to both cost reduction and price increase, the importance of expanding the volume of off-ticket services as an effective instrument for improving the efficiency of air transport is growing. This is due to the constantly improving new consumer needs, the satisfaction of which enables them to gain an advantage in the conditions of increasing internal and intersectoral competition.

**Practical implications:** The wider range of offering new, sought after by customers of off-ticket services becomes a key determinant of the improvement of passenger service comfort, enabling more favorable demand management and an increase in profit. This range of initiatives brings about beneficial changes in the entire passenger handling chain, ie in the design phase of the aircraft and air service, transport to the port, handling in port, in transit, handling in the port of destination and the environment of stay.

**Originality / Value:** The originality of the study of the effectiveness of the application of off-ticket sheet service implementation system lies in its universality. It can be used in any mode of transport, in any geographical space, for most entities and transport systems of multimodal services, it is a simplified method of identifying the expected results.

**Keywords:** Passenger air transport, revenue management, ancillary revenues, globalization.

**JEL codes:** A13, C81, L93, O11, R58.

**Paper type:** Research article.

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1. Introduction

The striving of the modern population to satisfy the growing service needs more and more comfortably causes a dynamic acceleration in two directions of activities. The first is to offer basic services with an ever higher level of quality and comfort. This creates a spiral of competition, in which the successive steps form a hierarchy that determines the competitive advantage in the market being served. The second is expanding the volume of off-ticket services, generating growing benefits for both consumers and bidders (Exboro, 2015).

While in the process of shaping competition, especially innovation, there are practically no restrictions, in economic strategies we encounter significant difficulties caused by the depletion of simple reserves, and launching more complex ones requires the involvement of significant expenditure, which, as we know, translates into the price of the service. As a result of a process that is shaped in this way, there is a certain critical point at which the size of the incurred expenditure will cause an increase in the price that makes it impossible to profitability of the supply. The effects of this mechanism are very clearly visible in the consumption of passenger air services, which is the transition of passengers from the traditional to low-cost segment from the moment they enter the market. These circumstances motivate the implementation of plans to optimize operational methods of revenue management, taking into account the level of global competition, prosperity and financial discipline (Keller, 2019).

In such circumstances, most of the airlines were forced to look for income beyond their core activities, focusing, inter alia, on the use of transport capacity (LF) and the expansion and effective use of more and more attractive and sought after services related to additional activity, popularly known as off ticket services

2. The Essence of the Use of Off-Ticket Services

While the degree of utilization of the transport capacity is determined by the economic situation on the world market, the development of off-ticket services is not subject to such limitations, and its scope of supply and effectiveness of offering are a derivative of the accuracy of the recipient's understanding by the tenderer and the attractiveness of satisfying them (Doganis, 2010). Taking the above into account, an attempt was made to present the mechanism of impact and the effects caused by the implementation of the volume of off-ticket services, offered beyond the sale of basic services.

In the conducted research and considerations, an attempt was made to demonstrate that the providers of passenger air services understood the essence of the current economic situation in this type of transport (Wensveen, 2015). With limited financial reserves at their disposal (with increasing prices for the purchase of airplanes and the maintenance of ground and line infrastructure) and the ever
decreasing possibility of reducing operating costs (e.g., increasing the costs of purchasing airplanes, their repairs and fuel), airlines have taken an active role in improving economic efficiency by expanding the supply of an attractive volume of off-ticket sheet services as a strategic concept enabling a significant improvement in their economic situation in the current market conditions (Roman, 2019).

The study of the significance and effects of the implementation of the expanding volume of off-ticket sheet services is fully justified, as these studies show that without this activity many carriers would not be able to achieve a positive financial result (Wang et al., 2017). Bidders realize that these activities have an increasing impact on their profitability and market position. In the case of these services, there is, in principle, no dissonance between the provider and the recipient. Customers even expect a wider stream of their supply, which is associated with additional revenues from bidders.

The vast majority of passengers accept these actions, although it should be noted that they have a limited impact on the choice of a specific carrier. It is also noticeable that not all of off-ticket sheet services enjoy a similar (high) level of approval. Relatively less accepted are those created as a result of unpacking the basic service. Most often, these are some elements separated from this service, which so far were included in the ticket price, and after unpacking, you have to pay an additional fee for them. Undoubtedly, this extends the volume of choice by preventing the consumption of an unwanted product, which, however, when given individually, is usually more expensive than the one offered in the package (Hawlena, 2012).

3. Motives and Criteria for Selecting a Comprehensive Transport Service

The empirical research conducted by the authors shows that the contemporary passenger is more and more interested in obtaining a comprehensive service covering the entire transport process, which can be described as "from the door of your own home to the destination. However, these studies also showed certain discrepancies in motivations mainly due to the level of wealth, age and the way in which the rest planning was implemented. These determinants largely determine the scope of consumption of off-ticket services, the choice of carrier (traditional or low-cost) and the preferences for choosing a service.

Practice shows that affluent people expect the widest possible implementation of a comprehensive transport service, with a full range of additional services, which, due to the level of comfort and costs, are most often provided by traditional carriers. Among the wide range of off-board services, it is worth mentioning: transport to the port of departure, choosing a seat on the plane, excess baggage fees, guide care, transport to the destination and the services of a guide at the place of stay.
Slightly different expectations are preferred by young people, often less wealthy, many of whom intend to implement an individual travel plan, in which air travel is only a necessary element (Maroulas, 2020).

4. Basic Sources of Revenue Generation from Off-ticket Services

Services related to off-ticket service are subject to systematic development, they are eagerly purchased by a growing group of customers, thanks to which they become an important element of optimizing commercial solutions. The structure of the most important elements generating revenues from off-ticket services activities for airlines is presented in Figure 1.

**Figure 1. Generating income from additional activities**

| In the ticket purchase phase | In the phase of using the service | After the flight is over |
|-------------------------------|----------------------------------|-------------------------|
| Booking amendment fee         | Commissions booking with         | Commissions booking with |
|                               | intermediaries                   | intermediaries          |
| Carriage of checked and       | Commissions for the sale of      | Commissions for the sale |
| special baggage               | insurance policies               | of accommodation before |
| Credit card use fee           | Commissions for car rent         | departure               |
| Numbered seat fee             | Resulting income from            |                        |
| Call Center Use               | exchange rate differences        |                         |
| Priority boarding fee         | Income from transfers to the     |                        |
|                               | airport                          |                         |
| Income for excess baggage     | On board catering revenues       |                         |
| Advertising revenue in the    | Revenue from on-board sale       |                         |
| in-flight magazine            | Income from transfers from the   |                         |
|                               | airport                          |                         |
| Commissions for the sale of  |                                  |                         |
| accommodation after the       |                                  |                         |
|                               |                                  |                         |

*Source: Based on own research.*

The information presented in the figure shows that the largest range off-ticket services is performed in the ticket purchase phase. However, they occur in all phases of the transport process, both in reaching the port, in the phase of using the flight,
and after its completion. This indicates that this range of offering is becoming more and more universal, and the trend of its development shows that this activity is systematically aimed at comprehensive coverage of the ever-growing range of newly emerging needs. It should also be noted that along with the expansion of the volume of these services, the level of their comfort varies, which is associated with the dedication of them to groups of different wealth and tastes.

Off-ticket services have become an enduring attribute of almost all airlines' economic efficiency improvement strategies. These activities are justified and beneficial, as evidenced by the amount of revenues obtained from the most important types of this benefit. Their share in the total global revenues of airlines is presented in Figure 2.

**Figure 2. The share of additional revenues in the total revenues of airlines in the world**

| Service                  | Share (%) |
|--------------------------|-----------|
| Baggage fees             | 27%       |
| Catering                 | 18%       |
| Loyalty programs         | 12%       |
| Hotel booking            | 10%       |
| Car rental, insurance    | 5%        |
| Choosing a place         | 3%        |
| Other charges            | 25%       |

*Source: Based on own research.*

The presented data show that the largest share of additional revenues in the total revenues of airlines in the world is recorded in baggage fees, and the smallest in the choice of a seat in an airplane (Hwang et al., 2020).

5. **Effective Management Off-Ticket Services**

Despite the relatively short period of application of off-ticket services revenues, their influence on the efficiency of airlines has been strengthened. This range of "ancillary revenues" was considered less significant until recently. However, with the emergence of low-cost carriers, it is gaining more and more importance as an important instrument in gaining demand growth, cost advantage and economic efficiency of carriers, and the attractiveness of offering all services. This is due to, inter alia, Research by the consulting company Idea Works showed that, mainly in the period of the 2009-2010 crisis, an increase in non-financial revenues saved many airlines from collapse.

Mainly low-cost carriers found themselves in a situation of economic threat, mainly due to a strong barrier to reducing costs. In such circumstances, one of the most effective solutions turned out to be the expansion of the volume of off-ticket services. (Gross and Schroder, 2007). The example of the Ryanair carrier proves that modern methods of revenue management are a key element of the strategy of
improving airlines’ finances. The initiatives implemented by this line show that the effectiveness of the use of off-ticket service instruments largely depends on the correct reading of the current significance of market transformations and changes in the tariff policy and the expected demand in peak periods (Holloway, 2008).

Despite the fact that the main determinant of the amount of revenues of service providers is the wealth of customers, the effective use of these resources increases if they are read early and correctly, which is the basis for extending the scope of supply of off ticket services. Thanks to these initiatives and offers that meet the expectations, the traveler gains the opportunity to specify the travel variant with elements securing his individual needs and the level of satisfaction and comfort. The aforementioned carrier, Ryanair recorded a deficit of EUR 101 million in the fourth quarter of 2008, but thanks to significant expansion and acceleration of services beyond the ticket, the financial year ended with a profit of several million (Malighetti and Paleari, 2007).

6. Assessment of the Global Dimension of the Revenues of Off-Ticket Services Airlines

When examining the assumed issues, it is worth knowing which airlines are leaders in the implementation of off-ticket services. A synthetic indicator of their success is the amount of revenues obtained from this type of activity, which indicates both the effectiveness of the carrier's operations and the willingness to learn in detail about the activities it uses, which can be used in competitive competition (Ziob, 2011). The absolute value of revenues on this account for selected airlines and their share in total revenues are presented in Figure 3.

**Figure 3. Global dimension of additional revenues and their share in total revenues of airlines in 2011–2019 [billion USD].**

Source: The 2020 CarTrawler Yearbook of Ancillary Revenue by IdeaWorksCompany.

The presented data indicate a systematic increase in these revenues and their share in total revenues. Detailed data presented in Table 1. The table contains important information on the effectiveness of the sale of off-ticket services by selected airlines, broken down into traditional and low-cost carriers. The data presented in
the table show that despite the occasional decrease in the revenues of some lines compared to the previous year, the trend continues to increase.

**Table 1. Revenues from the sale of off-ticket services of selected airlines in 2011-2019 [million USD]**

| Airline  | Years | Change 2019-2011 |
|----------|-------|------------------|
| American | 2011  | 2.113            |
|          | 2012  | 1.987            |
|          | 2013  | 2.079            |
|          | 2014  | 3.651            |
|          | 2015  | 4.718            |
|          | 2016  | 4.901            |
|          | 2017  | 5.274            |
|          | 2018  | 7.245            |
|          | 2019  | 7.413            |
|          |       | 5.300            |
|          |       | 251%             |
| Delta    | 2011  | 2.534            |
|          | 2012  | 2.576            |
|          | 2013  | 2.528            |
|          | 2014  | 3.213            |
|          | 2015  | 3.775            |
|          | 2016  | 5.172            |
|          | 2017  | 5.391            |
|          | 2018  | 5.570            |
|          | 2019  | 6.198            |
|          |       | 3.664            |
|          |       | 145%             |
| United   | 2011  | 5.171            |
|          | 2012  | 5.352            |
|          | 2013  | 5.703            |
|          | 2014  | 5.861            |
|          | 2015  | 6.199            |
|          | 2016  | 6.222            |
|          | 2017  | 5.749            |
|          | 2018  | 5.802            |
|          | 2019  | 6.580            |
|          |       | 1.409            |
|          |       | 27.3%            |

Low-cost carriers

| Airline  | Years | Change 2019-2011 |
|----------|-------|------------------|
| Southwest | 2011  | 1.180            |
|          | 2012  | 1.655            |
|          | 2013  | 1.623            |
|          | 2014  | 1.885            |
|          | 2015  | 2.119            |
|          | 2016  | 2.833            |
|          | 2017  | 3.084            |
|          | 2018  | 4.049            |
|          | 2019  | 4.498            |
|          |       | 3.318            |
|          |       | 281%             |
| Ryanair  | 2011  | 1.100            |
|          | 2012  | 1.388            |
|          | 2013  | 1.689            |
|          | 2014  | 1.906            |
|          | 2015  | 1.739            |
|          | 2016  | 1.982            |
|          | 2017  | 2.304            |
|          | 2018  | 2.801            |
|          | 2019  | 3.311            |
|          |       | 2.211            |
|          |       | 201%             |
| easyJet  | 2011  | 1.005            |
|          | 2012  | 1.147            |
|          | 2013  | 1.385            |
|          | 2014  | 1.457            |
|          | 2015  | 1.466            |
|          | 2016  | 1.355            |
|          | 2017  | 1.284            |
|          | 2018  | 1.598            |
|          | 2019  | 1.839            |
|          |       | 834              |
|          |       | 83%              |

Source: The 2020 CarTrawlerYearbook of Ancillary Revenue by IdeaWorksCompany

The dynamics of the development of this activity is evidenced by the results, which indicate that in the discussed period, the increase in these revenues for American amounted to 251%, and for Delta - 144%. Significant gains were also recorded in the low-cost segment, where, similarly, Southwest grew by 281%, Ryanair by 201%, and EasyJet by 667%. They are not the only carriers that recorded a favorable result in the period in question, as evidenced by the share of revenues from this activity in total revenues presented in Table 2.

**Table 2. Carriers with the largest share of off-ticket services revenues in total revenues in 2011-2019 [%]**

| Airline | Years | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------|-------|------|------|------|------|------|------|------|------|------|
| Spirit  | 2011  | 33.2 | 38.5 | 38.4 | 38.7 | 38.7 | 43.4 | 46.4 | 46.6 | 44.9 | 47.0 |
| Allegiant | 2012 | 27.0 | 29.9 | 32.6 | 32.4 | 37.6 | 40.4 | 39.8 | 41.2 | 46.5 |
| Wizz Air | 2013 | bd.  | bd.  | 34.4 | 33.7 | 33.7 | 39.4 | 41.6 | 41.1 | 45.4 |
| Ryanair | 2014 | 20.5 | 21.8 | 24.8 | 24.6 | 24.0 | 26.8 | 28.2 | 31.7 | 34.5 |
| EasyJet | 2015 | 20.8 | 19.5 | 19.2 | 19.3 | 19.4 | 21.3 | 22.2 | 22.8 | 23.8 |
| Jet2.com | 2016 | 27.1 | 26.5 | 27.7 | 28.5 | 29.4 | 26.0 | 27.6 | 23.0 | 23.7 |
| Air Asia | 2017 | 16.5 | 18.2 | 19.6 | 20.0 | 19.4 | 21.0 | 22.0 | 22.3 | 23.1 |
| Jetstar | 2018 | 15.3 | 18.6 | 20.6 | 20.8 | 21.3 | 22.0 | 22.5 | 23.0 | 23.9 |

Source: The 2020 CarTrawlerYearbook of Ancillary Revenue by IdeaWorksCompany

They analyze these data according to predetermined criteria, a constant upward trend should also be noticed in this aspect. This scope of research is supplemented by the data in Table 3, showing the value of services per 1 passenger in selected airlines.
Table 3. Value of additional services per 1 passenger of selected airlines in 2011–2019 [USD].

| Airline  | Years | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------|-------|------|------|------|------|------|------|------|------|------|
| Alaska Air | Traditional carriers | 24.6 | 29.9 | 32.6 | 31.5 | 34.3 | 31.4 | 30.4 | 42.1 | 43.5 |
| United   | 36.8 | 32.9 | 41.0 | 42.5 | 44.2 | 43.5 | 38.9 | 35.6 | 40.5 |
| Qantas   | 40.8 | 43.2 | 45.8 | 49.9 | 42.7 | 42.4 | 38.9 | 41.2 | 37.4 |
| Jet2.com | Low-cost carriers | 41.4 | 34.2 | 56.3 | 55.6 | 51.8 | 42.5 | 43.1 | 43.9 | 31.1 |
| Wizz Air | 22.5 | 30.1 | 34.4 | 34.8 | 32.7 | 30.4 | 31.2 | 33.2 | 35.4 |
| Ryanair  | 21.1 | 21.3 | 20.5 | 22.2 | 16.3 | 16.5 | 18.7 | 22.0 | 22.3 |

Source: The 2020 CarTrawler Yearbook of Ancillary Revenue by IdeaWorksCompany.

Based on the data, it can be stated that the growth dynamics was higher in the segment of traditional airlines than in the segment of low-cost lines. This is mainly due to the higher prices of these services offered to customers in this segment who prioritize quality and comfort over price sensitivity.

### 7. Off-Ticket Activities in Exceptional Economic Circumstances

Although off-ticket services are in principle related to the type of transport and carried out in the phase of its individual activity, it is also worth mentioning the important way to use this range of initiatives in the event of extraordinary circumstances in the global economic situation (Hoszman, 2019). When discussing this issue, two important events should be mentioned. The first, although it was shaped in the non-ticket sphere, is practically not included in it. It is the purchase of planes during economic crises, which result in the slowdown of air transport and many collapses of airlines and even entire enterprises (Rosa, 2016).

Contrary to popular belief, the period when major investments are not made has been used in a pragmatic manner. Suffice it to mention that during the post-2001 crisis, Ryanair and easyJet had agreements to purchase a significant number of aircraft at extremely low prices. These lines perfectly used the extreme circumstances of the economic downturn, securing themselves in the future to stabilize and even reduce costs. They took advantage of the fact that in a crisis both the key elements of operational success - machines and people - became more affordable, creating the basis for long-term cost advantage (Hawlena, 2016).

It also turned out that the currently existing SARS-CoV-2 pandemic may become a reason for a beneficial expansion of the volume of non-financial services. The research on the impact of the pandemic on the amount of these revenues, conducted by almost all airlines, showed a significant decrease, presented in Table 4.
Table 4. Revenues from the sale of off ticket services of selected airlines in 2019-2020 [million USD]

| Airline                  | Income [mln USD] | Change 2019/2020 [%] |
|-------------------------|-----------------|----------------------|
|                         | 2019            | 2020                |
| American                | 7 413.0         | 3 881.3             | -48      |
| United                  | 6 580.0         | 3 387.6             | -49      |
| Delta                   | 6 198.0         | 2 917.8             | -53      |
| Southwest               | 4 498.0         | 2 937.8             | -35      |
| Ryanair Group           | 3 311.3         | 1 633.2             | -51      |
| Air Canada              | 2 549.7         | 681.4               | -73      |
| Alaska Air Group        | 2 033.5         | 1 141.8             | -44      |
| Lufthansa Group         | 1 933.4         | 755.1               | -61      |
| International Airlines Group | 1 932.2    | 802.2               | -58      |
| Emirates                | 1 927.3         | 778.6               | -60      |

Source: The 2020 CarTrawler Yearbook of Ancillary Revenue by IdeaWorksCompany

It turned out that additionally paid coronavirus tests forced an immediate response, which showed that they could become a significant source of revenue growth for airlines. Today, it is difficult to determine their specific size on this basis, as it determines the possibility of free development of air traffic.

However, according to research by the Center for Aviaton (CAPA) and Collins, air transport will not reach full stabilization until 2023. More than half of the aviation and tourism industry representatives participating in these studies indicated that the use of coronavirus tests will be a key element in the revival of air traffic for the next 3 years.

The presented considerations show that the management of off-ticket services sheet revenues, regardless of classical activities, requires an immediate reaction to the newly emerging conditions. It is assumed that the airlines will not miss this opportunity. All other non-bank services are bought only by some travelers, while the tests apply to everyone. In the above-mentioned survey, 33% of respondents indicate that the quick test will become the most important part of non-bank revenue, more important than fees for extra luggage, duty-free sales, seat selection or hotel and car use.

8. Conclusions

The Current changes in air transport management indicate that providers of these services are increasingly focusing on providing a wider range of non-balance services. This action is justified, as the assessment of this phenomenon shows that this type of income already accounts for 30 to 50% of the share in total income, more and more effectively affects the level of efficiency and the positive balance sheet result of carriers.
It should be assumed that in the near and long term there will be an increase in the supply of these services, because they create a sought-after and well-rated complete offer, increasing the quality of the offer, reducing the overall nuisance of travel and increasing the comfort and satisfaction of customers. The attractiveness of offering off-balance sheet services results not only from the above-mentioned attributes, but also from the fact that it does not require large investments, and sometimes only basic business cooperation of partners.

The pandemic has reduced interest in air traffic, so some airlines have significantly lowered their ticket prices while increasing additional fares, making their value more important in the overall financial result. It has also created a new type of support service for family members and friends, connecting seats on the plane to isolate themselves from the possibility of infection from strangers.

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