

### Economic Nature of Air Transportation Market

*The specific of air transportation market as economic phenomenon is determined. The main elements of air transportation market, that is air services, participants and regulated bodies, are considered.*

Air transport can facilitate in the economic development of an economic system as a whole, of a region or of a particular industry. Political, economic and organizational instability provides negative effect on the air transportation market in Ukraine. To develop this segment of economy it is necessary to understand its specific.

Air transportation market as economic phenomenon is complex organizational system represented by the following interrelated elements (Fig. 1):

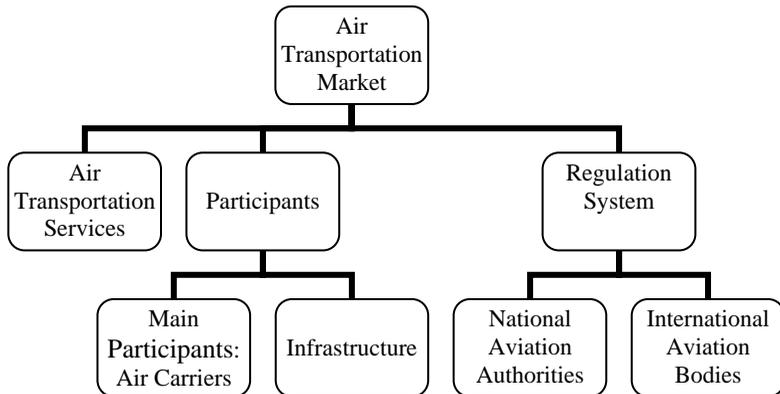


Fig. 1. The System of Air Transportation Market

Air transportation market is the institution through which air transportation services are bought and sold. These services include air transportation of passengers, cargo and mail, and aeronautical chemical works like processing of agricultural areas (Table 1).

It should be mentioned that the demand for air transportation services is a derived one that is driven by the needs and desires to attain some other, final objective. The main determinant of the demand for air transportation services is their price. The relationship between them is inverse. Non-price determinants incorporate consumer incomes, market size, number of consumers and competition among them, consumer's tastes and preferences, availability and prices for alternative types of transport, guarantee service for air passengers and cargoes.

Table 1.

## Volumes of air transportation services in Ukraine [4]

Air transportation services	Units	Total			including international ones		
		2015	2016	2017	2015	2016	2017
Passengers transported	thousand people	6475,2	6302,7	10555,6	5828,6	5678,0	9614,5
<i>including on scheduled lines</i>	–	4553,9	4629,8	6768,4	3924,7	4018,3	5837,5
Passengers-kilometers completed	billion. pass. km	11,6	11,4	20,3	11,3	11,1	19,9
<i>including on scheduled lines</i>	–	7,6	8,1	12,6	7,3	7,8	12,1
Cargo and mail transported	thousand tons	78,7	69,1	82,8	78,2	68,8	82,6
<i>including on scheduled lines</i>	–	10,9	13,8	19,2	10,6	13,5	18,9
Ton-kilometers completed (cargo and mail)	million tkm	239,3	211,0	275,3	238,9	210,8	275,2
<i>including on scheduled lines</i>	–	30,4	39,6	70,5	30,2	39,5	70,4
Commercial flights	thousand	74,8	66,3	93,0	61,3	56,0	78,1
<i>including on scheduled lines</i>	–	50,3	45,8	63,3	39,6	37,1	49,9

The supply of air transportation services is directly dependent on their price. The state of technology to provide air services (the qualification of the applied labor, automated machinery, efficient organization of production and labor), government regulation (tax policy, subsidies policy to support business, preferential credit policy), prices of energy resources and fuel are the major non-price determinants of the supply of air transportation services. Lack of air transport, as with any other input into the economic system, can stymie efficient growth, but equally excesses in supply are wasteful.

From the functional point of view, the air transportation market is a set of main (that is air carriers) and infrastructural participants that facilitate in providing air transportation services by main participants. There are nine major types of air carriers according to their specialization, such as: network airlines, regular international carriers and regional carriers, charter transportation airlines, combined express carriers, cargo operators, mixed airlines, isolated airlines, low cost airlines [3]. Infrastructural participants are airports, Air Traffic Management/Air Navigation

Services (ATM/ANS) Organizations, Pilot Training Organizations (PTOs) and Aero-Medical Centres (AeMCs), Air Traffic Controller (ATCO), aircraft repair plants and independent aviation technical bases, agencies that provide sale and booking of passenger and cargo traffic, universities and research institutes.

For example, air transport infrastructure in Kyiv Region is represented by:

- Production capacities of Antonov Aircraft Plant, 410 aviation plant of private manufacturers of small aircraft. “
- Flight test base in Gostomel.
- Two international airports (“Zhulyany“, “Boryspol“), four major aerodromes.
- Base Air Carrier (UIA) and dozens of Ukrainian and foreign airlines.
- Profile-based educational and research institutions (National Aviation University, Kyiv Polytechnic Institute, State Aviation Research Institute, Research Institute “Ukrayproekt” and others).
- ICAO Institute, Pilot Training and Cabin Training Centers.
- Aero-Medical Centre of National Aviation University.
- Associations, specialized exhibitions and specialized state agencies in aviation.

The air transportation market is regulated by national aviation authorities and international bodies like International Civil Aviation Organization (ICAO), International Air Transport Association (IATA), European Aviation Safety Agency (EASA), European Civil Aviation Conference (ECAC), Joint Aviation Authorities (JAAs). International controls are increasingly moving towards broad Open Skies formulations, allowing free provision of services between the countries. International bodies interact with national governments. Government controls over fares, market entry, and capacity continue to gradually and almost universally be removed or relaxed across the world. National bodies that regulate air transport market in Ukraine include Ministry of Infrastructure of Ukraine, State Aviation Administration of Ukraine, and Ukrainian State Air Traffic Services Enterprise.

Thus, understanding of the mechanism of air transportation market functioning can lead to an increase in economic efficiency, airfares reduction by increasing competition, encouraging the rationalization of air networks, and providing low-cost air transportation to the largest possible proportion of the population.

## References

1. Gönenç R., Nicoletti G. Regulation, Market Structure and Performance in Air Passenger Transportation. OECD Economic Studies. - No. 32, 2001/I. – 45 p.
2. The Impacts of Globalization on International Air Transport Activity. Global Forum on Transport and Environment in a Globalising World. – 10-12 November 2008, Guadalajara, Mexico. – 40 p.
3. Zhavoronkova G., Zhavoronkov V., Volvach N. Development of the Market of Aviation Transportation in Ukraine: Problems and Prospects. Trans Motauto World. - Vol 3, 2018. - p. 116-120.
4. Official web-site of State Aviation Administration of Ukraine // <https://avia.gov.ua/en>.
5. Official web-site of Ukrainian State Air Traffic Services Enterprise // <http://uksatse.ua>