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Comparison of the aviation market in Asia and Europe

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1. Introduction

The transport market is an economic category related to the production and exchange of transport services. It is a meeting place and a form of confrontation of supply and demand for services provided by carriers of different branches, transport systems and institutions involved in organizing and supporting sales (Rucińska, Ruciński and Wyszomirski, 2004, p. 34).

The air traffic structure in Asia is different than in Europe and North America. The distances between the major agglomerations, the huge number of potential passengers, lesser alternative transport competition, and rich society make the Asian market very attractive for aviation. Keep in mind that Asia is both the largest continent and the most diversified economic area in the world.

Modern business management consists by building the reality of an economic organization available to the manager by tools such like: elements, ideas, people and relationships between them, formal and legal institutions, material and monetary means, and also by the rights to dispose of them (Kozłowski and Piotrowski, 1996, p. 7). This principle also applies to transport companies.

The purpose of this work is describe different between European and Asian aviation market. Conducted research base on observation method and secondary interviews.

Within the work I would like to present the basic discrepancies that differentiate the Asian aviation market from European. The size and potential of these two aviation markets will be discussed as well as the orders placed by airlines, the size of the aircraft used, the justification for the choice, and the quality issues on both the European and Asian.

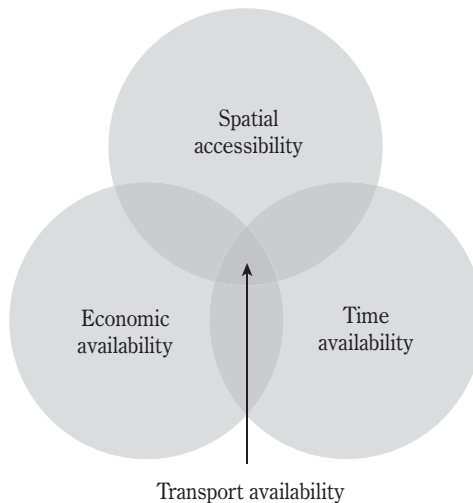
2. Transport accessibility

Transport availability is a collection of factors that make up one's choice for a service. Transport accessibility is influenced by many factors of different importance, nature and strength. The following figure shows the impact of individual accessibility on transport accessibility. Better transport – better conditions for economic and democratic development.

The main components that make up transport accessibility are spatial, temporal and economic accessibility. Spatial availability in the case of the air transport market is the coverage of a given airport area as well as the number of connections between individual airports, including transfer connections. Time availability includes the time it takes to get to the airport, the time spent at the airport and the size of the airport. Moreover this type of availability depend of

airport work organization, and the travel time including flight time and the transfer time for the connecting flights. We also distinguish economic availability, which results from the wealth of a given society. More affluent people fly more often and spend more money on airline tickets. An important element of economic accessibility is also the linking of poorer and wealthier regions. In this case we are dealing with immigrant travel, which we can observe in Europe, for example, Eastern Europe – Great Britain and in Asia, for example Persian Gulf – India.

Figure 1. Breakdown of transport availability, interrelations between specific availability categories¹



Source: own elaboration based on Hoszman (2014).

3. Connectivity concept

Air Connectivity indicator is currently one of the effectivity and competitiveness measure in airport and airlines connection market (Marciszewska and Dzedzic, 2016, p. 36). ICAO – International Civil Aviation Organization describes air connectivity as “the ability to move a passenger from one point to another with the lowest possible number of network to of connections and without an increase in fare, focusing on, from a commercial perspective, minimum connecting times with maximum facilitation ultimately resulting in benefits to air transport users” (*Enhancement of Air Transport...*, 2013). Another definition of air connectivity give as G. Burghouwt and Redondi (2008). They recalling the graph theory define

¹ Marciszewska and Dzedzic (2016, p. 32).

connectivity as the degree to which nodes in a network are connected to each other. This is by far the simplest way of defining this concept (Marciszewska and Dzedzic, 2016, p. 36).

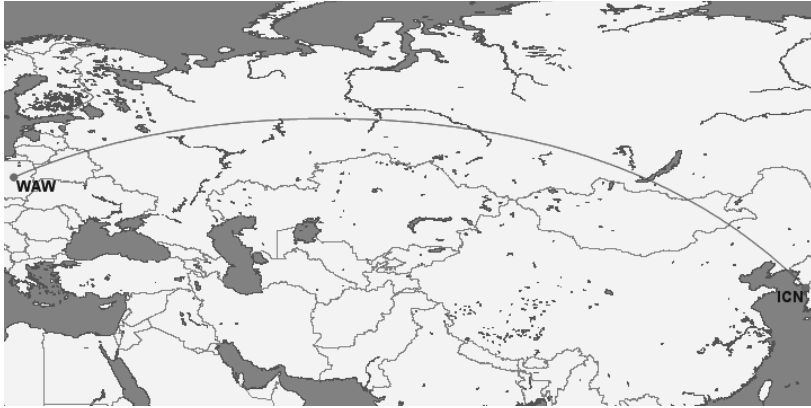
In order to prepare the best possible aviation offer, the carriers try to construct a grid of connections so as to maximize the possibility of connecting and distributing traffic to other connections, increasing aircraft fill rates and increasing fleet efficiency, thereby reducing the unit cost of passenger transport (Marciszewska and Dzedzic, 2016, p. 37). Transfers provide passengers with longer travel times but they get more connections and more frequent connections. Finally it is better for passengers.

On the quality of the connection in addition to the aforementioned frequency and travel time also affects the time needed for the transfer. Generally shorter transfer time is the more convenient for the passenger. Each of the airports minimum connecting time (MCT), which is the minimum time required between planes to allow a smooth transfer of a passenger. For example in Frederic Chopin airport in Warsaw this time is just only 30 minutes². The tendency to choose a particular connection is reduced if the transfer time is too long for a passenger who has another alternative. This makes that the carriers have to adapt to the passenger so that their offer is as attractive as possible. The most common solution is the division of the day into “arrival waves and departure waves” also called “arrival peak and departure peak”. On the basis of the available data it is possible to check which connections are most frequent for passengers, and which routes have the greatest transfer potential and are adjusted so that the interchanges are as comfortable as possible. With this solution we can prepare an attractive offer for passengers who will choose the offer of a given carrier. If the plane does not operate at least 2–3 times per day on one road, sometimes we have to choose “something at the expense of something”. Note that the arrivals and departures system also has its drawbacks. Mainly from the airport management point. The limited number of slots and huge traffic at the moment of the wave cause the maximum annual capacity remains unused. The solution is to co-operate main airline with the airport and set up slots for other airlines so as not to take slots to the main airline.

Passengers may also choose routes that are longer of travel time and overstate their routes by flying from Europe to Northeast Asia via the Persian Gulf instead of choosing the shortest routes that run over Siberia. For example passenger traveling from Warsaw Chopin Airport to Seoul Incheon Airport by LOT Polish Airlines flight get 4900 miles.

² <http://corporate.lot.com/pl/pl/hub-warszawa>

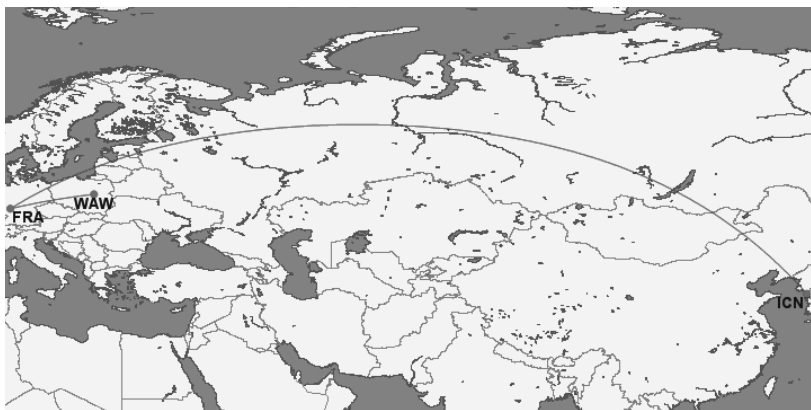
Figure 2. Lot Polish Airlines flight route from Warsaw to Seoul



Source: <http://www.gcmap.com/mapui?P=WAW-ICN&DU=mi&SU=kts&RS=best>

If they chose very popular airport which is Frankfurt am Main they route will be longer. About 5900 miles.

Figure 3. Flight route from Warsaw to Seoul via Frankfurt

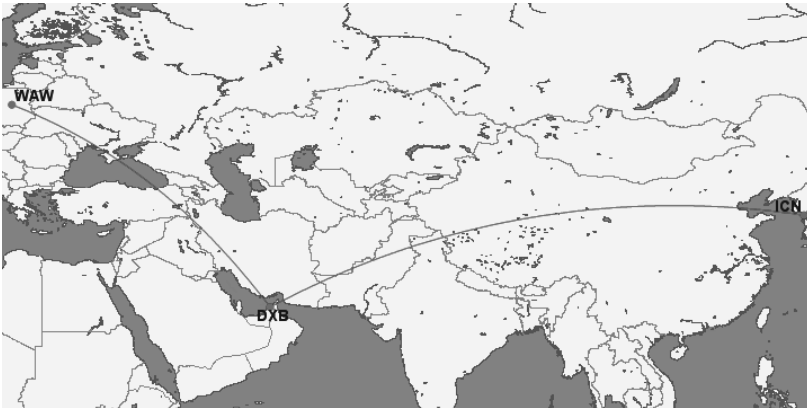


Source: <http://www.gcmap.com/mapui?P=WAW-FRA-ICN%0D%0A&PC=red&DU=mi&SU=kts&RS=best&RC=navy>

Passenger who's travel to Seoul via Dubai where is the hub of the Emirates airlines get about 7000 miles. This journey will take about 19h 30'. If the passenger chose connection in Germany the travel time will be 13h 20'. Direct connection from Warsaw Chopin Airport to Incheon Airport by LOT Polish Airlines flight will take only 9h 50' because this connection is directly. Moreover LOT Polish

Airlines use Boeing B787-8 which have higher cruise speed then Airbus A380 using by Emirates or Boeing B747 using by Lufthansa on this connection. It's give them extra 40–50 minutes competitive advantage.

Figure 4. Flight from Warsaw to Seoul via Dubai



Source: <http://www.gcmapi.com/mapui?P=WAW-DXB-ICN%0D%0A&PC=red&DU=mi&SU=kts&RS=best&RC=navy>

Many carriers are trying to expand their offerings knowing that long transit times are unattractive for a passenger because, according to the WCN³ (Weighted Connectivity Number or Weighted Number of Connections) or WNx⁴ (Weighted Number of Connections) that is the limit value of distance and travel time. It gives WCN 1.5 direct connection distance and 1.4 times direct flight time for WNx. This means that theoretically, the Dubai connection would use very few people. Meanwhile, the Emirates based reservation system offers 8 flights per week on the Airbus A380, which have between 489 and 615 seats on each flight. With nice airport for passengers, a good carrier reputation, a HUB system, attractive prices, the opportunity to use the Dubai stop-over program, where passengers have the opportunity to explore Dubai. The airlines from Persian Gulf grabbed a large share of the European market, although WCN and WNx often exceed twice time.

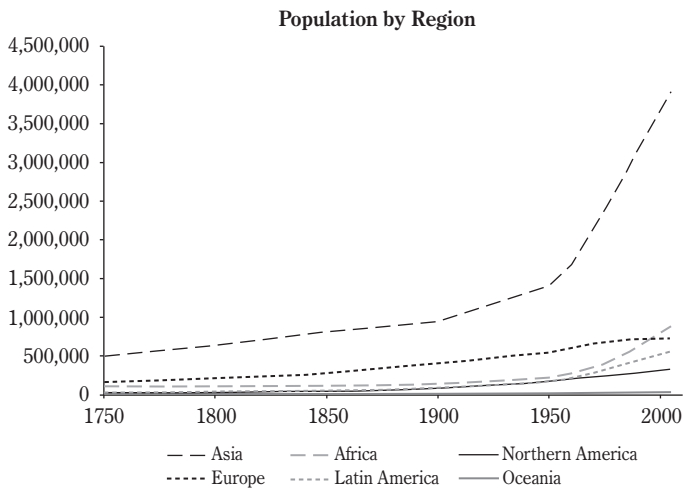
³ WCN – index developed by A. Danesi, allows to calculate the number of direct and indirect calls weighted by their quality, determined by the transfer time and route length.

⁴ WNx – index developed by G. Burghouwt and J. de Wit, allowing calculation of direct and indirect flights weighted by their quality determined by the transfer time and flight duration.

4. Ordered aircraft

Asia's aviation market is the fastest growing among all continents. The population that has grown dramatically in the last century has caused the manufacturers of airplanes to receive a huge number of orders from that continent.

Figure 5. Growing population in each continents



Source: <http://www.marketcalls.in/statistics/population-vs-global-warming-interesting-facts-and-charts.html>

Carriers in this region to meet the ever-growing number of customers, make one of the largest orders for new aircraft in aviation history. For example low cost airlines Lion Air which has 112 airplane (August 2017) would like ad extra 291 planes. Air Asia group working in many countries in Asia ordered 575 airbus A320 from 2011. Moreover they ordered wide body plane for Air Asia X. Among the traditional carriers, the bigger orders are from China. China Eastern Airlines ordered 278 planes, China Southern Airlines ordered 195 planes and Air China ordered 162 planes. Also the airlines outside Chinese market focus on intensive development. Singapore Airlines have the biggest order for wide-body plane in this area. In Europe the biggest orders has Norwegian, Ryan Air, Wizz Air and Easy jet. They are also the biggest low cost airlines in Europe. On legacy airlines market the biggest orders are from Turkish Airlines, Lufthansa Groupe and IAG concern (British Airways and Iberia).

5. Frequency of connections

The most popular air routes are in Asia. By analysing the frequency of flight on the most popular routes both in Europe and in Asia, we can see that one of the most popular Asian routes carriers fly several dozen times a day. Below are two tables. The first one shows the most popular connections in the world. As we can see 8 out of 10 are in Asia.

Table 1. The most popular flight in the world

Rank	City 1	City 2	Distance ^[5]	2015 Passengers (in millions)	2014 Passengers (in millions)	2012 Passengers (in millions)	2011 Passengers (in millions)	Note
1	Seoul-Gimpo	Jeju	450 km	11.1	10.5	10.156	9.9	Domestic
2	Tokyo	Sapporo	819 km	7.8	7.0	8.211	7.0+	Domestic
3	Tokyo	Fukuoka	883 km	7.6	8.3	6.640	6.6+	Domestic
4	Delhi	Mumbai	1150 km	7.3	6.8	6.1	5.6	Domestic
5	Sydney	Melbourne	706 km	7.2	7.8	6.943	7.5	Domestic
6	Beijing	Shanghai	1075 km	6.1	5.8	7.246	6.6+	Domestic
9	Hong Kong	Taipei	780 km	5.1	5.1	5.513	6.2+	Regional
7	São Paulo	Rio de Janeiro	366 km			7.716	7.6+	Domestic
8	Tokyo	Osaka	405 km			6.744	7.5	Domestic
10	Tokyo	Okinawa	1554 km			4.584	4.1	Domestic

Source: <http://www.iata.org/pressroom/pr/Pages/2015-09-16-01.aspx>, http://www.amadeus.com/web/amadeus/en_1A-corporate/Amadeus-Home/Newsroom/Archive/2013_04_17_300-world-super-routes-attract/1319560217161-Page-AMAD_DetailPpal?assetid=1319526516400&assettype=PressRelease_C, <https://www.economist.com/blogs/graphicdetail/2012/05/daily-chart-8>

Table 2 shows the movement in Europe. As you can see the differences in the number of passengers are huge.

Table 2. The most popular flight in Europe

Data retrieved from Eurostat								
Rank	Airport 1	Airport 2	2011	2012	2013	2014	2015	2016
1	Toulouse/Blagnac	Paris/Orly	2,322,456	2,330,224	2,379,100	2,330,949	2,318,015	2,358,917
2	Madrid/Barajas	Barcelona/El Prat	3,102,436	2,550,462	2,213,200	2,204,765	2,253,387	2,328,726
3	Nice/Côte d'Azur	Paris/Orly	2,236,436	2,175,773	2,160,300	2,072,138	2,113,506	2,124,792
4	Catania/Fontanarossa	Rome/Fiumicino	1,842,940	1,694,400	1,566,800	1,869,881	1,979,648	1,998,352

Data retrieved from Eurostat								
Rank	Airport 1	Airport 2	2011	2012	2013	2014	2015	2016
5	Oslo	Trondheim	1,749,545	1,818,877	1,873,944	1,912,141	1,942,959	1,988,105
6	Berlin/Tegel	Munich	1,667,408	1,731,145	1,831,700	1,868,877	1,974,929	1,939,820
7	Frankfurt	Berlin/Tegel	1,792,655	1,813,063	1,845,600	1,792,006	1,907,218	1,935,465
8	Oslo	Bergen	1,691,887	1,729,076	1,722,398	1,819,279	1,810,826	1,881,960
9	Munich	Hamburg	1,717,734	1,719,351	1,713,200	1,756,990	1,811,425	1,805,211
10	Barcelona/El Prat	Palma de Mallorca/Son Sant Joan	1,639,423	1,460,684	1,388,900	1,410,172	1,576,063	1,772,613

Source: Eurostat.

6. Size of used aircraft

A significant difference between Europe and Asia is the type of aircraft used. While in Europe meeting a wide-body aircraft performing a cruise within Europe in the 21st century is rare, in Asia is commonplace.

A wide-body aircraft is one that has a fuselage of at least 5 meters in diameter. The hull of this width enables the carrier to configure the two-corridor seats. This aircraft also has a much larger cargo space than a narrow-body aircraft. The cost of its operation are much higher than the operation of a narrow-body aircraft. Wide-body aircraft usually have at least two travel classes, divided into sections. In narrow-body aircraft there is one corridor and the cargo space is significantly smaller. Except the A320 family, it is not possible to take air-container. Lower cost of ownership causes that many charter lines decide to launch a long distance connections for travel agencies (even to South East Asia) on this type of aircraft but with stopovers due to limited range. It is logical that wide-body aircraft are long-haul and narrow-body aircraft are medium and short-haul aircraft. But why in Europe it's start a new era of using short haul plane to the United States and Canada, and in Asia it is normal to make domestic or international short-haul flights on wide-body aircraft?

The aviation market in Asia is different than in Europe. In Europe, most large metropolises have at least two airports. One for traditional carriers (CDG, LHR, WAW, FRA, MUC), second for low cost carriers (BVA, STN, WMI, HHN, FMM). In Asia, most large metropolises have one huge airport and usual separate terminals for low cost airlines. This means that these airports have limited capacity not so much in terms of passengers but in terms of the number of flights. This is why in Japan in domestic rout wide-body planes are used in a special domestic configuration, which has an increased number of seats, a small business class,

a smaller galley area and lower number of toilets. As a result, the range of planes and the Maximum Take-off Weight is also reduced in order to reduce costs, which is taken into account when airports calculate airport charges. Of course, the size of the urban agglomerations, which in Asia is definitely bigger, are not without significance.

Another important aspect to consider when airlines decide whether to allocate a wide-body or narrow-body aircraft is a question about the type of route. If this route is also an important transport route, they prefer to use a wide-body plane. Wide-body aircrafts have a very large cargo deck. Cargo can be transported in special air-containers or on air-pallets. Usually, by plane, more expensive or perishable goods are transported because air transport generates bigger costs than other methods of transport. In Asia, where the distance is higher and the railway and road network is not developed as in Europe, lots of the goods are transported by ship or plane. Use of wide-body aircraft allows carriers to take advantage of the potential of the route and optimize costs. Instead of two planes; one narrow-body plane for passengers and a separate cargo plane, they can send one wide-body airplane which can take also people and cargo.

Operational considerations are another issue. Having a larger long-haul fleet allows airlines to be more flexible. They can change an airplane for a long-distance flight even at the expense of canceling a short-haul flight which is usually less profitable than a long-haul flight. In addition, the use of a wide-body fleet on a wider scale than it is in Europe allows for a more efficient use of the fleet for rotations of a total length exceeding 24 hours.

Example: Departures and arrival are in local time

HKG-AMS 00:25-06:15, Travel time 12h 50m

AMS-HKG 12:45-06:55 (+1d), Travel time 11h 10m

As you can see in the above schedule, the entire rotation from the departure of the aircraft from Hong Kong to its return lasts 30.5h. To this time, we should add extra time to prepare the plane for flight from Hong Kong to Amsterdam (about 3h). If the airline wanted to make a connection to Europe by this same plane, the plane would have to wait 17 hours at the airport in Hong Kong. During this time, we have available long-haul planes, but we can't do long-haul return flights because we have just only 17h. Instead of waiting on the airport plane without earning money, Asian carriers often decide to send a wide-body aircraft in long-distance configuration on the route within Asia. The plane that flew from Amsterdam can make a rotation to Japan (about 4h flight one way) and return before re-rotating to Europe. Obviously, it is not such an easy planning, as the flight may be delayed and we will not be able to do the scheduled rotation. It is the operational center role that makes changes to minimize losses. Also we

should note that rotations are very complicated and it is very rare that particular plane is assigned to one of the routes. In the case of non-use long-haul aircraft on short routes, carriers must create routes so that total rotation does not exceed 24 hours (For example, rout from Europe to the east coast of the United States) or combining longer long-haul flight with shorter long-haul flight (For example flight Europe – US west coast with flight from Europe to India). This is a very difficult task as most traditional carriers based on the HUB system, where they need to match the connections to create the arrivals and departures waves to enable the travelers to make the transfer.

The decision which routes are operated by a wide-body or narrow-body aircraft is a business decision and it must be made by the carrier. In the case of the aviation market in Asia and the reasons I described above, the carriers decided to use on short-haul flight wide-body aircraft. In Europe, where goods are mainly transported by land, costs decide that narrow-body aircraft are better suited to making short and medium distance flight.

7. Quality vs price

Aviation has a relatively young history, but over the past 20-30 years historical changes have taken place, which changed the air travel from selective service to universal service. Low cost airlines was launched. Now we have also new channel of sale – internet. Moreover, now we can reserve extra services like hotel or car reservation during the ticket reservation process. In the era of popularizing aviation and increasing offer by low-cost carriers, traditional airlines must making the decision whether to raise quality to compete for quality with low cost carriers or to cut costs to offer lower fares.

To better understand the term of the product in passenger transport we should pay attention on product structure. Product structure is a collection of several levels that make up the entire product. We distinguish the product core, the real product, the extended product and the potential product. The core of a product is the essence of a product or service. The basic function to which the product or service was created. A real product is a product that directly affects the choice of the product or component that is essential to meet the needs. An extended product is an additional element for the consumer, often exceeding his expectations. There is also a potential product that we can make to improve the service or product. In the case of passenger transport, these are the upgrades of the hard product, for example cabin retrofit. Both in Asia and in Europe we can find low cost airlines that offer customers the basic service of passenger transport from point A to point B, the so-called core product. All other services,

such as luggage, meals and beverages, airport check-in or access to newspapers and other amenities, are also subject to a surcharge. This allows carriers to offer the customer the product they need the most – possibility of travel from point A to point B. In addition, low cost airlines are striving to the lowest possible cost. This is possible through because they have aggressive policy of negotiating with airports, a unified fleet (low cost airlines usually have one type of airplane, which reduces personnel costs and service costs). To keep costs low, low-cost carriers has only a minimum number of crews on board (the number of flight attendant in plane is determined by law) and in the base. Often low-cost airlines get local subvention from local government.

In addition to the basic offer, legacy airlines offer passengers additional services such as, for example: luggage, meals, drinks, blankets, pillows, newspapers or an on-board entertainment system. Moreover, traditional carriers try to use major airports, which in the vast majority are in better location than airport selected by low-cost lines.

Growing competition from low cost airlines has caused some sort of split. Some carriers have decided to cut some extras to give their customers lower prices. Some carriers change their tariff structure that the cheapest fare is giving only transport services and in the higher fares we get additional services. Price is an effective tool for creating demand (Rucińska, Ruciński and Wyszomirski, 2004, p. 64).

Some carriers from Asia have different strategy. For example, Singapore Airlines, famous for its high quality, decided to not join the price war with low cost airlines and they decided to compete by quality. As said in an interview with Nicholas Ionides vice President of Singapore Airlines: *“Singapore stands to be a premium line with slightly higher shelf than the competition. Our tickets may be more expensive, but the passenger is always sure to receive the best and comfortable product. Although our line is state-owned, it is well managed and modern. We want to change with the industry and react to all changes very quickly. We focus on three issues: the product, the onboard service and the connection grid. These three well-functioning pillars are the basis for the good functioning of our line. Of course, I could still multiply many examples, but then the answer to that question would take up a lot of space”*⁵.

Luggage included in the ticket price, often with increased weight, comfortably configured airplanes, free meals and drinks are just some of the elements that will encourage potential consumers to take advantage of traditional carriers.

⁵ <http://www.pasazer.com/mobi/news/25123/gosc,pasazera,nicholas,ionides,singapore.html>

8. New concept of long haul flight

Both in Europe and in Asia carriers are looking for new connections that will boost revenue. Only a few years ago, the market of long haul flights, it is those that lasted more than 6h, belonged exclusively to traditional carriers.

The market of low cost long haul flights is a really new market. In spite of attempts to launch connections between Europe and America; Asia to Europe. Due to the high cost of the carriers at that time, these connections did not constitute a significant competition for traditional carriers.

In Asia, the situation changed in 2006, when Jetstar began operations from Australia and New Zealand to Asia. These were still relatively expensive and the price difference between traditional carriers and low cost carriers was not significant.

At present, the long haul low-cost connections market in Asia is well established. Major players include Air Asia X (Air Asia), Jetstar (Qantas), Scoot (Singapore Airlines). These carriers mainly connect Asia with Australia and South-East Asia with India. They also connect Asia with America (Hawaii). Connections to Europe tried to launch Air Asia but withdrew from these plans. Currently, the only long distance connecting by low cost airlines is flight from Singapore to Athens by Scoot.

In Europe despite Michael O'Leary (CEO of RyanAir) rumours about connections from Dublin to USA by Ryanair, the first airline that has started and successfully maintains such connections is Norwegian. They both make connections to Asia and to North America. At present Level Up (IAG) also would like join to these market. Also Air France-KLM and Wizz Air would like start this type of connection. Because the Island has perfect localization on way from Europe to North America also low cost airlines from this country offer long haul flight from Europe to North America via Keflavik Airport. High impact of opening long haul flight by low cost airlines was production effective and economical plane – Boeing B787 Dreamliner.

The biggest impact on development the low cost connections between Europe and North America will be produce the narrow body plane, with range that allows cross the route from Western Europe to the US East Coast and Canada. Narrow body plane are cheaper in exploitation them wide body plane. Low cost airlines usually don't take cargo except passenger luggage so big capacity of cargo space are not required for them. Low cost airlines also don't need special configuration of cabin because they configure interior of the plane in method where they can put as much seat as possible. It's give low cost airlines possibility to reduce cost as in short haul flight. Airbus with their plane A321neo

LR and Boeing with their B737 Max probably change air traffic on North Atlantic road.

Norwegian Airlines would like to do this to reduce costs. Also Primera and Wizz Air say that they would like to do this same and start operating to USA and Canada by narrow-body plane. It gives them the possibility to offer a better price for their customers, but we must remember that the comfort of this flight will be much lower than in wide body legacy airlines plane.

9. SWOT analysis

To emphasize the differences between the European and Asian markets, SWOT analysis has been prepared.

European market:

Table 3. SWOT analysis for European market

<p>Strengths:</p> <ol style="list-style-type: none"> 1. An educated ability of cost effectiveness 2. Big network of connections, including many regional connections 3. Transparency of the offer – most of the market has the most well-known carriers 4. Major airports located usually close to cities 5. Cooperation of carriers with producers 	<p>Weaknesses:</p> <ol style="list-style-type: none"> 1. Overcrowded airport 2. Infrastructural constraints impeding the expansion of airports. 3. The client is used to low ticket prices 4. Low quality of the onboard product in regional flights 5. Strong trade unions
<p>Opportunities:</p> <ol style="list-style-type: none"> 1. Opportunity to open less popular long-distance routes thanks to new, more economical airplanes. 2. A very dynamically growing transport market in Central and Eastern Europe. 3. Increased passenger awareness in Central and Eastern Europe. 	<p>Threats:</p> <ol style="list-style-type: none"> 1. Carriers from the Persian Gulf with access to cheap fuel and good interchange base in the direction of south-east Asia 2. Increase in fuel prices 3. New regulations regarding noise emitted by airports 4. Construction of a wide international network of high speed train 5. Cheap Asian airlines making connections to Europe

Source: own elaboration.

Asian market:

Table 4. SWOT analysis for Asian market

<p>Strengths:</p> <ol style="list-style-type: none"> 1. High-frequency air connections 2. Effective airports 3. Good communication between the airport and the city 4. Modern fleet 5. A strong on-board product 6. Boeing and Embraer put the Asian market as a priority 	<p>Weaknesses:</p> <ol style="list-style-type: none"> 1. Unstable atmospheric condition 2. High costs of traditional carriers 3. Demanding passenger in Northeast Asia
<p>Opportunities:</p> <ol style="list-style-type: none"> 1. Opportunity to open new routes thanks to new, more economical aircraft. 2. A growing society 3. The fastest growing aviation market 	<p>Threats:</p> <ol style="list-style-type: none"> 1. Increase in fuel prices 2. Customers will start paying more attention to the prices of traditional carrier connections 3. Staffing problems

Source: own elaboration.

10. Summary

Differences between European and Asian carriers are apparent. Both airlines operate under competition from other operators. Sometimes, just one investment, such as the opening of high-speed railways in Taiwan, will lead to the disappearance of almost all domestic connections. Those carriers who have more diversified grid of air connection have a better chance for survive.

Both in Europe and Asia the aviation market is facing many changes. The ever-increasing competition from low-cost carriers brings some of the traditional carriers into financial trouble. The aviation market is a difficult market. It has many external factors, such as the price of fuel, which is the main component of the cost of the flight. After all, adequate business management, limited risk, knowledge and experience of management team may be many companies will avoid bankruptcy even in difficult times. Air Berlin bankrupted in 2017. Alitalia is struggling with huge financial problems. The problem does not affect only European lines. Cathay Pacific will soon enter the restructuring process due to its poor financial results. The aviation market is a very dynamic market. Only constant adapting to it will enable carriers to continually development.

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