International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2024: 2.102

Air Passenger Market Analysis of International Airports of Georgia (2018-2023)

Otar Anguridze[1], Demetre Kokashvili[2], Ani Maisuradze[3]

[1]Associate Professor, Georgian Aviation University, Tbilisi.

[2]Air Transport Management Bachelor's Student, Georgian Aviation University, Tbilisi.

[3]Air Transport Management Bachelor's Student, Georgian Aviation University, Tbilisi.

Abstract: ***This research delves into the transformation of Georgia's aviation sector, tracing its path from pre-pandemic stability to the profound impacts of the COVID-19 crisis and its subsequent recovery. The study examines the role of key international airports - Tbilisi, Kutaisi, and Batumi - and the influence of low-cost carriers, particularly Wizz Air, in driving passenger traffic growth. As Georgia's aviation market experienced a shift due to geopolitical tensions and the pandemic, passenger services sharply declined, with Kutaisi Airport halting operations for months. Yet, 2021 marked a turning point, with a 67% increase in passenger traffic, facilitated by expanded flight routes to Europe and Asia. By 2023, Georgian airports had fully rebounded, with passenger services up 36%, driven by new routes. Kutaisi Airport, in particular, emerged as one of Europe's fastest-growing airports, reflecting Georgia's broader aviation growth. With the country's strategic location and expanding tourism sector, Georgia's aviation industry is now a vital driver of economic development. The government's initiatives to expand and build new airports further reinforce the sector's potential, positioning it as a cornerstone for the future of the Georgian economy.***

Keywords: Air Passenger Market; International Airports; Georgia; Passenger Traffic; Market Analysis.

1. Introduction

Air transport holds a significant place in the global economy. In the era of globalization, the constantly increasing demand for air transport creates opportunities for the stable development of this sector. However, it is also undeniable that the aviation sector is one of the most volatile and sensitive industries amid international crises.

For many decades, air transport was dominated by states, which controlled all aspects of the sector. In many countries, there was a practice of maintaining loss-making routes due to national interests, while high-demand flights were often neither developed nor operated. Consequently, international tourism experienced very low growth rates. Tickets were relatively expensive, and air travel was considered an elite mode of transport accessible to only a few (Zajac, G. 2016).

The global airline industry was valued at $724 billion USD in 2022 (IbisWorld). It cannot be considered in isolation as an economic sector because it is interconnected with practically every sector of the economy. In this regard, it can be said that the aviation industry is characterized by very high inclusivity within the economy, affecting each citizen's awareness and development.

According to IATA (2023, December) statistical data, the aviation industry's revenues in 2022 amounted to $736 billion USD, with passenger services generating $436 billion USD. This indicates that consumer behavior significantly influences the revenue dynamics of airlines. From 2010 to 2019, the number of international air transportations consistently increased, with an average annual growth rate of 6.07% (ICAO).

The air transport industry in Georgia is characterized by high potential, primarily due to its geographical location in the region. However, it is evident that Turkey is the largest player in the aviation market in our neighborhood, as demonstrated by the capabilities of its airlines, with Turkish Airlines being a leading company and Istanbul Grand Airport (IST) being one of the world's largest airports, having an annual passenger capacity of 200 million (www.istairport.com). Additionally, Turkey has the second-largest airport, Sabiha Gökçen International Airport (SAW), which had a passenger flow exceeding 37 million in 2023 (www.sabihagokcen.aero). In terms of regional competition, Baku's Heydar Aliyev International Airport (GYD) also plays a role, with an annual capacity of 9 million passengers and a passenger flow of 5.8 million in 2023 (https://www.asec.az).

The role of the air transport industry cannot be considered solely from an economic outcome perspective. Air transport contributes to the improvement of quality of life, which may not always directly impact economic indicators but plays an indirect yet significant role in sustainable development, long-term issue support, and consumer choice formation, among other factors.

Air transportation is essential in supporting sustainable development and advancing international tourism (Forecasting, O. E. 2005). Tourism contributes to the reduction of poverty, stimulates economic growth, decreases unemployment, and increases budgetary revenues, among other benefits.

The increase in tourist flows, which generates economic growth, can have a positive impact on the creation of new jobs in the region. In addition to jobs directly related to aviation, the impact is reflected in higher employment in integrated supporting sectors. For example, large arrivals require larger hotel capacity and transport services. These job opportunities often offer economic advancement for local populations and contribute to reducing unemployment rates in regions dependent on tourism (Tribe, 2020).

It is noteworthy that the pandemic has left a significant mark on the development of the aviation sector. According to ACI EUROPE (www.aci-europe.org, 2023), global passenger transport is expected to recover in 2024, reaching 9.4 billion passengers, up from 9.2 billion in 2019. Pre-COVID forecasts had predicted 10.9 billion passengers in 2024, indicating a potential loss of 13.9% due to the pandemic.

2. Overview of the Georgian Aviation Industry

In Georgia's international airports, both Georgian and foreign airlines operate regular and irregular (charter) flights. The frequency of flights by airlines in the Georgian aviation market largely depends on the navigation season. In Georgia, the navigation period is divided into two segments: the winter navigation period, which spans five months (November - March), and the summer navigation period, which extends over seven months (April - October). Seasonality influences airlines to adjust the frequency of flights on certain routes and to modify aircraft types to accommodate varying passenger volumes.

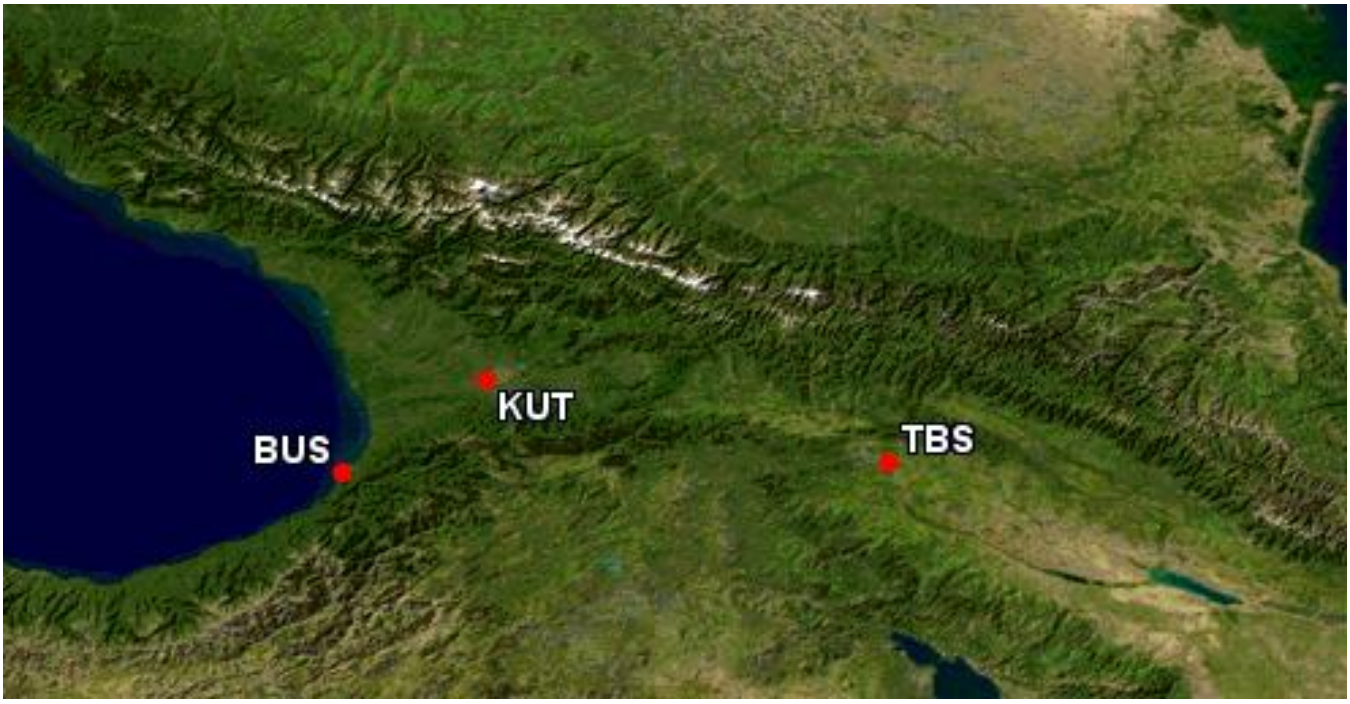

Figure 1.0: The Geographical Locations of Georgia's International Airports
Source: Great Circle Mapper

The flight schedules of airlines operating at Georgia's three international airports—Tbilisi Shota Rustaveli International Airport (TBS), Kutaisi David the Builder International Airport (KUT), and Batumi Alexander Kartveli International Airport (BUS)—are determined by factors such as frequency changes and aircraft capacity adjustments. This includes the operation of wide-body or narrow-body aircraft depending on demand.

It is also noteworthy that the Georgian aviation market is served by both full-service carriers (FSCs) and low-cost carriers (LCCs).

Airlines operating from Georgia's three international airports offer their passengers the option to utilize hub airports and point-to-point airports, depending on the passenger's preferences and the service offerings of the air carrier.

Georgia has an open skies policy with 32 countries and a visa-free regime with up to 100 countries, which enhances travel opportunities and is directly linked to the annual increase in passenger service numbers (Diplomat, 2023).

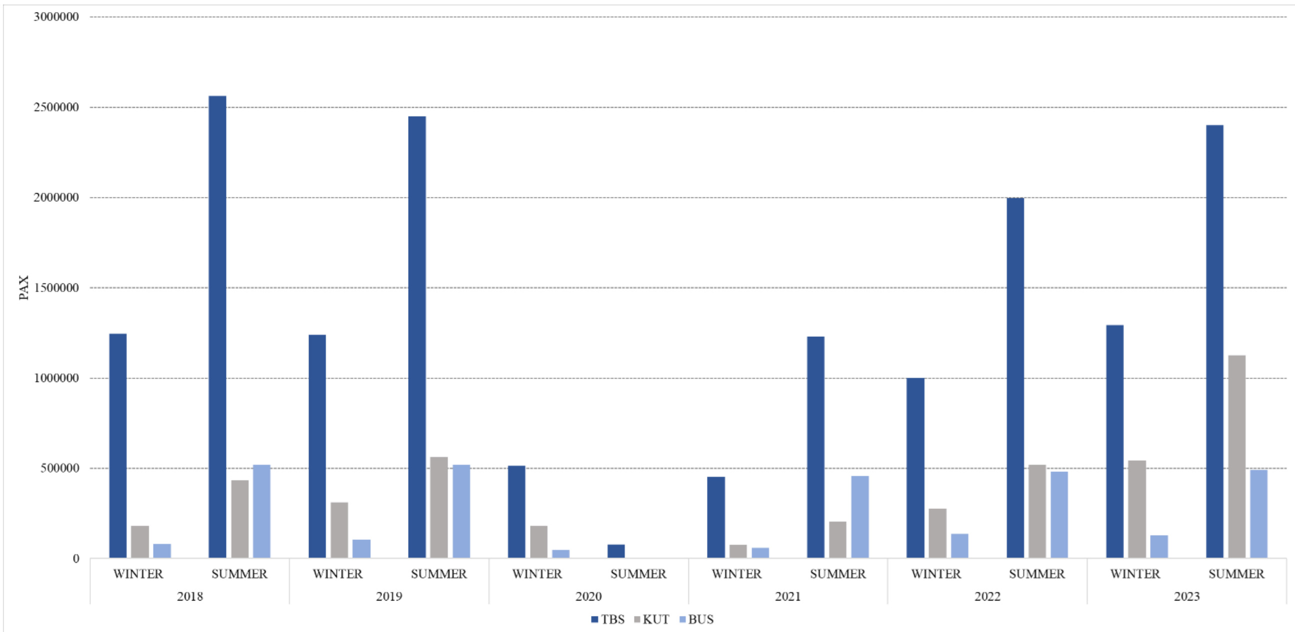

Figure 1.1: The Dynamics of Passenger Traffic at Georgia's Three International Airports Based on Navigational Seasonality (2018-2023)
Source: Georgian Civil Aviation Agency

Figure 1.1 presents data illustrating the six-year dynamics of passenger service from 2018 to 2023 at Georgia's three international airports, categorized by navigation season. Based on this data, it can be observed that the number of passengers transported during the summer navigation season significantly exceeds the total number of passengers served during the winter navigation season. This disparity can be attributed to the higher volume of international tourist flows during the summer season, which reflects a sustained international presence in Georgia.

Analysis of the Percentage Share of Passenger Traffic at Georgia's International Airports

The analysis of passenger service data from 2018 to 2023 reveals that during this six-year period, Tbilisi International Airport served 16.5 million passengers, Kutaisi International Airport served 4.4 million passengers, and Batumi International Airport served 3.0 million passengers (see Figure 1.2).

It is significant that Tbilisi and Batumi International Airports are managed by a private company, TAV Airports Holding, which is based in Turkey and entered the Georgian market in 2005. With the assistance of this company, both airports together served a total of 19.5 million passengers over the six-year period, accounting for 82% of the total market. In contrast, Kutaisi International Airport, which is state-owned and managed by United Airports of Georgia, served 4.4 million passengers during the same period, representing 18% of the market. In recent years, Kutaisi International Airport has experienced rapid growth and is currently one of the fastest-growing airports in Europe among those serving fewer than 5 million passengers annually, according to ACI EUROPE (Diplomat, 2023).

It is also interesting to note that the passenger service dynamics of Tbilisi and Batumi International Airports in 2023 decreased by [-2%↓] compared to 2018, whereas Kutaisi Airport saw a substantial increase of [171%↑]. This information clearly reflects the rapid growth of the state-owned airport in terms of passenger service, maintaining an average annual growth rate of 30% over the five-year period. However, this trend is not observed in the privately managed airports (Diplomat, 2023).

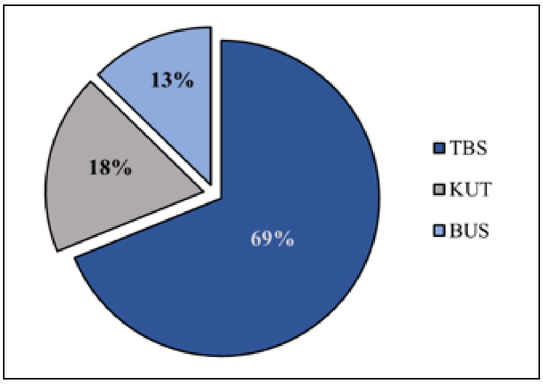

Figure 1.2: Percentage Dynamics of Passenger Services by Airport (2018-2023)
Source: Georgian Civil Aviation Agency

The increase in passenger service data at Kutaisi International Airport is influenced by various factors. One key factor is the entry of the low-cost airline Wizz Air into the Georgian market in 2016, which has played a significant role in the growth of the aviation sector (drifttravel.com, 2023). Naturally, the majority of the population in a developing country prefers to use low-cost airlines, which offer lower air ticket fares. Unlike Tbilisi and Batumi International Airports, Kutaisi International Airport offers lower airport charges to its operating airlines, which is directly related to ticket pricing. The numerical growth of passengers at Kutaisi International Airport is also driven by approximately 30 direct flights connecting Kutaisi with European and Middle Eastern cities, which are generally not available to passengers traveling directly from Tbilisi and Batumi International Airports.

One of the facilitating factors for the growth of Kutaisi International Airport's data is its geographical location, which has become a basis for tourism development and provides tourists with greater opportunities to travel throughout all regions of Georgia. It is also noteworthy that Wizz Air has thoroughly researched the Georgian market, specifically passenger behavior and their needs. The airline has connected Kutaisi International Airport with cities that have religious or historical ties to Georgia. Additionally, the factor of emigration plays a significant role in the airline's service objectives, linking Georgia with countries where emigration is notably high, such as Greece, Italy, Poland, and Germany. Furthermore, in response to the demands of the leisure passenger segment, which the airline focuses on, it offers flights to the most popular tourist cities, with routes varying according to navigation seasons. Figure 1.5 illustrates the significant share of Wizz Air in the Georgian air market over the years.

To examine the quantitative dynamics of passenger service at Georgian airports in greater detail, Figure 1.3 will be useful. As illustrated in Figure 1.3, the quantitative passenger service indicators for 2019 showed an increase compared to 2018 at Kutaisi (42%) and Batumi (4%) International Airports. In contrast, Tbilisi International Airport experienced a decline (-3%), primarily attributed to the suspension of flights between Georgia and Russia. This is further supported by the decrease in the market share of Russian-registered airlines in the Georgian aviation sector.

At Tbilisi International Airport, the share of Russian airlines (Ural Airlines, Aeroflot, S7 Airlines, Pobeda Airlines, Red Wings, Severstal Airlines, Nordavia, UVT Aero) has consistently exceeded that of other international airports in Georgia. Consequently, the suspension of flights to Russia has led to a marked change in the aviation market indicators. In 2018, Russian airlines accounted for 19% of the Georgian aviation market, whereas this share decreased to 11% in 2019. Additionally, according to Figure 1.5, Ural Airlines was one of the major carriers in the Georgian aviation market in 2018.

Between 2018 and 2019, Georgian Airways, a Georgian airline, also operated flights to Russia. The data, when combined with those of the Russian airlines, indicate that the total volume of passenger services to Russia far exceeded the figures previously mentioned.

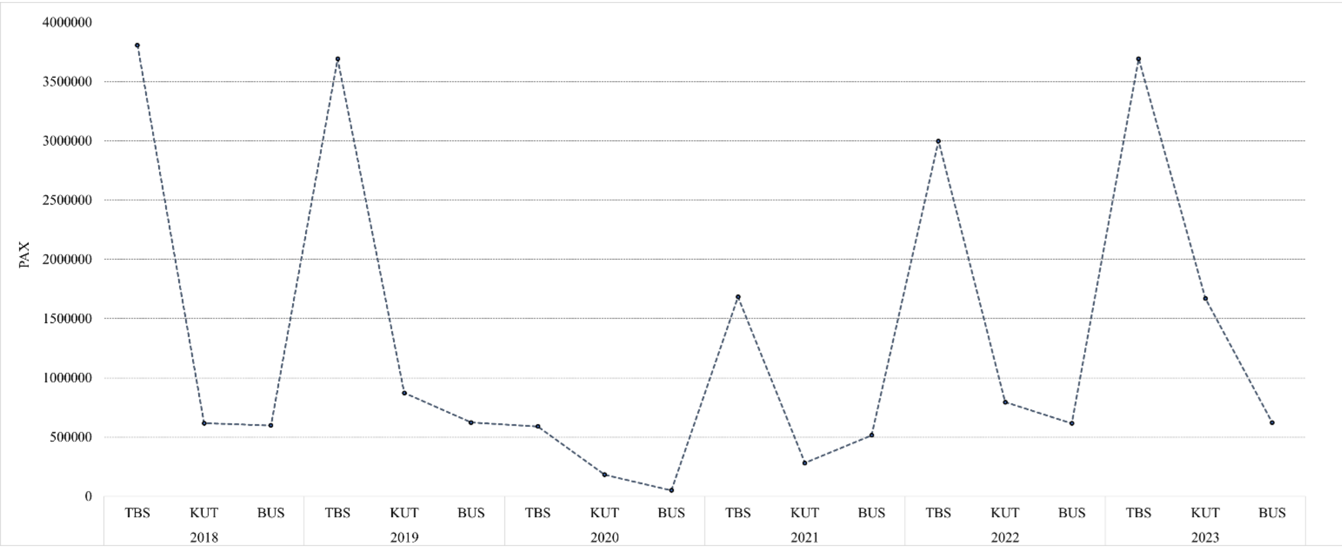

Figure 1.3: Quantitative Dynamics of Passenger Services by Airport (2018-2023)
Source: Georgian Civil Aviation Agency

Impact of the COVID-19 Pandemic on the Georgian Aviation Sector

The year 2020 was marked by significant challenges for both the global aviation industry and the Georgian aviation sector. The data presented in Figure 1.3 indicates that the passenger service market share in 2020 was notably lower compared to other years. According to the World Health Organization (WHO), the COVID-19 pandemic was officially declared on March 11, 2020, which led to the implementation of stricter regulations. Prior to these stringent restrictions, which aimed at preventing the spread of the virus, the Georgian aviation sector continued to operate regular and irregular flights, as clearly depicted in Figure 1.3. Despite the tightening of regulations and the limited operation of airports, irregular flights continued to facilitate the return of Georgian citizens to their homeland and the departure of foreign nationals to their countries (WHO, 2020).

As noted, in 2020, Georgian international airports continued passenger services despite the stricter regulations, as shown in Figure 1.4. This figure presents the total passenger service figures for Georgia's three international airports for the months of 2020 and 2021. Data from January and February 2020 confirm that airports were operating normally before the spread of the coronavirus. However, from the beginning of March, coinciding with the tightening of COVID-19 regulations, there was a sharp decline in passenger services. Particularly low figures were recorded during the spring and summer of 2020, when passenger service numbers at all three international airports were maintained mainly through irregular flights. It is also significant that in April, May, and June 2020, Kutaisi Airport completely ceased passenger services. Regarding the 2021 data, the figure clearly shows a quantitative increase in passenger services compared to 2020, reflecting the post-pandemic recovery. In 2021, passenger service data increased by 67% compared to 2020, which may be attributed to the introduction of 13 new European and 10 new Asian flight destinations at Georgian international airports (Diplomat, 2023).

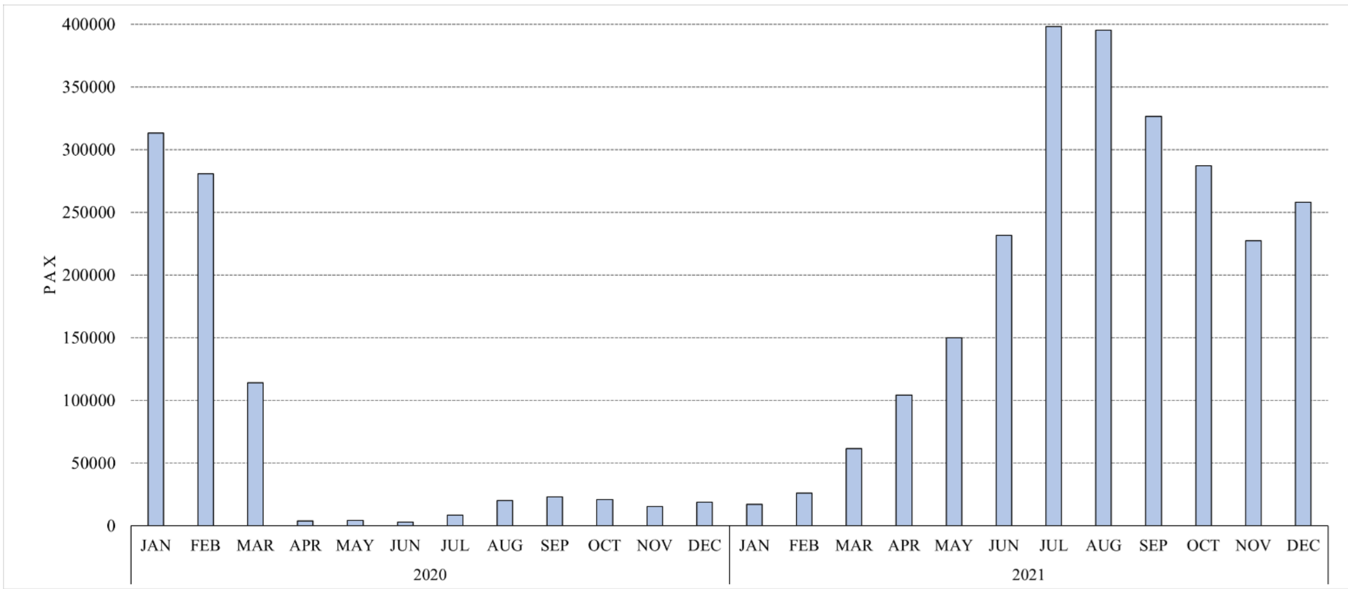

Figure 1.4: Total Quantitative Passenger Services at Georgia's Three International Airports by Month for 2020 and 2021
Source: Georgian Civil Aviation Agency

In Figure 1.4, a decline in the number of passenger services at airports is observed starting from September 2021. This decrease may be explained by the introduction of COVID-19 vaccination regulations, which stipulated that only vaccinated passengers could be served. Additionally, the onset of the winter navigation season, accompanied by a reduction in flights by airlines, likely contributed to the decrease in passenger numbers.

Post-Pandemic Situation and 2022 Results

Figure 1.3 shows that in 2022, the passenger service indicators at Georgian airports were on the rise. This increase was primarily driven by the lifting of COVID-19 restrictions and the return of airlines to their regular operations in the Georgian aviation market. In 2022, the number of airlines serving Georgia’s three international airports increased by seventeen, bringing the total to 55 airlines compared to the previous year, 2021. Additionally, the outbreak of the Russia-Ukraine war in February 2022 caused significant changes in the global aviation industry. Despite the growth of Georgia’s aviation sector, this situation led to the suspension of flights to Ukraine. Two airlines operated flights between Georgia and Ukraine, with their passenger transport numbers dramatically decreasing in 2022 compared to the previous year: Ukraine International Airlines [-97%↓] and SkyUp Airlines [-89%↓]. These results caused changes in the percentage distribution of airlines operating in the Georgian aviation market. According to the data in Figure 1.5, the percentage share of Ukrainian airlines remained high in 2019 and 2021. However, due to geopolitical reasons, the Georgian aviation sector underwent significant changes starting in 2022 as a result of the suspension of flights to Ukraine.

Analysis of the Georgian Aviation Market in 2023

Compared to 2022, data from 2023 show an overall increase of 36% in passenger services across Georgia's three international airports. This indicates an ongoing improvement in the post-pandemic situation and a return to pre-pandemic passenger numbers at the airports. Specifically, compared to the previous year, passenger services at Batumi International Airport increased by 1% [↑], at Tbilisi International Airport by 23% [↑], and at Kutaisi International Airport by 110% [↑]. Each of these figures is driven by several objective factors.

In 2023, the total number of airlines operating in the Georgian aviation market reached 62, the highest number in recent years.

The 23% [↑] increase in passenger services at Tbilisi International Airport is attributed to the resumption of international flights to Russia and China, as well as the introduction of flights to India. From the summer of 2023, direct flights to Russia are operated by Georgian Airways, Azimuth, and Red Wings. Since January, China Southern Airlines has been operating flights on the Tbilisi-Urumqi-Tbilisi route (agenda.ge, 2023). Additionally, from August 2023, IndiGo Airlines commenced flights on the Tbilisi-Delhi-Tbilisi route (aeroroutes.com, 2023). These direct routes to Asia from Tbilisi International Airport offer Georgia the opportunity to develop its tourism sector and strengthen its connections with the Asian aviation market, contributing to further growth of the Georgian aviation sector.

Starting in July 2023, the national carrier Georgian Wings began operating domestic flights on the Tbilisi-Batumi-Tbilisi route, and subsequently, regional flights on the

Paper ID: SR241227121042 DOI: https://dx.doi.org/10.21275/SR241227121042

Tbilisi-Baku-Tbilisi route (airport.az, 2023). Notably, this airline achieved a 1% market share among the operating airlines in Georgia and served nearly 36,000 passengers from July to December (agenda.ge, 2023).

As of December 2023, at Kutaisi International Airport, the airline Wizz Air, which encompasses three subsidiary companies - Wizz Air Hungary, Wizz Air Malta, and Wizz Air Abu Dhabi, has successfully delivered the 4th aircraft to its Kutaisi airport base. This development is expected to facilitate an increase in flight routes and passenger traffic, enabling the airport to handle up to 160,000 passengers daily. (www.routesonline.com, 2023)

In September 2023, Kutaisi International Airport served its millionth passenger, marking a record milestone in the airport's history (interpressnews.ge, 2023). Additionally, in July, FlyArystan, a Kazakh low-cost airline, increased its flight frequencies to four cities in Kazakhstan from Kutaisi International Airport (agenda.ge, 2023). Similarly, Red Wings Airlines, a Russian carrier, commenced flights to Russia, contributing to an increase in passenger traffic.

According to ACI EUROPE, in August 2023, passenger services at Kutaisi International Airport saw a 122.1%[↑] increase compared to 2019, among airports serving fewer than 5 million passengers annually (aci-europe.org, 2023).

In contrast, Batumi International Airport experienced a relatively modest increase of 1%[↑] in passenger traffic compared to the previous year. A fundamental reason for this low growth may be the geopolitical situation in the Middle East, which negatively impacted flight frequencies to Israel and led to a significant reduction in available flights. Additionally, in 2022, the opening of the Rize-Artvin Airport (RZV) in Turkey, located 90 km from Batumi International Airport, may have contributed to a decrease in direct flights from various Turkish cities to Batumi. This could have further diminished passenger traffic at Batumi International Airport.

The close proximity of airports between neighboring countries often creates significant competitive pressure in the aviation market, which can result in negative outcomes (avianews.ge, 2022).

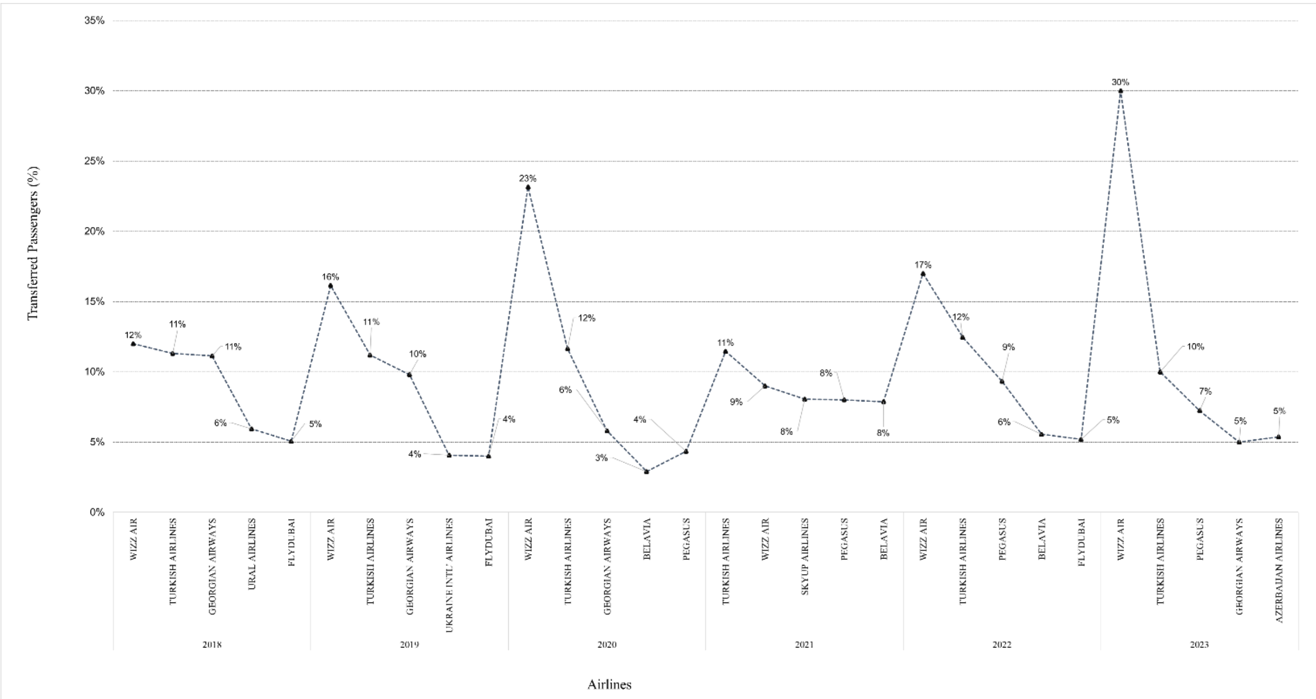

Figure 1.5: Airlines Operating in the Georgian Aviation Market with High Market Share (2018-2023)
Source: Georgian Civil Aviation Agency

Figure 1.5 reveals that in recent years, Wizz Air has emerged as the fastest-growing and largest airline in the Georgian aviation market. This growth has significantly enhanced the role of Kutaisi International Airport, transforming it into one of the fastest-growing airports in Europe, particularly due to its central location within the country. According to data published by ACI EUROPE on March 6, 2024 (www.aci-europe.org), Kutaisi Airport has ranked among Europe's fastest-growing airports, surpassing its 2019 growth figures in 2023.

3. Conclusion

In summary, the objective of our study was to illustrate the current state and potential of the aviation sector in Georgia. It is evident that the industry has undergone significant phases of development over the past six years. We observed the impact of the COVID-19 pandemic on the entire sector and noted that, with government support, resources were quickly restored and exceeded pre-pandemic levels.

The recovery of the aviation industry following the COVID-19 pandemic has been challenging and uneven. Airlines and operators have faced significant financial constraints. The post-pandemic landscape has demonstrated the industry's vulnerability to economic shocks, driven by changes in consumer behavior and travel preferences. In particular, prices and operating costs have increased at an unprecedented rate, leading to discussions on cost-cutting measures. In addition, the changing dynamics of global travel have led to calls for innovation in service offerings, requiring a complete reassessment of business models in the industry (Roni et al., 2023).

Over half of the world's tourists use air transport as their primary mode of transportation (Zajac, G. 2016). According to the United Nations World Tourism Organization (UNWTO), international tourism reached 88% of pre-pandemic levels. Furthermore, data from the International Air Transport Association (IATA) indicate that international air travel last year accounted for 88.6% of 2019 figures. This clearly demonstrates the close connection between these two major economic sectors.

The development of the air industry is a significant social and economic factor for the country. The development of an air hub further enhances this role due to the country's strategic position. It can be said that the aviation industry acts as a catalyst for nearly all sectors of the economy, especially in a country like Georgia, where there is a strong emphasis on the growth of the tourism industry and international trade. Aviation provides fast and global accessibility to all corners of the planet.

The tourism sector in Georgia is characterized by its high level of inclusivity, as practically every region of the country is involved in this sector. Therefore, as noted earlier, it is impossible to discuss tourism without addressing the favorable conditions at Kutaisi International Airport, which continues to enhance its attractiveness year by year.

Airports often serve as the first point of contact for tourists, playing a significant role in shaping their initial experience and perception of the destination. This influx of tourists not only stimulates spending at local businesses, not also contributes to job creation in the hospitality, retail and service sectors.

The research clearly indicates that passenger traffic at Georgia's international airports has been increasing annually. Considering the growth rate of the tourism sector, it is plausible to anticipate that the airports will reach their peak capacity in the coming years. Consequently, the Georgian government's new initiative, which involves the construction of a new airport in Tbilisi designed to accommodate 19 million passengers with potential for future development, along with the expansion of Kutaisi International Airport, represents a significant step forward and a solid foundation for the country's long-term sustainable development. Furthermore, the growing interest of international airlines in Georgia's aviation sector, combined with the activities of national carriers, is expected to play a crucial role in the advancement of Georgia's civil aviation industry. This sector is fundamental to the convergence of people, ideas, and values from across the globe and is set to become a major economic force for the country.

References

[1] "Archived: WHO Timeline - COVID-19," April 2020, https://www.who.int/news/item/27-04-2020-who-timeline---covid-19 (accessed 2024)

[2] "China Southern Airlines Resumes Flights to Georgia After Covid Hiatus," January 2023, https://agenda.ge/en/news/2023/341 (accessed 2024)

[3] "FlyArystan to Connect Western Georgia's Kutaisi Airport to Almaty with New Flights Starting June," February 2023, https://agenda.ge/en/news/2023/613#gsc.tab=0 (accessed 2023)

[4] Forecasting, O. E. (2005). The Economic and Social Benefits of Air Transport. Geneva, Switzerland: Air Transport Action Group.

[5] "Full Passenger Traffic Recovery Finally in Sight for Europe's Airports," October 2023, https://www.aci-europe.org/media-room/466-full-passenger-traffic-recovery-finally-in-sight-for-europe-s-airports.html (accessed 2023)

[6] "Georgian Wings Airline Launching Tbilisi-Batumi Flights," July 2023, https://agenda.ge/en/news/2023/2867 (accessed 2024)

[7] "Global Airlines - Market Size (2005–2029)," September 2023, https://www.ibisworld.com/global/market-size/global-airlines/ (accessed 2024)

[8] "Global Passenger Traffic Expected to Recover by 2024 and Reach 9.4 Billion Passengers," September 2023, https://aci.aero/2023/09/27/global-passenger-traffic-expected-to-recover-by-2024-and-reach-9-4-billion-passengers/ (accessed 2024)

[9] "Heydar Aliyev International Airport Accommodated the First Flight of Georgian Wings," September 2023, https://airport.az/en/press-release/heydar-aliyev-international-airport-accommodated-the-first-flight-of-georgian-wings/ (accessed 2023)

[10] "IndiGo Plans Tbilisi August 2023 Launch," August 2023, https://www.aeroroutes.com/eng/230704-6eaug23tbs (accessed 2024)

[11] "Industry Statistics - Fact Sheet," December 2023, https://www.iata.org/en/iata-repository/pressroom/fact-sheets/industry-statistics/ (accessed 2024)

[12] "International Tourism to Reach Pre-Pandemic Levels in 2024," January 2024, https://www.unwto.org/news/international-tourism-to-reach-pre-pandemic-levels-in-2024#:~:text=According%20to%20the%20first%20UNWTO,estimated%201.3%20billion%20international%20arrivals. (accessed 2024)

[13] "January Sees International Passenger Traffic Achieving Full Recovery for the First Time," March 2024, https://www.aci-europe.org/media-room/480-january-sees-international-passenger-traffic-achieving-full-recovery-for-the-first-time.html (accessed 2024)

[14] "Kutaisi International Airport: The Gateway to Georgia's Wizz Air Adventures," May 2023, https://drifttravel.com/kutaisi-international-airport-the-gateway-to-georgias-wizz-air-adventures/#:~:text=In%202012%2C%20Wizz%20Ai

r%2C%20a,flights%20commencing%20in%20September%202016. (accessed 2023)

[15] "Kutaisi International Airport Development General Plan Discussed at Ministry of Economy and Sustainable Development," 2024, https://www.economy.ge/?page=news&nw=2515&lang=en#:~:text=The%20implementation%20of%20the%20general,of%20passenger%20and%20cargo%20aircrafts. (accessed 2024)

[16] "Kutaisi International Airport - A Window to Europe: An Interview with Irakli Karkhashadze, Director of the United Airports of Georgia," July 2023, https://issuu.com/observer-diplomat/docs/diplomat_july_2023/s/28573551 (accessed 2024)

[17] "Kutaisi International Airport Welcomes Its Millionth Passenger," September 2023, https://www.interpressnews.ge/ka/article/770927-kutaisis-saertashoriso-aeroportma-memilione-mgzavri-miigo/ (accessed 2024)

[18] "Rize-Artvin Airport to Open on May 14," May 2022, https://avianews.ge/rize-arthvinis-aeroporti-14-maiss-gaikhsneba/ (accessed 2024);

[19] Rony, Z. I., Mofijur, M., Hasan, M. M., Ahmed, S. F., Almomani, F., Rasul, M. G., ... & Mahlia, T. M. I. (2023). Unanswered issues on decarbonizing the aviation industry through the development of sustainable aviation fuel from microalgae. Fuel, 334, 126553.

[20] Tribe, J. (2020). The economics of recreation, leisure and tourism. Routledge.

[21] "Wizz Air Delivered the 4th Aircraft to Its Kutaisi Base," December 2023, https://www.routesonline.com/airlines/4841/wizz-air/news/299662668/wizz-air-delivered-the-4th-aircraft-to-its-kutaisi-base/ (accessed 2024)

[22] "World Total Revenue Traffic — International and Domestic," 2019, ARC_2019_Air Transport Statistics_final.xlsx (icao.int) (accessed 2024)

[23] Zajac, G. (2016). The Role of Air Transport in the Development of International Tourism. Journal of International Trade, Logistics and Law, 2(1), 1-8.

[24] www.geostat.ge

[25] www.gov.ge

[26] www.airports.ge

[27] www.asec.az

[28] airport.az

[29] www.sabihagokcen.aero

[30] www.istairport.com