Chapter 6
European Low-Cost Airlines in Ukraine:
Features of Entry and Consolidation in the National Market

Mykhailo Rutynskyi
https://orcid.org/0000-0003-3142-8723
Ivan Franko National University of Lviv, Ukraine

Halyna Kushniruk
https://orcid.org/0000-0002-0242-9746
Ivan Franko National University of Lviv, Ukraine

ABSTRACT

This chapter is devoted to the issue of entry and activity of European low-cost airlines in the Ukrainian market. Ukraine, with the largest territory and population in Eastern Europe, is an important partner of European countries. The rapid development of air transportation between Ukraine and European countries in the 21st century is based on two factors: 1) high tourist interest in the historical and cultural heritage of Europe and 2) communication of migrant workers, the number of which is steadily growing. The authors reveal the specifics of the entry and development by European airlines of market niches of low-cost transportation in Ukraine in 2008-2021. In particular, the activities of airlines are considered: Ryanair, Wizz Air, German Wings, Meridiana, Ernest Airlines, Vueling Airlines, AegeanAir, Air Baltic, Austrian Airlines, and others. The activity of European low-cost carriers in the number of flights and directions of passenger transportation in Ukraine is evaluated.

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INTRODUCTION AND BACKGROUND

Low-cost flights in Europe have become quite popular and stimulate the development of mass tourism. They are successfully developed by low-cost airlines, which allow to fly at budget prices in different directions. Low-cost carriers (LCCs) have become an ideal alternative to transportation in the global economic crisis. It is especially relevant for Ukrainians, because it allows to travel even to those who have a relatively low income.

Low-cost airline is an air carrier that offers generally low rates, but at the same time does not provide most of the traditional passenger services. Key elements of LCC business model in today's conditions there is one class of service, simple tariff structure with limited differential services and there is no practice of return money for an unused ticket and rebooking services.

This chapter aims to investigate the issue of entry and consolidation of European low-cost airlines in the Ukrainian market in the Pre-Covid-19 Era, the impact of the COVID-19 crisis on the activities of LCCs, and Post-COVID-19 recovery of the low-cost air transportation market in Ukraine in 2021.

Ukraine is a member of such international aviation organizations as the European Civil Aviation Conference (ECAC), the European Organization for the Safety of Air Navigation (EUROCONTROL) and the International Civil Aviation Organization (ICAO). On 12 October 2021, Ukraine and the EU signed a Common Aviation Area (CAA) agreement, as part of the 23rd Ukraine-EU summit in Kyiv. It is an important step in supporting the process of liberalization of air services.

The development of international tourism and air transportation in Ukraine should be considered as interdependent processes. They were significantly influenced by international geopolitical factors.

The aviation industry in Ukraine began to develop after the state gained independence. In September 1992, Ukraine became a member of ICAO. In October 1992, the State Air Traffic Services Enterprise (UkSATSE) was established. In May 1993, it adopted its own Air Code and established scheduled flights to more than 70 countries.

In the difficult economic realities of the formation of the state of Ukraine in the 90s of the twentieth century there was a sharp decline in air traffic: the number of departing passengers decreased 11.5 times (from 15 million in 1990 to 1.3 million in 1999), and in a number of regional airports even more – dozens of times. The economic crisis in Ukraine, the rupture of planned economic ties with the countries of the former USSR, the formation of a market economy, a sharp decline in real incomes have led to this. Since 2000, a slow increase in air traffic has been observed. In 2001, according to the State Statistics Service of Ukraine, 2.1 million passengers used air transport in Ukraine, in 2007 – 6.2 million.

Since 2008, Ukrainians have been able to fly more economically and more often thanks to the entry into the market of the first European low-cost airline Wizz Air.

There are several stages in the development of international low-cost air transportation in Ukraine, in particular:

- rapid formation of the low-cost air transportation market: from the arrival on the Ukrainian market of the first low-cost airline Wizz Air to the beginning of the Russian aggression against Ukraine (2008-2013);
- geopolitical depression of the low-cost market, due to the beginning of the Russian aggression against Ukraine and the occupation of Crimea and border cities in eastern Ukraine (2014-2016);
- restart and exponential growth of the international low-cost air transportation industry, due to the introduction on June 11, 2017 for Ukrainian citizens of a visa-free regime with the EU (2017-2019);
- COVID-19 collapse of the LCC market (March 2020-May 2021);
- partial recovery of low-cost air transportation (spring-summer 2021);
- Post-COVID-19 recovery of the low-cost air transportation market in Ukraine and the competitive struggle for the consumers (from summer 2021).

Since 2012, when Ukraine hosted the EURO 2012 football championship, the entry of European LCCs into the Ukrainian market has been intensified. In 2012-2013, such companies as the Spanish Vueling Airlines, the Italian Air One (subsidiary Alitalia), Air Onix, the Latvian AirBaltic, the Turkish Atlasjet and others have established themselves in the Ukrainian market thanks to powerful marketing companies and promotional prices. Over the next few years, low-cost brands became established in Ukraine: the Arab Air Arabia, the Israeli UP, the Italian Ernest Airlines, the Greek AegeanAir, the Turkish Pegasus Airlines, and the Azerbaijani AZAL jet.

The main limiting factor in the growth of Ukrainian demand for international low-cost travel in 2008-2016 was the difficulty in obtaining Schengen visas. Wealthy Ukrainians, who received visas without problems, traditionally remained loyal to traditional scheduled airlines. Instead, tens of thousands of poorer Ukrainians, potential consumers of LCCs, faced the problem of complying with the financial formalities required to obtain a tourist Schengen visa.

In 2016-2017, the LCC market recovered after a two-year decline due to the Russian aggression against Ukraine. Thus, in 2016, the volumes of passenger air transportation exceeded the figure of 2013 by 2%, and in 2017 – by 30%. During 2017-2019, the outbound tourist flow received a strong impetus to growth due to the introduction of a visa-free regime with EU on June 11, 2017.

The work of low-cost airlines due to the introduction a visa-free regime with the EU showed an exponential growth trend. Qualitative changes have taken place in the structure of the incoming tourist flow from non-border countries. Thus, during the first year of the visa-free regime, a significant increase in the flow of air tourists was achieved: from Lithuania – by 32.0%, Latvia – 18.1%, Germany – 17.5%, Canada – 11.4%, China – 11.1%. The trend of increasing tourist flows also continued: from France – 6.0%, USA – 5.6%, Czech Republic – 5.6%, Georgia – 4.5%, Italy – 3.9%, Great Britain – 2.7%, Bulgaria – 2.4%.

Such a dynamic growth of incoming passenger flights to the cities of Ukraine had a positive effect on the country's economy in general and for the tourism industry in particular. Statistics of Kyiv, Lviv, and Odessa recorded an increase in average 40-55% of revenues to local budgets, the flow of air tourists led to job creation, improving living standards. For example, in 2017, revenues to the local budget of Lviv from inbound tourism increased by 81%; 2.6 million tourists spent EUR615 million in Lviv. On average, one tourist spent EUR75 a day.

Before the beginning of the COVID-19 crisis, European LCCs dominated the market of budget passenger transportation in Ukraine. In 2019, the leadership in the Top 10 ranking in popularity among the citizens of Ukraine was held by the following airlines: Ryanair, Wizz Air, SkyUp, Ernest Airlines, EasyJet, Vueling, AirBaltic, EstonianAir, AegeanAir, and GermanWings. In 2019, foreign low-cost airlines opened 29 new flights in Ukraine, including 21 new flights by leading airlines Ryanair and Wizz Air.

LITERATURE REVIEW

Fundamental market transformations of the airline industry have been going on since the end of the 20th century (Belobaba, Odoni, Barnhart eds., 2015; Evert R. de Boer, 2018). The development of mass tourism is forming an ever-increasing demand for transportation, an alternative to expensive traditional airlines (Pappas & Bregoli eds., 2016). Over the past 20 years, we have seen an unprecedented boom in a new type of airlines – low-cost carriers (Atiqur, Hossan, Zaman, 2012). In the 21st century, LCCs are steadily increasing their market niche and actively ousting traditional airlines from the market (Detzen et al., 2012; Mason, Morrison, Stockman, 2013; Gross & Lück eds., 2016; Heshmati & Kim, 2016; Dhingra & Yadav, 2018; Mazareanu ed., 2021; Global LCC Market Research Report, 2021). Price rivalry in airline markets of a network carrier against a low-cost carrier intensifies and in some cases encourages traditional airlines to establish their own low-cost subsidiaries (Fageda, Jiménez, Perdiguero, 2011; Bubalo & Gaggero, 2015; Pérez & Dobruszkes, 2019; Panduwinasari, Afandi, Wahyuni, 2020).

The LCC's business concept makes flights available to millions of average consumers and radically changes the picture of international tourist flows (Button, 2012; Vidović, Štimac, Vince, 2013; Koo, Lim, Dobruszkes, 2017; Akpur & Zengin, 2019; Dileep, 2019; Graham & Dobruszkes eds., 2019; Arora, Mittal, Mishra, 2020). New information technologies of simplified ticket booking and combination of routes, various smartphone services and applications actively contribute to this (Hassan, 2020).

In recent decades, LCCs have mastered not only the markets of economically developed countries. They are actively developing the markets of less developed countries (Huderek-Glapska, 2020), for example, Ukraine. In these countries, they are rapidly gaining popularity and loyalty of the mass consumer due to their attractive tariffs and opportunities to make budget trips (Dobruszkes, 2013; Forgas-Coll, Palau-Saumell, Sánchez-García, 2015; Riorini & Widayati, 2018).

Many scientific works of leading scientists, business analysts and experts-practitioners are devoted to the study of the processes of development of the low-cost air transportation sector every year. Thanks to the efforts of the international scientific community, a comprehensive research methodology has been developed with the involvement of a range of methods: from empirical to econometric (Dobruszkes, 2014a; de Wit & Zuidberg, 2016; Miranda, Baltazar, Silva, 2016; Antunes & Martini, 2020; Iacus, Natale, Santamaria, Spyratos, Vespe, 2020; Sabaitytė, Davidavičienė, Van Kleef, 2020; Mazareanu ed., 2021).

The modern geography of European air transport is inconceivable without Ukraine (Bjelicic, 2013; Dobruszkes, 2014b). Since 1991, the airspace of Ukraine has been actively integrated into the pan-European market and has been functioning according to its rules (Huderek-Glapska, 2020; Savych & Shkoda, 2020). Following the examples of successful European companies, the industry of national LCCs and traditional scheduled airlines with low-cost tariffs has been born in Ukraine in recent years (Kasianova & Suvorova, 2016; Savych & Shkoda, 2020).

In a number of works, scientists convincingly prove the positive effect of low-cost air transportation on the local economy (Ivanova, 2017; Tomczewska-Popowycz & Quirini-Popławski, 2021). This statement is true for both developed and third world countries (Graham et al. eds., 2020; Zhang & Graham, 2020).

Features of the evolution of the air transportation market in Ukraine are presented in publications of Kasianova & Suvorova (2016), Oleshko & Heiets (2018), Savych & Shkoda (2020), etc. In Ukraine, low-cost airlines make a significant contribution to the development of international tourism.

Destinations to which LCCs arrive show rapid statistical growth of the economy of tourism and hospitality, growth of welfare and mobility of the population (Dziedzic & Warnock-Smith, 2016; Dobruszkes, Givoni, Vowles, 2017; Butowski, 2018; Nistoreanu ed., 2020; Wisła & Nowosad, 2020).

COVID-19 caused a devastating crisis for the aviation sector, including in the low-cost segment (Albers & Rundshagen, 2020; Budd, Ison, Adrienne, 2020; Nhamo, Dube, Chikodzi, 2020; Dube, Nhamo, Chikodzi, 2021; Sun, Wandelt, Zheng, Zhang, 2021). However, low-cost airlines in 2020 and 2021 show better recovery trends compared to traditional airlines. It should be noted that in Ukraine today LCCs, along with charter airlines, play a significant role in reviving the air potential of the state (State Statistics Service of Ukraine, 2021).

PRESENTATION OF DATA AND RESULTS

Statistical Trends in the Development of Air Transportation in Ukraine

In the 21st century, Ukraine's air transportation industry is experiencing a difficult stage of development, complicated by external geopolitical, economic and pandemic challenges (Figure 1).

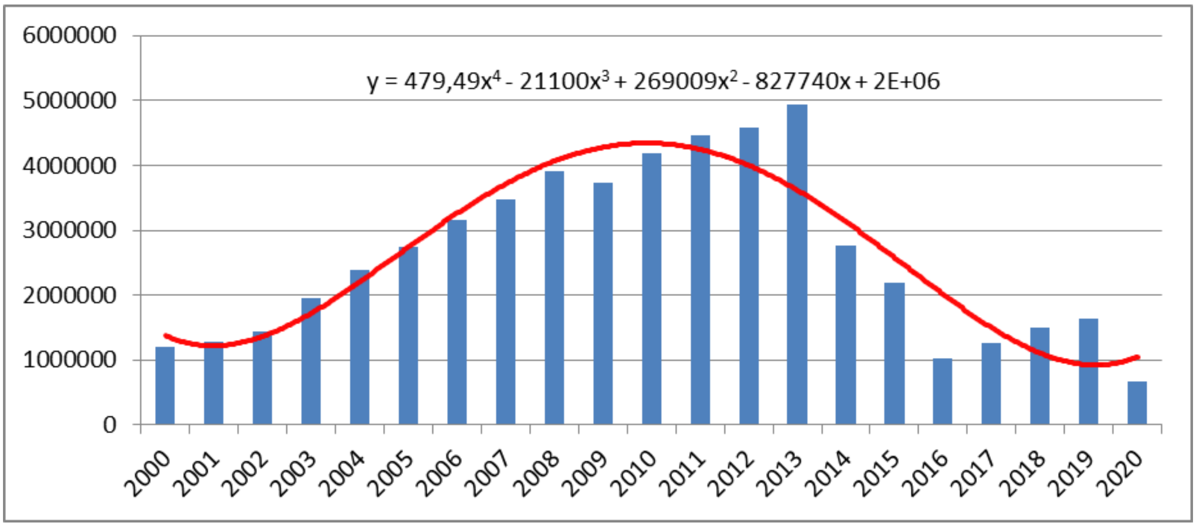

Figure 1. En-Route in Ukraine, in 2000-2020
Source: www.eurocontrol.int

A few years before the global pandemic, Ukraine's aviation industry survived the crisis of 2014-2016, caused by the invasion of the military of the Russian Federation in Ukraine, the occupation of Crimea, the loss of airports in Simferopol, Donetsk and Lugansk, the shooting down of 1 civilian and 9 military aircraft by modern missile systems of the Russian army, the closure of airspace in eastern Ukraine, the cessation of Russian air transit and flights to the Russian Federation.

About 30% of Ukraine's transit traffic passed over Crimea, 27% over the eastern part of the country. That is, in 2014, up to 60% of transit potential was lost. Until now, Ukraine loses up to 7 million passenger traffic annually due to the Russian Federation's occupation of the territories with the airports of Simferopol, Donetsk and Luhansk. It should be noted that the top airport in Simferopol in 1991-2014, which is now located in the occupied territory, annually serves about 5 million passengers.

By 2014, the volume of low-cost transportation by companies on international routes through the airports of Ukraine was steadily growing: from 550.2 thousand people (7% of the total air traffic of Ukraine) in 2011 to more than 1.2 million people (12% of total traffic) in 2013. The government and all international experts have modeled one of the highest forecast trends for the industry in CEE in correlation with the increase in the welfare of the population and the simplification of the visa regime with the European Union. More than 80% of low-cost transportation was operated by Wizz Air Ukraine, Wizz Air Hungary, Air Arabia, FlyDubai, Pegasus Airlines and Wind Jet. The aggression of the Russian Federation in 2014 brought down the aviation market of Ukraine to indicators of ten years ago (Figure 2). At the same time, there was a sharp decline in GDP, the devaluation of the national currency (by 97.3%), the deterioration of the purchasing power of the population and the reduction of tourist mobility.

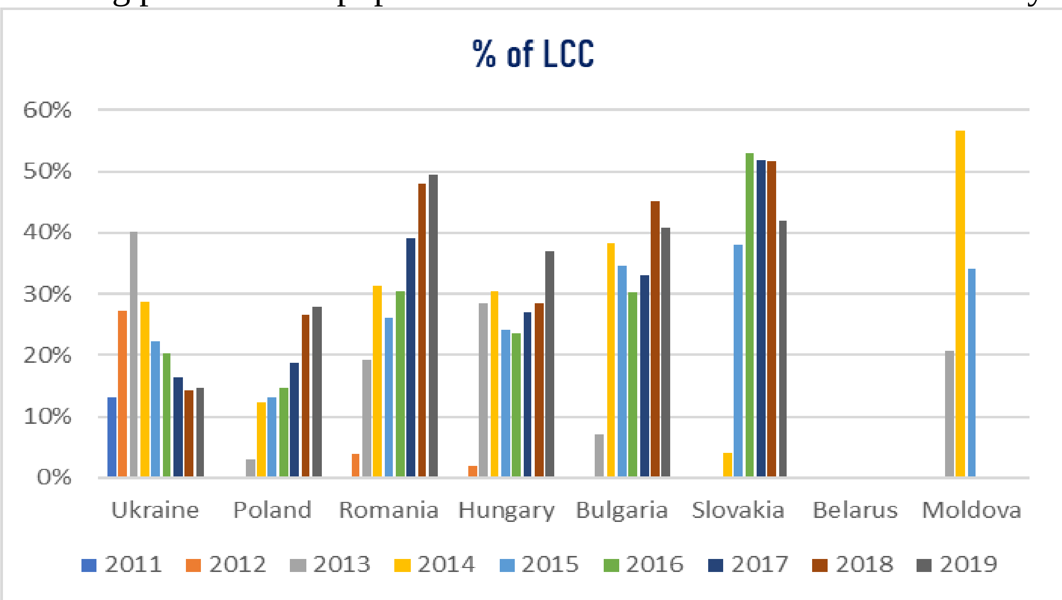

Figure 2. Dynamics of development of LCC markets in Central and Eastern Europe (CEE) in 2011-2019
Source: Eurostats, Aérogestion, 2021

In such crisis realities, the airports of Ukraine since 2014 (after the criminal shooting down of the Boeing 777 flight MH17 by the Russian Buk missile system) continued to actively fight for passenger traffic and gradually restore trust and reputation.

In 2017, airlines in Ukraine carried a record number of passengers (10.55 million). In 2017, Ukrainian airports also showed record growth. So, passenger traffic through the air gates of Ukraine increased in 2017 by 28%. The number of serviced aircraft was almost 160 thousand, which is 20% more than in 2016. Interestingly, 98% of total passenger traffic was concentrated in seven airports in Ukraine: Boryspil, Kyiv, Odessa, Lviv, Kharkiv, Dnipro and Zaporizhia. In the ranking of the largest airports in Central Europe, Kyiv Boryspil took 6th place after Vienna, Warsaw, Prague, Budapest and Bucharest.

In 2018, Ukrainian airports served more than 20 million passengers. In 2019, 24.3 million passengers were served (+ 18.5%), of which almost 22 million travelers (+19.8%) took advantage of international flights.The Ukrainian market of passenger air transportation for the first 6 months of 2019 showed a record growth of 20% compared to the same period last year (+10.7 million passengers). It was a record 2nd place among Central European countries. (Poland was the leader, +22.3 million passengers).

In 2019, scheduled passenger flights to Ukraine were operated by 40 foreign airlines from 37 countries (including four new ones – the Austrian Laudamotion (until October 31, 2020), the French Aigle Azur (until September 27, 2019), the Israeli Israir Airlines and the Norwegian Scandinavian Airlines System).

In 2019, Ukrainian airlines carried 13.7 million passengers, which are 9.5% more than in 2018, of which 12.6 million people were transported on international flights (+9.7%). Ukraine’s largest airline is UIA, which has been successfully developing since 1992 under the protectorate of governments and influential oligarchic groups. On average, 65-69% of all passengers of Ukrainian airlines use UIA services every year.

In 2019, Azur Air Ukraine set new record in the charter segment (1.74 million), and SkyUp – in the charter and low-cost segment (1.7 million passengers, which is 4 times more than 442 thousand people in 2018). The average load of low-cost international flights SkyUp in 2019 was 89%, Wizz Air and Pegasus Airlines – more than 95%. In 2019, airBaltic carried 215,438 passengers on three Ukrainian routes (+ 62% vs 2018); 35% of travelers traveled to Riga or from Riga, 65% – used Riga for transfer to the next flight. The most popular airBaltic transfer destinations for Ukrainian passengers were Tallinn, Helsinki, Oslo, Stockholm, Turku, Copenhagen, Amsterdam, Berlin, Moscow and St. Petersburg.

On the eve of the COVID-19 crisis, Ukraine fully felt the positive effects of the global increase in air traffic as, firstly, a transit country between Europe and Asia, and secondly, as a country with a high balance of migrant workers and tourists. (Labor migration of Ukrainians to the EU increased from 0.51 million in 2008 to about 2.4 million in 2019. During 2017-2019, 14.0-14.2 million foreign tourists visited Ukraine annually).

In total, in recent years, Ukraine served more and more flights: in 2018 – 300,853 flights (+ 18.5%), in 2019 – 335,407 flights (+ 11.5%). The density of air traffic in the country had a parity balance at the level of 1 to 2 between domestic and foreign airlines. Thus, in 2018, 106,654 flights were operated by Ukrainian airlines (+ 9.7%) and 194,199 flights – by foreign airlines (+ 23.9%), in 2019, respectively – 109,777 flights (+ 2.9%) and 225,630 flights (+ 16.2%). By type of flight in 2019, 141,680 were transit (+ 13.2%), 162,937 – international (+ 11.5%), 30,790 – domestic (+ 4%). That is, in recent years, Ukraine has established the status of an active subject of global air communications with an approximately equal ratio (41-48%) of segments of transit and international flights with departure or landing at the country's airports.

In 2014-2019, the most frequent flights in the Ukrainian sky were operated by UIA, Turkish Airlines, Belavia, Wizz Air and LOT (according to UkSATSE, which provides air navigation services in Ukraine). And the highest traffic growth trends in 2019 were demonstrated by low-cost and mixed-type companies: SkyUp – 10631 flights (+ 340.9%), Ryanair – 9295 flights (+ 437.9%), Azur Air Ukraine – 7229 flights (+ 48.8%), Wizz Air Hungary – 20944 flights (+ 37.3%), Turkish Airlines – 33716 flights (+ 12.5%), Qatar Airways – 5893 flights (+ 26.1%), etc.

At the beginning of quarantine in March-May 2020, the number of flights in the airspace of Ukraine decreased by more than 96%. The gradual revival of air flights in Ukraine began with the resumption of domestic passenger flights on June 5 and the resumption of international air transportation from June 15, 2020. In the tourist peak of August 2020, 6,690 flights took place, which is 56.3% less than in August 2019. Ukrainian airlines operated 6,373 flights, which is 45.5% less than in August 2019, foreign airlines operated 10,317 flights, which is 61.1% less than in 2019.

Passenger traffic at Ukrainian airports in the first half of 2021 showed a high rate of recovery: 479.1 million people were carried (Figure 3). The reason is the easing of quarantine restrictions and the beginning of the tourist season. Charter flights in the south-eastern direction (Turkey, Egypt, Bulgaria, Cyprus) were the first to resume.

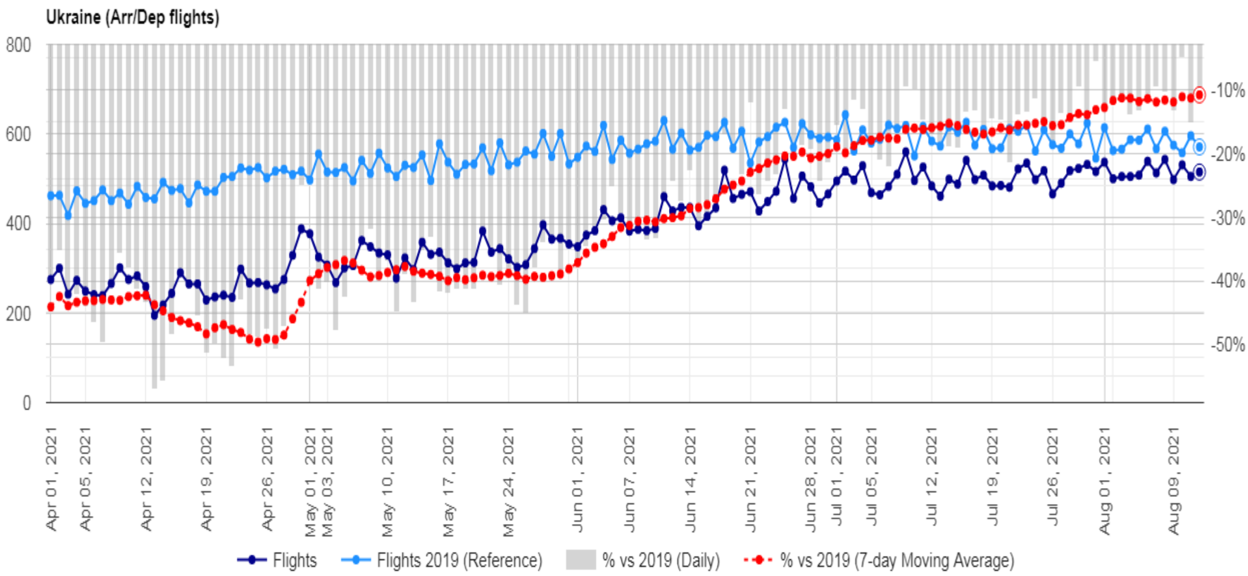

Figure 3. Ukraine: dynamics of recovery of the average daily flights for April-August 2021 compared to the same period in 2019
Source: www.eurocontrol.int

In July-August 2021, a new powerful impetus to the resumption of intensive low-cost communication between Ukraine and the EU was given by the governments of a number of European countries, which allowed vaccinated Ukrainians to enter for tourist purposes. This permit led to a sharp increase in passenger traffic from Ukraine to the tourist countries of the Mediterranean in the second half of the summer. Consumers sought to take the opportunity to rest, as in the autumn of 2021, new restrictions on air travel are likely to take effect in the EU due to the spread of the Delta strain.

Success Stories of European Low-Cost Airlines in 2008-2019: Competitive Development and Consolidation in the Ukrainian Market

In 2008, a new stage in the development of the air transportation market began in Ukraine. In September 2008, at the Ukraine-EU summit in Paris, President Viktor Yushchenko agreed with the EU leadership to launch a dialogue to determine the conditions for a visa-free regime. Since 2005, Ukraine has started an international promotion and abolished visas for tourist visits of EU citizens. As a result, 2008 was a record year for Ukraine in all years of independence in terms of inbound tourism – the country was visited by about 25.5 million people. An increase of 13% was observed in 2012, due to the final matches of the European Football Championship “Euro-2012”. The last positive stimulus to another sharp intensification of international passenger exchange between Ukraine and the EU was the decision of the Council of the European Union on May 11, 2017 to abolish short-stay visas (for up to 90 days-180 days) for Ukrainian citizens visiting the Schengen States (except the UK and Ireland). As a result, for the period from May 11, 2017 to May 11, 2019, citizens of Ukraine made more than 33 million trips to EU countries and the Schengen Area.

Since 2008, Ukrainians have been able to fly more economically and more often thanks to the entry into the market of the European low-cost airlines. EU LCCs have actively contributed to the development of European sympathy of the population of Ukraine, especially tourist-mobile youth. Young people, who actively traveled through Europe for 5 years thanks to budget flights, became the basis of the youth uprising in 2013, which was called the Revolution of Dignity and won the desire of Ukrainians for European integration.

The leaders among foreign airlines in 2010-2019, which carried out low-cost air transportation in Ukraine, were:

- Wizz Air operates direct flights to Poland, Germany, Lithuania, Latvia, Estonia, Great Britain, Denmark, Hungary, Greece and other countries;
- Ryanair carries passengers to all major EU cities and main hubs of the British Isles (London, Manchester and Dublin);
- SkyUp is the first national low-cost carrier;
- Pegasus operates flights to Turkey and Asian countries;
- Onur Air operates flights to Turkey;
- Vueling operates flights only from Kyiv to Rome and Barcelona;
- AirBaltic operates flights to Riga, Vilnius;
- EstonianAir operates low-cost flights from Kyiv to Tallinn;
- Ernest Airlines operated flights to Rome, Milan, Venice and Naples in 2017-2019;
- Meridiana operated flights from Kyiv to Calgary and Naples in 2014-2016;
- AegeanAir operates flights from Kyiv to Athens;
- GermanWings operated flights (until April 7, 2020) from Kyiv to Frankfurt am Main and Munich;
- Buta Airways, a low-cost brand within the structure of the Azerbaijani state airline AZAL, operates flights from Baku to the airports of Ukraine.

The success story of Wizz Air in Ukraine began in 2008. The fact that Ukraine reached the peak value of inbound tourism in 2008 is a significant contribution of this low-cost airline, which opened and made Ukraine available to thousands of budget tourists through the introduction of a promotional tariff policy.

In the Ukrainian market, Wizz Air for the period 2008-2021 experienced 2 stages of ups and downs, stagnation in 2020, and a rapid increase in passenger traffic in 2021.

In 2008, Wizz Air carried 229 thousand passengers, and 5 years later in 2013 – more than 1 million passengers. Large-scale aggression of the Russian Federation against Ukraine, criminal shooting down of flight MH17 by Russian missiles, disinformation fake campaigns against Ukraine collapsed Wizz Air passenger traffic in 2016 to 416 thousand people. However, before the COVID-19 pandemic in 2019, the airline carried 2.6 million passengers on Ukrainian route (Figure 4).

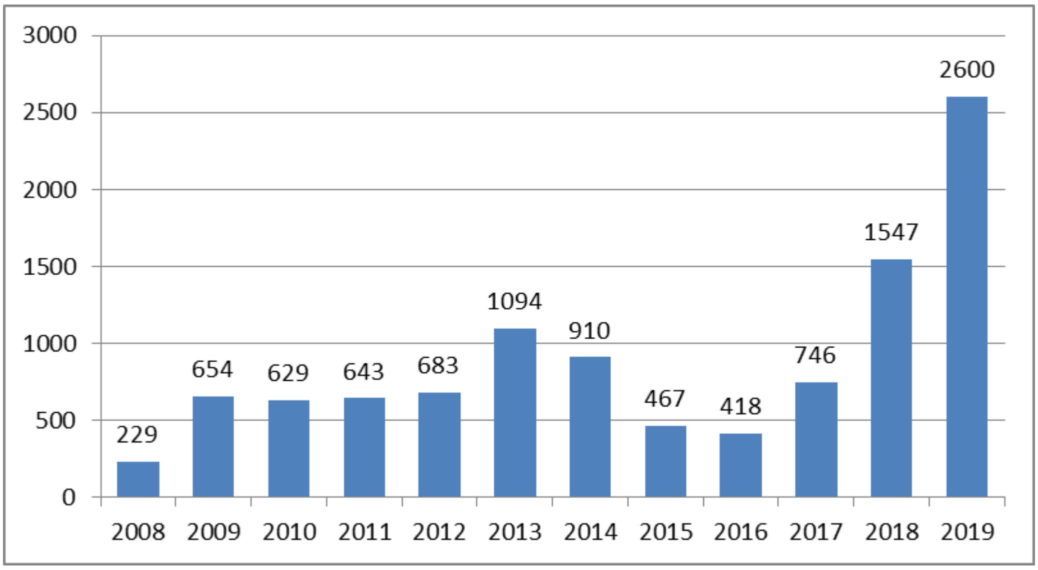

Figure 4. Wizz Air passenger traffic on Ukrainian routes in 2008-2019, thousand passengers
Source: Wizz Air, 2021

In July 2008, a subsidiary of Wizz Air Ukraine began operations. It had a separate IATA code WU, a Ukrainian operator's certificate and a fleet consisting of one Airbus A320 aircraft with Ukrainian registration. Boryspil became the base airport. In July-December 2008, the network consisted only of domestic routes – from Kyiv to Lviv, Odessa and Simferopol, and from Lviv to Simferopol. For the first time in the history of Ukraine, the airline sold tickets at an unprecedentedly low price of $ 1.5 one way. For six months of operation on the Ukrainian market, the Wizz Air brand has become a symbol of budget tourism for the economically active population of the country.

In December 2008, Wizz Air Hungary entered the Ukrainian market and opened its first flight to Ukraine – London (Luton)-Kyiv. In January

2009, Wizz Air Ukraine opened the first international routes. Low-cost began flying from Kyiv to Dortmund, Katowice, Cologne, Thorpe, and from Lviv to London and Dortmund.

It was very difficult for traditional international airlines to compete in the Ukrainian market with the Wizz Air brand, which won the trust of consumers. An illustrative example was the competition with the Lufthansa Group. In 2009, Lufthansa Group in the competition for the Ukrainian market with Wizz Air opened a flight program of its low-cost subsidiary GermanWings on the route Kyiv-Cologne. However, the greater popularity of the Wizz Air brand in the following 2010 forced Germanwings to cancel this flight program due to low aircraft load.

In February 2013, Wizz Air Ukraine announced the opening of flights from new cities in Ukraine – Kharkiv and Donetsk. At the same time, in July 2013, Wizz Air Ukraine was pushed out of its last domestic route Kyiv-Simferopol in Ukraine due to unfair competition from Air Onix. Instead, in 2013 Wizz Air Ukraine focused on the development of its new base in Ukraine – Donetsk Airport. It received a new A320. The route network from Donetsk covered Bergamo, Dortmund, Kutaisi, Memmingen, London, Rome.

At the beginning of 2014, Wizz Air completely dominated the LCC market of Ukraine (61.6%), and the second and third positions were held by competitors with 3-5 times smaller niches: Pegasus Airlines (17.1%) and FlyDubai (11.6%).

The military aggression of the Russian Federation in 2014 forced Wizz Air Ukraine to significantly reduce business activity. The airline lost its base in Donetsk and significantly reduced the route network from Ukraine due to a sharp drop in demand. The airline also refused to receive the fifth aircraft to open a base in Lviv. It was decided to reduce the fleet from four to two aircraft. Finally, in April 2015, Wizz Air Ukraine suspended flights. The airline’s fleet was completely disbanded. Part of the flights (only from Kyiv) was operated by Wizz Air Hungary, which opened a base with one A320 aircraft at Zhulyany airport.

On the promising route Ukraine-Italy Wizz Air in 2017 gave way to Italian Ernest Airlines. Nevertheless, Wizz Air has retained the status of the leader of the low-cost carrier in Ukraine. In 2018, it completely dominated (43.1%), and the second and third positions were held by competitors with four times smaller niches: Nordwind Airlines (12.9%) and Pegasus (12.5%). In 2018, Wizz Air received CESAAR award: the Company was named “The Best Low-Cost Airline of the Year in CEE region”. In 2019, Wizz Air was named “Airline of the Year” by Air Transport Awards (Wizz Air, 2020).

The President of Ukraine Petro Poroshenko became the initiator and guarantor of the resumption of business activity in Ukraine of the leading EU low-cost airlines. He personally held talks with the leaders of Wizz Air Hungary and Ryanair and convinced them of the political and economic feasibility of expanding the business of airlines in Ukraine after the adoption of a visa-free regime with the EU. In 2018-2019, more than 90 countries signed bilateral visa-free agreements with Ukraine.

So, Ryanair's success story in Ukraine began in 2018, ten years later than Wizz Air. The airline made its first flight on September 3, 2018 from Berlin to Kyiv with 100% loading. In 2019, Ryanair greatly increased the geography of flights from Kyiv and Lviv. Within a year, the company significantly pushed Wizz Air and won the favor of Ukrainians with convenient budget flights to London, Memmingen, Dusseldorf, Barcelona, cities of Northern and Eastern Europe.

The activity of LCCs in the London direction led to the fact that on October 3, 2019 British Airways after 23 years of flights was forced to cancel regular flights Boryspil-Heathrow due to falling profitability. A similar decision on November 17, 2019 was forced to take Brussels Airlines, closing the flight Brussels-Kyiv under pressure from low-cost competitors.

In F-2020 (from April 1, 2019 to March 31, 2020) Ryanair declared a plan to carry more than 1.5 million passengers on the 41 Ukrainian flight from Kyiv, Odessa, Lviv and Kharkiv, to increase the frequency of flights from Ukraine from 52 to 115 per week, and travel capacity – up to 42,714 seats in both directions per week (vs 19,656 in F-2019).

Ryanair's business activity in Ukraine has not gone unnoticed by its main competitor. In 2019, Wizz Air Hungary maximized the geography of routes from Ukraine and entered a fierce competition with Ryanair on most routes.

Ryanair's route network from Kyiv covered 25 destinations, 15 of which duplicated the Wizz Air network, which had been under construction since 2008. In particular, Ryanair and Wizz Air launched parallel routes from Kyiv to London, Vienna, Berlin, Frankfurt, Dusseldorf, Nuremberg, Athens, Vilnius, Warsaw, Gdansk, Katowice, Krakow, Poznan, Wroclaw, and Bratislava. In addition, Ryanair connected Kyiv with Barcelona, Madrid, Valencia, Dublin, Manchester, Stockholm, Karlsruhe, Bydgoszcz, Paphos and Sofia. This geography of flights exceeded Kyiv's Wizz Air route network by 40% (Figure 5). With such an extensive flight network, Ryanair in 2019 successfully won the brand's popularity among Ukrainians.

A similar situation has developed in the regions of Ukraine. For example, from Lviv duplication on the route network Ryanair and Wizz Air was 60%. Three of the five routes partially intersected: to London (Ryanair to Stansted, Wizz Air to Luton), to West Germany (Ryanair to Dusseldorf / Weeze, Wizz Air to Dortmund) and to Southern Poland (Ryanair to Krakow, Wizz Air to Katowice). In 2019, after a break of 11 years, Wizz Air returned to Odessa, where it opened 6 routes – to Berlin, Budapest, Wroclaw, Katowice, Gdansk, and Bratislava. It is noteworthy that the first five of these six directions of Wizz Air are strongly duplicated with similar directions of Ryanair, which also in 2019 expanded its route network from Odessa from one to seven directions.

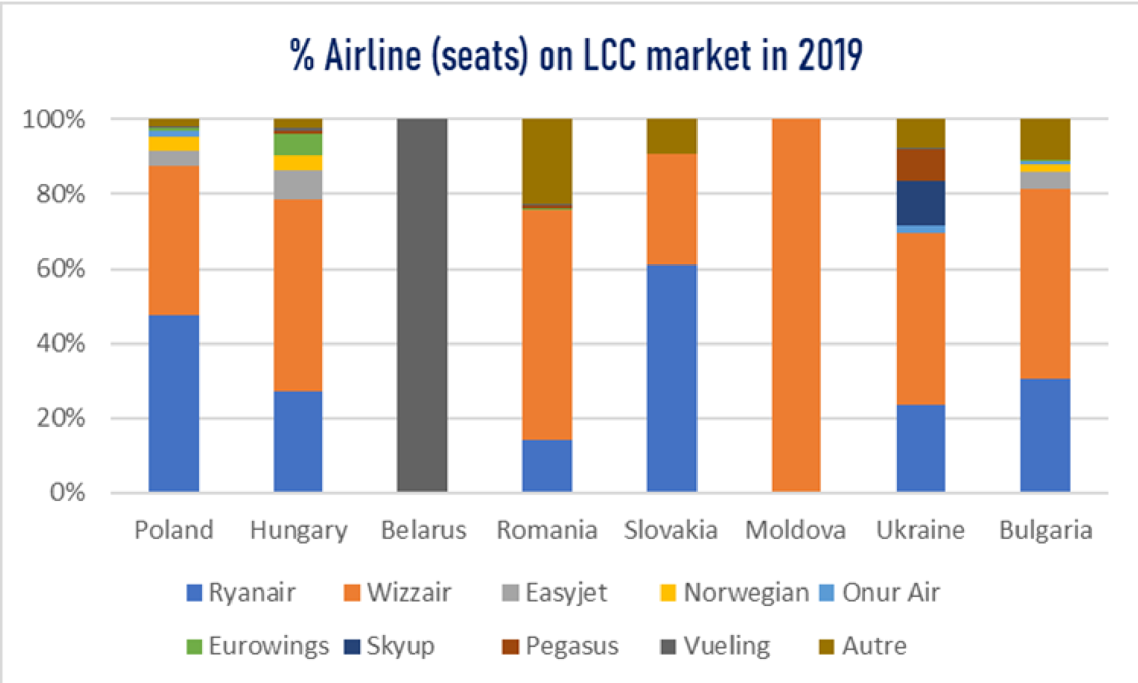

Figure 5. Comparison of LCC markets of Ukraine and its neighbors in 2019
Source: Eurostats, Aérogestion, 2021

In total, during 2019, 29 new routes were opened by foreign LCCs in Ukraine, including 21 new routes by Ryanair and Wizz Air Hungary. Nevertheless, Wizz Air has retained its long-standing status as Ukraine's largest low-cost carrier: the route network from Ukraine included 45 destinations in 13 countries. Wizz Air increased its potential to 45.2% (the number one carrier), Ryanair – 30.7%, Pegasus – 8.1% of the LCC market of Ukraine. Taking into account all airlines operating to CEE, the second and third positions in the number of traffic in Ukraine after the national carrier UAI (37.3%) were won and held by the European LCCs Wizz Air (12.3%) and Ryanair (8.3%) (Wizz Air, 2020).

In 2018-2019, Ukrainian consumers watched the unprecedented price war of low-cost giants on routes duplicated on more than 60% in the top EU destinations.

Moreover, in 2019, the airline's subsidiary, the British Wizz Air UK, also entered Ukraine for the first time, and in 2021 – the Wizz Air Abu Dhabi. Similarly, Ryanair is actively promoting its subsidiary brands on the Ukrainian market – Malta Air, Ryanair UK and Buzz. In 2019, Laudamotion, a low-cost subsidiary, launched flights from Ukraine to Vienna and Stuttgart.

On May 21, 2018, against the background of the success of foreign LCCs, the first flight of the first national low-cost airline of Ukraine SkyUp started.

On the eve of the global COVID-19 crisis, a number of other airlines have thoroughly studied the promising Ukrainian market and prepared projects to launch in Ukraine their own low-cost flights. In 2019, the Central Office of Air France-KLM announced the intention to launch flights to Ukraine of the subsidiary Transavia in order to develop a network of routes. Turkish Pegasus Airlines has initiated the opening of a subsidiary, Ukrainian-Turkish low-cost airline in Ukraine, etc.

Development of Flight Geography of European Low-Cost Airlines in the Struggle for the Ukrainian Tourist in the Pre-COVID-19 Era

The number of LCCs in the Ukrainian market is constantly changing due to the severity of competitive and geopolitical risks (Oleshko & Heiets, 2018; Savych & Shkoda, 2020). However, the main group of top airlines that have earned the trust of consumers and actively compete for the maintenance of a market niche, formed in 2008-2012. Despite the COVID-19 crisis, from the beginning of summer 2021 it actively resumes its flight programs. Among them are the following:

- European giant airlines Ryanair and Wizz Air;
- European "medium" airlines easyJet, Norwegian Air Shuttle, Air Baltic, Vueling Airlines and AegeanAir;
- Turkish airline Pegasus Airlines;
- Arab airlines Air Arabia and Flydubai.

Each of these airlines has a different life cycle and business strategy for business development in the Ukrainian market. Some airlines have won well-deserved trust and loyalty in Ukraine. Others, for example, the Italian airline Ernest Airlines, in 2017-2019 "flashed" in the Ukrainian sky with a bright meteor. Ernest Airlines maintained the highest percentage of flights between Ukraine and Italy (precondition: the presence of a huge (about 0.5 million people) Ukrainian diaspora in Italy, its high air mobility, a significant amount of annual pendulum labor migration of Ukrainians to

Italy, and the great popularity of Italian destinations among Ukrainian tourists).

In recent years, the geography of traditional scheduled and low-cost flights has been constantly diversified. Before the COVID-19 crisis, the main geographical vector of air services Ukraine-European Union was stable. Among the most popular communications was the dominance of flights to the capitals and cultural centers of Western Europe (Figure 6 and Figure 7).

Figure 6. Top 15 destinations served by all types of carriers in 2019 from Ukraine
Source: Aérogestion, 2021

Figure 7. Top 15 locations dominated by LCCs in 2019 from Ukraine
Source: Aérogestion, 2021

Since 2018, SkyUp and the national giant UIA have been actively involved in the competition with foreign LCCs. In 2018, SkyUp started its operations with only 10 charter flights. In mid-2019, scheduled flights expanded to 30 destinations, and at the end of the year to 50. Among the most popular destinations of SkyUp were Tbilisi, Barcelona, Larnaca, Poprad and Sofia.

In 2018, through the Amadeus Content Rail & LCC booking system, Ukrainians in the LCCs segment purchased tickets, usually from market leaders with recognizable brands, a reliable reputation and a wide geography of flights. Ryanair and Wizz Air became the leaders of trust of Ukrainian consumers with indicators, respectively, of 39.24% (+ 26% vs 2017) and 35.06% (+ 121% vs 2017) of all sales in Ukraine on flights of LCCs. The share of lesser-known carriers was as follows: easyJet – 7.5% (+55% vs 2017), Ernest Airlines – 7.37%, others – less than 3%. Amadeus Content Rail & LCC steadily increased the volume of customer turnover of low-cost passengers in Ukraine before the COVID-19 crisis. For example, only in the first half of 2018, the total number of tickets sold by agencies through this booking system increased by 51% (Amadeus, 2018).

The development of the domestic flight network of the Ukrainian SkyUp has revived in Ukraine such a concept as domestic passenger traffic on budget routes. For example, in November 2019, the launch of Kyiv-Lviv and Lviv-Kharkiv flights by SkyUp from Lviv Airport led to a jump (by 36.1%) increase in domestic passenger traffic at this airport.

Successes of SkyUp and Turkish LCCs have led to ousting from the market and bankruptcy of the Ukrainian airline Atlasjet Ukraine (2014-2019), which specialized in flights to Istanbul.

COVID-19 Crisis: the Scale of the Collapse of the International Air Transportation Market and the Competitive Struggle for the Consumers

In March 2020, the world imposed strict restrictions to conteract the COVID-19 pandemic. International air traffic "froze" for several months (there were only evacuation flights) (Figure 8).

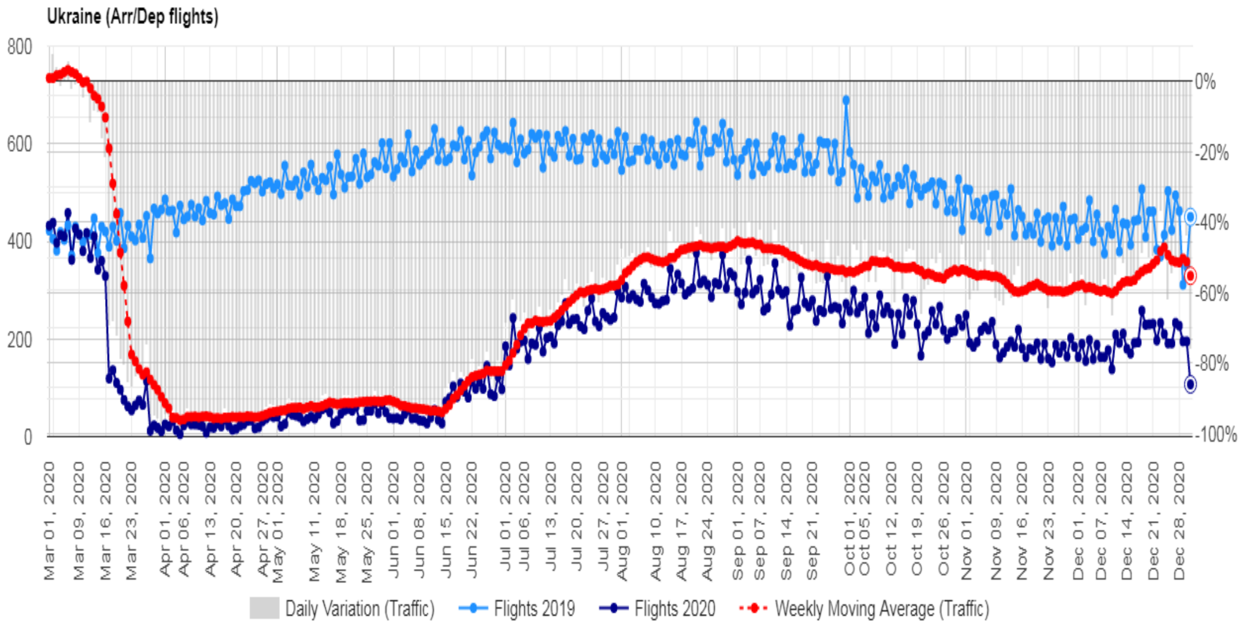

Figure 8. Ukraine: dynamics of average daily flights for March-December 2020 compared to the same period in 2019
Source: www.eurocontrol.int

In 2020, Ukraine twice restricted the entry of foreigners into the country: the first time from March 17 to June 15, the second time from August 28 to September 28. Authorities argued that these were measures to conteract the spread of COVID-19. Only from September 28, 2020 in accordance with the government resolution №757 foreigners were again allowed to enter the territory of Ukraine for tourism. Health insurance covering coronavirus treatment is mandatory for such individuals. However, with the global pandemic growing in the world, traditional scheduled and low-cost airlines have chosen a strategy to minimize flight programs by the end of 2020. The total lockdown also lasted in Ukraine from January 8 to 25, 2021, but the government did not restrict the operation of international flights.

The biggest unfavorable factor in the resumption of low-cost traffic was the ban on tourists entering Europe. This situation affected both the geography of flights (over 65% of routes were not resumed in 2020) and the flight schedule of airlines. On many flights that resumed in the summer of 2020, LCCs left one or two flights a week.

On the other hand, the vacated niche was filled by airlines operating on routes to popular countries of resort rest with a "softer" policy of COVID-19 formalities for foreign tourists: for example to Turkey, Zanzibar, Hispaniola, and the Maldives.

Ukraine is a strategically important market for generating tourists for Turkey. And its Boryspil airport is the main hub for sending tourists to

Turkey not only from all regions of Ukraine, but also transit tourists from Belarus and the Russian Federation. Thus, in 2020, during the periods of easing of quarantine restrictions, the presence of the Turkish state airline Turkish Airlines and the private low-cost airline Pegasus Airlines, and the Ukrainian SkyUp, increased the most actively.

The top 10 airlines that dominated the number of flights in Ukraine in 2020 included 4 traditional scheduled, 2 charter and 4 low-cost airlines with commensurate market shares, in particular, Wizz Air Hungary (6.4%), SkyUp (5.9%), Ryanair (4.2%) and Pegasus Airlines (2.4%) of the total number of flights (Figure 9).

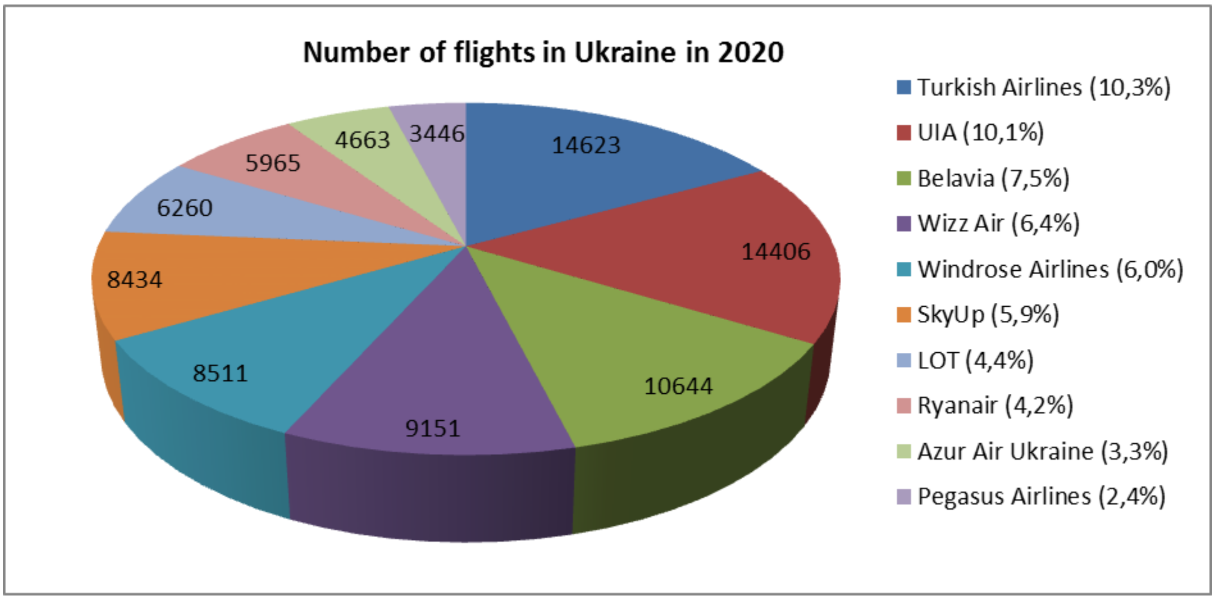

Figure 9. TOP-10 airlines that dominated the number of flights in Ukraine in 2020
Source: State Aviation Administration of Ukraine, 2021

The leader of the Ukrainian market, the regular airline UIA, recorded in 2020 a huge loss of $ 0.16 billion. In 2020, UIA served almost 17 thousand flights (-72% vs 2019), in the first quarter of 2021 the drop in passengers was -67% vs 2019, the number of scheduled flights decreased by 82%, while the number of charter flights increased 2.6 times. The volume of traffic has decreased four times: 1.8 million passengers in 2020 vs 8 million in 2019. Charter flights in partnership with tour operators to the resort airports of La Romana, Male, Mattau, Marsa Alam, and Kayseri provided profits for the airline.

Paradoxically, in the midst of the COVID-19 crisis, the small Ukrainian SkyUp even increased its market potential through skillful maneuvering (closing routes to closed Europe for tourists and increasing charters to resorts in Egypt and Turkey, available to unvaccinated tourists). On March 18, 2020, the newly established national low-cost airline Bees Airline made its first flight to Egypt. Both of these low-cost airlines have partially resumed flights, focusing business on servicing tourist flows to accessible resort countries (Egypt, Turkey). In August 2020, SkyUp set a new record for the number of passengers carried in one month – 211,886 travelers vs 186,131 in 2019. In September, SkyUp carried 168,379 passengers vs 168,911 in 2019, including 29,689 on 232 scheduled flights and 138,690 on 772 charter flights.

On June 21-24, 2020, after a 3-month break, a number of leading scheduled and LCCs resumed flights between Kyiv and major cities in Europe and Asia. Subsidiaries Swiss Airlines, Austrian Airlines and Brussels Airlines of the German airline Deutsche Lufthansa AG, Turkish Airlines, and the largest European low-cost carrier Ryanair were the first to connect Ukraine and the EU. On July 08, 2020, Flydubai resumed flights on the Kyiv-Dubai route; on July 14, 2020, Air France resumed flights Kyiv-Paris 2 times a week vs 14 times in 2019; on August 18, 2020, SAS Scandinavian Airlines resumed the Kyiv-Oslo flight. On August 1, 2020 Turkish Airlines completely restored the pre-crisis route network from the largest airport in Turkey to six airports in Ukraine.

Fierce competition for dominance in the Ukrainian market between Ryanair and Wizz Air did not stop even in the midst of the COVID-19 crisis against the background of almost synchronous collapse of airlines geography and flight frequency.

In the summer of 2020, the competition between LCCs reached its peak in the direction of Italy. This is a promising market: the second largest diaspora of Ukrainians lives in Italy and this country is traditionally the leader among the destinations of budget travelers-Ukrainians.

In 2020, the authorities of Ukraine and Italy liberalized the flight market. LCCs Ryanair, Wizz Air, SkyUp and easyJet actively participated in the competition for a new niche. EasyJet soon left the competition due to price competition. And Ryanair and Wizz Air have implemented a policy of price war and direct duplication of more than 60% of routes. Ryanair was the first to embark on popular routes. But in August, it began to be actively pressed by Wizz Air, which opened its base in Milan. Parallel routes were launched from Kyiv to Rome, Milan, Bologna and Catania. In addition, Wizz Air has launched alternative routes to Venice and Naples. Also Wizz Air has launched parallel routes from Lviv to Rome, Milan, Verona and Catania. At the same time, Ryanair has already launched alternative routes to Venice, Naples, Pisa, Turin and Palermo, from Odessa – parallel routes to Rome, Milan and Bologna, from Kharkov – to Milan.

Additionally, Wizz Air connected Venice with flights to Kharkiv and Odessa.

Thus, Ryanair resumed almost 50% of its Ukrainian routes during the summer navigation season. Flights between the cities of Ukraine and Italy were especially popular among Ukrainians. Ryanair's route network, with the permission of the Italian aviation regulator ENAC, in July-August 2020 was expanded to 11 destinations, in which the low-cost operated 28 flights a week. Some of these flights were given by Ryanair management to a subsidiary of Malta Air, acquired in 2019.

In summer of 2020, Wizz Air, following its direct competitor in the Ukrainian market, resumed a flight program of 40% of the intensity before the COVID-19 crisis from the Kyiv and Kharkiv airports. Moreover, the Hungarian low-cost carrier opened a second base in Ukraine on July 1, 2020 with a location at Lviv International Airport, from where it launched 6 traditional (to Milan, Rome, Berlin, Gdansk, Katowice, Wroclaw, Pardubice, Bratislava) and 5 new flights to Lisbon, Billund, Tallinn, Hamburg and Szczecin. During the crisis of international air transportation, the airline has strengthened its popularity among a large segment of Ukrainian labor migrants.

The hard lockdown declared by Ukraine in September 2020 turned this page in the competition war. Due to the deteriorating epidemiological situation in the world since mid-September, Ryanair has reduced the flight network from Ukraine from 31 to 8 routes and reduced the frequency of flights. At the same time, Wizz Air has reduced more than 60% of summer navigation flights.

In general, from September 2020 to April 2021, European low-cost airlines re-reviewed flights and again reduced the number and geography of flights from Ukraine. For example, before the COVID-19 crisis, Ryanair operated 68 flights from Ukraine. In spring of 2020, the low-cost airline temporarily suspended flights. In summer, 26% of flights were resumed compared to 2019. And on October 15, 2020, Ryanair completely canceled 10 more flights from Ukraine, and postponed another 36 flights until March 2021. Cancellation of 46 flights out of 68 is a 75% reduction. In April 2020, the low-cost airline Wizz Air served only 6% of flights. In August, the Wizz Air resumed up to 80% of flights. In November, flights decreased to 21% compared to 2019 (Topalov, 2021).

Assessment of Post-COVID-19 Recovery of the Low-Cost Air Transportation Market in Ukraine in 2021

Since May 2021, the international air transportation market of Ukraine shows a statistical trend of recovery of passenger traffic on average higher than in most EU countries. Ukraine is the only one in the EUROCONTROL Member State Area, which recorded a positive increase in traffic in 2021 (Figure 10). Ukraine's neighboring countries show more critical indicators: Poland (-40.3%), Slovakia (-37.5%), Romania (-17.3%), etc.

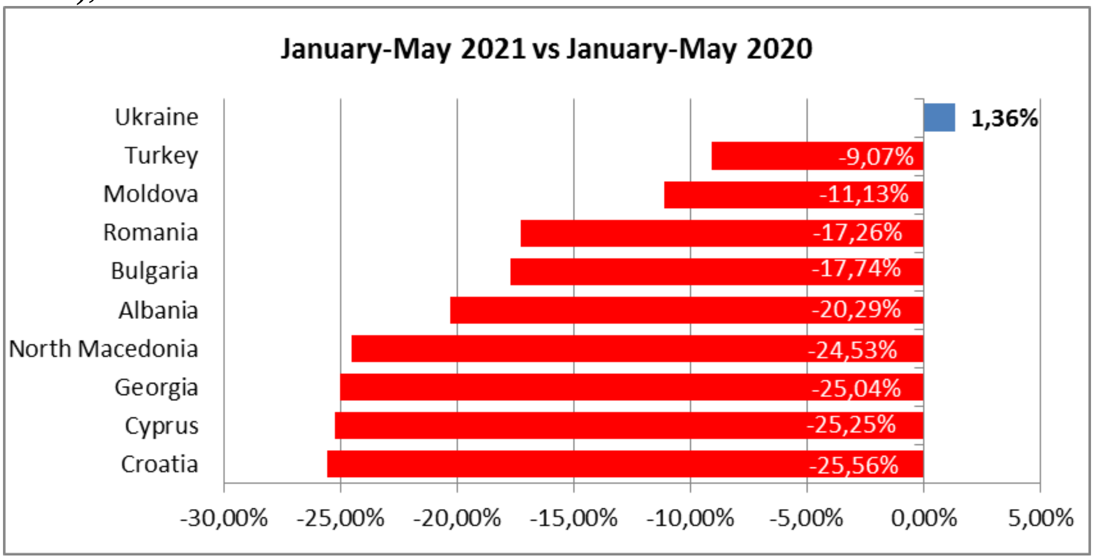

Figure 10. States (FIR) with the highest traffic growth in 2021
Source: https://ansperformance.eu/traffic/

In May 2021, the passenger air transport market showed a level of 60% of traffic in the same month of 2019. Such a high recovery rate took place even despite the fact that the powerful operator of the Belarusian and Russian markets Belavia came under sanctions and suspended flights in Ukraine.

In June 2021, Ukraine practically reached the pre-crisis level in the number of domestic flights – 2,965, which is only 2.6% less than in June 2019. The number of international flights amounted to 11,469, which is 27% less than before the crisis. The policy of closed borders in the EU aimed at counteracting the spread of COVID-19 still impedes transit traffic. In June 2021, 6,679 airplanes flew in transit through Ukraine, which is 60% less than in June 2019. In order to resume international transit as soon as possible, in 2021 Ukraine decided in principle to reduce twice the tariff for the flight over the Black Sea – from 51.1 EUR to 25 EUR per 100 km.

Kyiv, Dnipro, and Odessa entered the top 10 ACCs in the EUROCONTROL Member State Area with the highest traffic growth in January-May 2021 (Figure 11).

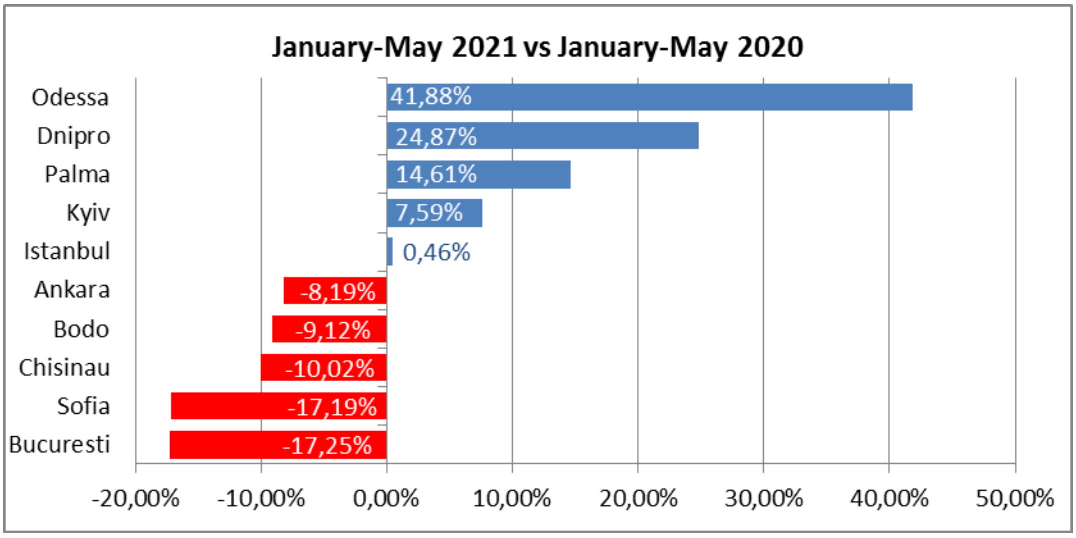

Figure 11. Area Control Centers (ACCs) with the highest traffic growth in 2021
Source: https://ansperformance.eu/traffic/

In 2021, Boryspil Airport began to restore passenger traffic through charters. In the first half of 2021, the hub served 3.4 million people (52% vs 2019). Given the restrictions on passenger traffic in a number of EU countries, the geography of flights from Boryspil has undergone significant changes. Thus, in May 2021, 65% or 460 thousand passengers went to Antalya, Sharm el-Sheikh, Hurghada, Istanbul, Ankara, Bodrum, Dalaman, Dubai, Tbilisi and Amsterdam.

Development of cooperation between the airport and airlines is the only guarantee of rapid post-COVID-19 recovery of business potential of partners. Lviv Airport is a good example of such cooperation. On June 22, 2021, the number of flights at Lviv airport exceeded the pre-crisis 2019 figure (Figure 12). Passenger traffic was restored by 62% vs July 2019.

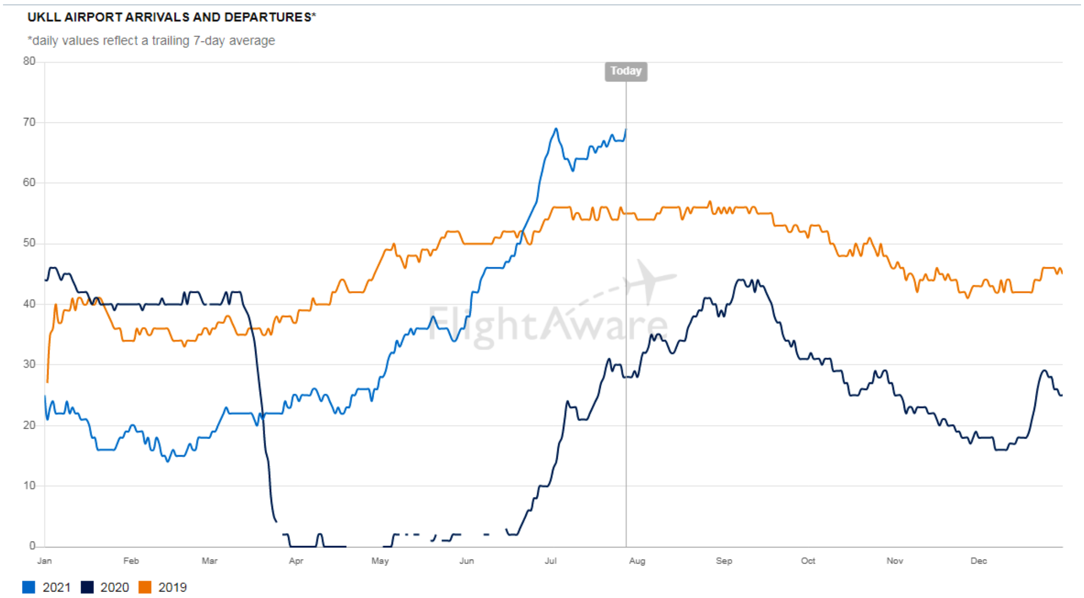

Figure 12. Dynamics of the number of flights served by Lviv International Airport in 2019-2021
Source: https://flightaware.com/live/airport/UKLL

One of the vectors of Lviv Airport's strategy is close cooperation with Ryanair and the development of Wizz Air's geography of flights. The second vector is increasing the intensity of passenger traffic with Turkey by deepening collaboration with Turkish Airlines and Pegasus Airlines. The third vector is the opening of the destination Ukraine for passengers of airlines in the Arab region.

Before the crisis, the ratio between Ukrainian citizens and foreigners on traditional scheduled and low-cost flights was about the same – 50% to 50%. Currently, 73% are foreign citizens, 27% – Ukrainians who have a residence permit or citizenship of European countries. (Exceptions are flights to Italy: due to the large Ukrainian diaspora in this country, on these routes most passengers are citizens of Ukraine.) The ratio has been dynamically equalizing since the summer of 2021, which is due to the mass vaccination of Ukrainian citizens.

EUROCONTROL experts predict generally positive scenarios for resumption of air traffic in Ukraine after the COVID-19 crisis (Figure 13). The trend of traffic recovery in Ukraine in 2021-2022 is higher than the EU average. By 2023, Ukraine has a chance to return to the pre-crisis level of 2019. Charter and low-cost airlines will play an important role in it.

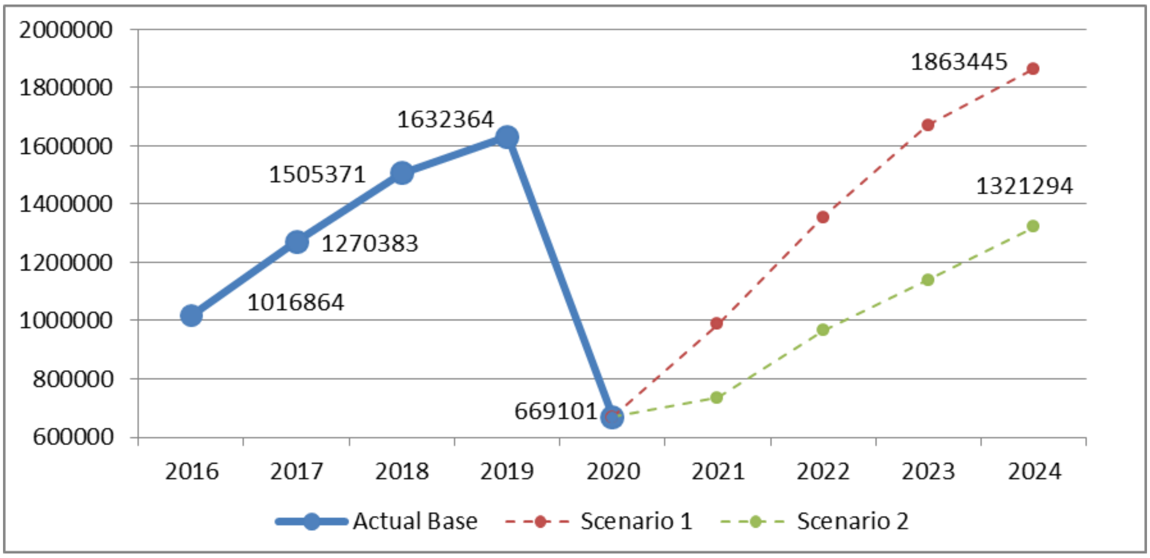

Figure 13. En-Route STATFOR Forecast 2016-2024 in Ukraine
Source: www.eurocontrol.int

The Top 10 aircraft operators in Europe on July 07, 2021 (daily flights) according to EUROCONTROL data included the most popular low-cost airlines, in particular, easyJet (+ 158% over 2 weeks), Wizz Air (+ 52%), Ryanair (+ 24%), Pegasus (+ 19%). European low-cost airlines are now operating 54% of 2019 flight volumes (Eurocontrol, 2021). European market leaders in 2021 take an active part in the competition for dominance in the airspace of Ukraine.

In 2021, COVID-19 restrictions on the access of air tourists to a number of countries in the world have made significant changes in the geography of flights of low-cost giants Ryanair and Wizz Air from Ukraine. For the period of winter navigation October 25, 2020 – March 28, 2021, due to the total lockdown low-cost flight programs were suspended for more than 60-70% of flights in a number of countries.

Demand market research has shifted vectors of business activity of air carriers from Western Europe to some countries of South-Eastern Europe, more accessible to unvaccinated tourists. At the same time, there is a tendency of competitive duplication of flights from Ukraine to a number of popular destinations in Western Europe. When launching new flights, the management of LCCs promptly monitors the situation with changes in the COVID status of countries (“red” or “green” zone).

In January 2021 Ryanair offered flights from Kyiv only to Berlin, Vienna and Valencia, in February – to London and Manchester, Madrid, Krakow, Poznan. Until the summer season, the LCC did not fly at all from the regional airports of Kharkiv and Kherson, and it left only two flights from Lviv to London and Bologna.

With the start of summer navigation in 2021, Ryanair launched 18 routes from Ukraine (6 of them to Gdansk, Katowice, Krakow, Poznan, Warsaw, Wroclaw, Poland, and traditionally popular flights to Rome, Bergamo, London and Berlin), another 37 routes started in June or July 2021. Now the Ryanair group, in addition to the Irish low-cost carrier, also includes Laudamotion in Austria, Buzz in Poland and Malta Air in Malta. In 2021-2023, as part of a strategy to diversify its activities, the group declared its intention to attract subsidiary brands to increase its market presence in Ukraine.

Wizz Air served 11-14 flights in the winter of 2021 and only in March began to actively increase the frequency and geography of flights. Wizz Air has declared ambitious development plans in the Ukrainian market for 2021. The low-cost carrier restarted 12 routes from Kyiv and five each from Lviv and Kharkiv. May 2021 Wizz Air ended with a resumption of passenger traffic at 73% (vs 2019).

In the summer of 2021, LCCs synchronously restarted direct flights from Kyiv, Lviv, and Kharkiv to Cyprus – a popular beach and resort destination for thousands of Ukrainians. Ryanair flies to Paphos, Wizz Air – to Larnaca.

In 2021, Wizz Air holds 26.6%, Ryanair – 16.2%, SkyUp – 28.6% of the LCCs market of Ukraine (Wizz Air, 2021). The base for Wizz Air in Ukraine is the airport "Kyiv". But on July 3, 2021, after a 10-year break, Wizz Air returned on a permanent basis to Boryspil Airport – the main aviation hub of Ukraine. Wizz Air Abu Dhabi, a subsidiary, has connected the capital of Ukraine with the UAE capital Abu Dhabi. Due to high customer demands for comfort, new Airbus A321neo aircraft are on the route. Wizz Air Abu Dhabi will compete with no less branded LCC Flydubai for customer loyalty in this direction.

By the end of 2021, the leaders of the low-cost airline market in Ukraine have declared their intention to open flights at a number of new airports in Zaporizhzhia, Dnipro, Vinnytsia, Chernivtsi, Uzhgorod, etc. (Ryanair, 2021; Wizz Air, 2021). In the conditions of crisis, an active phase of strategic redistribution between the European main low-cost airlines of the Ukrainian air transportation market begins.

Several well-known low-cost airlines in Europe and Asia in 2021 have declared their intention to enter and actively develop the Ukrainian market. Thus, from the summer of 2021, a new round of competition began in the Ukrainian sky between a group of leading players in the market (Ryanair, Wizz Air and Pegasus) and a group of novice airlines, which are just entering the market with quite attractive tariff strategies and flight geography. On June 1, 2021 Eurowings from Germany opened the sale of tickets for flights from Dusseldorf to Kyiv. Promo tickets are offered at a price of $ 49.99 one way at the Basic rate. Therefore, the airline has declared its intention to launch flights from several major cities in Western Europe to Boryspil airport by the end of 2021. On July 2, 2021, the Spanish Vueling resumed flights on the route Barcelona-Kyiv at a promo tariff of EUR 90 round trip.

In June 2021, SkyUp carried a record number of passengers since its inception, charter flights – 183,490, scheduled flights – 110,657. SkyUp also entered the Saudi market for the first time, where it competes with Flynas on flights to Kyiv and Lviv. In 2021, Bees Airline increased its fleet to four Boeing 737-800s. It operates flights from Kyiv, Lviv, Odessa, Kherson and Kharkiv. Along with regular flights to Bulgaria, Armenia and Georgia, Bees Airlines operates charter flights to the resorts of Antalya, Sharm el-Sheikh, Hurghada, Rhodes, Larnaca and others.

On 12 October 2021, Ukraine and the EU signed a Common Aviation Area (CAA) agreement. It will be a powerful positive impetus for market liberalization (Abate & Christidis, 2020) and a signal for all EU airlines to get involved in increasing traffic, and especially in the low-cost segment, between the EU and Ukraine.

CONCLUSION

COVID-19 crisis is not over yet. New aggressive strains, such as Delta, from the fall of 2021 threaten another mass disease and strengthening of quarantine restrictions. However, market demand for low-cost transportation remains consistently high (Czerny, Fu, Lei, Oum, 2021) as governments in a number of tourist countries seasonally open borders, ease COVID-19 formalities and encourage the arrival of foreign tourists.

Low-cost airlines have become an ideal alternative to transportation in the global economic crisis. It is especially relevant for Ukrainians, because it allows to travel even to those who have a relatively low income.

In recent years, the demand for air transportation for employment in European countries has been increased in Ukraine. The introduction of a visa-free regime with the EU has contributed to this. In addition, it affected foreign airlines – they began to significantly increase their presence in Ukraine. Factors of their successful functioning include low prices, a competent policy of obtaining additional income, a unified fleet consisting mainly of new aircraft, and the integration of modern technologies. Ukraine has remained attractive for foreign low-cost carriers, which is largely due to the favorable geographical location and moderate pricing of airports with developed infrastructure of some of them.

Due to the scale of the COVID-19 pandemic in Ukraine, in 2020, the EU Council several times (every 2 weeks) extended the travel ban for

Ukrainians on air travel in the EU. Continuation of the travel ban on January 30, 2021 canceled the business plans of Wizz Air and Ryanair for the resuscitation of the Ukrainian aviation tourism market in the first half of 2021.

In 2020-2021, the risks of business activity in the low-cost transportation segment increased the most. Investment risks of entering new markets in conditions of uncertainty are even higher. However, many low-cost airlines are willing to take risks. The reason is obvious: due to the COVID-19 crisis, new market niches of low-cost service have been vacated, which until recently were densely filled and distributed among the leading airlines with promoted brands. In such realities, the chances and potential benefits are commensurate with the potential threats. With the support of the government and the airports of a particular country, and given the conjuncture of its low-cost market, during the COVID-19 crisis for a number of airlines there were good chances to establish itself in the air transportation market of Ukraine and try to gain a foothold in this market.

In autumn of 2020 and winter of 2021, low-cost airlines maintained a minimal presence in the market of air services in the 4 largest cities of Ukraine – Kiev, Lviv, Odessa and Kharkiv. Thus, Ryanair has limited only 15 strategically important flights for its own business from Ukraine: from Kyiv to Vienna, Paphos, Malta (served by Air Malta), Berlin, London, Manchester, Krakow, Budapest, Valencia and Madrid, from Lviv to London and Bologna, from Odessa to Dusseldorf, Gdansk and Krakow.

In summer of 2021, traditionally, tourist activity intensifies. Low-cost airlines respond quickly to the COVID-19 pandemic in the world, monitor restrictions and situationally enter the market with new flights to countries that, in the hope of tourists, weaken the barriers of international air transportation.

Significant growth potential is concentrated on low-cost transit flights in the airspace of Ukraine. Their number decreased compared to 2013 due to the aggression of the Russian Federation, the temporary occupation of Crimea and hostilities in the east of the country. However, low-cost transit flights show a stable growth trend. For example, in recent years, the share of transfer passenger traffic at the main airport of Boryspil has been increased: 2015 – 21%, 2016 – 27%, 2017 – 28%, 2018 – 28%, 2019 – 29%. Prolonged political crises in the Russian Federation and Belarus leave the only comfortable transit corridor through Ukraine for a number of LCCs from Europe and Asia. Therefore, the intensity of low-cost traffic through Ukraine after the COVID-19 crisis will continue to grow steadily.

The success of foreign low-cost airlines in the Ukrainian market encourages national airlines to be more actively involved in this segment of international traffic. The first national low-cost airline SkyUp started its flight program in Ukraine, on the route Kyiv-Sharm el-Sheikh. On March 18, 2020, the newly established national low-cost airline Bees Airline made its first flight to Egypt. With the easing of international isolation restrictions and the relaunch of flights between individual countries on June 15, 2020, both of these low-cost airlines have partially resumed flights, focusing business on servicing tourist flows to accessible resort countries.

Signing of the Common Aviation Area Agreement between Ukraine and the EU opens the domestic Ukrainian market for European LCCs. It is one of the significant factors in reducing ticket prices. It will lead to more aircraft occupancy, which in turn will increase airport revenues. “Open Sky” is a powerful impetus to minimize the loss of the aviation industry due to the COVID-19 pandemic.

Thus, despite the COVID-19 pandemic, the instability of the military-political and economic situation in the country, forecasting of the future development of low-cost air transportation in Ukraine is optimistic. Ukraine’s passenger air transportation market has favorable preconditions for its recovery and successful development. First of all, it is due to the significant growth of popularity of passenger low-cost airlines, the entry into the airspace of Ukraine of new foreign low-cost airlines, the opening of new flights by Ukrainian low-cost carriers, a visa-free regime with EU, the modernization of the infrastructure of Ukrainian airports and their development taking into account modern ICAO requirements.

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KEY TERMS AND DEFINITIONS

Air Transportation: A method of transporting goods, mail and carrying passengers by aircraft. Air transportation is classified by direction, cargo category, type of loading, class of service, etc.

COVID-19 Crisis: A global complex crisis caused by the COVID-19 pandemic. The outbreak began in December 2019 in Wuhan (Hubei, China), and was recognized by the WHO as a pandemic on March 11, 2020. Air transportation has faced huge financial losses due to international quarantine measures.

European Common Aviation Area (ECAA): A single market in aviation services. ECAA agreements were signed on 5 May 2006 in Salzburg between the EU and some external countries. On 12 October 2021, Ukraine and the EU signed an ECAA agreement, as part of the 23rd Ukraine-EU summit in Kyiv.

Low-Cost Airline: An airline that operates with an especially high emphasis on minimizing operating costs, offers generally low fares in exchange for eliminating many traditional passenger services.

Low-Cost Carrier (LCC) Business Model: An economic model of passenger air transportation according to the following business formula: “low costs – low fares – high demand – high incomes”. Key elements of LCC business model in today’s conditions there is one class of service, simple tariff structure with limited differential services and there is no practice of return money for an unused ticket and rebooking services.

Pre-COVID-19 Era: A period of stable dynamic development of the global (including European) air transport market by scheduled and low-cost airlines in the 21st century (except for the collapse of 2008 due to the financial crisis), which lasted until March 2020, that is, before the global COVID-19 crisis.

Post-COVID-19 Recovery: A period of recovery of the potential of the global and regional air transportation markets by scheduled and low-cost airlines after the lifting of quarantine travel restrictions imposed by governments around the world in 2020-2021 to counter the spread of the COVID-19 pandemic.

Ukraine's LCC Market: One of the most promising markets for LCCs, given the number of the country's economically active population, as well as the dominance of the destinations in the EU in the ranking of tourist and personal air transportation of Ukrainians.