INSTITUT EKONOMICKÝCH STUDIÍ

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BAKALÁŘSKÁ PRÁCE:

AIRLINES FROM INTERNATIONAL PERSPECTIVE

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OBOR: EKONOMIE

ROK: 2004

Prohlášení:

Prohlašuji, že jsem tuto bakalářskou práci vypracoval samostatně, přičemž jsem použil pouze uvedených pramenů a literatury.

V Praze dne: 31. 5. 2004 . . . .

Rád bych touto cestou poděkoval všem, kteří se na této bakalářské práci podíleli. Zejména pak svému konzultantovi za cenné připomínky a náměty k dalšímu studiu a svým rodičům, přítelkyni, známým i kamarádům za jejich užitečnou zpětnou vazbu, trpělivost a technickou podporu. A nesmím zapomenout na svého dědečka, který mě naučil lásce k letadlům. Děkuji.

Project of Bachelor Thesis

Term of bachelor exams:	**summer semester 2003/2004**
Author of the bachelor thesis:	**Martin Peška**
Leader of the thesis:	**RNDr. Miron Tegze, CSc.**

Theme:

AIRLINES FROM INTERNATIONAL PERSPECTIVE

Goal of the work:

The goal of this work is to map the current airline industry (passenger transport), analyze the problems that the airlines have to face and outline the main paths that the airlines may take in order to thrive and survive. The main focus of the work is the interdependence of four major factors that determine the future of the industry: external shocks, role of (de)regulation, low-cost carriers and traditional airlines with their alliances.

The basic outline:

- Introduction
- Characteristics of the airline industry
- Role of state and deregulation
- Low-cost airlines and their strategies
- Traditional airlines and their fight for life
- Alliances of the network carriers
- Conclusion and forecasts

Main sources:

- Magazines and newspapers (especially The Economist, Aero, Aerlines... and Czech periodicals MF Dnes, Týden)
- Internet pages including those of the airlines, alliances, consulting companies, IATA and the European Commission
- Kleyman, Birgit: The development of multilateral alliances; Helsinki 2002
- Doganis, R.: The airline business in the 21st century; London 2001

In Prague, 28th of May 2004

Signature of the consultant: Signature of the author:

ABSTRAKT

Teroristické útoky z 11. září 2001, zpomalení ekonomického růstu, epidemie SARS, válka v Iráku a růst cen ropy měly v posledních letech negativní vliv na hospodářský vývoj celého světa. Ale právě tyto externí šoky, společně s deregulací vnitřních trhů v USA a v Evropské Unii, rozhýbaly do té doby relativně klidné vody civilního letectví. Navíc dramatický vstup nízkonákladových aerolinií na trh s mimořádně nízkými cenami letenek a jejich následný úspěch znamenal pro již tak oslabené tradiční dopravce nárůst konkurence a nutnost na tento fakt reagovat. Tito zavedení přepravci museli výrazně snížit své náklady a zefektivnit svůj provoz. Začali rovněž vzájemně těsněji spolupracovat, a to především sdružováním se do aliancí.

Tato bakalářská práce se snaží především popsat a vysvětlit vzájemnou závislost jednotlivých „hráčů“ leteckého trhu, kterými jsou tradiční aerolinie, nízkonákladové společnosti a stát. Detailní analýza zvolených strategií těchto hráčů a jejich vzájemného působení vyústí v poslední části do prognózy, ve které se autor pokouší nastínit budoucnost sektoru civilní letecké dopravy.

ABSTRACT

The September 11th terrorist attacks, economic downturn, slump in business travel, SARS epidemic, the Iraq war, and growing oil prices all had a negative impact on the world economy. But these external shocks, together with the deregulation of US and EU internal markets, led to deep and mostly positive changes in the airline industry. The dramatic emergence and success of low-cost carriers with their unbeatably low fares meant that the traditional airlines had to react not only to the external shocks but also to this new challenge. All of these network carriers had in common struggle to cut the costs and improve efficiency. The traditional airlines began to cooperate more intensively – especially through alliances.

This bachelor thesis most of all tries to describe and explain the interdependence of the „players“ on the market of civil aviation. These are the traditional carriers, low-cost airlines and the state. A detailed analysis of the players’ strategies and their relationships results into a final synthesis in which the author tries to outline the possible future development of the airline industry.

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Chapter 1

1. INTRODUCTION

Let us first ask a question: Is the aviation industry really so important? To answer that, lets just take a peek at several selected facts. Every year, over 1.6 billion passengers worldwide use the world's airlines for business and leisure travel. Research indicates that by 2010, this number could exceed 2.3 billion.[1] Each day airlines achieve the remarkable by safely moving 5 million people some 40 million air miles around the world.[2] Air transport provides 28 million direct, indirect and induced jobs worldwide, a figure that is expected to rise to 31 million by 2010. [3]

It's beyond dispute that the entire aviation industry is more than ever gaining on importance with the integrating processes of the world's nations. It is especially crucial for international business but it's role as a mode of transport for the "ordinary" people is increasingly essential. It's an industry that could be described as the showcase of mankind's abilities and determination to conquer one of the elements - the air.

The goal of this work is to briefly analyze the airline industry and forecast development in the years to come. Although many purely theoretical issues can be found while studying the operations of the carriers (such as optimalization tasks, dynamic pricing or network and synergic effects), the approach chosen for this work is based on practical examples following simple theoretical ideas. Most of the discussion will refer to the markets of USA and European Union because these two regions are the key to understanding the development of the whole world market. Freight transport and military aviation are undeniably important but the focus of this work lies on the passenger transport of the civil aviation.

The key issues that will be discussed respectively are: main characteristics of the industry; deregulation of the market and its impact; low-cost carriers and new strategies; survival of the traditional carriers and the growing importance of alliances. The conclusion

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[1] ATAG (Air Transport Action Group): 'Facts & Figures'; http://www.atag.org/content/showfacts.asp?folderid=430&level1=2&level2=430&

[2] 'Silver linings, darkening clouds'; The Economist, *internet edition*; 25.3.2004

[3] 'Fast Facts: the air transport industry in Europe has united to present its key facts and figures'; ATAG; http://www.atag.org/files/FAST%20FACTS-145330A.pdf

will bring my opinion on how the airlines will try to thrive and survive in future and what the market for civil passenger aviation will look like.

TECHNICAL REMARKS

✈ The overview of the airline industry has proven itself to be surprisingly difficult since during months of research I didn't come across a single study that would cover all the key aspects of the sector. Moreover, the problem of obtaining relevant sources has turned out to be probably the most difficult part because the prices of up-to-date studies by reputable consulting companies are worth hundreds of dollars and can't be found in any public library.

✈ Most of the sources I used come from searching internet pages and databases of articles. I try to give a full internet address (as visited in May 2004) which enables the reader to easily look up any additional information. All of the listed pages have free access excluding that of Economist internet edition, where the access is restricted to subscribers. Page numbers in references are often omitted simply do to the fact that the electronic form doesn't comply with the pages on "hard-copies" and could be therefore misleading.

✈ Because of the high degree of interdependence among the segments of the airline industry (state, traditional airlines and low-cost carriers), it's necessary to realize that the chapters overlap considerably. As an example, the chapter on traditional carriers enhances the knowledge on the cost structure, which was already discussed in the second chapter. Therefore I occasionally use "(see ...)" as a cross-reference where I find it helpful.

✈ The many terms that I use for traditional airlines such as full-service, network, regular, major, national or flag-carriers are synonyms. No-frills (meaning "no extras" onboard such as free food or drinks) is a synonym for low-fare and low-cost. The low-cost carriers are often abbreviated as LCCs.

If we talk about domestic market in the case of European Union, the transport among the individual Member States is included.

Chapter 2

2. OVERVIEW OF THE AIRLINE INDUSTRY

2.1 HISTORY IN BRIEF

The first unmanned flight took place at Kitty Hawk on December 17th 1903, by Wilbur and Orville Wright. In over 100 years of existence, the aviation industry made huge progress. Aviation is a symbol of globalization, making boundaries between the nations look odd and obsolete. It's a great paradox that for many years the industry kept itself entangled in archaic mercantilist approach and short-sightedness of national pride and prestige. In the past, the passenger segment was held firmly in the hands of national airlines - the flag carriers of the world's nations. The travel was only for the rich, since the fares were sky-high. The gigantic, mostly state-owned, airlines didn't have to compete with each other and enjoyed the bilateral treaties among the various states. These treaties provided them with monopolies of flying to the foreign markets and closed the industry to new entrants. Only irregular charter airlines serving the tourist passengers could get some share of the market.

In 1978 the domestic market in America was liberalized, having great impact on the entire industry. Eventually, new carriers started showing up in USA, undertaking new strategies and innovations and rippling the still waters. It took Europe 15 years to follow America's lead and liberalize its internal market. Again, this led to entrance of new dynamic airlines, lowering fares dramatically and causing headaches to the traditional giants.

The oil shocks and economic downturns of the 1970's and the early 1980's and the Gulf war in 1991 showed the limits of the aviation industry. With several airlines filed for bankruptcy during these hard times and many of them have been liquidated afterwards.

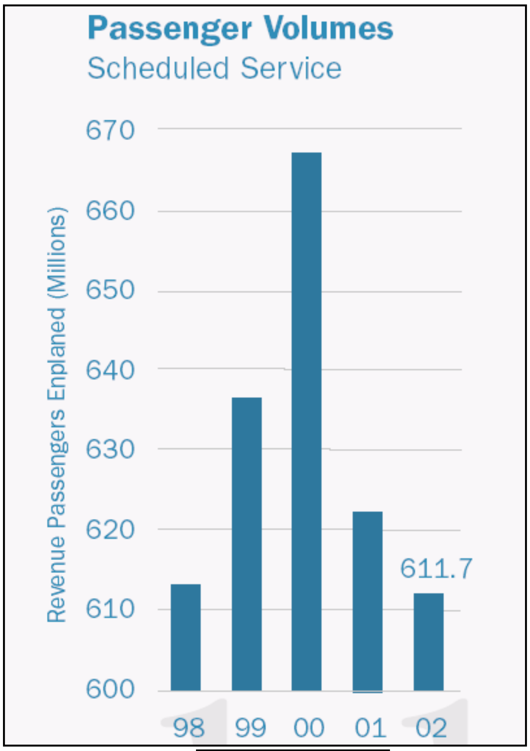
Especially during the second half of the 1990's, the airline industry enjoyed a rare run of big profits, most of which came from draining the full pockets of business travelers. The good years allowed the airlines to concentrate on fight for the biggest market share, leading to overcapacity and frequent cases of uneconomic behavior. For example in USA between the years 1996-2001, the big carriers added 3% more capacity each year in a mostly mature market and it is believed that by the middle of 2001, the American domestic market witnessed around 15% over-capacity.[4] Furthermore, from 1995 to 2000, airlines earned profits of $39

[4] 'Landing with a bump'; The Economist, *internet edition*; 15.8.2002

billion and took delivery of more than 4,700 jetliners, both record levels.[5] Additionally the cost-unconscious airlines enabled the labor contracts to swell at unprecedent rates increasing the power of labor unions.

During the year 2001 the world economy started to deteriorate, especially with the bursting of the American dotcom[6] bubble. The external shocks (September 11th terrorist attacks, SARS[7], Iraq war...) only poured some oil into the fire, which has already been burning under the cauldrons of the carriers. These diverse shocks all had a similar follow up - a slump in the world travel and increased trouble for the traditional carriers. The terrorist attacks (and similarly the SARS epidemic) caused great doubts and fear among consumers

Figure 1



Source: *ATA*

resulting naturally in a fall of demand, thus hitting hard the "revenue" side of the airlines' accounts. The War in Iraq, besides ever-increasing uncertainty of the air safety, hit hard the

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[5] Costa, Peter R.: 'Rethinking The Aviation Industry'; The McKinsey Quarterly, 2002 Number 2 Risk and resilience; http://www.mckinseyquarterly.com/article_page.asp?ar=1190&L2=23&L3=79&srid=69

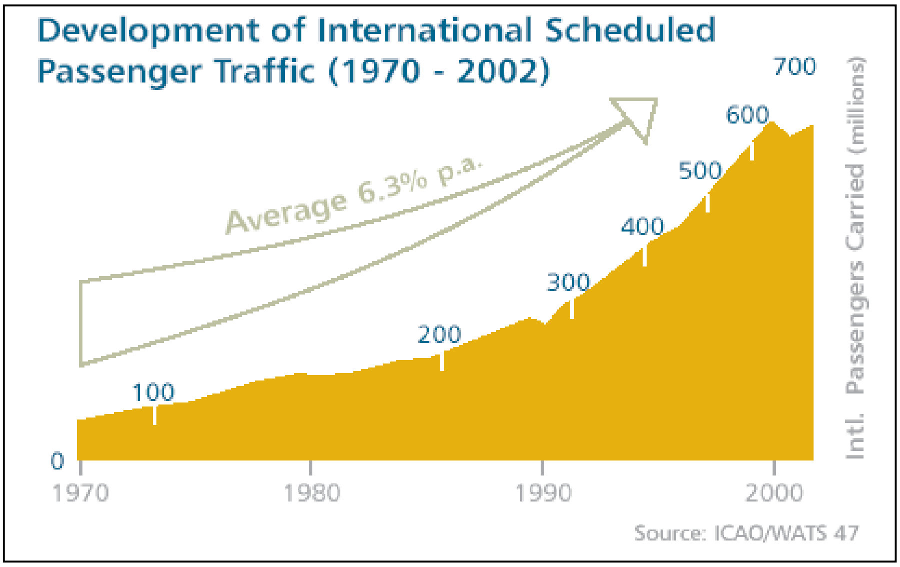
[6] i.e. the companies specializing in computer related activities

[7] Severe Acute Respiratory Syndrome

"expenditure" side with the resulting soaring fuel prices. The impact of these external shocks on North American passenger numbers is depicted on **Figure 1.**[8]

But regardless the recent troubles, between the years 1970 and 2002, worldwide passenger traffic has averaged an annual growth rate of over 6%, which can be observed on **Figure 2**.[9] This growth was nearly double the rate of real global GDP.

Figure 2



Source: *IATA*

2.2 CHARACTERISTICS OF THE INDUSTRY

The airline industry has several characteristics, which make it a rather specific industry branch. The following list is far from complete but the main characteristics are as follows:

2.2.1 SERVICE INDUSTRY

Even though the airlines are usually associated with all sorts of equipment such as airplanes, it's important to realize that no physical product is given in exchange for the money paid by the consumer.[10] Therefore it is a service industry with the main product being the transportation from point A to point B.

[8] '2003 Economic Report: A Review of the U.S. Airline Industry'; ATA; pg.6; http://www.airlines.org/econ/files/2003AnnualReport.pdf; ATA = Air Transport Association

[9] 'Annual Report 2003'; IATA:; pg.4;

[10] assuming that the meals enjoyed on board are only a by-product of the provided service and omitting the inevitable truth of many passengers taking home with them some part of the equipment such as headphones or blankets

2.2.2 SEASONAL

As many other industries, the airline sector is seasonal, when most of the carriers' profits are achieved during the summer holiday season. But holidays like Christmas or Easter with the connected boost in demand allow the carriers to charge as much as ten times more than the "usual fare". Throughout rest of the year, huge discounts have to be often handed out to the customers to fill the planes, making the flights mostly unprofitable. The seasonality of the industry applies only to passenger traffic because the demand for transport of cargo is much more stable throughout the year.

2.2.3 LABOR INTESIVE AND HIGHLY UNIONIZED

Each airline requires for successful enterprise a virtual army of more or less qualified workforce (such as pilots, managers, flight attendants, mechanics, cooks, lawyers, baggage handlers...). After all, it is a service industry that requires mostly personal attention. Long history of the airline business as a regulated industry and frequent lack of suitable substitutes (e.g. pilots) makes it also "ideal" for unions. Labor costs per employee are among the highest of any industry.

2.2.4 CAPITAL INTENSIVE

It takes more than a telephone and a plain office to start an airline business. Especially the traditional carriers need many expensive facilities and equipment (e.g. maintenance hangars, airplanes, flight simulators). Not only is it necessary to have enough capital for the startups, it's also crucial to have enough free cash at hand to run the company. With newly adopted techniques (see 4.2.1 and 5.3.1) such as leasing equipment or joint exercises, the amounts of required capital have been decreasing but nevertheless nothing changes on the fact that the high needs of capital require consistent profitability.

2.2.5 HIGH CASH FLOW

In order to repay the acquired capital (repay debts or leasing payments), to buy new airplanes, or simply to pay for the operating expenses, the airline requires a high positive cash flow (profits plus depreciation).

2.2.6 SUBSTANTIAL BARRIERS TO ENTRY

Not long ago, the entrance of new competitors into the airline industry had been considered to be slow and painful. But in recent years the plague of new low-cost carriers certainly proved that the barriers to entry have been beaten down. The major airlines had to cope with the slump in demand by cutting their operations and labor force. This left many planes sitting on the ground just waiting to be bought or leased and the manufacturers of airplanes were eager to make a deal at bargain prices.[11] The cuts in labor force allowed the new entrants to acquire qualified personnel such as pilots or engineers at a portion of the "regular" costs. It is now possible to launch a new low-cost airline for as little as $10 million.[12] Some other aspects of barriers to entry, which have to be taken into account, are infrastructure availability (e.g. airport slots[13]) and remaining regulation on certain international routes.

2.2.7 SMALL (THIN) PROFIT MARGINS

Most of the previous characteristics make competing in the airline business risky and nerve-taking. Since the economic downturn and increased competition as consequence, the airlines had to reduce their fares to fill the planes, thereby thinning the already small profit margins. As little as one passenger less on a flight can turn profit into loss and vice versa.

2.2.8 PRO-CYCLICAL

Since the industry is highly sensitive to variations of external factors (such as fuel prices, wage levels or fluctuations of demand), has thin profit margins and relatively high barriers to entry, it's pro-cyclical. History shows that downturns in the airline industry go on for years after the end of general economic recessions.[14] The slumps in the years 1970 to 1975, from 1980 to 1984, and especially the 1990's cycle (though mild) showed how vulnerable the major airlines are to economic downturns. It took five years before airlines regained profitability in 1995 following the early 1990's economic slowdown, caused especially by the Gulf War.

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[11] narrow-body Boeings and Airbuses (especially favored by the LCCs) now cost roughly half of their price in the late 1990's

[12] 'Crowded skies"; The Economist, *internet edition*; 22.4.2004

[13] slot can be defined as a docking station for aircraft

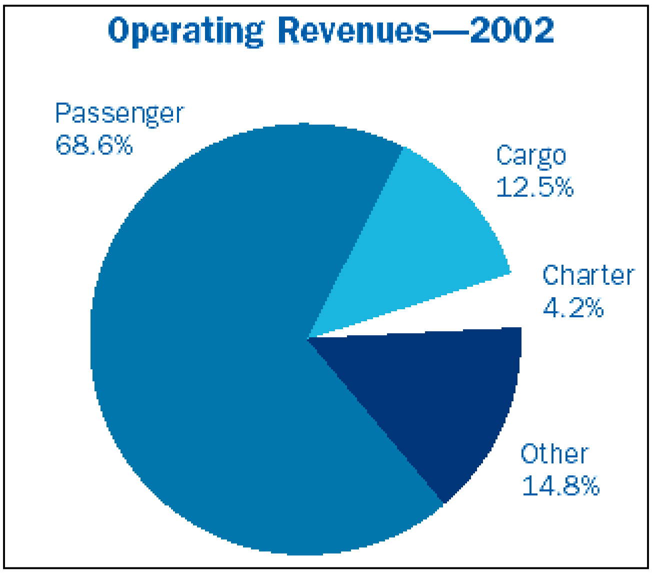
[14] Costa, Peter R.: 'Rethinking The Aviation Industry'; The McKinsey Quarterly, 2002 Number 2 Risk and resilience; http://www.mckinseyquarterly.com/article_page.asp?ar=1190&L2=23&L3=79&srid=69

2.3 COSTS AND REVENUES

2.3.1 WHERE THE MONEY COMES FROM

As the graph for the U.S. airline sector (**Figure 3**)[15] shows, most of the industry's revenues come from passengers (nearly 75%). Most of the passenger revenues (nearly 80%) in USA come from domestic travel, the rest being international travel. In rest of the world the ratio of revenues from international flights is substantially higher with the countries' internal markets being far from the volume of American domestic market.

Figure 3



Source: *ATA*

Most of the revenues come from business travelers since businessmen usually tend to have lower price elasticity than their leisure-traveler counterparts. The percentual part of the revenues withdrawn from corporate pockets has decreased significantly from 35% in 1999 to around 20% nowadays.[16] Interesting fact is the phenomenon of frequent flyers (more than 10 trips a year), which add up only to 8% of the total number of passengers flying in a given year but they make about 40% of the trips.[17]

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[15] '2003 Economic Report: A Review of the U.S. Airline Industry'; ATA; pg.18; http://www.airlines.org/econ/files/2003AnnualReport.pdf

[16] Costa, Peter R.: 'Rethinking The Aviation Industry'; The McKinsey Quarterly, 2002 Number 2 Risk and resilience; http://www.mckinseyquarterly.com/article_page.asp?ar=1190&L2=23&L3=79&srid=69

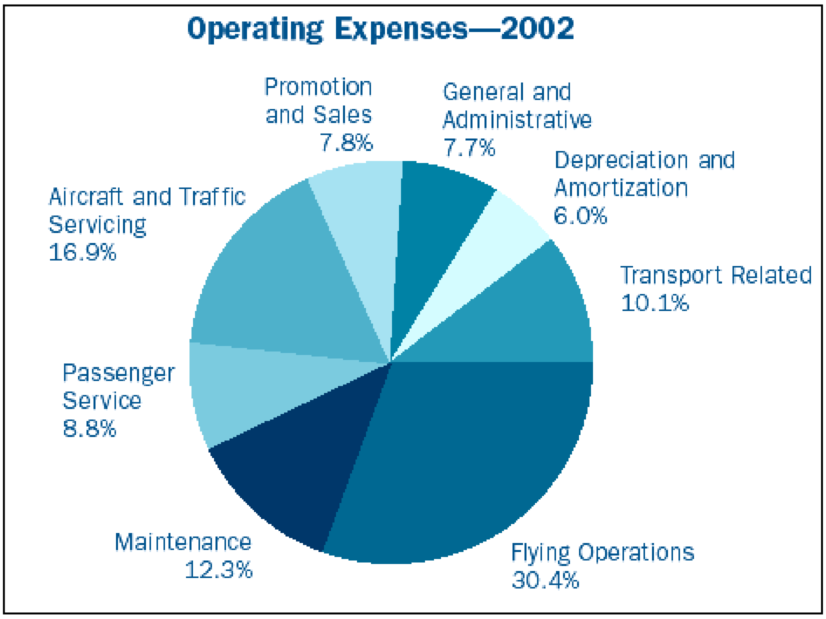
[17] 'Airline Economics'; ATA, 1999; www.airlines.org

2.3.2 WHERE THE MONEY GOES

The largest portion of the pie (**Figure 4**)[18] goes to flying operations, which is essentially any cost associated with the operation of aircraft. The most important components of these costs are fuel consumption, landing fees and contributions to air control centers. Aircraft and traffic servicing are basically any expenses incurred on the ground handling such as handling passengers' luggage. The passenger service costs are the cost of activities contributing to comfort, safety and convenience of passengers while in flight and when flights are interrupted. These expenses include salaries of flight attendants and passenger food expenses. It is important to point out here that the percentual figures displayed on Figure 4 are only an average for the whole domestic market of USA. Therefore, the cost structure certainly varies among the carriers. For example, the amount of money spent on passenger service will be disproportionately larger for a full-service carrier than for a low-cost airline.

The cost structure of the airlines needs to be emphasized as it is extremely crucial for the survival and prosperity of the carriers.

Figure 4



Source: *ATA*

18 '2003 Economic Report: A Review of the U.S. Airline Industry'; ATA; pg.18; http://www.airlines.org/econ/files/2003AnnualReport.pdf

2.4 THE PLAYERS

So far, we already now some basics about the structure and functioning of the industry (the playground) but we haven't yet talked about the members of the airline sector (the players and the actual playing fields).

The industry can be, of course only generally speaking, divided into two kinds of teams. The most important players of the first type of team (the full-service team) are the quarterbacks[19] - the traditional airlines, which account for most of the world's air travel. But other players (such as running backs, linebackers, or wide receivers) like the regional carriers and smaller national airlines are necessary to make the team complete.

On the opposite side play the low cost airlines- some of the most talented and valuable players, having most successful young players (such as Southwest or Ryanair) as their leaders- the rival quarterbacks. Other players of the second kind of team are the unscheduled, charter airlines that lend their aircrafts, usually to tourist operators.

The state governments are the referees of the game that even set the rules. Coaches of both teams are recruited from the heads of international organizations, such as IATA or often (only for the full-service teams) top managers of alliance groupings. What else is necessary for the game? Of course the playgrounds themselves, which can be described in our analogy as the airports and the airline markets. For a successful game, some playing equipment is required. The most important gear, the aircraft, is mostly provided by two manufactures- Boeing and Airbus, with smaller manufacturers like Bombardier catching up. Finally, the spectators are the consumers, the customers of the airlines.

Now that we have defined the basic players and setup of the game, lets look at how well the teams have been playing. The traditional teams have plenty of experience, with some of their airlines being over 80 years in service. But nowadays, it can be said that many of these airlines are too big and unskilled for today's matches. They managed to stay in the league only because of support from the state governments (referees) that granted them many uncompetitive advantages, such as protection from competition and creditors. The traditional airlines managed to strenghten their teams by alliancing, improving thus their coordination of movement and actions on the market field.

[19] to use an analogy with American football, where quarterback is the key player of each team

The second type of team, dominated by the low-cost carriers, is gaining on strength in the last years. The no-frills business model is relatively new (the first LCCs showing up after 1978 in USA and in 90's in Europe) but it paradoxly can be prevailingly looked upon as their comparative advantage. The reason for this statement is the empirical evidence of the innovative strategies and clever new approaches to business, which the regular airlines failed to undertake. The LCCs' biggest disadvantage is often their lack of cooperation resulting in severe competition among players of the "same team" and their narrow specialization on small fields (domestic markets and shorter distances).

Let us now leave the NFL analogy and look at the most important players. The state - the referee and rule-setting authority, the newly emerged low-cost airlines and the traditional carriers.[20] For now, let us just look at the following table (**Figure 5**)[21] that shows the worlds' capital markets' opinions on the best players and compares it with the statistics on the biggest players.

Figure 5

Flying lessons

Top ten airlines by:

market cap, $bn Mar 23rd 2004		revenue-passenger-kilometres, bn, 2003*	
Southwest Airlines	10.5	American Airlines	193.2
Singapore Airlines	7.6	United Airlines	167.2
Cathay Pacific Airways	6.7	Delta Airlines	158.9
Japan Airlines	6.2	Northwest Airlines	110.2
Lufthansa	6.0	Japan Airlines	104.8†
British Airways	5.2	British Airways	101.1
All Nippon Airways	5.1	Air France	100.5
Qantas Airways	4.7	Lufthansa	93.0
Ryanair	4.0	Southwest Airlines	77.2
Air France	3.7	Qantas Airways	76.9

*Airlines with available data only †2002

Sources: FactSet; company statistics

Source: *The Economist*

[20] The charter airlines are rather specific players and outreach the scope of this paper; more discussion on the charters is in Appendix B.

[21] 'Silver linings, darkening clouds'; The Economist, *internet edition*; 25.3.2004

Chapter 3

3. DEREGULATION [22]

There is no dispute that the state plays a crucial role in the entire aviation industry. It's influence ranges from setting the rules of the game and handing out state aids to actual ownership of many airlines and airports.

3.1 HISTORY OF REGULATION AND DEREGULATION

The spider web of the regulatory agreements between governments goes a long way back. At a conference held in Chicago in November 1944, governments set down to lay some basic rules on the international aviation, especially the technical and legal rules. At that time, America proposed a very liberal set-up but other states thought of aviation as a matter of national interests and a question of prestige. Thus came into existence the anachronistic system of bilateral agreements, with the governments making instead of the airlines almost of the decisions such as route-planning, seat capacity and even ticket prices. In aviation, as in Frederick the Great's Prussia, everything was forbidden that was not explicitly permitted[23]. An International Air Transport Association[24] (IATA) was set up as a tariff setting organization, which led to almost 40 years of international cartel, making the OPEC look amateurish. The fares were extremely high, so only the rich could afford to fly. It was time for a change. The first state to liberalize its domestic market were the United States of America.

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[22]the term "deregulation", as it is used in the text later on, means the reduction or total abolishment of regulation in areas such as airline routes and fares but certain areas still are and will be regulated, e.g. safety and security

[23] 'Open skies and flights of fancy'; The Economist print edition; 4.10.2003; pg. 70

[24] IATA has today 273 active and associate Member airlines (including the world's largest) and flights by these airlines comprise more than 98.4 percent of all international scheduled air traffic

3.1.1 US DOMESTIC MARKET

In the 70's, following the oil crisis, the government agency CAB[25] approved a series of agreements to limit the capacity on major routes and allowing the carriers to increase fares. Despite these consumer-unfriendly measures, earnings of the US airlines remained very poor. After a long and burdensome process in the mid-70's, the CAB realized that airline prices in particular would fall automatically if government constraints on competition were lifted and that the aviation industry was naturally competitive, not monopolistic.[26] In November 1977, CAB fully liberalized the cargo carriers' sector. Finally, in the Airline Deregulation Act of 1978, restrictions on domestic routes and schedules were eliminated along with governmental controls over domestic rates. It didn't even take a year for the US domestic market to change from the very basics.

3.1.2 EU DOMESTIC MARKET

In the European Union, everything is much more complicated than in America. The historical and cultural differences between the Member States make it extremely difficult to put aside questions of national pride that goes hand in hand with the national "flag-carrier" notion. Even today with the increased integration of EU it is important to realize that the Member States often have differing interests and plans. It's not much of a surprise that (compared to the US development) the European Union started to liberalize its internal market only step after step and with a great delay.

The first "package" of measures was adopted in December 1987, which for example limited the rights of governments to object to the reduction of new fares and more flexibility was allowed in sharing seating capacity for two countries signing a bilateral agreement.

The second "package" from June 1990 opened up the market a little further with enhanced possibilities in capacity-sharing and setting of fares.

The third "package" was the last and final stage of the European deregulation. It was adopted in July 1992 and applied as from January 1993. This package gradually introduced freedom to provide services within the European Union and led in April 1997 to the freedom to provide cabotage, i.e. the right for an airline of one Member State to operate a route within

[25] Civil Aeronautics Board; ceased to exist on January 1, 1985 and several board functions were shifted to other government agencies, primarily the Department of Transportation
[26] 'Airline Deregulation'; ATA (Air Transport Association); 1999; www.airlines.org

another Member State[27]. ‘As a result, air transport within the European Economic Area is now governed by common rules which provide for licensing, market access, pricing freedom and the application of the competition rules.’[28]

3.2 EFFECTS OF DEREGULATION

The effects of deregulation were similar in both USA and EU and showed that the calm years of the “flying national dinosaurs” have come to an end. The most obvious changes occurred in the areas of consumer benefits, structural changes, increased competition, growth of the overall sector and the emergence of clever innovations.

3.2.1 CONSUMER BENEFITS

Many serious studies in both EU and USA have been done on the consumer benefits after the deregulation of the domestic markets. One of them[29] estimated that the traveling public in USA was **saving in excess of $20 billion a year as a result of deregulation**. Fifty-five percent of the savings resulted from lower fares and 45 percent from increased service frequency, which helps reduce the number of nights that travelers must spend on the road. More than 90 percent of air travel in the year 1999 involved a discount, with discounts averaging two-thirds off full fare. Other studies also show that ‘fares were 20% lower than they would otherwise have been, and 80% of passengers enjoyed lower fares, especially on routes flown by the new low-cost carriers, such as Southwest Airlines and AirTran (formerly ValuJet)‘[30]. The reduction in ticket prices in America can be easily observed on **Figure 6**.[31]

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[27] © European Communities, 1995-2003;
http://europa.eu.int/comm/transport/air/rules/competition_en.htm

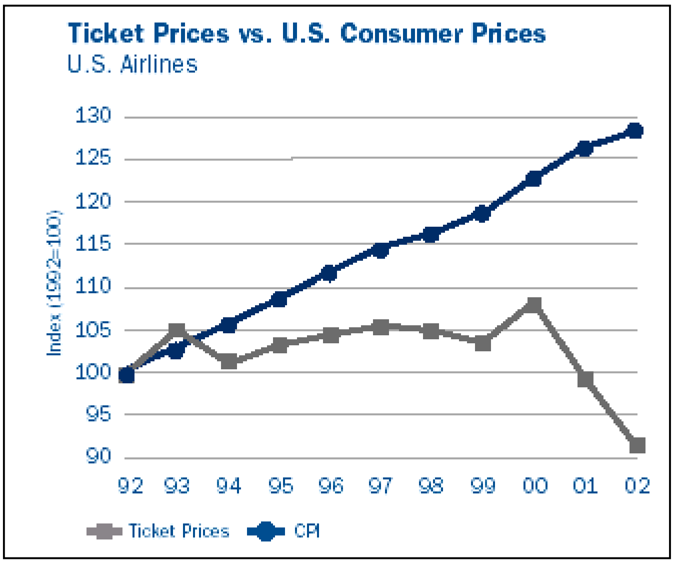
[28] ‘The European Airline Industry: From Single Market To World-wide Challenges’; A Communication from the European Commission; 1999; pg. 18

[29] ‘The Economic Impact of an EU-US Open Aviation Area’; The Brattle Group; December 2002; section 1 pg. 3; (which is citing ‘The Evolution of the Airline Industry’; The Brookings Institution; 1995)
http://europa.eu.int/comm/transport/air/international/doc/brattle_aviation_liberalisation_report.pdf

[30] ‘Open skies and flights of fancy’; The Economist print edition; 4.10.2003; pg. 71

[31] ‘2003 Economic Report: A Review of the U.S. Airline Industry’; ATA; pg.12;
http://www.airlines.org/econ/files/2003AnnualReport.pdf

Figure 6



Source: *The Economist*

3.2.2 STRUCTURAL CHANGES

One of the most important consequences that the deregulation had on the airline industry was a dramatic change in the structure of the entire aviation. Not just the airlines have undergone a complete reform but also infrastructure (such as airports and air control centers) and even plane manufacturers had to accommodate to the new rules of the game.

✈AIRPORTS

With the deregulation acts of the last quarter of the 20th century, traditional carriers developed a very efficient system network of flights, called the hub-and-spoke system. Collecting the passengers from smaller cities into larger airports (hub airports) and distributing them further on into the world allows the big airlines to offer high frequency of flights to remote destinations without the risk of having the planes empty. This development led to the evolution of giant airports such as London, Atlanta, Chicago or Frankfurt with unprecedented levels of traffic and amount of offered flights. The LCCs were mostly left with the point-to-point operations, usually offering direct flights between the secondary airports of the domestic markets.

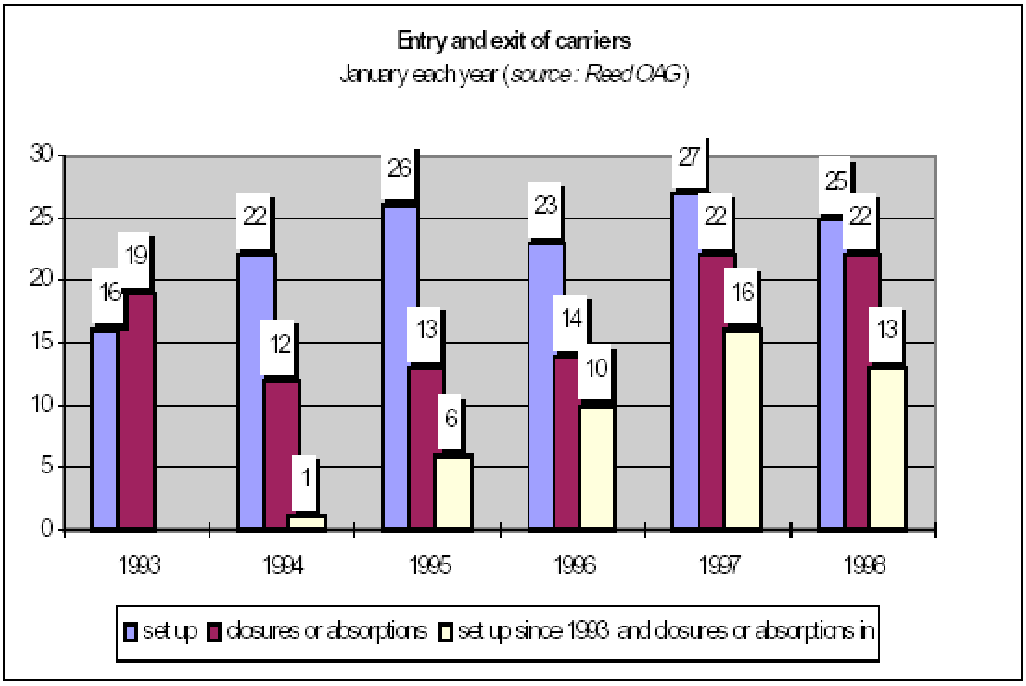
✈AIRCRAFTS

The change in structure of the airports also led to the development of different types of aircrafts. For the long distances between major hub airports and intercontinental flights new, high-capacity aircrafts were manufactured most of all by the two dominant companies Boeing and Airbus.[32] The same manufacturers also engage in the construction of the narrow-body aircrafts with lower operating costs (e.g. more fuel efficient) especially suitable for the LCCs and domestic flights.[33]

3.2.3 INCREASED COMPETITION

It's a well-known fact that liberalization of a certain market leads to increased competition just as 'The appearance of new airlines, combined with the rapid expansion into new markets by many of the established airlines, resulted in unprecedented competition in the airline industry.'[34] In USA, by the year 1999, 85 percent of airline passengers had a choice of two or more carriers, compared with less than two-thirds in 1978. The airlines competed and still compete intensely with one another, especially in the small- and medium-sized markets. A figure from the statistical books of the EU (**Figure 7**)[35] shows well the dynamic nature of the sector in six years following the full liberalization of EU domestic market.

Figure 7



Source: *The European Commission*

[32] today Airbus' A380 now increasingly dominate the market of long-distance travel

[33] e.g. Airbus' A319 and Boeing's 737

[34] ATA: 'Airline Deregulation', 1999; www.airlines.org

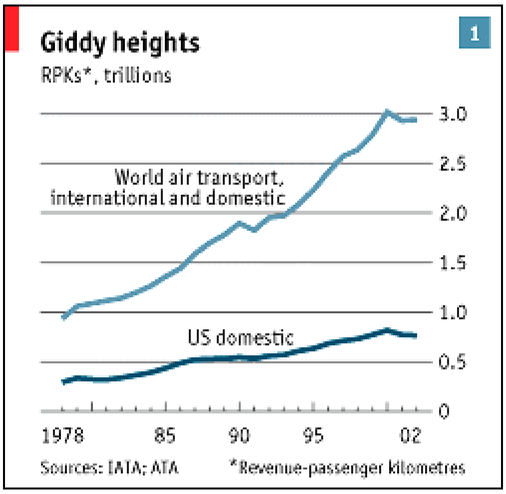
[35] 'The European Airline Industry: From Single Market To World-wide Challenges'; A Communication from the European Commission; 1999; pg. 22

3.2.4 GROWTH OF THE AIRLINE SECTOR

The best way to show the immense growth of the airline industry is by graphs and facts. In the last full year of government regulation of the airline industry, 1977, **U.S.** airlines carried 240 million passengers. By 1999 they were carrying nearly 640 million.[36]

A simple graph (**Figure 8**)[37] can tell more than a hundred words:

Figure 8



Source: *The Economist*

The number of air routes between different Member States of the **European Union** has increased by over 30% since 1993.[38] An initial view of the impact of liberalization is given by the trend in the number of carriers within the European market. Indeed the number of scheduled carriers has grown steadily between 1992 and the year 1999,[39] mostly because of the emergence of new airlines.

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[36] 'Airline Deregulation'; ATA; 1999; www.airlines.org

[37] 'Open skies and flights of fancy'; The Economist print edition; 4.10.2003; pg. 69;
revenue passenger kilometers means: one fare-paying passenger transported one kilometer

[38] © European Communities, 1995-2003; http://europa.eu.int/comm/transport/air/rules/bilan_en.htm

[39] 'The European Airline Industry: From Single Market To World-wide Challenges'; A Communication from the European Commission; 1999; pg. 22

3.3 THE ROLE OF THE STATE

It's no surprise that the state played and still plays in the entire aviation industry a crucial role. The deregulation process throughout the 20th century weakened the governments' position but many key areas still remain regulated and under direct control or at least supervision of the states. The EU and USA differ a lot in the approaches and measures in which the states intervene in the industry but they have many things in common.

3.3.1 HARMONIZING AIRSPACE

The USA are ahead of EU on the issues of improving their aerospace because they already have a working and efficient air control system and most of the much needed harmonization measures have been already implemented. The EU needs to tackle the fragmentation of its airspace. The Single European Sky initiative (see Appendix A) of the Commission is designed to tackle these problems and should bring the much-needed consolidation of especially air traffic control.

3.3.2 ENVIRONMENT AND SAFETY

These two areas of control were and will be firmly in the hands of the US and EU executive bodies, though in Europe the talks between national and union-wide control are still an unresolved issue. The governments try to do their best to tackle the environmental problems by giving out new and tougher guidelines and restrictions on the level of emissions and noise levels. But if we look aside these official proclamations we may observe that the airline industry is heavily undertaxed where tax exemptions for fuel provides no incentive for airlines to use the most efficient aircraft, reducing the CO_2 emissions.

Safety is a key issue since accidents in the sky tend to be lethal. The facts speak for the opinion that the USA and EU are both doing a good job. For example in Europe, with a third of global air traffic, only a tenth of accidents occur here. The safety standards are regulated also by international authorities, such as IATA.

3.3.3 AIRPORTS

Most of the airports in both USA and EU are in the hands of the state, allowing them to push forward many proposals and goals. Europe's 50 largest airports have already reached or are close to reaching saturation points in ground capacity.[40] The congestion at and around large hub airports causes serious problems with air traffic management, pollution or noise. The governments of both EU and USA are trying to tackle these problems by:

- adjusting airport charges (prevent bunching of flights at certain times of a day)
- promoting intermodality with rail
- limiting growth of the airports, especially the ones in urban areas[41]
- revising the temporary allocation of slots, allowing thus greater access to the market and increasing competition

3.3.4 OTHER

Other areas of competence of the EU executive bodies are:

- delegating licenses to airlines that fulfill certain technical and operational criteria
- the European Community still has control mechanisms of fares under certain exceptional circumstances[42]
- public service obligations for certain routes, imposed on the carriers in cases when the market mechanisms wouldn't provide such positive externalities
- antitrust law enables the states to be a watchdog guaranteeing fair competition in the airline sector

3.3.5 STATE AID

The aviation industry went through difficult times in the last years. As a consequence of economic downturns, slump in business travel, September 11th terrorist attacks, SARS[43] epidemic, Iraq war, bad management, wrong decisions, overcapacity from the profitable late 1990's, increased competition etc., lots of airlines have found themselves in the red numbers without a perspective of bright future. In a competitive market it's nothing extraordinary for the companies to go bankrupt. For example, the U.S. largest carriers such as American

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[40] 'White Paper: European transport policy for 2010: time to decide'; © European Communities, 2001; http://europa.eu.int/comm/energy_transport/library/lb_texte_complet_en.pdf; pg. 37

[41] the Royal Commission on Environmental Pollution has said that if air travel is not restrained, British airports could be serving more than a billion passengers by 2050; (from The Economist *internet edition*: 'Up, up and away'; 4.12.2003)

[42] Regulation (EEC) No 2409/92; the Community can for example object to fare reduction in a price war hurting the competitiveness of the industry

[43] Severe Acute Respiratory Syndrome

Airlines or United were both producing losses of over $3 billion for the year 2002.[44] But what happens when the most hit companies are the biggest ones with tens of thousands of jobs at stake? Furthermore in Europe, several traditional carriers such as Air France, Alitalia or ČSA are still in the hands of states and prevailingly looked upon as national "flag-carriers". It's no surprise that at this point the decision on the future of these airlines becomes a political issue.

In the wake of the Gulf war in 1991, seven American carriers filed for bankruptcy and four liquidated themselves. In 1991, airline sales fell by 12%, year-on-year, in the first month of fighting and by about 7% in the eight months after the outbreak of war.[45] It took a long time for the U.S. carriers to get out of this slump. Following the terrorist attacks of September 2001, the airports were closed for four days. That caused great losses for the carriers and the American government promptly compensated the airlines with $5 billion to get the industry back on its feet. The real question is whether the government was also wise to deliver another $10 billion in guaranteed loans through the Air Transportation Stabilization Board (ATSB), a body created specially for that purpose.[46] Another popular American practice is the Chapter 11 of the bankruptcy code, for which the troubled giants can file. Falling under Chapter 11 allows the carriers to acquire soft loans and protection from creditors in exchange for a feasible plan to get back on their feet. Renegotiating labor contracts (which swelled in the late 90's), streamlining their operations and fleet (e.g. reducing the number of types of aircrafts) has all been part of the managerial plans of the U.S. scheduled airlines. That helped them to get their hands on the bailouts from the ATSB but on the other hand cost the American taxpayers billions of dollars.

EU has chosen somewhat different approach to handing out money. The Commission in its 1994 guidelines builds the definition of state aid on the "market economy principle".[47] The European Commission in Council regulation 659/1999 explains that 'State aid is no longer necessary and there is no longer any reason for it.'[48] Even today the EU looks at state aid as an exceptional measure that contradicts the chosen liberal market approach. Nevertheless a recent example of state aid can be seen when Alitalia persuaded European

[44] 'Flying dinosaurs'; The Economist, *internet edition*; 6.2.2003

[45] 'The darkest hour'; The Economist, *internet edition*; 20.3.2003

[46] 'Grow up'; The Economist, *internet edition*; 19.9.2003

[47] when no private investor would have invested the same amount, the public aid is then considered state aid

[48] © European Communities, 1995-2003; http://europa.eu.int/comm/transport/air/rules/state_aid_en.htm

Union to approve yet another national rescue package disguised as a capital increase. Other airlines, such as the Olympic Airways of Greece, swallowed considerable amounts too.

So after all, the U.S. and European approach is not as different as one might think. The difference is mainly in the magnitude of the aid and that aid from the Member States is not as talked about as the cases from America.

3.4 TRANSATLANTIC TALKS

The history, current development and most of all the future of the EU-USA relationship are crucial for the development of the entire industry. Several issues that will be now discussed (e.g. bilateral agreements) apply to many other states than just the USA and the EU Member States but the development of the agreements and diplomatic talks between Europe and America clearly demonstrates the complexities of inter-governmental negotiations.

The chosen approach at the 1944 conference in Chicago was a complicated system of bilateral agreements between pairs of states, strictly listing the constraints and privileges. The individual states delegated these privileges (e.g. the right to fly to foreign country's selected cities) to their national "flag-carriers". It's no wonder that because of insufficient competition, tight regulation and the overwhelming barriers to entry, fares were so high tat air travel was only for the rich. The process of deregulation eased the conditions first in America in 1978 and in the 1990's within the Member States of the EU. But deregulation of intercontinental aviation was (and still is) far from such success.

The post-war governmental deals between USA and EU member states determined which airline could fly where, the frequency of the flights and even what fares they could charge. Therefore, any competition that would lower prices and benefit the consumers was nearly nonexistent.

3.4.1 OPEN SKIES AGREEMENTS

Things started to loosen up a little after the deregulation of European internal market. America started signing up European countries for bilateral deals.[49] These arrangements were called "open skies" agreements and even though they were far from liberal, they were better than the old ones. The Netherlands were the first country to sign such a deal in 1993, being

[49] 'Open skies and flights of fancy'; The Economist print edition; 4.10.2003; pg. 71

followed by states like Germany, France and others. The template was that any U.S. carriers could fly anywhere from USA to a bigger variety of cities in the respective EU country with no restriction on fares, routes and frequencies. In return the Member state's "flag-carrier" was allowed to collude on fares and capacity with its American counterpart with guaranteed immunity from US antitrust law for such alliance.[50] The carriers eagerly snatched onto this new opportunity. Close operating alliances (e.g. KLM and Northwest) were established, allowing the transatlantic partners to pool flights and revenues. The consumers benefited from such alliances to some extent but the real winners were the airlines with these "exclusive rights". The revenues of especially American network carriers rose significantly since the number of international passengers almost doubled and the transatlantic flights are considered to be some of the most profitable.

These Open Skies deals bring more benefits to the American carriers than to their European counterparts and that's why these arrangements have been a thorn in EU's flesh. The situation where each Member State separately, and not the Union, negotiates access conditions with third countries has proven to be a handicap.[51] One example of how these agreements are tilted in America's favor is that American carriers are free to fly between European airports but European airlines cannot pick up passengers to fly within America.[52] The European carriers can only fly to United States from their home country or sometimes a single hub. As an example, it is impossible for Air France to offer a flight from Frankfurt to America since such flights are restricted only to the German carrier Lufthansa.

Another upsetting part of the deals for the EU is the constraint on foreign ownership. America limits foreign shareholders to 24.9% of its airlines, while Europe sets the roof of non-EU ownership to 49%.[53] That doesn't allow the airlines to build closer transatlantic connections such as transatlantic mergers.

On 5 November 2002, the Court of Justice of the European Communities delivered its judgment in the cases, which the Commission had brought against eight Member states[54] regarding these countries' signing bilateral air service agreements with the United States. The ruling was that these countries made commitments in areas where competence had been

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[50] 'No more squalid deals'; The Economist, *internet edition*; 24.1.2002

[51] e.g. the European airlines have only been able to obtain 160 slots at Tokyo's Narita airport, while the American carriers have 640

[52] 'No more squalid deals'; The Economist, *internet edition*; 24.1.2002

[53] 'Open skies and flights of fancy'; The Economist print edition; 4.10.2003; pg. 71

[54] Austria, Belgium, Denmark, Finland, Germany, Luxembourg, Sweden and the United Kingdom

transferred to the Community (e.g. intra-Community fares and rates) but most of all violated one of the basic principles of the Treaty of EU: discrimination on grounds of nationality.[55] Since these bilateral agreements give privileges to the national flag-carrier, they discriminate against other European airlines. The bilateral deals with USA also make mergers among the Member States nearly impossible because both countries' carriers risk loosing their "privileges" (guaranteed by the current agreements) and thereby delimit entrepreneurial behavior on the European market.

The Court has denounced the Open Skies agreements as inconsistent with the Community law and suggests that they are renegotiated on a Union-wide base.

The ruling of the European Court of Justice boosted the competences of the Commission as a Union-wide negotiator. The Commission has been granted a negotiation mandate with all third countries, including the USA, and the objective is to give European airlines 'Community' nationality in relations with third countries[56] and promote the role of Europe in international aviation.

3.4.2 OPEN AVIATION AREA

The European Commission wants to use the granted mandate as much as possible to change the current deals that are unfavorable for the EU. Europe is pushing forward new round of talks that are to replace the existing agreements with a single EU-US comprehensive agreement, establishing an "Open Aviation Area" (OAA) between the two territories.[57]

These negotiations cover all aspects of air transport such as rules for: market access (routes, frequency, capacity), market entry and rules for foreign ownership and control, setting air fares, ensuring competitiveness, safety, security and harmonization of technical standards. Both sides officially declare that they wish to put aside all regulation except on safety and technical issues. But let us look closer at the motivations and goals of both sides.

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[55] © European Communities, 1995-2003; http://europa.eu.int/comm/transport/air/international/dev_en.htm

[56] 'White Paper: European transport policy for 2010: time to decide'; © European Communities, 2001; http://europa.eu.int/comm/energy_transport/library/lb_texte_complet_en.pdf

[57] © European Communities, 1995-2003; http://europa.eu.int/comm/transport/air/international/dev_en.htm#towards

✈EU

For a long time, the common transatlantic aviation area proposal has been in the center of attention of EU. As it was already mentioned earlier, the current deals are contradictory to the EU principle of non-discrimination and are disadvantageous for the European side of the table in many ways. The energetic Commissioner for Energy and Transport, Loyola de Palacio, will be replaced this summer, following the elections into the European Parliament, and therefore she seeks to push the talks as fast as possible. Following is a quote from the 2001 White Paper[58]: 'The Community must base these agreements with its main partners on principles guaranteeing free access to traffic rights, equal conditions of competition, protection of safety and the environment and the elimination of property rights. These are the principles underpinning the concept of a common transatlantic area in air transport, which the Commission wishes to see replace the current transatlantic agreements.' The Brattle Group report[59] for the European Commission estimates that the EU-US Open Aviation Area would bring an increase of 17.7 million to 46.7 million passengers per year, consumer surplus of more than $5.1 billion annually, and would upgrade employment to higher levels on both sides of the Atlantic.

✈USA

The U.S. attitude can be described by a British motto: 'Oh, but we *are* moving towards the metric system – inch by inch'.[60] The main reason for such "half-hearted" stance is that the United States are much happier with the present state of the deals than their European counterpart. Instead of a dramatic change in the arrangements, US desire a more gradualist approach. 'The European vision to build a transatlantic Open Aviation Area is just the sort of grand project that plays well in Brussels...Such visions play less well across the Atlantic to those bound up with the realities of Washington politics and still keen to sign up the world to its tried and tested open skies formula.'[61] It's also important to realize that America's major carriers have difficulties even staying alive, paying thus more attention to their internal

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[58] 'White Paper: European transport policy for 2010: time to decide'; © European Communities, 2001; http://europa.eu.int/comm/energy_transport/library/lb_texte_complet_en.pdf; pg 93

[59] 'The Economic Impact of an EU-US Open Aviation Area'; The Brattle Group; December 2002; pgs. vii and viii; http://europa.eu.int/comm/transport/air/international/doc/brattle_aviation_liberalisation_report.pdf

[60] International Aviation Club, American Bar Association; Washington 18 March, 2004; Presentation By Ulrich Schulte-Strathaus, Secretary General, Association of European Airlines

[61] Airline Business magazine; 'Comments' section; March 2004

issues.[62] But these troubled giants are likely to benefit from the OAA because it should allow for inflows of significant foreign capital, which they desperately need.

3.4.3 THE CURRENT DEVELOPMENT

Up to date (May 2004), not much progress has been done on getting closer to the Open Aviation Area that the EU hopes for. The U.S. side of the table has so far offered only a partial deal (e.g. allowing EU airlines to fly from any European city to any American city) in exchange for an end to all bilateral restrictions concerning US carriers (especially slot allocation at hubs like Heathrow airport). But EU doesn't want to step back from its grand vision. Besides, the European delegation fears that approving such a mini-deal will leave the USA with little motivation for further talks. On the other hand, Brussels' negotiators need to realize that a better offer may not come in a US election year (i.e. this year's presidential elections) and the future approach from the new cabinet to this issue is unsure and the entire process would freeze for months.[63] The US negotiators' explanation of this partial deal can be described as "a first step to a staircase that leads somewhere". The question without clear answer is whether the EU side can believe that.

There is no need to point out that the EU-US talks are crucial for the entire aviation sector for the years to come. The common transatlantic aviation market would create the largest liberalized airspace in the world with the rest of the world under strong pressure to follow such example. That landmark ruling could change the whole of aviation, moving it from a regulated market of protected national flag-carriers to a truly global business where cross-border mergers and acquisitions are as commonplace as they are for banks.[64] 'Rule number one: there shall be no rules, other than that of the market!'[65]

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[62] 'Open skies and flights of fancy'; The Economist print edition; 4.10.2003; pg. 71

[63] the necessary time for new administration to get in place

[64] 'Open skies and flights of fancy'; The Economist print edition; 4.10.2003; pg. 70

[65] 'Open the skies'; The Economist print edition; 4.10.2003; pg. 15

Chapter 4

4. LOW-COST CARRIERS (LCCs)

Motto: “To provide our customers with safe, good value, point to point air services...”

easyJet mission statement[66]

The terrorist attacks of September 11th 2001, SARS epidemic and the war in Iraq hurt the aviation industry badly. Yet, there are winners of the shake-out process - the low-fare airlines. How is it possible that while the industry as a whole was losing billions of dollars per year since 2001, most of the LCCs could achieve net profits and expand their services and fleets? This chapter tries to answer this question.

4.1 STORY SO FAR

The term “low-cost carrier” is a relatively new one. After U.S. Congress approved the Airline Deregulation Act in 1978 (see 3.1.1), the barriers to entry were beaten down. After some time, new entrants to this promising market started showing up, thereby increasing competition and putting high pressure on the existing carriers. The process was speeded up during periods of economic downturns when loss-making traditional carriers had to free up some market space. Newly, managers had to be much more careful especially in their pricing, scheduling, booking, fleet planning and cost-reducing activities. The new entrants led the way in this field. The first one, and one of the most prosperous until today, to introduce the low-cost business model were Southwest Airlines and the first carrier in Europe to copy the successful model were Ryanair and easyJet. Many others followed with random success but new LCCs were and still are popping up like mushrooms after rain ever since. From September 11th 2001, no less than 60 new airlines have got off the ground.[67] The latest markets to be flooded by new entrants are the ones in central-eastern Europe and Asia. For long, Asia was considered to be unsuitable for LCCs with long distances between the cities, lower purchasing power of the inhabitants and a lack of suitable secondary airports. The tremendous success of AsianAir, the Asian LCC market leader proved that the skeptics are definitely wrong. Many aviation specialists already see the market of LCCs overcrowded

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66 easyJet: http://www.easyjet.com/EN/about/index.html

67 ‘Crowded skies’; The Economist, *internet edition*; 22.4.2004

(especially in EU and North America) and the severe competition may lead to a number of no-frills airlines going out of business in the years to come.

So far we have talked about the stunning numbers and performances of the LCCs but we haven't yet clearly outlined what are the main points, which make an airline an LCC.

4.2 COSTS OF THE LCCS

The first, and perhaps the most important task of a low-fare airline, is to cut the costs to the minimum. This can be done in various ways:

4.2.1 FLEET PLANNING

It's best to start with fleet planning, since without airplanes there's no airline. The question to be answered is: What kind of airplane to select and how to get it?

✈NEW OR OLD?

Selecting the right airplane can be crucial to financial success of an airline. Generally speaking, newer airplanes are more efficient than older types. The efficiency is especially sought after, when it comes to fuel consumption and minimizing the crew needed. Tradeoff exists between price and efficiency, so the important decision is to choose between new and used airplanes. Buying an older and cheaper, yet functional, aircraft from a major carrier is the common practice of several LCCs. For example AirTran Airways in USA use old DC-9 jetliners and thereby manage to keep their asset costs down.[68] The prices of these older aircraft are low because the traditional airlines either have decided to update to a newer type or had to lay back some machines in order to cut back and streamline its operations. In the desert area of Arizona, more than 2000 airplanes sit on the ground, eager to be bought. Acquiring a new airplane with high utilization of the obtained aircrafts is another possibility favored by many LCCs such as Southwest.

Aircrafts don't necessarily have to be bought - another way of getting a new airplane is operating leasing. This option is gaining on importance because it's a way to reduce the risk involved in purchasing new technology, putting it forward to the high-income leasing companies. Especially for the startups, shrinking the amount of capital needed to start doing business is vitally important. Another reason for leasing is that it leaves the airline with fewer tangible assets, making it less volatile to hostile takeovers. Do to the decline in demand of

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[68] Costa, Peter R.: 'Rethinking The Aviation Industry'; The McKinsey Quarterly, 2002 Number 2 Risk and resilience; http://www.mckinseyquarterly.com/article_page.asp?ar=1190&L2=23&L3=79&srid=69

aircrafts by the traditional carriers, it's possible to lease nowadays a narrow-body Airbus A320s, ideal for the low-cost carriers, for only about $150,000 a month, compared with $350,000 normally.[69]

✈**WHAT SIZE AND TYPE?**

Since the LCCs more or less concentrate themselves on short-haul travel, smaller and medium-sized airplanes are most commonly used. The large, high-capacity machines are usually put on the more frequently traveled routes between major hub airports, which are still mostly dominated by the major, traditional airlines. Uniting the fleet of aircrafts is a sure way to cut the costs on maintenance and servicing. It is usual for the LCCs nowadays to have only one or two types of aircrafts, usually manufactured by Boeing or Airbus. Interestingly, the LCC's plane isn't divided into first and economy class, as is the common practice for traditional airlines. Instead, the interior of the aircraft is as simple as possible, without any sections and favored seats. Seat planning is not a key issue for LCCs, since the motto is: the more, the better which results in squeezing in as many seats on a given plane. Higher amount of filled seats under the same operating costs means higher profit. Stretching legs is something that every passenger of an LCC is looking forward to after the plane lands because the space between the seats is cut to the minimum, which is obligatory for every airline. Therefore comfort is not a slogan by which the low-fare airlines could lure the customers.

4.2.2 ELECTRONIC BOOKING SYSTEM, DYNAMIC PRICING

By online registration, the LCCs managed to cut the sales costs radically. They save huge amounts normally used on downtown offices, provisions and commissions to travel agents and overall administrative costs. It's common for price sensitive travelers to look on the websites of various LCCs, compare the fares and schedules and then choose accordingly to their personal preferences. All of this can take place from the travelers' home computers, without any personal contact until about one hour before the flight. Not to mention that there's no need for the airlines to print out the actual tickets - a passport and a simple booking reference are enough to get on a plane. Electronic ticketing also allows an airline to document sales and keep track of the company's going much more efficiently than the 'traditional' booking system. By electronic booking, the LCCs manage to omit one link of traditional distribution chains – the travel agents, and thereby save on their provisions.

[69] 'Cheap and cheerful'; The Economist, *internet edition*; 22.5.2003

The web has become the key to clearing the overcapacity produced by the airlines. Travel has become the largest e-business in the world, with Americans spending tremendous amount of $27 billion on travel online. Some forecasts predict that over 30% of all travel business will be booked online by the year 2005.[70]

The dynamic pricing model is the practice of selling the cheapest tickets early and raising prices as each plane fills up. This allows the airlines to maximize their revenues by withdrawing as much consumer surplus from their passengers as possible. Another aspect of the dynamic pricing strategy is that in a run-up for holidays such as Christmas or Easter, the fares can increase as much as tenfold. The LCCs in their short history already mastered these yield management techniques, setting an example for traditional airlines and newly emerging followers.

4.2.3 POINT-TO-POINT OPERATIONS

With the deregulation acts of the last quarter of the 20th century, traditional carriers developed the hub-and-spoke system. Since the major carriers keep the huge international hub airports mainly to themselves[71], the newcomers, mainly LCCs, are left to operate on second-class airports. This doesn't mean that LCCs don't operate on large hubs but the heart of their operations lies within the smaller airports. Therefore, flying from a smaller airport directly to another, can be considered a leftover of the traditional carriers' networks, which the hungry LCCs readily snap up. The LCCs have mastered this activity and turned it into their advantage. The smaller regional airports in areas with high unemployment rates gladly accept these airlines and give them certain benefits and discounts in exchange for job opportunities, growing numbers of tourists and improved prestige of the city. The problem is with the fact that nearly all airports are public property and several luring incentives can be seen as direct subsidies to private airlines, which is a forbidden uncompetitive action in most of the world. Recently, the European Commission ruled, that Ryanair would have to pay back millions of euros, which it got from the Belgian airport Charleroi in form of various subsidies.[72] As the LCCs try to develop these secondary airports into more attractive international hubs and the competition with the traditional hubs increases, some disputes are showing up. For example,

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[70] 'New routes to the beach'; The Economist, *internet edition*; 31.7.2003

[71] often caused by the regulator framework of state governments or simply by exercising the great market power of the traditional carriers

[72] 'Ryanair musí vrátit část peněz od úřadů'; MF Dnes; 5.2.2004

in 2002, Lufthansa started persuading the European Commission to order Ryanair to stop calling their airport 'Frankurt-Hahn', when in fact it's 100 kilometers away from Frankfurt[73].

There are several reasons why the LCCs stick to shorter flying routes. The lack of free slots at the international hub airports is one of them. Moreover, the aircrafts' insufficient equipment, crew and comfort for the travelers limit their operating ranges to small and medium distances. Also staying on the ground for longer period in order to clean up, refuel and do the maintenance, which is necessary after a long flight, contradicts the LCCs' strategy of flying as much as possible. Last but not least, the cost of fuel on long-range flights doesn't comply with minimizing costs since the prices of oil are nowadays higher than ever. Still there are several LCCs that are ready to tackle the long-haul challenge. Already several low-fare airlines in the USA that are operating from coast to coast, but transatlantic and other long distance flights remain to be the playground of larger, traditional carriers. There won't be much difference between the flag carriers and long-range LCCs, so calling the new courageous airlines undertaking this challenge LCCs may be somewhat misleading.

4.2.4 FLYING = EARNING

Staying in the air as much as possible and keeping the planes at rest for as little as possible is one of the keys to the success of the LCCs. EasyJet and Ryanair for example manage to have their planes 11 hours a day in the air, compared to around 7 hours of the British Airways.[74] By keeping the network of flights simple, the LCCs can get as much as 50% more flying hours out of the same-sized fleet than traditional airlines with more complicated networks. EasyJet admits having only "one and half planes' worth" of spare capacity, whereas British Airways have on stand-by at Gatwick and Heathrow around a dozen aircrafts in case of any problems. The point-to-point system is more risky than the hub-and-spoke model used by the conventional carriers, but the LCCs reduce the risk by offering unbeatable low fares, thus flying with full aircrafts. And flying as many full planes a day as possible is sure enough the goal of all airlines.

[73] 'Flag carriers at half-mast; The Economist, *internet edition*; 28.2.2002

[74] 'Fly me, I'm cheap'; The Economist, *internet edition*; 15.8.2002

4.2.5 NO CATERING, NO FRILLS

Perhaps the mostly associated word with LCCs beside ‘cheap’ is ‘no frills’, ‘no extras’. To an experienced passenger traveling with an LCC for the first time, the level of service offered on board is a new experience. Nobody can expect to get any drinks, food or other refreshments for free during the flight. Pillows and blankets are even scarcer than on the flights of conventional airlines. The number of toilets is decreased in exchange for additional seats. Small wonder that the planes of low-cost carriers are sometimes referred to as “flying buses”.

There is no sitting order for the simple reason of avoiding the administration costs and trouble that this ‘additional’ service brings. The goal of the LCCs is simple: leave out everything that is not essential for flying!

4.2.6 LABOR COSTS

According to the US Department of Travel in 1999, passenger, aircraft and travel services made up around 25% of major airlines’ costs. Cheap and flexible working force is a key element of the LCCs’ strategy. No catering on board means no need for numerous flight attendants; one motivated baggage handler can do the work of two old ones and why have so many unnecessary dispatchers? Another example is that pilots of EasyJet and Ryanair fly about 900 hours a year, which is over 50% more than British Airways.[75] Employing personnel for shorter periods undermines the bargaining power of the ground and air staff unions, which are a major threat to wage-reducing craves of regular airlines. Nevertheless, the overworked staff and chronic shortages of workers and equipment have negative consequences such as delays, which have to be taken into account when flying LCCs.

4.3 THE PRICE OF FLYING CHEAP

As a result of the omnipresent cost cutting, a traveler on an LCC-operated flight can’t expect any refreshments, neither much comfort. On the other hand, what must be expected are delays. Especially the shrinking of the ground staff leads to chronic shortages of the personnel. It’s almost a routine for LCCs to have their flights delayed and Ryanair, which carries over a million passengers per month, even advises its customers not to book connecting flights.

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[75] ‘Fly me, I’m cheap’; The Economist, *internet edition*; 15.8.2002

Frequent flyer programs are common among the traditional airlines, keeping their customers faithful. LCCs keep their customers by low fares (and low fares only); therefore it doesn't make sense for them to offer such programs. A most recent case of LCCs trying to secure the stability of passengers' demand other than by simply offering the lowest fares is the case of Song Airline, a low-cost daughter of Delta Airlines. Song is handing out four free tickets on every flight to passengers that will be the "best behaving ones" and it's up to the flight attendants to decide on who that is.[76] But such initiative is only an exception from the general rule that the low-cost carriers compete simply by the ticket prices.

Keeping the fares low consequently raises the break-even load factors for LCCs. The break-even load factor is the percentage of seats the airline has to fill to cover its costs. The LCCs have to fill up almost 80% of their seats to generate yield, which is far more than the industry's 66 percent calculated by ATA.[77]

Buying a ticket in great advance can save a lot of money and therefore can be quite reasonable. The trouble comes, when somebody has to reschedule the flight or cancel it altogether. Switching the date can be penalized by a sum that considerably exceeds the original price. And that's not all! The difference between prices of the original ticket and the price for the date of this change has to be leveled off. Canceling the flight leaves the customer with empty hands, since refunds usually don't exist. Each potential traveler has to think of this possibility very thoroughly before buying the ticket.

Safety is another key issue for every airline. So far, the governments have the safety laws firmly in their hands. They won't allow any unapproved airplane to touch the ground of the state-owned airports. Even the older secondhand planes, which are being widely used by the LCCs, have to comply with the standards. The public secret is that pilots have to cut corners on certain routes and fly at the uttermost speed limit, in order to keep up the hectic flight timetables.[78] This can be a very shortsighted practice, since the future of the entire airline is constantly at risk. The once successful American ValuJet airline went out of business after one of its planes crashed in Florida swamp in May 1996, all people on board being killed.

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[76] 'Buďte na sebe hodní. Poletíte třeba zadarmo'; MF Dnes; 29.5.2004

[77] 'Airline Economics'; ATA; 1999; www.airlines.org

[78] 'Fly me, I'm cheap'; The Economist, *internet edition*; 15.8.2002

4.4 PASSENGERS OF LCCS

By offering one-class-only, no-frills, no-comfort services, the low-fare airlines can't count on businessmen to prefer such flight. Business travelers are often the ones that keep the well-established airlines afloat because of their inelasticity of demand and thus are being 'ripped off' by paying high fares. But these corporate air pilgrims request in exchange high level of comfort, reliability and dense frequency of flights to and from their destination. This contradicts the LCCs' strategy of no-frills and point-to-point (less frequent) flights. Some of the more price-sensitive businessmen nowadays opt for this cheap way. But the revenues from these passengers aren't so striking since they're paying low fares just like every other passenger onboard.

The low-fare airlines thereby concentrate on price-sensitive travelers. Tourists are especially price sensitive and don't have problems with booking their flights long in advance. The exact date is not a problem and one flight a day is more than enough. On short and mid-haul flights they also don't mind as much the reduction of service and some of the discomfort onboard. So tourists can form the ideal clientele for the no-frills concept. The only task that needs to be worked on is the careful selection of holiday destinations .

By taking a closer look at the segmentation of the market, it's easy to realize that the LCCs do not fill their planes by only taking away passengers of the traditional airlines. By the extremely low fares they create an entirely new group of cost-conscious customers, which otherwise would use other modes of transport or not travel at all. This idea is well illustrated by the diagram of market segmentation (**Figure 9**).[79]

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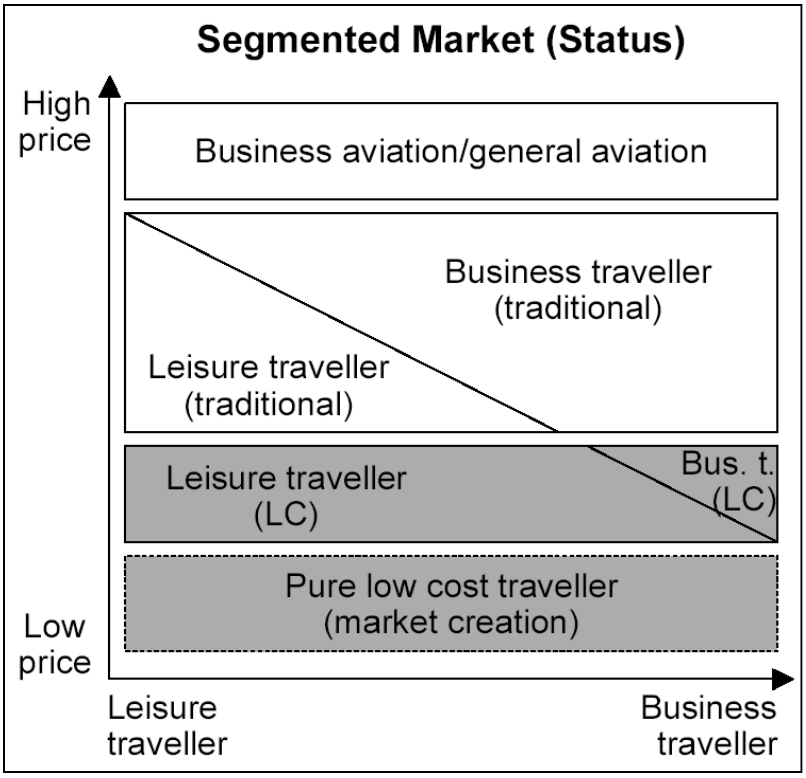
[79] Kaiser, Alexander - Cell Consulting: 'Crusade Into the New World'; pg.3; May 2003; http://www.cell-consulting.com/f/27/file.pdf

Figure 9



Source: *Cell Consulting*

Single independent tourists are not the only travelers looking for visiting their vacation spots for cheap. The LCCs soon realized that the market of package tourism is a vulnerable one with promising revenues. The task was to lure away the clients of the travel agencies, which were using charter airlines for vacation travel. The first advantage of the LCCs is that their schedules are more flexible than those of the charter airlines. The no-frills airlines hooked up tightly with hotel chains, car-renting companies and the like to create a virtual tour package without the need of a travel agency. Everything is happening online and the agile tourist can save lots of money by switching from the package tours to this kind of service. And saving money is something that most tourists go for.

Chapter 5

5. TRADITIONAL CARRIERS

Some of the traditional full-service airlines, e.g. British Airways, Delta Airlines or ČSA, have been now carrying travelers on their planes for over 80 years. For long time, the national flag carriers have been a protected species, with governmental control of almost every aspect of their activity. Some post-war troubles, such as the deregulation acts and oil shocks, have revealed several weaknesses of the network carriers. With liberalization of domestic markets, a green light was given to domestic competition. But since many major airlines, such as Air France and Alitalia, are still owned by their state governments and the bilateral agreements between countries persist, the deregulation has been just partial. For several reasons (e.g. governmental bailouts or upturn of demand for business travel) the high majority of network carriers managed to steer their inefficient schooners without the pressure to fundamentally adjust the course.

The real blows to these carriers came not long ago. The economic downturn, slump in business travel, terrorist attacks, Iraq war, SARS epidemic and other threats and events could play a decisive part in the entire aviation industry. The impact of such a combination of events on major carriers could be compared to a meteor strike that allegedly destroyed the dinosaurs by creating a "nuclear winter" which the creatures that ruled the world could not survive.[80] The airlines had to react to these new challenges and we will look at how they did in this chapter and Chapter 6. But first let us put under magnifying glass the biggest problems of the airlines.

5.1 THE BIGGEST PROBLEMS

5.1.1 INCREASED COMPETITION

With the liberalization of the American and EU domestic markets, the space for new market entrants opened up. Most of these new players were airlines with a low-cost, no-frills business model. They could offer fares at much lower levels than their full-service counterparts. For some time, the majors could use their market power and cross-subsidies to compete in a price war with the new market dogs but in long run, such a strategy is evidently

[80] 'A way out of the wilderness'; The Economist, *internet edition*; 1.5.2003

unsustainable. In the past, following the emergence of the new carriers, one important reaction of the traditional carriers to the increased competition (which mainly focused on point-to-point operations) could be observed. The hub-and-spoke system that the big airlines dominate, was and still is the most economical way to offer frequent air service in most markets. Even though some low-cost carriers are now flying between big hubs, they may never conquer that market.[81] The early success of the hub-and-spoke network caused that many mainstream airlines lived in denial for several years after the appearance of the LCCs, saying that the no-frills carriers do not pose a threat on them. For example Lufthansa claimed even in the year 2002 that it didn't have a single route where it would compete with the LCCs.[82] In one way, the newly emerged carriers indeed have created a new clientele for their flights but on the other hand they have already pulled many "traditional" travelers on their side of the playing field. Recent action of Lufthansa (when it rose its share in one of the LCCs, Germanwings, to nearly a half in order to be able to tackle the expansion of easyJet and Ryanair)[83] clearly demonstrates that the competition is up. To look at the Czech Republic's own playground, the new aggressive marketing campaign of the national ČSA flag carrier doesn't coincide with the appearance of new competition from Smart Wings simply by chance.[84] Another example comes from America where four out of every five airline markets (i.e., the area served by a pair of airports) now feature a budget carrier as well as a network airline.[85] And with a forecast of the LCCs taking around 30% of the US and EU domestic markets (some analysts even forecast as much as 50%) in a couple of years, to look away from such a threat can be likened to sitting on a sinking Titanic and pretending that nothing's wrong.

5.1.2 DECLINE IN CORPORATE TRAVEL

The new and severe competition has been (and still is) just one cause of many wrinkles on the foreheads of the airline managers. In the past, airlines' profits mainly came from wringing businessmen and controlling the lucrative transatlantic transport. The economic downturn and bursting of the dotcom bubble was followed by a decline in corporate travel, since the companies' bloated travel expenditures were an obvious target for cuts. Even

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81 'Landing with a bump'; The Economist, *internet edition*; 15.8.2002

82 'Flying high'; The Economist, *internet edition*; 7.11.2002

83 'Crowded skies'; The Economist, *internet edition*; 22.4.2004

84 Páral, Pavel: 'Začínáme se prát o klienty'; Euro #15 (weekly economic magazine); pg. 26; 13.4.2004

85 'Silver linings, darkening clouds'; The Economist, *internet edition*; 25.3.2004

before the start of the war with Iraq, revenues from corporate travel in the year 2003 (as compared to year 2002) were down by 5% in Europe and by 10% in America.[86] More important for the carriers than the immediate blows has been the overall shift of behavior patterns of the business travelers, which is unlikely to change in the following years. This shift was caused mainly by the ebb of these passengers to the LCCs (with the companies now looking at the internet for the cheapest and most suitable flights). Moreover, some substitutes of corporate travel, such as videoconferences, have improved a lot in last few years with prices of these means of communication going down sharply. Another new trend takes away customers of the biggest corporations from the traditional carriers – renting a corporate jet, which may take away at least 10 percent of first class travelers by 2005.[87]

5.1.3 TRANSATLANTIC FLIGHTS

Intercontinental travel (especially the Euro-American passenger flows) generates disproportionately high levels of revenues. For the airlines that offer transatlantic flights, these operations often account for much of their yields. The terrorist attacks on USA, resulting in a huge plunge in numbers of transatlantic flights (see **Figure 10**)[88] were extremely

Figure 10

Source: *The Economist*

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[86] 'Business travaillers'; The Economist, *internet edition*; 3.4.2003

[87] Costa, Peter R.: 'Rethinking The Aviation Industry'; The McKinsey Quarterly, 2002 Number 2 Risk and resilience; http://www.mckinseyquarterly.com/article_page.asp?ar=1190&L2=23&L3=79&srid=69

[88] 'Flag carriers at half-mast'; The Economist, *internet edition*; 28.2.2002

painful, even though these numbers have been rising since then and forecasts show that the transatlantic aviation area has a bright future.

5.1.4 THE HIGH COSTS

With the revenue side of the account statement being hit hard, the expenditure side came under the spotlight. The rising fuel prices, caused mainly by uncertainty brought about by the war on Iraq, were bad news for the airlines, since expenditure on fuel is a substantial part of the cost structure. For example in March 2003 the price of fuel was two times higher than during the same time of year 2002[89] and the trend is upward-sloping.

The high wage levels and overemployment induced by the profitable mid-90's have proved to be extremely costly too. The unions in aviation are powerful and their behavior can be sometimes described as sawing off the branch they are sitting on. For example in the tough times of November 2002, unions demanded from the German carrier Lufthansa a 9% pay rise for cabin and ground staff.[90]

5.2 THE CONSEQUENCES

Some of the airlines were quicker to react to these new challenges than others and some of them were even successful. We have to admit that among the less successful ones, sometimes a portion of especially bad luck had its share. Such case of bad luck becomes especially obvious in the case of Swissair, once very successful airline. The Swiss carrier indebted itself by making huge investments in its own growth and raising stakes in other airlines right before the September 2001 events. With the decline in revenues and passenger numbers, Swissair wasn't able to repay these debts. The government aid came too late, and without even being able to cover its operating expenses, Swissair went out of business. Other European flag carriers, especially the ones offering flights to USA, have found themselves in the red with an urgent need for restructuring. Some carriers, like Alitalia or KLM, have produced losses in five consecutive years proving that successful restructuring is no easy task.

Luckily for the American giants, the special Chapter 11 of bankruptcy code saved many of them from following European Swissair or Belgian Sabena into the valley of no return. It's important to realize that the American carriers were losing money even before the

[89] 'The darkest hour'; The Economist, *internet edition*; 20.3.2003

[90] 'Flying high'; The Economist, *internet edition*; 7.11.2002

terrorist attacks when their net profits dropped from margins of nearly 4 percent during 1998-2000 to losses greater than 3 percent in the first half of year 2001. After September 11, the net profit margins sank to –8.5% and passenger traffic dropped by 6.8%.[91] If we look at the following diagram (**Figure 11**)[92] the trouble of the American carriers becomes even more convincing.

Figure 11

Source: *The Economist*

5.3 FIGHT FOR LIFE

The airlines could choose from several main approaches to tackle the new challenges. But all of them had in common a tendency to copy some of the techniques of the successful challengers and a desperate struggle to cut the costs.

5.3.1 COST REDUCTION

✈LABOR

We may come easily to an agreement that cutting costs has been in the last years alpha and omega of every airline's success. And labor costs were and still are the most important key to cost reduction for the traditional carriers. By taking into account the strong labor unions and the fact that dismissing workers in large numbers is a hot political issue (i.e.

[91] Costa, Peter R.: 'Rethinking The Aviation Industry'; The McKinsey Quarterly, 2002 Number 2 Risk and resilience; http://www.mckinseyquarterly.com/article_page.asp?ar=1190&L2=23&L3=79&srid=69 ; the drop of 6.8% for the entire year 2001

[92] 'Flying dinosaurs'; The Economist, *internet edition*; 6.2.2003

especially for the state-owned companies), the task of cutting labor costs is much more difficult than it may seem. The publicly owned carriers have paradoxly a relative disadvantage by having what we could call "salvation of last instance" from their governments in the worst of times. That's because the unions can count on this fact and boycott wage cuts, waiting for the "deux ex machina",[93] to come to rescue.

Among the first airlines to cut the labor costs were Continental Airlines and US Airways (American carriers), laying off about 20% workers each.[94] Some of the reductions in labor force were really impressive when British Airways (in order to streamline its operations) cut over 14,000 jobs as the airline abandoned Gatwick airport. But most of the cuts in wage bills were achieved only by trimming working time instead of dismissing employees.

✈FLEET

Overall, more than 20% of the network carriers' fleet capacity has been cut following the events of 2001.[95] But much of that reduction consisted of simply parking planes on the ground, saving thus on fuel, maintenance or landing fees (the variable costs). But stowing the airplanes away into Arizona desert doesn't change anything on the fact that most of the airlines have been left with the heavy costs of leases or repayments (the fixed costs). A good exhibit of cost-reduction (following capacity reduction) was carried out by Lufthansa, when it managed to cut its operating costs by 8% in just one year.[96] Spreading flights more evenly throughout the day also enables additional cuts in fleet capacity.

On the other hand, the reduction in fleet size can be even contradictory to the favored hub-and-spoke system of the carriers. This system builds on the large number of connecting flights and keeping too many planes on the ground (and thereby cutting the amount of connections offered) may discourage the travelers, especially the wealthier ones, to use these hubs. Also some spare capacity of planes is required in order to replace a malfunctioning aircraft, so that the fragile system of interconnecting flights is not broken.

Other cost-reducing actions cover areas such as ground handling operations, where for example Ryanair's £12 charges were roughly a quarter of those of British Airways.[97] Some

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[93] from antic drama: God or God-like character comes into the play at the ending and solves the hopeless situation

[94] 'Airline Industry Profile'; http://biz.yahoo.com/ic/profile/airlin_1600.html

[95] 'Flag carriers at half-mast'; The Economist, *internet edition*; 28.2.2002

[96] 'Flying high'; The Economist, *internet edition*; 7.11.2002

[97] 'Fly me, I'm cheap'; The Economist, *internet edition*; 15.8.2002

desperate attempts to lower the cost were carried out by struggling airlines, e.g. AirCanada. It revealed that it had saved $100,000 by reducing the number of lemon and lime slices it serves with in-flight beverages.[98] Such an obsession by costs is something that is typical for the low-cost airlines but in the case of traditional carriers, this kind of measure may seem rather tragicomic.

5.3.2 NEWLY ADOPTED TECHNIQUES

In the past, the traditionals invented themselves several new techniques. For example frequent-flier programs reward the best customers (i.e. the ones who fly the most) by many benefits ranging from access to premium lounges, free tickets (after collecting enough bonus "points" awarded for each flight according to its length), or even guaranteed seat on a sold-out flight for the passengers with the highest priority (e.g. holders of "platinum card" in the case of KLM). Among other innovative "self-invented" techniques are commonly-used practices like overbooking[99] or handing out present to passengers on flights.

But most of the newly-invented strategies come from copying the LCCs. The reasoning is simple - during the hardest times for the traditional carriers, over 60 new airlines emerged,[100] nearly all of them following the low-cost business model. The no-frills sector was expanding by 10% a year and managing to earn some comfortable profits for the LCCs' shareholders. With such a successful story, it's no wonder that almost all traditional carriers tried to implement at least some of the LCC's clever techniques. The low-cost airlines' obsessive emphasis on reducing costs has already been mentioned and all traditionals tried to cut the costs (only to a limited extent which wouldn't hurt the reputation of the airline as a full-service one) with random success.

One important technique that has been copied from the no-frills airlines is the **improvement of pricing strategies**. Yield management, as the quest for maximum revenues is called, is probably the most erudite part of the airlines' operations. One of the fundamental techniques is the dynamic pricing strategy, the strategy of increasing fares with growing demand. Booking in advance and complying with additional conditions (e.g. staying at the destination for a weekend) usually guarantees the lowest fares for these travelers with the

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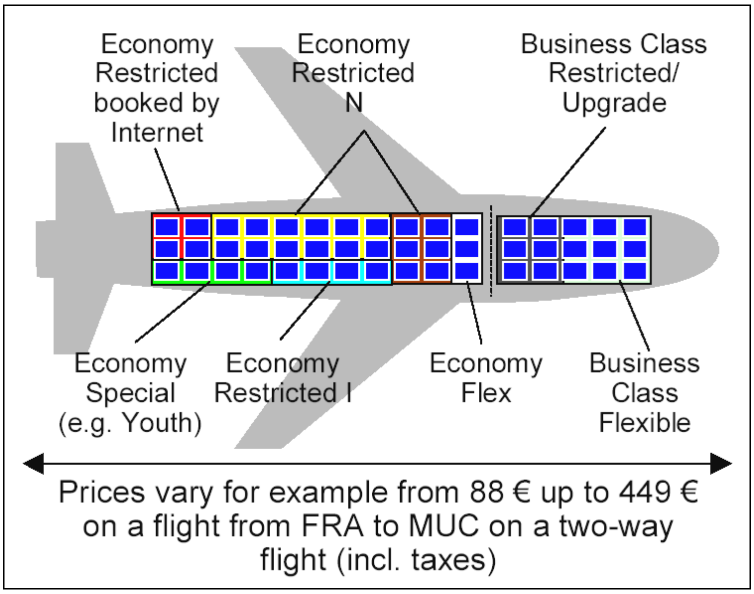
[98] 'It's open skies for airline alliances'; Toronto Star; 16.10.2003

[99] i.e. selling more seats than actually are on the plane hoping that some passengers will cancel their flights before the departure; if too many passengers show up for the flight, the airline offers incentives, such as free tickets or cash, to passengers that give up their seat

[100] 'Crowded skies'; The Economist, *internet edition*; 22.4.2004

highest price-elasticity. As the day of departure approaches and the plane is virtually being filled up, the fares increase. On the other hand, the dynamic pricing also includes huge discounts for last minute flights in cases when the seats had not been filled up. It's always better to have the seat filled even if the passenger pays only a fraction of the full fare (as long as the revenue from this passenger exceeds the costs). The LCCs mastered the dynamic pricing but the network carriers are improving rapidly. An example of price variation on the plane of a traditional carrier (flying e.g. from Frankfurt to Munich) is on **Figure 12**[101]. Today, it's no surprise that one passenger sitting next to another (on the same plane) can be paying a multiple or a fraction of his companion's fare.

Figure 12



Source: *The Economist*

The LCCs introduced **electronic booking**, which allows travelers to look up the most suitable flight and lowest fair on the Internet. The web-booking brings additional savings to the carriers that use it, as it cuts the distribution costs and travel agents are no longer necessary (saving thus on their provisions). Nowadays, all of the major carriers offer the option to look up flights and fares, featured on their internet home pages.

Optimizing the air force is a crucial task for all the airlines. The trend (of both traditional and low-cost airlines) is to simplify the fleet as much as possible. By limiting the number of types of aircraft, the carriers save on costs such as maintenance. The traditionals

[101] Kaiser, Alexander - Cell Consulting: 'Crusade Into the New World'; pg.5; May 2003; http://www.cell-consulting.com/f/27/file.pdf

also learned from the low-cost carriers that airplanes could be only leased. Such operating leasing (the practice of hiring the airplane from a lessor without ever acquiring the aircraft) is now becoming increasingly popular. The reason is that it allows the carriers to adapt their fleet to current demand and needs. For example Iberia started using “wet leasing” (the industry's equivalent of hiring temporary workers and aircraft along with them) as part of its capacity,[102] which allowed the airline to cut its operations quickly in response to the decline in travel and laying thus a cornerstone of Iberia’s reasonable performance.[103]

Purchasing new airplanes, instead of using older ones, is also a way to cut the operating costs, since the new aircrafts are more fuel-efficient and require less maintenance and in-flight personnel.

5.4 BASIC STRATEGIES

We already analyzed the main troubles of the traditional carriers and looked at some newly adopted techniques in their struggle for place on Earth. But let us look closer at the three basic options that the airlines have in order to survive. Besides continuation of the ineffective previous model, these strategies are: growth, focus and low-cost.

5.4.1 FOCUS

So far, most of the traditional carriers stuck closely to their tactic of dividing the plane into economy and business/first class sections. Many specialists (e.g. from the McKinsey consulting company) suggest that this model is unsustainable. The main ground for this statement is that the business and leisure travelers differ in their needs and preferences.

Leisure travelers are less concerned with service, flight frequency, or connecting traffic and most of all seek the lowest prices. Flocks of more or less successful LCCs offer their service to these cost-conscious customers and also compete with the charter airlines for the lucrative tourist industry.

‘The business travelers demand frequent flights to a wide range of destinations, seek quality service, and are willing to pay a reasonable premium for such benefits.’[104] Even

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[102] ‘Viva España’; The Economist, *internet edition*; 28.11.2002

[103] Iberia made an operating profit of €106 million in the first half of 2002, compared with a loss of €16 million in the same period of year 2001; from The Economist print edition: ‘Signs of life’; 1.8.2002

[104] Costa, Peter R.: ‘Rethinking The Aviation Industry’; The McKinsey Quarterly, 2002 Number 2 Risk and resilience; http://www.mckinseyquarterly.com/article_page.asp?ar=1190&L2=23&L3=79&srid=69

though the network carriers have a comparative advantage over the LCCs when they can offer more connections in one day (in case that the business meeting runs longer) between hub airports, the low-cost airlines have taken some of the more price-sensitive business travelers from them.

After the slump, the business travel is now slowly returning back to original levels. But the traditional carriers have to fight for the lucrative businessmen that kept them very much afloat in the past and have the potential of generating some profits. The solution of concentrating on these profitable travelers – the businessmen - by greater product differentiation is at hand. The differentiation can happen in several forms but mostly it has been the luxury and extra-service way that has been chosen. The special all-inclusive lounges at the airport or generous frequent flier programs are designed for a common purpose – to keep the first-class businessmen in their seats.

5.4.2 LOW-COST

Some of the traditionals went even farther in their relationship with LCCs than to copy some of their techniques and be more cost-conscious. Few of the less successful network carriers have actually turned themselves into one. For example the failing Greek carrier Olympic Airways scrapped long-haul full-service routes altogether and reinvented itself as a low-cost carrier in south-east Europe.[105]

Other airlines have their shares in selected no-frills carriers, e.g. Lufthansa in germanwings.[106] Besides the virtue of getting hands on the LCCs' revenues, the main reason is to allow the full-service airline to exercise at least some control over the no-frills carrier's operations and sometimes even to use this influence to tackle competition (in the case of Lufthansa to bring a stop to the massive invasion of Ryanair and EasyJet in Germany).

Very often did the major airlines try to establish their own daughter low-cost companies to try their luck in the profitable no-frills sector. British Airways' Go or Buzz from KLM were among many ambitious projects, most of which were far from successful. The main reason for failures is that the indebted majors with their soft budgeting just don't have the financial discipline and enterpreneurial acumen to be able to cope with the severe competition in the no-frills sector. The traditionals also used their control of these companies to promote their own needs, sometimes allowing their LCCs to operate only the least

[105] 'Flag carriers at half-mast'; The Economist, *internet edition*; 28.2.2002

[106] 'Crowded skies; The Economist, *internet edition*; 22.4.2004

profitable routes. The troubled Dutch Buzz was taken over by Ryanair and Go was sold in a management buy-out and later merged with EasyJet. The Czech national carrier ČSA was in serious talks with the charter airline Travel Service, claiming that it wished to use this acquisition to turn it into their low-cost company.[107] Even though the talks went nowhere, the no-frills idea still sits in the heads of the executives.[108] In general, the network carriers are unlikely to cease their efforts to run their own LCCs, even though 'it is a lot easier to start an airline from scratch than to take a legacy airline and make a profit.'[109] But the profits of the most successful LCCs are just too tempting to be resisted.

5.4.3 GROWTH

It may look like a paradox that in the hard times for airlines, growth is the number one choice. The explanation is that by the term growth (as we use it here) isn't meant just the limited definition of growth as simple enlargement of a single airline. The term growth also relates to possibilities of mergers and alliances – the cases of joint growth. To understand better this part of the chapter, let us define two basic terms applied to growth issues - economies of scale and economies of scope.

Scale economies occur when unit costs go down as total production is increased. But in the air transport industry scale derived economies usually have their limit. To increase an airline's size from, say, two aircraft to twenty does carry scale benefits but beyond this point, nearly no scale economies have been found.[110] To justify this statement, we have to realize that the airline industry is labor intensive with high share of direct operating costs. 'With more than 50% of total costs being variable it is possible to say that the possibilities for reaping savings from spreading the fixed costs over a greater production output are limited, especially since the increase in output is linked to relatively high direct costs.'[111]

Generally speaking, **economies of scope** occur when unit costs diminish as the variety of produced products increases. In the case of airline industry, the scope effect usually applies to the number of markets that the airline serves. In other words, it means that as the total number of intercity flights (that the single airline can offer) increases, costs go down and profits rise.

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[107] 'Sen ČSA o levných aerolinkách mizí'; MF Dnes; 27.2.2004

[108] 'ČSA zlevní letenky až na tři tisíce korun'; MF Dnes; 25.3.2004

[109] 'Having fun and flying high'; The Economist, *internet edition*; 11.3.2004

[110] Doganis, R.: 'The airline business in the 21st century'; London 2001; pg. 25

[111] Kleyman, Birgit: 'The development of multilateral alliances'; Helsinki 2002; pg. 43

✈GROWTH OF A SINGLE AIRLINE

The organic growth of a single airline can bring to small airlines some economies of scale. The main savings can be achieved on maintenance costs, facilities and specialized workforce. It is obvious that buying a maintenance hangar with capacity of five planes makes no sense for an airline that operates less than ten aircraft. The hangar can be shared with other airlines but it's always more efficient to use the facility by the carrier's own airplanes. Hiring a specialized crew of e.g. engineers is optimal for a small fleet but with increasing number of operating aircraft, it's more economical to have these specialized workers as contracted long-term employees.

To show an example of single airline's expansion, we can look at the case of ČSA. During the last year, the Czech Republic's national carrier ČSA has revealed its plans for a sharp increase in its fleet and operations. The plan is to get fifteen new airplanes by the end of year 2006, thereby increasing the total fleet to 50 machines.[112] Other features of ČSA's enthusiastic expanding is to offer approximately fifteen new destinations, strengthen its position on the market of charter airlines and undertake a massive marketing campaign. With the launch of a first Czech low-cost airline – Smart Wings, the competition has increased substantially. ČSA reacted to this threat especially by aggressive marketing and offering huge fare discounts. By growth, ČSA wishes to strengthen its position (already dominant) on its hub airport in Prague and offer the new lucrative destinations, simply before the competition does. The Czech carrier is also expecting increased passenger flows from the EU countries' following Czech Republic's accession of the European Union in May 2004. The activities of ČSA are understandable if we look at the realities of the Czech aviation market but in the world of smaller national champions, such expansion is rather unusual. High majority of these airlines concentrate on inner consolidation (e.g. renegotiating labor contracts, streamlining of operations) and joining stronger partners in alliances.

On the other hand, many of the worlds' biggest carriers (especially the American ones) have been especially keen on growth in the past. Even though the purely economical benefits of expanding fleet from, say, 500 aircraft to 600 are limitly approaching zero (sometimes it can even harm the airline - e.g. hiring more workers strengthens the corresponding unions), the managers of these major airlines nevertheless focus on winning the highest possible market share. Beyond reasoning of prestige and glory, such behavior can be in a special way considered as "wise" when it comes to getting hands on governments' money. Employing

[112] Pražák, Marek: 'ČSA se pouštějí do odvážné hry'; MF DNES; 19.3.2004

tens of thousands of people makes the airline "too big to fail", when state governments simply cannot afford to let such an airline be liquidated. Such behavior could be observed especially in USA with the "magical" Chapter 11 of the bankruptcy code.

✈MERGERS

Besides forming international alliances (to which the entire Chapter 6 is dedicated), another possibility for growth is by **merging**. Up until recently, mergers between national flag carriers were forbidden by bilateral agreements between the pairs of countries, the agreements being especially strict about foreign ownership of the national champions. Some of these bilateral restrictions were abolished with the deregulating processes but other restrictions come from the corresponding national antitrust authorities and relations with third countries. The first merger (if we don't take into account that SAS came into existence as a merger of national companies of Norway, Sweden and Denmark already in the 40's) to break the thinning ice has been the marriage of **Air France** and **KLM**.

KLM, the Dutch carrier, was hit especially hard by the September 11th events, with most of its profits stemming from the transatlantic aviation. The company became seriously indebted and has been producing one loss after another. But even before 2001 the weak KLM had been looking for a save haven. The Dutch carrier had especially good relations with its U.S. partner – Northwest Airlines (already since 1989). But any closer relations didn't have a chance of success, since foreign ownership between US and EU carriers is even today strictly limited by the bilateral open skies agreements and national authorities. An attempt to link up with Alitalia fell through four years ago, just before the American authorities rejected a planned deal with British Airways. Washington indicated that, if British Airways took control of the Dutch carrier, the bilateral deal between America and the Netherlands would be cancelled.[113] After 14 years of KLM's quest for a strategic partner, Air France opened its arms.

At last, in late September 2003, a cross-border merger of the French carrier Air France and Royal Dutch Airlines KLM was announced. The deal was approved in February 2004 by the European Commission with numerous conditions aimed at promoting competition (e.g. surrender some landing slots at several airports).[114] That will make the Air France-KLM giant

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[113] 'Open skies and flights of fancy'; The Economist, *internet edition*; 2.10.2003

[114] Johnson, Keith and Michaels, Daniel: 'EU Clears Air France-KLM Merger'; The Wall Street Journal – Europe; 12.2.2004

the world's largest airline, measured by sales (3rd in amount of passengers carried in a year).[115] The two airlines will be owned by a joint holding company (with Air France owning 81%) but the two airlines will continue to operate under separate brands. To get around the bilateral agreements with the United States, 51% of the KLM subsidiary will be actually owned by Dutch interests for three years, guaranteeing thus the couple the previously negotiated rights to operate their flights to USA without any further restrictions. It's necessary to admit that the merger of the two airlines is believed to be more beneficial to KLM and by acquiring the indebted smaller carrier, Air France yet again postponed its plans on privatization.

Many aviation specialists suggest that the merger in the short term offers only little prospect of reducing costs.[116] The biggest drains on profitability, such as high operating costs and excess capacity, will still persist,[117] since there are no plans for rationalization or cutbacks for the company as a whole (some cuts in capacity are in line for the loss-making KLM). The heads of KLM and Air France themselves declare that the merger will bring savings of €0.5 billion, especially on distributing networks, catering and ground-handling operations.[118] These forecasted savings show that mergers, unlike organic growth, allow for some economies of scale. But the main purpose of the merger is to pursue the economies of scope.

By jointly controlling two out of four Europe's major hub airports (Amsterdam's Schiphol Airport and Charles de Gaulle Airport outside of Paris, the other two being Frankfurt and London's Heathrow), the marriage of the two major carriers places its bet on the future of the industry. If the EU-US talks on the Open Aviation Area will go as well as the airlines hope they will, the Air France-KLM huge airline will be in a good position to gain dominant position on the transatlantic market, which could mean big profits and bright future for the two.

The KLM-Air France merger set an example, which other airlines might follow. E.g. Iberia and British Airways (which owns 9% of Iberia's shares) would like to merge one day.[119] Alitalia is also on a hunt for a dominant partner, with realistic possibilities of merging with the KLM-Air France Goliath in future. Generally speaking, the anticipated cost savings,

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[115] 'KLM a Air France vytvoří největší aerolinie světa'; MF Dnes; 20.4.2004

[116] 'A bet on the future'; The Economist print edition; 4.10.2003; pg. 70

[117] Johnson, Keith and Michaels, Daniel: 'EU Clears Air France-KLM Merger'; The Wall Street Journal – Europe; 12.2.2004

[118] 'KLM a Air France vytvoří největší aerolinie světa'; MF Dnes; 20.4.2004

[119] 'Viva España'; The Economist, *internet edition*; 28.11.2002

more rational use of limited air routes and congested airports and other long-term advantages foreseen in the Air France-KLM combo promises fiscal salvation for other airlines joining in a consolidation the likes of which few industries have seen in the past century.[120] But mergers naturally have several disadvantages. The main ones are that merging usually is demanding on cash for capital injections (the KLM-Air France deal got around this by simply crossing shares), is hard to get approved from the regulating authorities, and sometimes may lead to economic inefficiencies observed by giant companies. Merged companies also cannot react to the development of world markets so swiftly as the carriers with only loose ties (which can be broken quickly). In the following chapter we will look at the alternative to mergers and organic growth – the alliances.

[120] 'It's open skies for airline alliances'; Toronto Star; 16.10.2003

Chapter 6

6. ALLIANCES

In this Chapter we will look at the phenomena of recent years - airline alliances of the traditional carries. The main reason for the successful development of these alliances is the fact that they actually allow the carriers to gain many benefits from **reaping economies of both scope and scale without the trouble** connected with organic growth or mergers. Especially the cost of organic growth is significantly higher than the cost of teaming up with a partner.[121] Besides, by alliancing with an airline, this carrier becomes a partner, whereas under organic growth into that carrier's market, it would be a competitor. The mergers are a strenuous and time-consuming task with uncertain results, since antitrust authorities, foreign-ownership clauses of bilateral treaties and nationalistic issues make the mergers extremely difficult to carry out. The regulations mainly apply to the economies of scale, whereas economies of scope are more likely to be accepted by the governments. Generally, the less overlap between two tied-up airlines' route systems, the higher the likelihood that this cooperation will be approved by the authorities.[122]

For low-cost airlines, alliances don't make much of a sense. The reason is that the LCCs concentrate on point-to-point operations without connecting traffic. And it is exactly the increasing number of possible connections with economies of scope and network effects that drive the traditional carriers into alliances. Therefore in the rest of this chapter when we talk about alliances, only the cooperation of the traditional, full-service carriers, is meant.

Connecting traffic (as the LCCs well know) is far less profitable than origin-destination travel (i.e. passenger simply going from point A to point B). Analysts of America's domestic market suggest that origin-destination traffic is 1.6 to 2 times more profitable.[123] Similar dependence can be found also for the alliances. If the passenger demands to fly to a destination that the carrier doesn't directly operate, procuring the passenger on a connecting flight of a partner airline can bring an additional share of revenues that the carrier would normally loose. And this is the very basic idea of economies of scope.

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[121] Kleyman, Birgit: 'The development of multilateral alliances'; Helsinki 2002; pg. 70

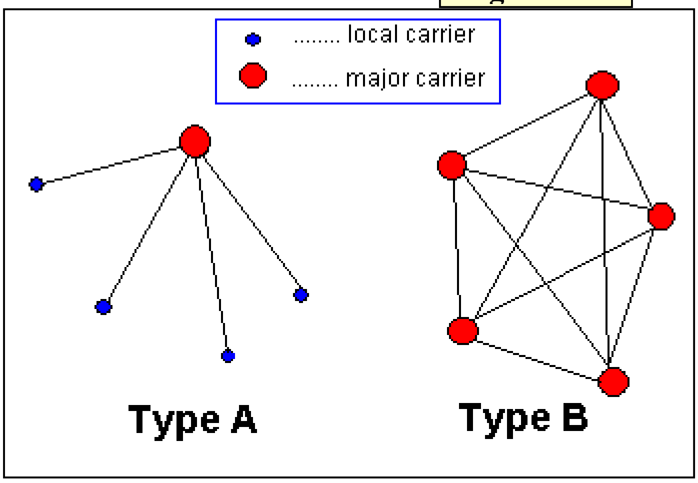
[122] Kleyman, Birgit: 'The development of multilateral alliances'; Helsinki 2002; pg. 121

[123] 'Silver linings, darkening clouds'; The Economist, *internet edition*; 25.3.2004

6.1 TYPES OF ALLIANCES

There are basically **two types of alliances** outlined in **Figure 13**.[124] **"Type A"** connections show the bilateral relationships of one dominant network carrier with smaller, usually regional or local airlines. Such groupings can be mostly found on large markets, where the major airlines do not engage themselves into covering all of the regional cities. They gladly leave these activities to local carriers, which feed the small-city passengers to the network carriers' hub airport. These bilateral ties, often called **feeder relations** allow the regional airline to have a share of the further connecting travel outreaching the bulk of its operations and reaping thus the economies of scope. On the other hand, for the major carrier the portfolio of bilateral relations provides them with additional passengers to fill their planes and allow them to earn higher profits (increasing its load factor). These relations have proven themselves to be very useful and often overgrew to majors' acquisition of the regionals' shares to "safeguard" the connections and have better control of their activities. "Type A" connection can also take place with bilateral agreements between two major airlines without being conditional on relations with other network carriers. As the common practices of these pairs of airlines do not basically differ from the joint activities of multilateral alliances, there is no need to discuss them separately.

Figure 13



Source: *Kleyman; The Development of Multilateral Alliances*

"Type B" alliance is formed by multilateral agreements between several major carriers (of course these carriers can and often do form their own "Type A" groupings making the network more sophisticated). Since the main focus of this work is the international

[124] Kleymann, Birgit: 'The development of multilateral alliances'; Helsinki 2002; pg. 89

perspective, the attention is addressed to the “Type B” connections – the multilateral alliances.

Basically, any alliance is based on contractual agreements but the central governments differ of these alliances differ from consensus-seeking sessions to formal submission of members to a common authority. Alternative ways to quantifying the “tightness” of the relationship are by measuring the amount of costs sunk into this partnership or the amount of coordination with partners required for any one change in route management (e.g. frequencies, aircraft on route) implemented by a carrier.[125] But these methods transcend the scope of this paper.

6.2 THE THREE GIANTS

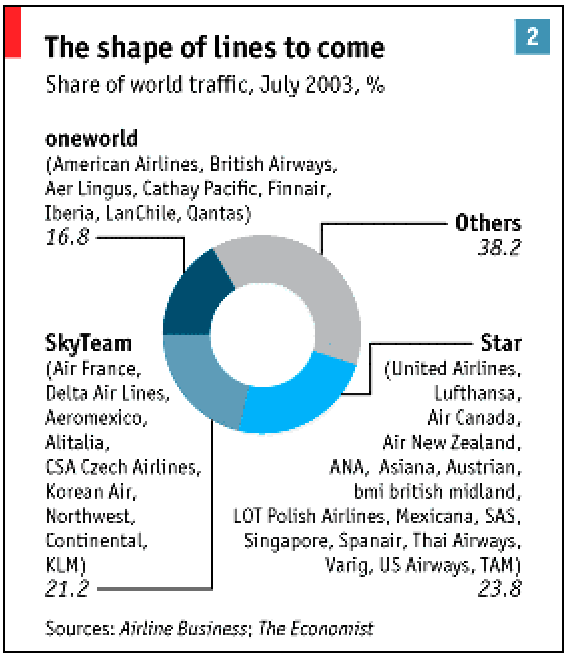
The history of formal multilateral alliances is a relatively short one. In the past six years five alliances have come down to three and some of the members no longer exist. KLM and Northwest Airlines had intensive connection under an alliance informally called “Wings” since 1992. But since Northwest (as well as Continental Airlines) have close ties to Delta Airlines and KLM is merging with Air France, it’s natural that all these carriers will join the Skyteam alliance soon. Another alliance that ceased to exist (as a consequence of two members going bankrupt) was Atlantic Excellence with Delta, Swissair, Sabena and Austrian Airlines as former members.

Today, only three major global alliances exist: Star, oneworld and Skyteam. For long, Star Alliance (also being the oldest) dominated the world markets. But today, with Skyteam being joined by several new members such as KLM, Northwest or Continental Airlines, this alliance is catching up. Star has a comparative advantage over its competitors by having strong position in the rapidly growing Asian market. **Figure 14**[126] shows us the shares of the world traffic that these alliances have.

Figure 14

[125] Birgit Kleymann: ‘The development of multilateral alliances’; Helsinki 2002; pg. 121

[126] ‘Open skies and flights of fancy’; The Economist print edition; 4.10.2003; pg. 71



Source: *The Economist*

6.3 ALLIANCING OBJECTIVES

Airlines join random alliances with hyped hopes. But let us now look in greater detail at what exactly do the airlines seek and what do they get.

Market-defensive objectives[127] are usually aimed at securing the airlines' position on the market. By cooperation with other airlines, the carrier ensures itself sufficient numbers of passengers (by having these travelers delegated from the partners) and decreases the vulnerability of the airline to competition. The shelter from competition can be especially useful when the airline needs to restructure itself by cutting costs or temporarily reducing capacity and doesn't want to lose its market share to competitors. These advantages over unallied competitors lead to chain reactions when a carrier joins an alliance simply because its competitor has already done so.

Market-offensive objectives are another incentive for joining an alliance. The main goal of this strategy is to boost revenues and goodwill of the airline. By linking with a respected carrier or operating together under a prestigious brand (e.g Skyteam or Star) with other major airlines can promote the ranking of the small carrier in the eyes of the traveling society and bring additional passengers. This reasoning can naturally be found especially among smaller and weaker airlines (e.g. ČSA entering the Skyteam Alliance). Another aspect

[127] the objectives mentioned by Birgit Kleymann in 'The development of multilateral alliances'; Helsinki 2002; pg. 73-74

of the market-offensive strategy is acquiring know-how from the teamed-up airlines, such as improving skills on yield management. The market-offensive objective also complies with the desire of the airlines to secure their dominant position on important hub airports. Well-coordinated interconnecting traffic from the hub offers only limited space for competition. Besides, the “home” carrier doesn’t need to fight with the partner airlines for slots and flying times.

Efficiency-seeking objectives are another reason for hooking up. The efficiencies are especially derived from sharing facilities and establishing maintenance joint ventures, again closely connected with economies of scale, (which can sometimes be quite large). The improved harmonization of schedules also brings along efficiencies concerning increasing passenger load factors.

The last objective can be called **environmental control**. By joining forces under a single roof of an alliance, the airlines attain higher market power. This market power can be in particular useful when it comes to negotiating with supplier companies. For example Skyteam managed to negotiate an alliance-wide deal with Coca Cola, which brought estimated $10 million of purchasing benefits.[128] Another example of cost savings derived from greater market power is oneworld’s purchase of economy class headsets for all its members from one supplier, which saved them more than 50%.[129]

6.4 JOINT ACTIVITIES

Before we get any further, let us look at how the airlines cooperate in the alliances. There are several types of links[130] between the carriers, ranging from **cost sharing ventures** (e.g. two airlines cooperating on purchase of new aircrafts) and **pooling assets** (e.g. sharing facilities), to **pro-rate agreements**[131] and **codesharing practices**, **feeder** relations (i.e. “Type A” alliance), **marketing alliances** and other **joint ventures**, **equity stakes** and finally **mergers** being at the highest level of cooperation. We will not explain all of these cooperating activities, instead we will focus only on the most common practices - codesharing, joint marketing and joint ventures.

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[128] ‘Mile high clubs’; Business Travel World; Apr2003; downloaded from EBSCO database

[129] ‘Mile high clubs’; Business Travel World; Apr2003; downloaded from EBSCO database

[130] as listed by Kleyman, Birgit: ‘The development of multilateral alliances’; Helsinki 2002; pg. 75-79

[131] i.e. share of the revenue, which airline A gets from airline B, if B carries A’s passengers on B’s route; simplest form of an agreement

6.4.1 CODESHARING

According to the definition, codesharing means that airlines put their identifier codes on that of an airline partner, so the trip appears seamless to the traveler. It enables airlines to sell journeys beyond their regular route network.[132] In other words: one airline sells a flight under its own code, even though the actual flight is operated by its partner airline. So it is common to see on the list of departing planes (at the airport) that a single flight has two relevant codes. The codesharing agreements are the most widely used practice among partner airlines. It's usual that all members of a multilateral alliance share codes at least on some of their flights with other members. But the codesharing practices are not restricted only to the multilateral alliances - a major carrier usually has a whole portfolio of partners with which it shares the codes. Sometimes, regulatory authorities limit codesharing for certain routes or carriers. For a long time, British Airways weren't allowed to do any codesharing with its US partner American Airlines. But the usual practice of the authorities is to allow (and occasionally even promote) codesharing for flights where the two carriers do not overlap their activities and limit codesharing especially on flights between the carriers' major hub airports. There is no need to point out that the carriers reap economies of scope when allowed to codeshare.

6.4.2 MARKETING ALLIANCES

The marketing alliances are nowadays becoming increasingly popular and require intensive cooperation between the partners. They offer a wide range of benefits to both airlines and consumers. Using a single brand name (e.g. oneworld) not only saves costs in joint advertising but also allows the national carriers to promote themselves as a part of a globe-wide network. The marketing alliances include sale of the partners' tickets. It is possible to go to a counter of one carrier (or possibly to a shared downtown office) and buy a wide range of interconnecting flights of the allianced airlines. An example can be seen on **Figure 15**, where the flight was physically operated by Alitalia (code AZ) but the ticket was sold by ČSA (both are members of Sky Team alliance – the logo in bottom-right corner) There is also no need for more than one check-in in the origin destination for all of the connecting flights.

[132] 'Mile high clubs'; Business Travel World; Apr2003; downloaded from EBSCO database

Other aspects of marketing alliances are joint frequent flier programs. The travelers are rewarded by the same benefits no matter on which plane are they sitting (i.e. a plane of allied airlines). Hand in hand with the frequent flier programs go the lounges for premium passengers. Sharing these lounges between the partnered airlines saves money for the carriers and allows the passengers to access lounges at airports where their "mother" airline doesn't physically operate itself. A small overview of joint marketing from the point of view of the three major alliances is on **Figure 16.**[133]

Figure 16

Alliance	Founded	Destinations	Lounges	Lounge access	FFP* reciprocity
Oneworld	1999	550	440+	yes	yes
Star	1997	688	550	yes	yes
Skyteam	2000	512	340	yes	yes

* FFP= frequent flyer points

Source: B*usiness Travel World*

6.4.3 JOINT VENTURES

A joint venture takes the marketing alliance several steps further. Under the joint ventures, the partners may collude on joint pricing and revenue sharing. Of course such activities are often considered as uncompetitive and therefore need clearing from the

[133] 'Mile high clubs'; Business Travel World; Apr2003; downloaded from EBSCO database

authorized institutions. Antitrust immunity is not easily acquired, as for example British Airways and American Airlines will probably never get such immunity no matter how hard they try to convince the authorities of their good intentions. They main reason for this ban is that the US authorities are afraid of British Airways having a too strong position on the transatlantic routes. The joint ventures, once approved usually apply to routes where there is a potential of overlapping operations (e.g. Lufthansa and SAS on Germany-Northern European market).[134] Even though today several airlines pool their revenues on certain flights (e.g. United and Lufthansa of Star Alliance), as long as they don't share the costs, the program is not considered a full-fledged joint venture.[135]

Looking back at our three giants, Star Alliance and Skyteam both have close ties among the partners. All of the member airlines codeshare and some undertake joint ventures and pool their revenues. On the other hand, oneworld Alliance is a more loosely organized grouping as not all members even codesharing with each other, being thus more of a marketing alliance. A small overview of the

6.5 CONSUMER BENEFITS

The alliances bring many benefits to the customers. A world traveler desires flexibility and more choices for his international travel and the alliances can offer exactly that. Already mentioned were the possibilities of earning frequent flyer points on flights of member carriers and access to more lounges. But probably the biggest benefit to consumers is the increased convenience that the alliances bring. The increase of convenience is brought about by improved connecting traffic, no strenuous additional check-in procedures or care about the luggage. But what about the fares? One study showed that 'codesharing reduces interline fares by 9%; membership in an alliance reduces them by 4%; and anti-trust immunity between two carriers reduces them by 16%. If all three are in place it can mean up to a 27% reduction'.[136]

To illustrate the benefits better, let us look at a bit unacademical example of a wealthy tourist from Bilbao in Spain, longing for a trip to, say, city of Pandang on Sulawesi island in Indonesia. Such a journey requires several flights on different carriers' boards. In our example one possibility would be to travel from Bilbao on board Iberia or British Airways to London.

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[134] Kleyman, Birgit: 'The development of multilateral alliances'; Helsinki 2002; pg. 77

[135] Jonas, David: 'International Airline Alliances: The Tango Continues'; Business Travel News; 28.4.2003; (downloaded from EBSCO)

[136] 'Mile High Clubs'; Business Travel World; April 2003; downloaded from EBSCO

From London catch a flight to Hong Kong on board British Airways or Cathay Pacific and finally from Hong Kong enplane a local carrier to the final destination. The minimum number of flights that the traveler has to take from Bilbao to Sulawesi and back is six, no matter how hard he tries. If the tourist was to pay full fares for all these flights, the price would be astronomical. But flying on board the oneworld alliance (Iberia, British Airways, Cathay Pacific and its probably closely connected local carrier) and booking in great advance (or very last minute), the trip can be arranged for as little as $1,300 (estimate). Another advantage for our traveler is the possibility to go only through only one check-in in Bilbao (i.e. get all the boarding passes at once) and not have to care about the luggage until the arrival on the island. And if our tourist flies a lot and has a oneworld frequent-flier card, he can get access to luxurious lounges on all of the above-mentioned airports. Moreover, since the airlines cooperate intensively, the time spent on airports waiting for a connecting flight would be shorter than otherwise.

6.6 TO JOIN OR NOT TO JOIN

We have already seen many advantages that the airlines get from joining an alliance. Basically, these benefits come from economies of scale (e.g. pooling assets or better, alliance-wide deals) and economies of scope (e.g. being able to sell a ticket on flight that the airline doesn't physically operate). To talk in numbers, Aeroflot, which has just recently been invited to join the Skyteam alliance, counted the expected benefits of joining the alliance to $20 million per year.[137]

Some airlines have claimed that they don't see any reason for being in an alliance. These carriers often concentrate on differentiated products, such as business travel, where the specific service doesn't comply with the all-round service of the allied carriers.

Nevertheless, airlines all over the world are in an obvious rush to join one of the three major alliances (e.g. LOT joining Star Alliance, Malev and Aeroflot enlarging Skyteam and many more). And if we assume that the airlines themselves know best what is good for them, we can conclude that: 'Joining neither alliance is an option in the short-term, although there's a feeling that it will be inevitable.'[138]

[137] 'Aeroflot might benefit $20m per year from joining Sky Team'; RosBusinessConsulting; 2004; downloaded from EBSCO

[138] 'Mile High Clubs'; Business Travel World; April 2003; downloaded from EBSCO

If the airline industry is allowed to behave freely, as other industries are, the three alliances are likely to be the bases of three global combines that will rule the worldwide industry. Some skeptics predict that these cartels will bring fewer planes and higher fares but many others, including me, see this consolidation as a way forward, a path that leads somewhere.

Chapter 7

7. CONCLUSION

This work has been intended to give a detailed analysis of the airline industry and give my opinion on its future development. So far, I outlined the main characteristics of the sector, took a closer look at the role of state, described the reasons for success of the low-cost carriers, and discussed, how the traditional carriers reacted to the increased competition and external shocks such as terrorist attacks and war in Iraq.

Any sustainable forecast of an industry that is so dramatically changing is basically impossible because an **equilibrium on the market is yet to be reached**. Especially important for the future of the airlines is the position that the state governments will adopt on the liberalization of the air travel market. For example, it is possible that, as a consequence of extreme blows to the world stability such as another wave of terrorism, majority of the biggest airlines might find themselves again in the hands of the state, with negative impact on liberalization as a consequence. A slightly less probable development might occur if the state regulates the minimum fares, making thus the airlines compete in service and bringing a revolution to the low-cost sector.

To be able to make any kind of prediction, we have to fix some of the explanatory variables – make several **assumptions**.[139] Let us assume (and hope) that the world economy will not encounter any severe blows and that the behavioral patterns of passengers will not change dramatically in the next few years. The assumption about the stability of passengers' preferences can be very restricting because, for example, a series of accidents of the low-cost carriers may lead to a massive decline in demand for the "cheap" travel. Another assumption has to be made on the development of the EU-US talks on the transatlantic Open Aviation Area. Let us make an optimistic educated guess that in three to five years, the transatlantic area will become a single market with no restrictions on foreign ownership and on the range of operations, including the right of cabotage.[140] Finally, the most crucial assumption is that the regulatory authorities will allow closer cooperation and integration of the airlines (which can be doubted to some extent).

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[139] making such assumptions is a forecast itself but without such limitations, no predictions are possible

[140] the right of a carrier to operate flights between any pair of cities regardless the state

FORECASTS

Under these basic assumptions we can finally make some **forecasts** on the future development of the airline industry.

State governments will finally realize that the airline sector remains heavily undertaxed. Therefore I suppose that considerable tax raises will help to promote fuel efficiency of new planes, keep the older and inefficient aircraft on the ground and break the link between the economic growth and growth of air transport, congestion and pollution.

Rest of the world is likely to follow the successful example of Open Aviation Area and the airline industry will become a free worldwide market with competitive forces in every segment of the industry.

The **low-cost carriers** (LCCs) will expand in the years to come until the market for the cheap travel becomes saturated. I believe that as much as 50% of domestic travel will be dominated by these carriers. This domestic market will include intra-state transport as well as short-haul international flights in regions with higher concentration of cooperating states, such as Southeast Asia. Some consolidation will take place in the low-cost sector because many of the new airlines that are now entering the markets all over the world will go out of business, as the competition will be inevitably steadily increasing. The biggest low-cost carriers such as Ryanair, Southwest or easyJet will dominate the cheap travel but they will have to pay an increased attention to inefficiencies brought by overexpanding. They should limit their operations to short-haul transport.

The **traditional airlines** will have to continue cutting costs and streamlining their operations. The key goal of the managers will no longer be market share but productivity. Therefore the major carriers will most probably make further reductions in their capacity and leave some of the less profitable flights to regional airlines and LCCs. Mergers will become more popular in the next few years after the full liberalization of the transatlantic area but will be later replaced by the increasing role of the alliances.

Alliances are here to stay. The yet unallied airlines will apply for membership in one of the three main groupings - Skyteam, Star and oneworld, to gain the many benefits from such membership. Because the individual member airlines will increasingly submit their sovereignity to a common governing authority, consolidation inside the alliances is likely to occur. The consolidation inside these alliances will however limit the possibilities of cooperation outside them. Such development implies growing competition among the global alliances, laying thus the cornerstones of three contesting “mega-carriers”. All alliances will offer a network of flights that will cover the entire globe. The one that will be the most successful in conquering the highly promising markets of China and India is likely to hold the upper hand and have the brightest future.

Appendix A: SINGLE EUROPEAN SKY

In recent years, a steady rise in delays and congestion at large airports has drawn an increased attention from the European Commission. Delays cost airlines between €1.3 billion and €1.9 billion a year[141] and most of the delays are caused by the fragmented air traffic control system. In EU, airspace is basically organized as it was in the 1960s, when each country regulates its own airspace, regardless to cross-border traffic flows. For example, a flight from Rome to Brussels passes through no less than nine different air control centers (ACCs). The European air traffic control system is divided up into 26 subsystems consisting of 58 en route control centers. This is three times as many as for a comparable area in the USA.[142] The aircrafts follow certain corridors during their time in the air. But these corridors often don't follow the most rational paths because of the presence of e.g. national military zones. An accute lack of coordination adds to additional constraints to air travel. Few examples of the troubles and inefficiencies of the European aerospace are listed at the end of this appendix- (**Figure 17** and **18**).[143]

The task that the European Union has to solve is to harmonize the air traffic control through Eurocontrol institution and eliminate differences between national practices.[144] The European Commissioner Loyola de Palacio[145] in the Single European Sky (SES) brochure[146] forecasts: 'The payoffs will be considerable – better use of congested airports, fewer delays, and reduced pollution. Airlines and their customers will benefit from shorter, cheaper flights, and safety will be improved by reducing the strain on pilots and controllers.' The SES initiative is a long distance run with difficult political negotiations (shifting the sovereignty over the aerospace from Member states to the integrated EU) still ahead. But the payoffs from single European sky are worth the trouble.

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[141] © European Communities, 1995-2003; http://europa.eu.int/comm/transport/air/single_sky/index_en.htm

[142] 'White Paper: European transport policy for 2010: time to decide'; © European Communities, 2001; http://europa.eu.int/comm/energy_transport/library/lb_texte_complet_en.pdf; pg. 36

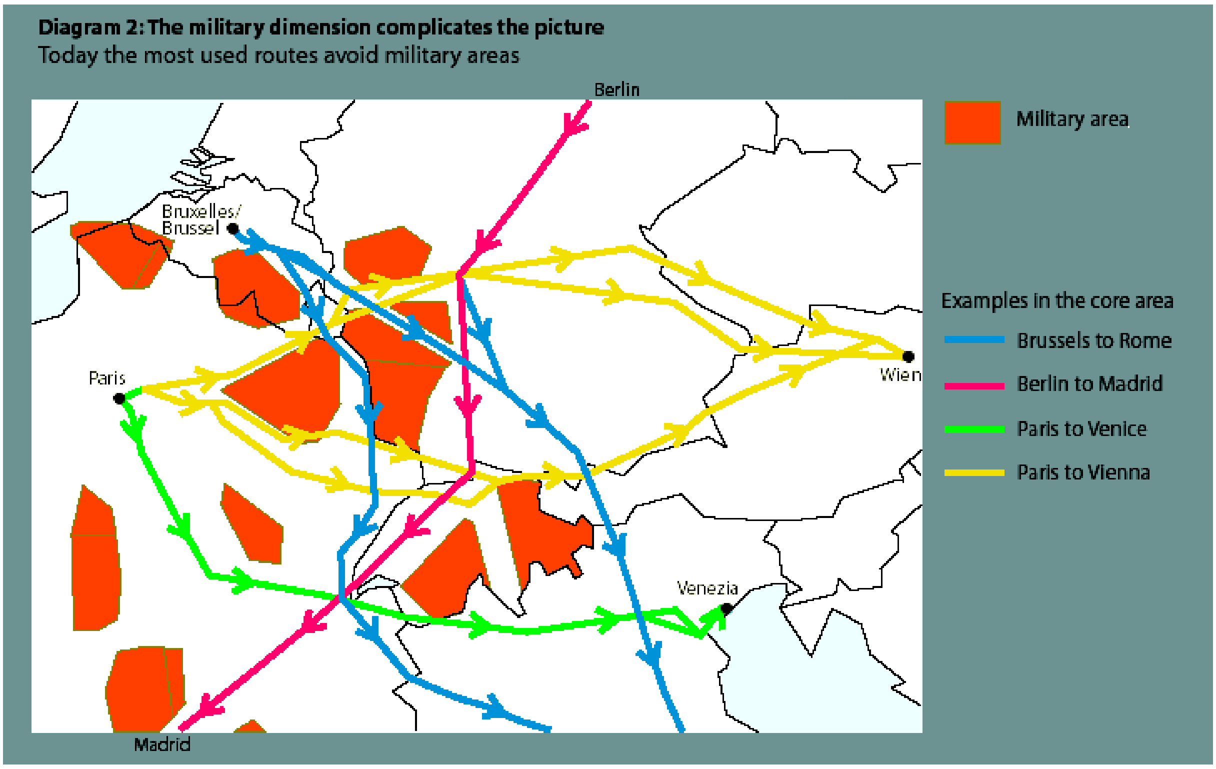
[143] © European Communities, 2002; http://europa.eu.int/comm/transport/air/single_sky/doc/publications/brochure_en.pdf

[144] it's not uncommon for a single aircraft manufacturer to have to produce different versions of the same type of aircraft to comply with the regulatory framework of the Member states

[145] Vice-president of the European Commission and Commissioner for Energy and Transport

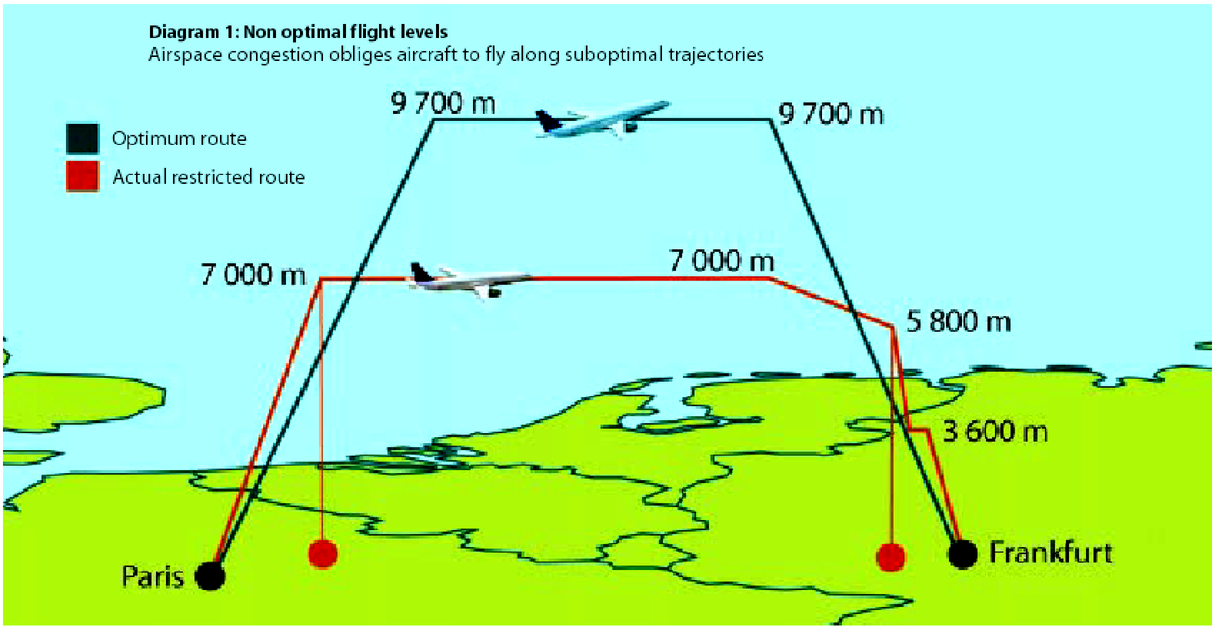
[146] © European Communities, 2002; http://europa.eu.int/comm/transport/air/single_sky/doc/publications/brochure_en.pdf; pg. 2

Figure 17



Source: *European Communities*

Figure 18



Source: *European Communities*

Appendix B: CHARTER AIRLINES

The Second World War was finally over. People could lead their normal life again and enjoy whatever it brings. A large shift in people's behavior towards leisure and travel was an apparent reality. This meant that the demand for aviation and international travel has surged up but the restrictive bilateral treaties between national governments led to duopolies on each international route. These market imperfections that occupied the aviation industry in the post-war period had a natural consequence of high airfares, which many people couldn't afford. The demand for travel and cheaper tickets during the vacation season exceeded the abilities and capacity of the national monopolists. New scheduled airlines were forbidden to enter the market, so the only way of saturating the excessive demand was issuing limited operating licenses from the governments to seasonal carriers. Charter airlines, as they were called, could grow and prosper under these conditions. A whole new industry of package tourism has developed on top of these new charter airlines and remains to be important business even today. Package travel is mostly northern European specialty (nowadays increasingly popular in Japan and other Asian states), thus it's not surprising that the first charter airlines developed in United Kingdom and Germany. In Europe, the seventies and eighties were the best days for package holidays and charter airlines, since the market remained regulated. In USA, where deregulation came much earlier (full liberalization of internal market in 1978), the charter airlines didn't have such a nutritious ground. They had to compete with newly emerged airlines, often flying to same destinations while being more efficient at the same time. After the deregulation in Europe, the European charter airlines were faced with new and great problem - fierce competition from the low-cost carriers. For example LTU International Airways, Germany's dominant charter flight operator and tourist packages dealer in the 70's and 80's, has thrived within the regulatory framework of Lufthansa being the monopolistic scheduled airline.[147] The removal of these regulations doesn't coincide with the decline of LTU by coincidence.

The LCCs are flying to same destinations with lower costs, therefore being able to offer lower fares. The low-fare airlines substitute the package travel with extensive cooperation agreements with chains of hotels, rent-a-car specialists, facultative trips providers and the like.

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[147] Kaiser, Alexander -Cell Consulting: 'The Rise and Fall of the (Tourist) Charter Airline Industry'; July 2002; http://www.cell-consulting.com/a/1/122/index.htm

Similarly as the low-cost carriers, the charter airlines try to keep their fleet of aircrafts as simple as possible[148], saving thus on maintenance and training costs. Other techniques used by the charters also resemble the LCC model, such as the lately observed trend of adopting a more regular schedule. But on the other hand the charter airlines try to keep up a certain standard of services, which put in comparative disadvantage to the no-frills airlines. Since the classical model of the charter airlines seems to be unsustainable in the light of the sever competition from the LCCs, there are basically two options to choose from.

The first one is to differentiate their products more from the LCCs by offering higher standard of service or new and more exotic destinations, concentrating thus on the more demanding upper-class travelers. Recently, a new impulse was given to the charter airlines. Big corporations started hiring small jet planes for their business travels. Therefore focusing on these premium, well-paying passengers and lending them exclusive jets with the crew can be a way to go for the charters.

The second choice is to become an LCC itself. The second trend can be observed by many charter airlines, which either turn themselves into LCCs straightaway or do it step by step – establishing new daughter LCC companies. There can also be a mix of these two. One example for all is the Czech charter airline Travel Service, who was flying for Czech tourist agencies to favorite holiday destinations such as the Canary Islands. Travel Service has recently (by the beginning of May 2004) started operating a new daughter LCC called Smart Wings. The parent company will concentrate more on exotic locations, such as Brazil or Dominican Republic, with direct flights from Prague. The increasing regularity of the flying schedules could be observed during the winter of 2003/2004 when Travel Service was flying to Bangkok in Thailand every Wednesday.

[148] Travel Service and its daughter carrier Smart Wings own only one type of aircraft - Boeings 737

USED SOURCES

BOOKS:

- Kleyman, Birgit: 'The development of multilateral alliances'; Helsinki 2002
- Doganis, R.: 'The airline business in the 21st century'; London 2001
- Laaser, Claus-Friedrich: 'Global strategic alliances in scheduled air transport – implications for competition policy'; Kiel 2000
- Morrison, Steven and Winston, Clifford: 'The economic effects of airline deregulation'; Washington 1986

MAGAZINES:

- The Economist (print edition and internet edition – www.economist.com)
- Aero International - Das Magazin der Zivilluftfahrt
- Aerlines – International Magazine for Students of Aviation (www.aerlines.nl)
- Euro, in cooperation with BusinessWeek
- Týden

NEWSPAPERS:

- MF Dnes
- Lidové noviny
- The Wall Street Journal – Europe

STUDIES ON THE INTERNET:

- 'Fast Facts: the air transport industry in Europe has united to present its key facts and figures'; ATAG; http://www.atag.org/files/FAST%20FACTS-145330A.pdf

- Costa, Peter R.: 'Rethinking The Aviation Industry'; The McKinsey Quarterly, 2002 Number 2 Risk and resilience; http://www.mckinseyquarterly.com/article_page.asp?ar=1190&L2=23&L3=79&srid=69

- '2003 Economic Report: A Review of the U.S. Airline Industry'; ATA; http://www.airlines.org/econ/files/2003AnnualReport.pdf

- 'The European Airline Industry: From Single Market To World-wide Challenges'; A Communication from the European Commission; 1999; http://europa.eu.int/comm/transport/air/rules/doc/com_1999_182en.pdf

- ‘White Paper: European transport policy for 2010: time to decide’; © European Communities, 2001; http://europa.eu.int/comm/energy_transport/library/lb_texte_complet_en.pdf

- ‘The Economic Impact of an EU-US Open Aviation Area’; The Brattle Group; December 2002; pgs. vii and viii; http://europa.eu.int/comm/transport/air/international/doc/brattle_aviation_liberalisation_report.pdf

- Kaiser, Alexander - Cell Consulting: ‘Crusade Into the New World’; May 2003; http://www.cell-consulting.com/f/27/file.pdf

- ‘A SINGLE EUROPEAN SKY Brochure’ © European Communities, 2002; http://europa.eu.int/comm/transport/air/single_sky/doc/publications/brochure_en.pdf

- Kaiser, Alexander -Cell Consulting: ‘The Rise and Fall of the (Tourist) Charter Airline Industry’; July 2002; http://www.cell-consulting.com/a/1/122/index.htm

INTERNET DATABASES AND OTHER USEFUL PAGES

JSTOR; http://www.jstor.org

EBSCOhost; http://ejournals.ebsco.com/

Pro Quest; http://proquest.umi.com/pqdweb

‘Airline Industry Profile’; http://biz.yahoo.com/ic/profile/airlin_1600.html

‘Airline Economics’; ATA, 1999; www.airlines.org

‘Airline Deregulation’; ATA; 1999; www.airlines.org

easyJet: http://www.easyjet.com/EN/about/index.html

Sky Team: www.skyteam.com

Airline Business magazine; ‘Comments’ section; March 2004; www.airlinebusiness.com

©European Communities, 1995-2003;

http://europa.eu.int/comm/transport/air/rules/competition_en.htm

http://europa.eu.int/comm/transport/air/rules/bilan_en.htm

http://europa.eu.int/comm/transport/air/rules/state_aid_en.htm

http://europa.eu.int/comm/transport/air/international/dev_en.htm

http://europa.eu.int/comm/transport/air/single_sky/index_en.htm

and many more...