ACTIVITIES OF UKRAINIAN AIRLINES IN THE CONDITIONS OF WAR: STATUS AND PROSPECTS OF DEVELOPMENT

ДІЯЛЬНІСТЬ УКРАЇНСЬКИХ АВІАКОМПАНІЙ В УМОВАХ ВІЙНИ: СТАН ТА ПЕРСПЕКТИВИ РОЗВИТКУ

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The article is devoted to a comprehensive analysis of the functioning of the aviation industry of Ukraine in the pre-war period and during the war, as well as prospects for its development in the post-war period. The paper examines how the COVID-19 pandemic has affected the airline industry, causing a sharp drop in demand for air travel, which in turn has forced airlines to reduce flights, curtail routes and even suspend operations. Attention is focused on the structure of the aviation market of Ukraine, the activities of the main airlines and their financial results in the pre-war period. The impact of the war on the business models of Ukrainian airlines is being studied, as well as the strategies they have used to maintain competitiveness in the passenger transportation market. Forecasts regarding the recovery of passenger traffic and the air transport market in Ukraine in the context of global economic recovery are considered. Based on this analysis, the article offers recommendations for Ukrainian airlines aimed at adapting to new conditions, increasing competitiveness, and realizing the potential for business recovery after crisis periods.

Keywords: *airline, tourism, instability, forecast, sustainable development, innovative solutions.*

Стаття присвячена дослідженню функціонування українських авіакомпаній у довоєнний період та в умовах війни, а також визначенню перспектив їх розвитку у майбутньому. Аналізується вплив глобальних та локальних факторів, таких як пандемія COVID-19 та війна в Україні, на авіаційну галузь, вивчаючи як змінились операційні стратегії авіакомпаній та, які заходи були вжиті для адаптації до нових умов. Важливим аспектом дослідження є порівняння українського авіаринку з іншими країнами, де ситуація була менш драматичною або зростала на фоні зниження економічної нестабільності. Акцентовано увагу на структурі авіаційного ринку України, діяльності основних авіакомпаній та їх фінансових результатах у довоєнний період. Окрему увагу приділено стратегіям, які використовували українські авіакомпанії для збереження конкурентоспроможності на ринку пасажирських перевезень у важкі часи пандемії та війни. У статті розглядається вплив війни на бізнес-моделі українських авіакомпаній, де деяким довелося адаптувати свої стратегії, змінивши або скоротивши пропозицію маршрутів, скоротивши персонал або навіть змінивши парк. Проте, незважаючи на численні труднощі, українські авіакомпанії продовжують шукати можливості для зростання та розвитку. Особливу увагу приділено перспективам розвитку авіаційного ринку України після закінчення війни. У статті зазначено, що серед ключових факторів, які сприятимуть відновленню ринку авіаперевезень після війни, є стабільність політичної ситуації, інвестиції в розвиток авіаційної інфраструктури, оновлення парку літаків та впровадження інноваційних технологій. Розглянуто прогнози щодо відновлення пасажиропотоку та ринку авіаперевезень в Україні в умовах відновлення світової економіки. На основі проведеного аналізу, у статті запропоновано рекомендації українським авіакомпаніям щодо адаптації до нових умов, підвищення конкурентоспроможності та реалізації потенціалу відновлення бізнесу. Результати дослідження свідчать про можливість поступового відновлення українських авіакомпаній, де для цього необхідно здійснити низку заходів, зокрема зміцнення внутрішніх ресурсів, підвищення безпеки авіаперевезень, оновлення інфраструктури аеропортів та залучення інвестицій у розробку нової авіаційної техніки.

Ключові слова: *авіакомпанія, туризм, нестабільність, прогноз, сталий розвиток, інноваційні рішення.*

General problem statement. Airline operations have undergone significant changes under the influence of both global and local events. At the global level, the COVID-19 pandemic has become one of the main factors that have forced the aviation industry to significantly adjust its operational strategies. Border closures, flight restrictions and reduced passenger traffic have caused huge financial losses for many airlines, forcing them to adapt to new conditions. In response, airlines have been forced to optimize their routes, reduce the number of flights and introduce new security measures, including mandatory health checks and quarantine restrictions for passengers.

On the other hand, at the local level, the influence on the activities of airlines depends on the economic situation in specific regions, changes in the demand for air transportation, and national strategies for the development of transport infrastructure. For example, countries with active vaccination programs and rapid economic recovery were able to return to normal levels of air travel more quickly, while others that faced prolonged lockdowns or economic hardships were more severely affected. It is worth noting that countries in which tourism is defined as a priority direction of the country's development and a source of filling the budget have better adapted to the pandemic, minimizing its impact (for example, Turkey, Egypt, Greece). One of the great challenges facing the aviation industry today was the war in Ukraine, which led to great losses, significant destruction and damage.

Analysis the last one's research and publications. The question of the functioning of the passenger air transportation market is covered quite widely in the publications of the scientific community. The global approach to air transport management is reflected in the work of J. Wensveen [1], as well as the diagnosis of the influence of external environmental factors is actively discussed in the works of X. Wu & A. Blake (COVID-19) [2], P. Ansell (constancy) [3], S. Gössling, S. Dolnicar (impact of climate) [4], C. Chu et al. (impact of war) [5]. Special attention is paid to the problems of the functioning of airlines, which is emphasized by N. Pohuda et al. [6], T. Prymak et al. [7], O. Ovsak et al. [8], which highlights both the peculiarities of their functioning and the prospects for the development of Ukrainian airlines. However, the issues of the activities of Ukrainian airlines in wartime conditions remain insufficiently disclosed

Formulation of the article's purposes. Accordingly, the purpose of the article is to study the functioning of Ukrainian airlines in the pre-war period and during the war, with the determination of possible prospects for their development in the future.

Presentation of the main material research. In today's environment, airlines actively invest in technologies to improve the customer experience, in particular in the automation of boarding processes, digital documents and new forms of contactless service [9]. In addition, the growing popularity of environmental initiatives and the reduction of CO_2 emissions has led to the development of "green technologies", such as the introduction of new green aircraft, alternative fuels and more efficient routes to reduce emissions. Airlines are also affected by changes in global geopolitical situations, which lead to route adjustments, demand shifts in different regions, and additional restrictions. For example, political instability or sanctions may force air carriers to change flight routes or stop flights to certain countries. However, one of the most important factors is war, which affects the activities of all business entities, especially airlines.

Current trends indicate that the number of flights is increasing every year for both passenger and cargo transportation. The recent development of the aviation industry, given the consequences of the pandemic, can be explained by a combination of rising living standards and a decrease in the cost of air travel. Although North American and European airlines currently dominate in terms of revenues and the number of passengers carried, it is expected that the greatest growth in the future will occur precisely in the markets of Asia [10]. The forecast data of the IATA, where regional distribution in 2024 the passenger air transport market developed at the fastest pace in the Asia-Pacific region – 17,2%, which will continue in the coming years (Fig. 1).

It is worth noting that the impact of environmental factors on the aviation industry has always been quite noticeable, evidence of which can be considered the period of recovery after the impact of the relevant factor, for example, war or crisis. Based on information from the IATA [11], the COVID-19 pandemic over the past 35 years has had the greatest negative impact, which was reflected in the recovery period of the industry (Table 1).

As a result of the war, and as a result of the closure of the airspace of Ukraine, air transportation experienced a decrease in European passenger traffic by 3,3% and 0,8% in world traffic in 2021 [12].

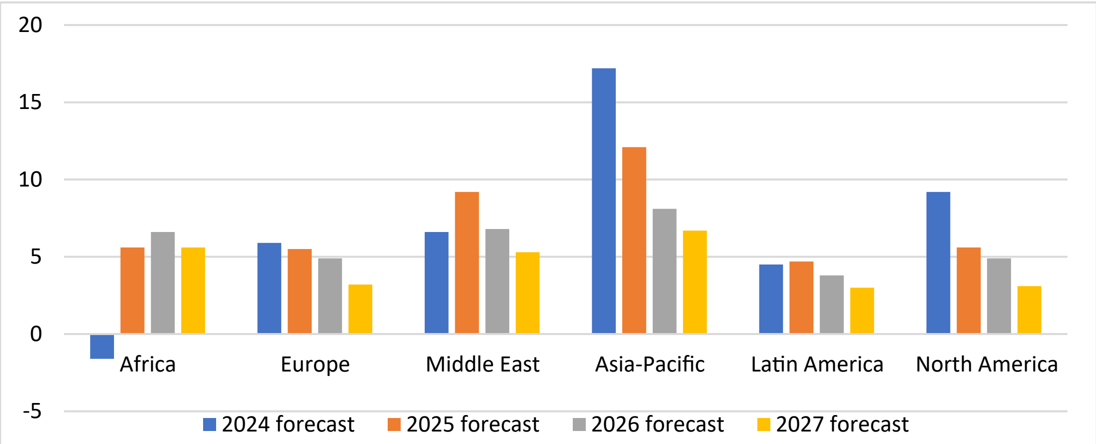

Figure 1. Estimated rates of growth in the number of air passengers, % [11]

Table 1

Recovery of the global aviation industry after the impact of environmental factors [11]

Event	Year	Recovery, months
Gulf War	1991	11
September 11 attacks	2001	16
Global financial crisis	2008	19
COVID-19	2020	48

According to forecast data of the Airports Council International (ACI) [13], in 2023 the international market of passenger air transport showed qualitative growth, where in 2024 global passenger traffic, while not reaching pre-pandemic levels, was still 4% higher than pre-pandemic, indicating a successful recovery of the transport industry after COVID-19. Despite the improvement of the macroeconomic situation in the world in 2024, in particular, the reduction of inflationary pressure, the aggravation of geopolitical conflicts, problems in the labor market and restrictions on the supply of aircraft have gained considerable importance. At the same time, improvements in passenger air traffic and airlines' return to profitability point to positive trends, with travel spending still higher than pre-pandemic levels and uncertainty over global trade policy rising significantly. Forecasts based on various development scenarios in the next 5 years indicate an improvement in the overall market situation (Fig. 2).

If we evaluate the activity of airlines, then from the position of the number of flights performed by the world representatives of the aviation industry during 2004–2024, qualitative growth in passenger demand for aviation services can be observed (Fig. 3), where, according to trends, further annual growth of 5.6 million is expected flights.

In 2024, the leadership among representatives of the aviation industry in the world was held by the leading American airlines, where according to the value of the brand, the first positions were occupied by Delta, American Airlines and United Airlines [14], which were recognized as the most expensive since 2017. In terms of the number of transported passengers in Europe, Ryanair took the lead in 2024, having carried out almost 96,000 flights per year flights [15].

It is worth pointing out the fact that the war in Ukraine had a rather negative impact on Ukrainian airlines, but certain positive changes have taken place among representatives of neighbouring countries. In particular, the war created both challenges and opportunities for air service providers in Eastern Europe. For example, Poland has seen an increase in the number of flights, including passenger, cargo and military flights, which has prompted investment in new equipment and the hiring of additional staff. In 2023, the Euro Jet company noted an increase in the number

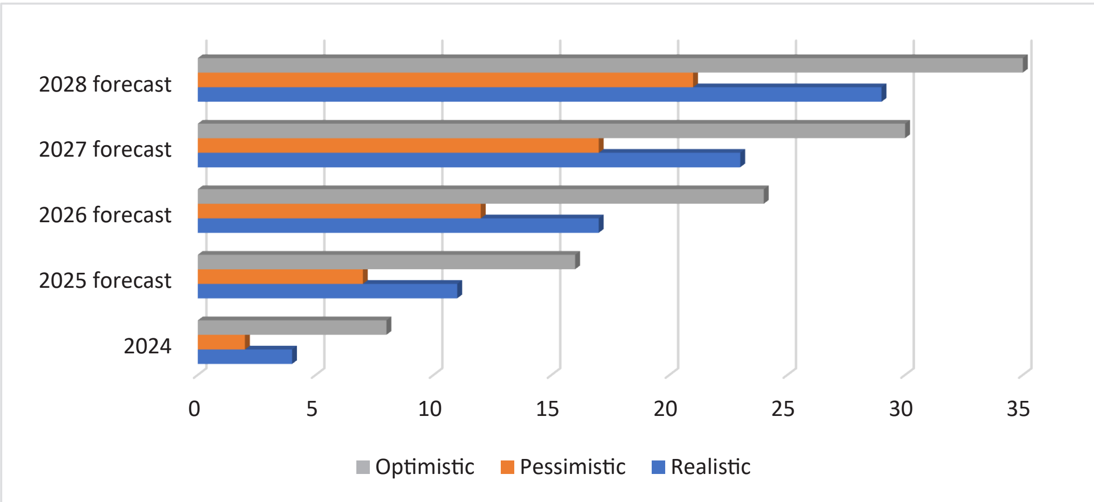

Figure 2. Forecast scenarios for the development of the world passenger air transport market, % relative to 2019 [13]

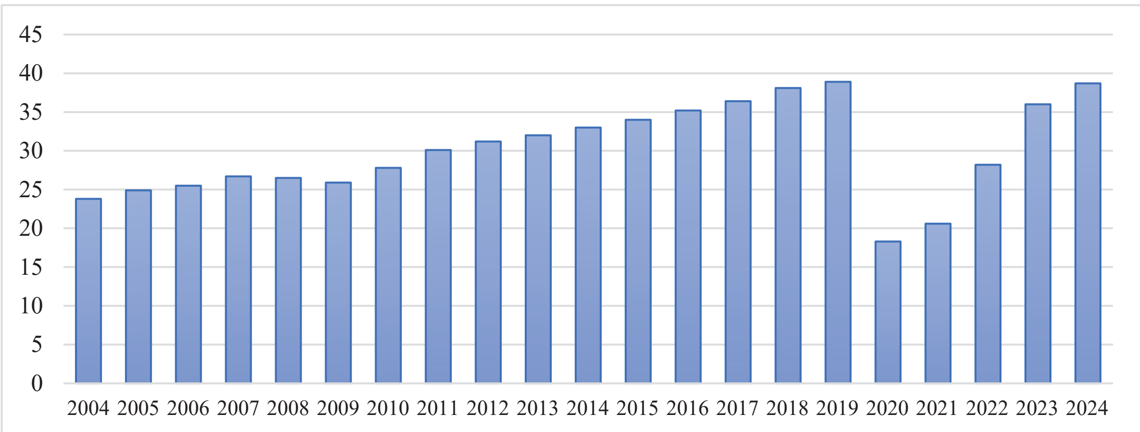

Figure 3. Dynamics of the number of flights performed by international airlines in the world, mln [10]

of business aviation flights in Poland and Hungary, as well as the reorientation of flights that previously went to Ukraine to Polish airports. Traffic to Rzeszów increased significantly, which required operational measures to expand infrastructure and personnel to ensure high-quality service [16].

Analyzing the activities of Ukrainian representatives of the aviation industry in the pre-war period, it is appropriate to consider the main players who provided services, their main indicators of activity in this period and possible directions of their development. In 2017, the number of Ukrainian airlines was 18, of which 6 were the main market players, where in 2021 their number decreased to 16, of which 4 key players accounted for 93% of passenger traffic. The TOP-5 Ukrainian airlines during 2018–2021 by the number of realized flights are presented in the Table 2.

Evaluating the structure of air transport in Ukraine during 1993–2021, there was a preponderance of foreign airlines operating flights compared to Ukrainian ones (Fig. 4).

As shown in Fig. 4, precisely with the beginning of hostilities in the East of Ukraine and Crimea, the share of flights by Ukrainian airlines increased significantly in the following years, which can be considered one of the indicators of the future development of the aviation and tourism industry after the end of the war.

The intensity of air traffic in 2022 before the start of the war was characterized by a significant amount of traffic, where almost 31 thousand were realized flights, of which 15 818 were international, 3943 – domestic, and 11143 were transit [17]. During January–February 2022, the largest shares in the airspace of Ukraine in terms of the number of realized flights were occupied by: Ryanair – 16,9%, Wizz Air – 11,5%, SkyUp – 9,7%, Ukraine International Airlines – 9,5%, Turkish Airlines – 8,7%, Bees Airline – 4,6%, LOT Polish Airlines and Pegasus Airlines with 3,1% [19].

With the beginning of the war, Ukrainian airlines were forced to stop all flights over the territory of Ukraine, and flights in other countries were not allowed by the current legislation of the European Union. Airlines had the right to transport passengers only between Ukraine and other countries, without the possibility of carrying passengers from other countries. This led to the fact that some airlines went bankrupt, some suspended operations, and others radically changed the business model of their operations.

In 2023, three Ukrainian airlines continued to operate, namely SkyUp, Windrose and Skyline Express (previously known as Azur Air Ukraine), but abroad [19]. The main destinations served by the Skyline Express airline in the specified period were Bulgaria, Egypt, Greece and Turkey. SkyUp flew both under its own brand and performed charter flights for the airlines of Egypt, Moldova, the Netherlands and Turkey. In both 2023 and 2024, Windrose continued operations, expanding its presence both domestically and internationally. Among the key changes that took place in the airline after the start of the war, were the

Table 2

Leading airlines of Ukraine by number of flights [17]

TOP airlines	Number of completed flights, thousand			
	2018	2019	2020	2021
Ukraine International Airlines	61,691	58,772	14,406	> 20
SkyUp (since 2017)	–	10,631	8,434	> 16
Windrose	9,301	10,185	8,511	> 15
Azur Air Ukraine	4,859	7,229	4,663	> 8,5
Bees Airline (since 2019)	–	–	–	< 3,5

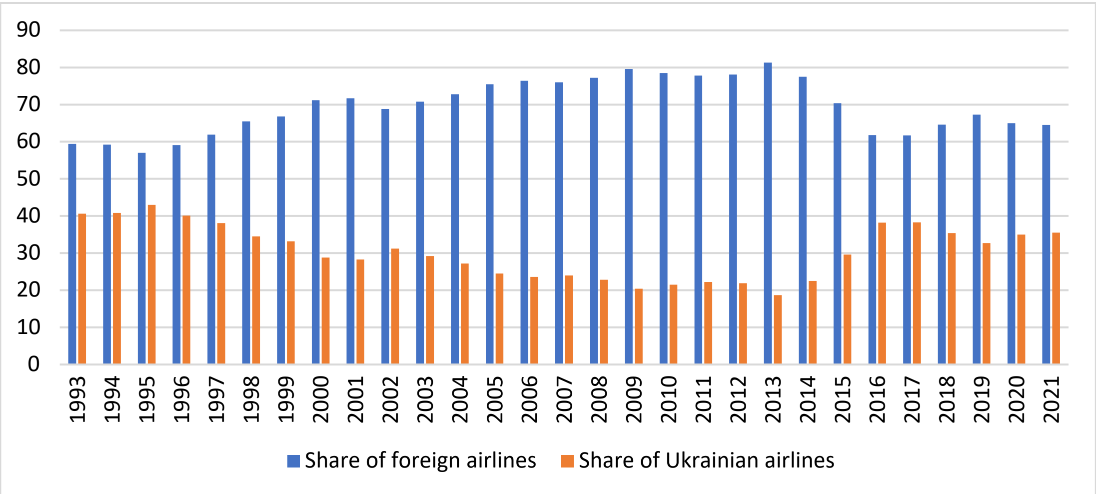

Figure 4. Distribution of air traffic in Ukraine by airlines, % [18]

Table 3

The level of revenues of the leading airlines of Ukraine, mln UAH [21]

Airline	2021	2022	I-III quarter 2023
Ukraine International Airlines	9284,5	1755,9	5,3
SkyUp	7695	2756,8	3233,8
Windrose	4559,4	772,1	719,5
Skyline Express	3846,4	527,5	368,9
Bees Airline	1531,4	267,6	9,5

inclusion of new aircraft from Ukraine International Airlines.

In 2024, the SkyUp airline also continued its activities, modifying the business model to meet new market requirements. As of October 2024, the airline performed 6,502 charter flights, provided services to more than 1 million passengers. passengers who travelled to 67 countries [20]. The main emphasis included the execution of flights for other air carriers under the relevant ACMI contracts. Evaluating the performance of Ukrainian airlines through the lens of revenue, it was SkyUp that was the most successful at the end of 2023 (Table 3).

According to the forecast data of IATA [22], the demand for air transportation is expected to grow, which is also reflected in the indicator of net income per 1 passenger, where the highest level in 2024 and the forecast year 2025 was noted in the Middle East region – 23,1 and 23,9 dollars in accordance. In general, the average value from 6.4 dollars. will be increased to 7 dollars. net profit per airline passenger. It can be assumed that the airline industry in the coming years expects a certain improvement in the growth of passenger volumes in various regions of the world, which is also explained by the effect of delayed demand caused by the pandemic. Therefore, Ukrainian companies, possessing a significant number of planes and offers, are quite competitive in the passenger air transportation market, which will require flexible actions regarding further functioning and development in the future.

Prospects for the development of Ukrainian airlines in the future depend on several key factors. First of all, it is the stability of the situation in the country and the restoration of the airport infrastructure. In addition, investments in the renewal of aircraft fleets and the introduction of the latest technologies to ensure flight safety will play an important role. Given the growing demand for domestic transportation and the gradual resumption of international flights after the war, Ukrainian airlines can expect to gradually increase their market share if they can compete effectively on price and service quality.

Conclusions. The results of the conducted research indicate the gradual recovery of the aviation industry in the world, despite the challenges of the external environment. The considered development scenarios testify to the growing role of the Asia-Pacific region as one of the promising tourist destinations, where airlines also play an important role. The analysis of the activity of Ukrainian airlines showed a positive trend towards an increase in demand for relevant services. Despite the difficult conditions of the war, Ukrainian airlines have the potential for recovery and further development, in particular thanks to innovative approaches, flexibility in responding to challenges and significant support from the state and international partners.

Overall, airlines that can adapt to changing market conditions, invest in new digital and green technologies, improve passenger service and ensure effective cost management will benefit the airline industry in the coming years. Companies that will be able to implement innovative solutions to improve the safety, ecology and sustainability of tourism, as well as be ready to be open and transparent in all areas of activity, have every chance to strengthen their positions and ensure stable financial growth.

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