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Analysis and prospects of aviation development in Ukraine

The dynamics of the development of aviation transport has been analyzed, the main trends are identified and the problems of aviation development in Ukraine are determined. It was determined that inadequate state support, incorrect fiscal and monetary policies, and lack of financing programs for aircraft construction and leasing programs led to the stopping of mass production of aircraft, the industry's backlog from the world level, and the transition of domestic airlines to the operation of foreign-made aircraft.

Modern trends in the development of the world economy are determined by the constant expansion of globalization processes associated with the search for new sources of economic development.

Transport is one of the main factors affecting the deployment of productive forces, acting as an element of both national and international infrastructure. Transportation serves the production process, provides increased efficiency in the use of productive resources, is the engine of economic growth.

Transport accounts for about 10% of GDP, transport accounts for 20% of all private investment, transport consumes 15-18% of all energy, transport infrastructure accounts for up to 5% of the world's territory.

Civil aviation is an integral part of the transport system, the main activity of which is the implementation of such services as the transportation of passengers, baggage, cargo and mail.

The main trends in the development of civil aviation in the world and Ukraine are the growth of volume indicators. Positive dynamics is observed in all areas of operations. In particular, the recovery of air transportation after the fall, which took place in 2014-2015, is observed. Moreover, according to the results of 2017 the volume of passenger air transportation exceeded the pre-crisis level by more than 30%, whereas in 2016 the excess was only 2.1%.

According to data for 2017, 32 domestic airlines operated on the market of passenger and cargo air flights, which carried 93.0 thousand commercial flights, which increased by 17% compared to 2016. Passenger transportation was carried out by 18 domestic airlines, 5 of which: « International airlines of Ukraine», « Rose of the Winds», « Azur Air Ukraine», «Atlasjet Ukraine» и « Bravo» carry 93% of passenger traffic. The best dynamics is shown by the airline "Rose of the Winds," the volume of passenger traffic increased by 2.5 times [1]

It should be noted that modern world integration has a significant impact on the organization of aviation infrastructure. World aviation as a whole, feels the influence of world and internal crises. The most optimal solution for overcoming the crisis is the development of leasing of aviation equipment.

Today, there are 150 leasing companies on the world market with an estimated value of assets of about $ 140 billion. The 10 largest leasing companies account for slightly less than 70% ($ 100 billion) of assets and about 60% of the total number of aircraft units. In this sector, two major companies dominate: GE Capital Aviation Services and International Lease Finance Corporation (ILFC)

It is expected that it is the leasing companies that will play a key role in financing aircraft shipments in the future, which cannot but affect the quality of airlines. According to estimates of the British consulting and analytical company Ascend, operational leasing will account for 50% of the total market after 2020. [3] (Figure 1.):

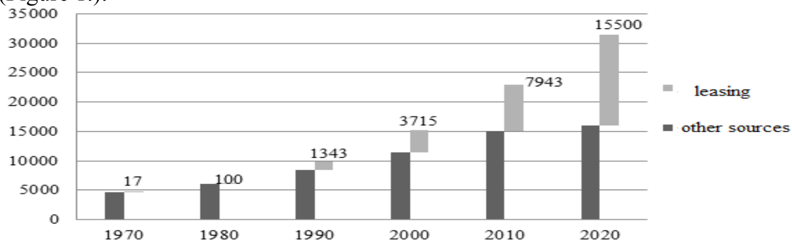

Fig. 1. Dynamics of growth of operational leasing of aircrafts 1970-2020, (number of aircraft)

The analysis showed that the fleets of Ukrainian airlines require serious modernization. According to the State Register of Civil Aircraft, more than 80% of the aircraft of Ukrainian airlines are leased abroad.

Only four airlines own their own aircraft. The fleet of the airlines "Motor Sich" and "Ukraine" entirely consists of own aircraft, "Urgi" and UIA - in part.

Table 1

Analysis of the geographical structure of the fleet of Ukrainian aircraft

country of origin of aircraft	number of units
USA	23
Cyprus	21
Ireland	11
United Arab Emirates	8
Singapore	7
Portugal	7
Other countries	25

The actual problem today is the aging of the aircraft fleet. The average age of the aircraft is more than 22 years. The oldest fleet operates "Motor Sich", the average age of aircraft over 35 years, and the oldest 46 years. The newest fleet of aircraft is owned by the airline - "Ukraine", the average age of the aircraft fleet is 11 years. The largest Ukrainian carrier, UIA, uses the fleet, whose age exceeds 12 years.

In addition, the fleet of Ukrainian airlines is not so numerous. Only four carriers have more than 10 aircraft: UIA - 41 (without freight), Urga - 14 (excluding freight and training), Windrose - 11 and Khors - 10. Six airlines have the size of the fleet range from 3 to 7 aircraft. These are Yanair, Motor Sich, DART, BravoAirways and Ukraine.

In addition, Ukrainian airlines prefer foreign-produced aircraft -90% of the total number of aircraft. The share of Boeing aircraft is 42%, and Airbus is 14%, while Antonov planes are operated by only three air carriers: Urgi is 6 units, Motor Sich - 5 units and Ukraine - 2 units - 11% in total park of Ukrainian air carriers. The most popular model of "Antonov" is An-26-100 (5 units).

At present, American Boeing and French Airbus occupy a leading position in the global civil aviation market. They produce and sell annually aircraft for tens of billions of dollars about 700 large trunk planes each and have orders for 6700-7200 new aircraft for a decade ahead.

Ukraine is one of the ten countries in the world, which has the capacity to fully complete the production of aviation equipment. The main domestic enterprises of the aviation industry are State Enterprise "Antonov", Kharkov State Aviation Production Enterprise and State Enterprise "Plant 410 of Civil Aviation".

Today, the An aircraft are operated in 78 countries around the world. At the same time, no serial aircraft has been manufactured in Ukraine since 2016, although existing capacities allow producing up to 24 An-148 aircraft and their modifications per year. During the Soviet period of development at the Kharkov State Aviation Production Enterprise and the state enterprise Kyiv Aviation Plant "Aviant", which is now part of the state enterprise "Antonov" annually produced about 200 aircraft. In addition, there are no acceptable conditions for Ukrainian airlines to buy or lease domestic An-140, An-148 and An-158 aircraft, and a system of services for them was not created.

In accordance with the text "Strategies for the revival of domestic aircraft industry for the period until 2022" published on the website of the Cabinet of Ministers to the main factors restraining the development of aircraft building in Ukraine are:

-the lack of funds for the majority of customers for the direct purchase of new domestic aircraft;

-the absence of the seller of other financial instruments for the sale of aircraft (there is no strong base leasing company that specializes in the promotion of An aircraft to the market);

- lack of or insufficient support for export contracts for the supply of aviation equipment;

- the breakdown of established cooperative ties in the development and production of aviation equipment.

Ukrainian airlines could carry out transportation on domestic aircraft, if they created a system for financing the leasing of their own aircraft. According to experts, the cost of creating aviation equipment is about 5 thousand dollars per kilogram and it has the greatest multiplier effect. The multiplication factor is 10. This means that one hryvnia spent on the purchase of domestic aircraft provides 10 hryvnia for production growth in related industries.

Conclusions

Despite the crisis processes in the world and in Ukraine, aviation demonstrates positive trends in operating activities. However, the transition of Ukrainian airlines to foreign aircraft has a negative impact on Ukrainian aircraft industry and on the economy as a whole. Analysis of the aircraft industry indicates that there are difficulties for enterprises, which is associated with tough competition in the global market against the backdrop of low effective demand in the domestic market, a significant deficit of working capital, a tight monetary and restraining fiscal policy. There is a situation in which all state and banking systems work against domestic aircraft construction. At the present stage, it is advisable to develop a long-term strategy for the development of aircraft construction, adjust the fiscal burden and monetary instruments, create investment development programs and leasing programs.

References

1. https://mtu.gov.ua/content/statistichni-dani-v-galuzi-aviatransportu.html- сайт министерства инфраструктуры Украины
2. https://www.investec.com/content/dam/australia/aviation/Investec_Report_Aviation_Leasing_as_Part_of_a_Broader_Investment_Portfolio.pdf
3. https://www.flightglobal.com/services/consultancy/
4. https://avia.gov.ua/reyestr-tsivilnih-povitryanih-suden-ukrayini
5. https://cfts.org.ua/- центр транспортных стратегий
6. О.М. Кириленко, Н.С. Скопенко. Економічні та правові особливості використання термінів злиття, поглинання, придбання, консолідація. - Теорії мікромакроекономіки: зб. наук. праць.–Київ.: 2011, АМУ, с. 61-67.