EUROPEAN AIR TRANSPORT MARKET UNDER INFLUENCE OF COOPERATIVE ARRANGEMENTS

Maja Ozmec-Ban¹, Ružica Škurla Babić²

^{1,2} Faculty of transportation and traffic sciences, University of Zagreb, Croatia

Abstract: European air transport plays a vital role in the European economy. Liberalization of European air transport market combined with the ever-increasing permeation of Internet in the booking systems brought airlines into unenviable position. European full service carriers, as well as flag carriers, are highly exposed to competition from low cost carriers on short haul markets. On the long-haul markets they are exposed to competition from the Gulf airlines, including Turkey. These threats caused further airline industry consolidations that were various and multiple. Consolidation can be recognized in alliances, mergers and take-overs, but also bankruptcies of financially weak airlines. The paper provides an overview of European air transport market in the last decade considering various modes of cooperative arrangements and business models.

Keywords: European air transport, full service carriers, low cost carriers, alliances.

1. Introduction

Until the EU Third package of liberalization measures in 1993, EU routes were monopolized by EU so called flag carriers such as Air France, British Airways, Lufthansa, KLM and so on. After the removal of restrictions on market entry, capacity, frequency and pricing, and a removal of cabotage rights in 1997, new players exploited the opportunity and entered the European market in the second half of 1990s'. These new players were low-cost carriers (LCCs) which competed full service carriers (and flag carriers) in short-haul market, and Gulf carriers which competed full service carriers in long-haul markets. According to Vidović, Steiner and Škurla Babić (2004: 2) LCCs are airlines that provide transportation at lower price while eliminating many services that full service carriers provide, such as free in-flight service and extra baggage. They operate short-haul flights from secondary airports and provide no service onboard, having one type of aircraft in fleet (Ryanair and easyJet). A term "Gulf carriers" is used for airlines based in a country alongside Persian Gulf, but mostly used for these three: Etihad Airways (founded in 2003, based in Abu Dhabi), Emirates Airline (founded in 1985, based in Dubai) and Qatar Airways (founded in 1993, based in Doha). These three airlines have expanded aggressively and are creating an increasingly global network (Dresner et al, 2015: 31) and compete head-to-head with European, Asian and American carriers in international markets.

Over the last 30 years a series of consolidations and bankruptcies in European (and global) air transport market began to occur. Liberalization, while providing market access to new players, has led to a wave of numerous mergers and takeovers (or acquisitions) of full service carriers, and their formation into global alliances around the globe. For the most part, mergers and take-overs are quite similar - two previously separate firms are combined into a single legal entity. A merger is a result of a mutual decision of two companies to consolidate and to become one entity. Merger is often described as a decision made by two "equals". On the other hand, a take-over is a purchase of a smaller company by a larger one. A take-over can produce the same benefits as a merger, but it does not necessarily have to be a mutual decision of the two companies in question. Thereunto, full service carriers began to form alliances to broaden their networks. Over the years many alliances have emerged, and many have failed, but three most prominent alliances were forged in the late '90s and still exist: Star Alliance, SkyTeam and oneworld. The purpose of the paper is an overview of European air transport market in the last decade in terms of different cooperative arrangements of full service carriers.

2. Mergers and Take-Overs in Europe 2008 – 2017

During the era of flag carriers, bankruptcies and take-overs were rare in the European air transport market. However, they've become more often and have had a significant impact on the market function and competition.

Following the global financial crisis in 2008, air transport market went through significant consolidations. In the US, Delta Air Lines merged with Northwest Airlines in 2008, United Airlines merged with Continental Airlines in 2010, Southwest Airlines and Air Train Airways merged in 2011 and in 2013 American Airlines merged with US airways. Accordingly, several mergers (Table 1) occurred in Europe in the last decade.

Popularity of mergers and take-overs has increased due to liberalization, globalization and technological development. Mergers have become a popular practice in aviation, since the "key concept of merger is that a company can extend its business and create shareholders' value by purchasing another company" (Hsu and Flouris, 2017).

Table 1 *Mergers, take-overs and bankruptcies of chosen air carriers in Europe from 2008 to the end of 2017*

= $=$ $=$ $=$ $=$ $=$ $=$ $=$ $=$ $=$					
Year	Airline	Mergers, take-overs or bankruptcies			
2008	KLM	Take-over of Martinair			
2009	Lufthansa	Take-over of Germanwings			
		Take-over of Brussels Airlines			

¹ Corresponding author: mozmec@fpz.hr

Year	Airline	Mergers, take-overs or bankruptcies				
		Take-over of British Midlands				
		Take-over of Austrian Airlines				
	SAS	SAS Norge, SAS Sweden, SAS Denmark and SAS International merged into SAS				
		Scandinavian Airlines				
	Alitalia	Joint venture with Air France-KLM group and Delta Airlines				
2010	Lufthansa	Take-over of Eurowings				
2011	IAG	Merger of British Airways and Iberia into IAG				
	British Airways	Integration of British Midlands into BA				
2012	airberlin	Etihad acquired 29,21% share in Air Berlin share hold				
	Malev	Bankruptcy – ceased operation				
	Air Serbia	Etihad acquired 49% share in Air Serbia share hold				
2013	Darwin Airline	Etihad acquired 33% share in Darwin Airline share hold				
	Alitalia	Etihad acquired 49% share in Alitalia share hold				
2014	Germanwings	Merged fully into Eurowings (Lufthansa Group)				
2015	Air Lituanica	Bankruptcy – ceased operation				
Estonian Air Bankruptcy – ceased operation Nordica Formed after bankruptcy of Estonian Air as Estonian for the state of t		Bankruptcy – ceased operation				
		Formed after bankruptcy of Estonian Air as Estonian flag carrier				
	Darwin Airline	Etihad sold its stake to Adria Airways				
2017	Monarch Airlines	Bankruptcy - ceased operation				
	airberlin	Bankruptcy after Etihad pulled financing – ceased operations				
	Alitalia	Bankruptcy after Etihad pulled financing – continue to operate due to governmental loan				
	Darwin Airline	Bankruptcy – ceased operation				

Source: gathered by the authors

The major benefit of mergers is cost rationalization (Vasigh, Fleming & Tacker, 2016: 16). Since the airline industry exhibits large economies of scale, merged airlines can spread their high fixed costs over a greater network. While some see mergers as solely positive outcome, European Commission is concerned that a change towards a more concentrated market might reduce competition. Following that concern, in 2004 Council Regulation (EC) no. 139/04 on control of concentrations between undertakings (EU Merger Regulation, 2004) was adopted. This EC Merger Regulation gives the European Commission authority to make decisions regarding potential mergers and take-overs. When two or more airlines (of which one is an EU carrier) decide to merge they need to notify the European Commission (Nemeth and Niemeier, 2012: 45). If the merger leads to a dominant position on a given EU route, the Commission introduces remedies or prohibits the merger. Remedies are simply conditions under which a merger could be approved, such as:

- surrender of slots at congested airports;
- interlining and codeshares obligations;
- open frequent flyer programs;
- freezing or reducing frequencies;
- price reduction mechanism;
- sale of assets.

Lufthansa and KLM were one of the first airlines faced with European Commission new rules. In only few years Lufthansa has finalized five mergers, as seen in Table 1. Lufthansa took over Austrian Airlines in 2009. Two airlines had many overlapping routes. Origin/points of destination impacted by the merger were: Vienna-Stuttgart, Vienna - Cologne/Bonn, Vienna-Frankfurt, Vienna-Munich and Vienna-Brussels. The Commission concluded that Lufthansa is to make available slots at Vienna and/or Frankfurt and/or Munich and/or Cologne/Bonn and/or Stuttgart and/or Brussels (COMP/M. 5440, 2009) to allow one or more prospective new entrant(s) to operate a new or additional competitive air service on the following identified city pairs. Just like in the Lufthansa-Austrian case, European Commission decided that in the case of British Airways and Iberia merger, British had to give up their slots on Heathrow and Gatwick routes to competitors, but only if the competitors have already exhausted their slot portfolio (COMP/39.596-BA/AA/IB, 2010). From this, and other decisions of European Commission regarding merger control, it can be seen that in the most cases where an airline gains full control of the other airline, the most common remedy is surrender of slots at congested airports.

There is an interesting pattern seen in a Table 1, regarding bankruptcies of European carriers, linked with the Gulf carrier Etihad Airways and its pulling out of financing of their insolvent equity partners, such as Darwin Airline, airberlin and Alitalia. Etihad Airways' equity partner network at the beginning of 2017 included airberlin, Air Serbia, Air Seychelles, Alitalia, Jet Airways, Virgin Australia and Etihad Regional, and represented the world's seventh largest global grouping of airlines. However, since the CEO who designed a plan to gain proxy presence of Etihad Group in different countries, obtaining stakes in different airlines has left the Etihad, Etihad has changed its business plan and stopped financing their risky investments, airberlin and Alitalia. This decision weakened further airberlin and Alitalia, causing airberlin to completely cease operations and Alitalia to file for bankruptcy, continuing to operate but relying on Italy government support.

3. Global Airline Alliance

According to (Ohmae, 1989) "Companies are just beginning to learn what nations have always known: in a complex, uncertain world filled with dangerous opponents, it is best not to go alone". Evans (2001: 229) defined the concept of a strategic alliance as "a particular horizontal form of inter-organizational relationship in which two or more organizations collaborate, without the formation of a separate independent organization, in order to achieve one or more common strategic objectives".

The basic strategy of every airline is to weaken competition on certain routes and to gain market share, so it is no wonder that alliances were formed. Since the deregulation and liberalization on both sides of the Atlantic have impacted the airline market, full service carriers developed a strategy to form global alliances which will expand their global network and provide them comparative advantage versus low cost carriers. The first truly global alliance is Star Alliance. It was formed in 1997 between United, Lufthansa, SAS, Air Canada and Thai Airways. Shortly after formation of other alliances followed:

- oneworld alliance in 1998 was formed between American, British Airways, Qantas and Cathay Pacific,
- Qualiflyer in 1998 included Swissair, Sabena, Turkish Airlines, Air Liberte and TAP Portugal,
- SkyTeam in 1999 formed between Delta, Air France and Aeromexico.

However, Qualiflyer alliance was dissolved in 2001 after Swissair demise, and ultimately in 2002 when it was bought by the Lufthansa group and incorporated into Star Alliance.

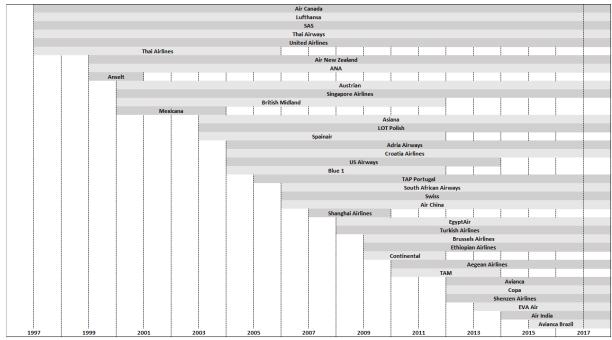


Fig. 1.Timeline of member airlines participation in Star Alliance
Source: Airline Business Airline Alliance Survey, September 2017

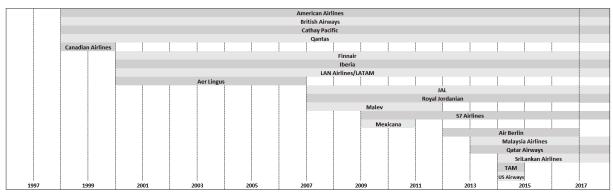


Fig. 2.Timeline of member airlines participation in SkyTeam
Source: Airline Business Airline Alliance Survey, September 2017

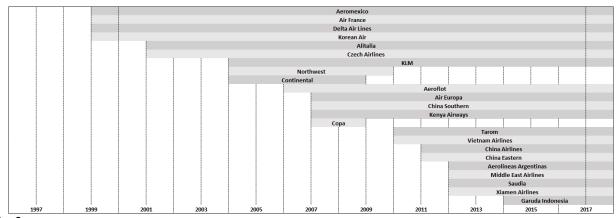


Fig. 3.Timeline of member airlines participation in oneworld
Source: Airline Business Airline Alliance Survey, September 2017

The three existing global alliances have expanded over the course of two decades, which can be seen in Fig. 1, 2 and 3. They provide geographical coverage to all areas of the world. Expansion and optimization of alliance members route network provides greater flight options to passengers. Combined, these three alliances hold 56.9% (Table 2) of share in total nonstop scheduled capacity offered in year 2017. Dominantly full service carriers are members of global alliances, with an exception of Qatar Airways, Gulf carrier that became a member of SkyTeam in 2013.

Table 2 *Alliance statistics*

Column1	Star Alliance	SkyTeam	oneworld
Member airlines	28	20	14*
Revenue (\$ bn)	181	147	134
Countries Served	191	177	157
Destinations served	1218	1065	978
Share in scheduled capacity offered	22.7%	18.3%	15.9%

Source: Airline Business Airline Alliance Survey, September 2017

4. Development of Full Service Carriers

The business model of full service carriers is under increasing pressure, on short-haul as well as on long-haul market. According to (Eurocontrol Seven-Year Forecast, 2018) LCCs accounted for over 31% (versus 26% in year 2013) of the European flights in 2017. Figure 4 shows the comparison of total share of European flights per market segment shows in 2017. Even though full service carriers do own a significant market share in 2017, the comparison indicates a negative trend in full service carriers market share in regards to LCCs in the total supply of intra-EU flights. It is presumed that due to the stagnation in growth in European market (mostly UK and Ireland), some LCCs will develop a new strategy, and increase route range, which will generate a so-called hybrid LCCs (Burghouwt et al., 2015). This occurrence might provoke the cannibalization of full service carriers.

According to the same report (Eurocontrol Seven Year Forecast, 2018) on the extra-EU market, first partner is USA, which was a number one destination from European countries, and the second was Russian federation. However, the third one was The United Arab Emirates with 164 daily departures on average and an increase of 1.2% compared with 2016. The growth of Gulf carriers is increasing due to their massive network and their hubs that provide passengers great connectivity to beyond markets (Australia, North and South America, Africa and Asia).

since Air Berlin ceased operations in late 2017, it is no longer part of oneworld alliance:



Fig. 4.Comparison of share in European flights per market segment in 2016 and 2017 Source: Eurocontrol Seven-Year Forecast, February 2018

The effects of anti-monopolization due to rise of new players on the market, as well as merger control regulations have pushed full service further to consolidation. The increase of mergers in European market, with the increase of number of alliance members, show that full service carriers are looking for an optimal collaborative arrangement to remain on the market, preferably gaining more market share and financial gain. It is evident that full service carriers will be increasingly exposed to their opponents (LCCs and Gulf carriers). Therefore, further industry consolidation might be expected, along with continuity of bankruptcies of financially week airlines, but also the optimization of hub-networks. Idea of integration of LCCs into global alliances so that they could be feeders to full service carriers' network is no longer just an idea: Vueling (Spanish LCC) started to optimize their schedule to contribute to Iberia financial results (Burghouwt et al., 2015).

The invasion of Gulf carriers into market that was previously dominated by Europe an US full service carriers has raised the concerns on "fair competition". Various mechanisms are being considered currently on a global scale (since it is a global issue) to address the issue of "fair competition". One of them is to include "fair competition" clauses that will be formulated by European Commission, E States or ICAO in international agreements on air transport, and the other could be requesting more transparency on the financials of the carrier in question before granting any traffic rights.

5. Conclusion

There are numerous factors that affect the consolidation of full service carriers and entire European air transport market. All of them are derived from the liberalization of air transport market (regionally and globally). In the past 30-year period the regulative framework has changed and adapted countlessly to the needs of the market. However, regulatory framework to be differed takes time. At the same time, all the airlines on global market looks for a cooperative arrangement that is the best option to their prosperity. Most of the major players participate in many forms of cooperative arrangement, pulling even smaller players into their networks: via mergers or full take-overs, or via forming alliances global networks. This overview of European air transport market gives a sense of what are the threats to a full service carriers business model, and gives a input to a further more detailed research of efficiency of merger control remedies in European air transport market, as well as the impact of global alliances on specific route networks (extra-EU routes operated by European full service carriers and their alliance partners vs. Gulf service carriers).

References

Airline Business Airline Alliance Survey. 2017. Available on internet: https://reader.flightglobal.com/publications-dist/1264/81157/1433/8601/article.html. [15.05.2018]

Burghouwt, G.; Mendes de Leon, P.; De Wit, J. 2015. EU Air Transport Liberalization, Process, impacts and future considerations, *International Transport Forum*, Discussion paper No. 2015-04.

Case No COMP/M. 5440-Lufthansa/Austrian Airlines, Brussels 28/08/2009. Regulation.

Case No COMP/39.596-BA/AA/IB, Brussels 14/07/2010. Regulation.

Council Regulation (EC) no. 139/04 of January 2004 on control of concentrations between undertakings (the EC Merger Regulation). 1-24.

Dresner, et al. 2015. The impact of Gultf carrier competition on U.S. airlines, *Transportation Research Part A*, 79: 31-41.

Eurocontrol Seven-Year Forecast. 2018. Available on internet: https://www.eurocontrol.int/sites/default/files/content/documents/official-documents/forecasts/seven-year-flights-service-units-forecast-2018-2024-Feb2018.pdf [10.06.2018.]

Evans, N. 2001. Collaborative strategy: an analysis of the changing world of international airline alliance, *Tourism Management*, 22: 229-243.

Hsu, C.; Flouris, T. 2017. Comparing global airline merger experiences from a financial valuation perspective: an empirical study of recent European based airline mergers, *Transportation Research Procedia*, 23: 41-50.

Nemeth, A.; Niemeier, H. M. 2012. Airline mergers in Europe - An overview on the market definition of the EU commission, *Journal of Air Transport Management*, 22: 45-52.

Ohmae, K. 1989. The global logic of strategic alliances, Harvard Business Review, (Mar-Apr): 143-154.

Vasigh, B.; Fleming, K.; Tacker, T. 2016. *Introduction to Air Transport Economics: From Theory to Application*. 2nd ed. New York: Routledge.

Vidović, A.; Steiner, S.; Škurla Babić, R. 2006. Impact of low-coat airlines on the European air transport market. U: Zanne, M., ed. In *Proceedings of the 10th International Conference on Traffic Science ICTS 2006: Globalization and Transportation*. Portorož: University of Ljubljana, Faculty of Maritime Studies and Transportation, 1-10.