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**SKY WARS: STRATEGIES AND PERSPECTIVE OF AIRLINE
COMPANIES**

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Introduction:

The international airline industry is capable of serving almost every region of the planet from the most commercial to the less accessible and remote. This industry has been one of the leading forces that made the creation of a global economy possible. In addition it is itself an important economic force both for its internal operations and for how it affects its complementary industries such as the tourism industry and the airplanes manufacturing. Moreover the airline industry is among the most followed industry both by its participant, of course, but much by government policy makers and the media as well.

Data shows that in 2014 around 3.3 billion of passengers were carried around the globe, approximately 44% of the world total population. But there is more to it than just human passenger, it is estimated that each year around 50 million tons of freight are shipped by airplanes all around the world, carrying around 35% of the total value of products traded internationally. Moreover the airlines industry gives employment to around 57 million people producing an economic activity of something like \$2.2 trillion.

Tony Tyler, the CEO of the International Air Transport Association (IATA) tried to explain some of the benefits that the aviation industry has brought to mankind in the last century: “Today the aviation industry re-unites loved ones, connects cultures, expands minds, opens markets and fosters development. Aviation provides people around the globe with the freedom to make connections that can change their lives and the world”¹.

The opening chapter of this thesis will explain and analyze how the airline industry works and how it developed and evolved from its birth up until today. It will be centered on the birth and the expansion of the industry as well as on the economic needs and opportunities that this sector had to offer and that led it to become one of the most important industry of the last century.

In the second chapter the focus will be on how companies have reacted all across the world to the deregulation, which started in U.S. in 1978, on the changes derived from the explosion of low-cost carriers and on the impact that the recent crisis, worsened by the tragedy of 9/11, has had on the airline industry.

¹ Johanson, Mark; How the airline Industry Has Evolved in 100 years of commercial air travel; *International Business Times*; *ibtimes.com*; (2014)
Available at: <http://www.ibtimes.com/how-airline-industry-has-evolved-100-years-commercial-air-travel-1524238>
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Keeping to the topic, in the last chapter will be discussed the specific case of the Italian flagship carrier Alitalia from its foundation in 1947 and development through the first privatization in 1996, the more recent crisis which ended with the company going bankrupt in 2008 and with the purchase of the brand by Compagnia Aerea Italiana (CAI) in December of the same year, analyzing lastly today's situation and overall activity of the renewed company.

In my thesis I will attempt to retrace the cardinal moments which made the airlines industry what it is today, and try to explain how the growth of this market has impacted on the behaviors of people and businesses all around the world. Through researches and analytical data I will discuss of the economic performances of this industry.

Chapter 1:

Since ancient times mankind has always been fascinated by flight. It is important to understand that the invention of the airplane has had a huge impact on most sectors of the economy across the world, and it changed the way human beings and businesses perceive long distances nowadays.

In my dissertation I will discuss and focus on how the airline industry has developed during the last century and how it affected the economy of the entire globe.

1.1 Historical overview:

Sir George Cayley conceived the first airplane concept, in 1799. It was the first model with fixed wings, propulsion system and a movable control surface. From this starting point many engineers and scientists tried to develop their own version of airplanes with several successes, but it wasn't until 1903, with Wright brother's "Flyer", that mankind could experience the first controlled, sustained and powered flight. The key of the success of their invention was that, differently from other projects, they focused mainly on developing effective methods of pilot controls rather than on the power of the engine. The two brothers were the first to render the product available on the market.

However the real launch pad for airplanes to evolve into one of the most important innovation in history was WWI, in which aircrafts were first employed on a large scale giving birth to the aviation sector. After the war, airplanes were starting to be used for commercial purposes, at first just for transportation of goods and later even with human passengers and the first airlines companies started to blossom all across Europe and the world. It is interesting to notice how fast the airplane industry developed. From the first flight in 1903 it took only six more years for the birth of the first commercial airline the *Deutsche Luftschiffahrts-Aktiengesellschaft* (DELAG) funded in 1909. The first scheduled commercial flight was in 1914 in Florida. The two decades that were to come signed the dawn of the airlines era with the birth of many companies, mostly in Europe and in the United States, some of which are still operating in the industry after almost a century.

As stated above WWI has had an important role for the development of the aviation industry as most of the earliest commercial airplanes were basically aircrafts used during war rearranged for transport of people and freight and the earliest pilots were the military aviation's ones. On the other hand at the end of WWI that large surplus of planes affected highly the demand for new ones and many aircraft manufacturers went bankrupt. The first European airline that had

airplanes with fixed wings was the British company, Aircrafts Transport and Travel, founded in 1916, which employed a former military fleet of vehicles. It was the first company to serve on an international route over the British channel on the 25th august 1919. Soon competitors started to appear all over the continent with the first being the French which established in late 1919 the Société Générale des Transports Aériens which offered services on the same route over the British channel. One year later, in 1920, the Dutch company KLM was created with its first flight being on the London-Amsterdam route with a borrowed aircraft from the British company Aircrafts Transport and Travel. KLM is the oldest airline still operating in the world, followed by Australian Qantas established in late 1920, Czech airlines and Avianca, which is a Colombian company.

In the United States the post-war outlook was similar, and so the excess of pilots and aircrafts that were unemployed provided to the airline industry a great incentive to flourish. As already said the first scheduled commercial flight took off in 1914 from St Petersburg to Tampa in Florida, however until the early 20's there was a low intensity of service for what concerns commercial flight with human passengers as the air carriers were mostly focused in carrying freight and mails. This was due to the American landscape as there were almost no natural obstacles (as for instance the British channel in Europe) to isolate major cities and for this reason railroads were capable of efficiently transport people almost as fast as airplanes but with an higher level of comfort.

However, the US government started an experimental project for airmail service distribution between Washington, Philadelphia and New York at first and all the other principal cities of the States in the following years. Once the service was well established, providing a sense of trust and efficiency to the public, the next step was it's selling to privates and the creation of laws to regulate the air service and that allowed the development of private air carriers, which were sometimes created or at least co-financed by manufacturers of aircrafts and engines (e.g. Ford) and that through successive mergers and acquisitions finally achieving a well established national dimension (United Airlines, TWA, American Airlines e Pan Am) and even reaching as far as to cover some of the first international routes.

However the development of the services intended to carry human passengers in this stage was limited by the scarce power of the airplane's engines which were unable to provide enough power to carry a large number of people, moreover the flight comfort on board was inadequate and lastly there was the difficulty to travel both at night and in non optimal climatic conditions.

The first no stop transatlantic flight by Charles Lindbergh in 1927 represented a big turning point for the airline sector for the huge echo that had on the public opinion that made the industry gain the interests of important private investors. Thank to those investors during the 30's were introduced fundamental technological innovations which allowed the production of more powerful and lighter engines, devices for night flights and for flights with low visibility (e.g. radio beacons, altimeters, artificial horizons, auto-pilot) and a larger and more comfortable cabin in the fuselage.

The introduction of this improvement started a strong competition between the two principal aircraft manufacturers, Boeing and Douglas Aircraft which in 1936 brought to the realization of the "plane that changed the world"²: the DC-3; it was, indeed, the first airplane to render profitable for airlines the passengers service, this vehicle could carry 21 travelers in optimal condition for what concerns safety, soundlessness and speed for that time and all in addition to low operating costs.

Even if the Boeing's and the Douglas's planes represented a big step forward for the development of the industry, and for the improvement of aircrafts design, they had a major limit. They could fly no higher than 10.000 feet, altitude at which the level of oxygen starts to rarify and people on the plane began to feel dizzy and even fainted.

However this could not stop the technological progress through which the industry was undergoing. The airlines wanted to fly higher, in order get above the turbulence and storms, which are frequent at lower altitudes, motion sickness represented a major problem for many airline passengers and as a consequence was an impediment to the growth of the air industry.

The first able to overcome this problem was the Boeing manufacturer with the creation of the Stratoliner, which started its operation in 1940 with the Trans World Airways (TWA). This was the first pressurized aircraft, with a concept as simple as pumping air in the fuselage as the vehicle gained altitude in order to maintain an internal atmosphere as similar as possible to that experienced at lower heights. With this revolution, this aircraft could double the precedent altitudes reaching 20.000 feet and increased consistently the speed of travel approaching the 200 miles per hour.

² Ingells, Douglas J.; *The Plane That Changed the World: A Biography of the DC-3*; (1st ed.)US: Aereo Publishers (1966)

1.2 - Industry outlook pre-deregulation:

Government decisions continued to have a role as important as the technology improvement for the aviation's industry growth, and in 1938 was enacted one of the most important notice by the American Congress, the Civil Aeronautics Act. Until that time there was no central agency working for the long-term growth and development of the aviation industry and the policies concerning this sector were passed from time to time to several different government agencies and departments. Moreover, the postal reforms, enacted in 1934, imposed a significant reduction on the airline payrolls for airmail services causing a period of financial loss for several companies.

For this reason the industry wanted a more rationalized government regulation, being supervised by an autonomous entity. To satisfy this need was enforced the above mentioned Civil Aeronautics Act, which provided for the creation of such independent entity, the Civil Aeronautics Authority (CAA) whom had the power to regulate and supervise fares, routes, mergers and almost every branch of the airways sector. With the creation of this agency the goal was to create and maintain a regulated order within the industry, holding rates to reasonable levels and conjunctly helping to restore the financial outlook of the airline industry, so as to foster and support the growth of the commercial air carriers.

Successively the Congress founded a separate agency to investigate on airplanes accidents, the Air Safety Board, which in 1940 under President Roosevelt advice was incorporated within the CAA giving birth to the Civil Aeronautics Board (CAB). Along with the prodigious technological innovation, policies had had a major role in the success of the industry in the years that were to follow.

As WWI, World War II greatly affected the aviation industry. In 1939 when the war broke out with Hitler's invasion of Poland in the United States were manufactured less than 300 aircrafts. Just five years later when the war was about to end, U.S. airplane manufacturer were producing more than 50.000 vehicles per year.

During this period, of course, most of the planes were fighters and bombers, however the importance of the aviation sector for the war effort became quickly apparent and essential. Throughout the war, airlines provided for fast long distance transportation of both troops and supplies, to and from the front. It was the first time that airlines were facing a demand that exceeded by far the capacity of their operations. Many of them exploited also the opportunity to explore new routes gaining an exposure that at the end of the war would give a broader economic perspective and mental attitude.

There were several technological advances in US's aircraft design during the war, that improved the performances of the planes under every aspect, from speed to altitude and again to distance enhancement, with US having set the primary post-war goal on the mass production of such vehicles for commercial purposes as well as military ones. However the most revolutionary innovation introduced occurred in Europe, specifically thanks to British scientists whom invented the radar and the jet engines, two inventions destined to drastically boost the aviation industry.

The post-war aviation industry was then ready to grow at a rapid pace, one of the major forces that drove this quick expansion was the introduction of the previously mentioned jet engine, that made possible, in 1952, to fly from London to Johannesburg, South Africa, at an unprecedented speed of 500 miles per hour carrying the likes of 36 passengers.

However safety was still a major issue and with the advent of the Cold War the funds needed to solve this problem were provided by the government most involved in the conflict, so as to help the development of the jet's technology. Most of the technological improvements on jets were intended to serve a military purpose, as history teaches war boosts technological innovation, but they were later applied on a mass scale to the commercial branch of aviation. One of the most representative transfer from military to civilian jet improvement was the jet tanker Boeing designed for the Air Force in order to refuel bombers in flight. This aircraft model had a great success as a military product, but even more as a passenger jet, when renovated and modified in 1958 was introduced on the market as the first Boeing jet to carry people: the Boeing 707. This massive machine had four jet engines and with a length of 125 feet could lodge up to 181 passengers travelling at the incredible speed of 550 miles per hour. It had also an incredible economic advantage in comparison to the previous passengers aircrafts, due to several improvements that were able to cut its operating and expenses costs, as its engines were more reliable than the piston-driven ones and put less strain on the airframe making the flight more comfortable for clients and producing less vibration, thereby cutting maintenance costs, in addition to that the old octane gasoline fuel was replaced by kerosene fuel with a reduction of almost 50% for refueling. The pioneer of the jet commercial usage was the American airline Pan Am that with the adoption of the Boeing 707 signed the beginning of the Jet Age.

Commercial aviation exploded, but with the rapid rate of growth of the industry new questions arose. The skies were becoming too crowded for the systems of aircraft separation in use at the time, the Congress had to take measures and to face the upcoming problem in 1958 approved the Federal Aviation Act.

The act provided for the creation of a new safety regulatory entity, the Federal Aviation Agency, later renamed Federal Aviation Administration (FAA) in 1967 after the Congress's foundation of the Department of Transportation (DOT). With this new regulatory body to supervise safety matters the Civil Aeronautics Board maintained jurisdiction over the economic branches of the airline system, such as routes and fares. Meanwhile the FAA was entrusted with the establishment and operation of a traffic control system, in order to maintain a safe and ordered separation of all commercial flights during every step of the journey from take offs to landings.

Another big revolution happened in the aviation sector in 1969 with the introduction of the Boeing 747, once again the role of pioneer of the industry was well played by Pan Am airlines, which was the first company to acquire and adopt the vehicle in commercial service. The greatest different from any other planes seen until that time was the size, the Boeing 747, indeed, was double the size of any other Boeing jet, it was composed internally by two aisles and it could host as many as 450 passengers per flight.

Once it was understood the benefits that derived from the economies of scale gained from the adoption of larger jets, other aircrafts producer quickly followed the trend and started to manufacture larger vehicles. The two most representative example of this phenomenon are found in the Douglas first wide-body jet, the DC-10, in 1970, and the L-1011 by Lockheed, which was created later during the same year. However both of these models were smaller than the 747 with a carrying capacity of almost a half, around 250 passengers.

At the same time, there were efforts by the government of the United State and of the major European countries to develop a supersonic commercial aircraft. The first to succeed in such venture was the Soviet Union that during December of 1968 was testing the Tupolev 144. In the following couple of months the first Concorde was made fly by an association of West European airplanes producers, which produced eventually a number of small commercial aimed jets as well. On the other side of the medal, during 1971, the US projects for the ideation of a supersonic jet made for commercial services were having a strong delay, behind this stalling there was the public concern about the costs and the sonic boom that such machine would produce.

However the incredibly rapid rate of growth of the aviation industry of this period, was coming to an end along with the hopes of a sustained economic growth in every other sector of the economy, as the entire world was about to face a severe economic downturn. The overproduction of the post war decades began to show its drawbacks as the oversupply was

facing a drastic decrease of the demand most products. To aggravate the situation in 1973 the OPEC, a Middle Eastern intergovernmental organization, posed an embargo on oil, causing an enormous increase of fuel costs and helped generally to increase price inflation. All these factors put a tremendous strain on the aviation sector.

The CAB had to respond in some ways to this crisis in order to respect its mandate to ensure the economic sustainability of airlines, and allowed carriers to increase fares. It also enabled a four-year official suspension on new services and agreed to several accords among airlines to limit capacity on some of the major routes.

The public was not content with the measures taken by the board, as the cost to fly increased. Furthermore, these moves had little effect on the financial situation of most of the companies, and earnings were at an historical low throughout the 70s, despite the CAB allowed for increased fares and capacity constraint.

By 1974 the public opinion stated to feel that government regulation were too burdensome to US industry and were contributing to inflation. In 1975 the Civil Aeronautics Board came to the conclusion that airline prices would automatically fall if government constraint on competition were lifted. On a report of the same year is stated that the industry was “naturally competitive, not monopolistic”³. As a result of this realization the government agency began voluntarily to slowly let go on the industry, mostly under the leadership of Alfred E. Khan, who became chairman of the board in 1977 and who was a supporter of the idea that the board should give to carriers greater pricing freedom and an easier access to routes.

³ Ben-Yosef, Eldad; 1970s-DEREGULATION; In *The Evolution of the US Airline Industry: Theory, Strategy and Policy*, 110-111; Dordrecht: Springer; (2005)

Chapter 2:

In this chapter I will start the discussion from where we left in the previous one, beginning with the analysis of the aftermath derived from the deregulation process of the aviation sector which took place in the United States and Europe starting from the 1978.

2.1 – Post-deregulation shock and new perspective:

The increasing loss of trust towards aviation regulation brought the CAB in 1975 to authorize new competition networks on several courses, and allowed charters companies to operate with a low fare service. To respond to the increase in competition, American Airlines requested to be allowed to apply discounts up to 45% on its prices, and this wish was promptly guaranteed by the board. Given the success of this experiment, in 1978 the Congress was convinced to pass the Airline Deregulation Act. Such legislation, made the CAB exit the scene terminating its jurisdiction over airlines routes and over the setting of fares.

After the enactment of the Deregulation Act the aviation sector undergone a period of rapid transformation, this process brought important operational and marketing advantages with the emerging hub-and-spoke model, moreover there was a constant increase of the demand for intercity flights, and the once regulated costs for major inputs for operations started to be more volatile. Among all the changes the most significant one derived from the Deregulation act was the sharp decrease of prices for flying. The increased competition in the industry affected the fares which had a decrease of almost 40% compared to the pre-deregulation prices.

The just mentioned hub and spoke system had a huge development during the first decade following the Enactment of the Deregulation Act, period during which the focus on airlines was switching from individual carrier route system to this new configuration intended to increase profitability. Following the 1978 airlines were able to develop route hubs and by 1996 each major airline had already started to establish one or more important route hubs located in strategic and large airports. Soon after the passage of the Act many formerly local carriers started to expand at a rapid rate posing a real threat to the bigger well established competitors. By 1984 the number of airlines competing in the U.S. market almost doubled compared to pre deregulation years. In the competitive environment encouraged by the Deregulation Act many airlines tried to expand their market share through merger and acquisition rather than by internal growth. And as a matter of fact during the first decade of the Deregulation age the airline industry went through an period of massive consolidation registering in this period alone the outstanding number of 51 airline mergers and acquisitions.

This period of huge transformation and the economic benefits it derived for the airline sector demonstrated that the previous period of strict regulation had had a negative effect on the natural development of the aviation market by forcing policies of expansive fares, leading to inefficiency and poor consumer satisfaction and choice. Moreover, the high intensity of regulation hindered the natural development of hub and spoke operations, which flourished during the first deregulation period bringing one of the most effective innovations for the sector. Given the extraordinary results achieved by the U.S. industry, the European community started to pay attention to the new industry trend criticizing the way the European aviation market was conceived, as the consumers interests were apparently sacrificed in favor of the flagship carriers interests which operated in a protected and closed environment.

In the European Community Treaty there was explicitly regulated transportation by rail, road and inland waterways. However it was unclear whether such regulation were to be applied to the aviation transportation or not. To put an end to this debate the court of justice declared in 1974 that those articles of the treaty were regulating the airways too.

After the advent of the Nouvelles Frontières, the European national airlines started to feel that their pricing power was put at risk and to prevent a loss in market power they tried to convince each government and the European Commission to enforce a sort of immunity for the airlines sector from the EU competition laws. In the following years more precisely between 1987 and 1993 the European commission approved and enacted three Air transport liberalization packages aimed at increase gradually the degree of freedom of the airlines within the industry. Those measures achieved a removal of most entry barriers and European airlines had now free access to every routes within the Union. With the enforcement of the third package, substantially, every carrier of the EU were licensed under similar conditions. However the process of deregulation had a stronger impact in the US rather than in Europe, nevertheless this transformation brought several important modifications to the aviation industry.

First, in the European aviation market there was an above average growth, data which gains importance given the fact that during part of the liberalization period the economy was facing a recession. The total number of routes available increased from 490 to 520 in the period between 1992 and 1996, encouraged mostly by the introduction of new nonstop courses operated by former charters company which started a scheduled service.

By 1996 the number of licensed company increased, almost eighty were created while around sixty ceased to operate. For what concerns the impact of liberalization in the EU on airfares data shows that the average prices on routes served by two or more carriers have generally been

lower than those operated without competition. In addition to that the increasing competition kept on driving down prices as airlines were able to enact promotional programs in order to capture a larger market share.

Even if liberalization was a big help in the establishment of a well functioning aviation market, there are some forces which are still impeding the sector to reach its full potential. The most important factor is that the increase of the competition in the European airline business is in deep contrast with the structured system of national owned carriers adopted by almost every member of the EU. As a matter of fact the different government were not really disposed at implementing the several measures provided by the liberalization, and tried to impede or at least delay the licensing and operations of the non-state owned companies. Moreover there were other obstacles impeding equal competition, as the national carriers had tax advantages, but mostly it concerned the congestion of airports and slots allocation, as one of the main obstacle for new entrant carriers is the access of attractive slots on major routes, all of these slots, indeed, are owned by national airlines which also have a superior access to the services and facilities offered by the airport, thus gaining a completely free competitive advantage. To aid the formation of an equal competitive environment should occur a privatization of all of the major national airlines.

The implementation of the third air liberalization package in 1993 increased the competition within the aviation industry, in response European airlines attempted to improve their competitiveness and appeal to costumers reducing costs and increasing intensity of operations. An important role for competitiveness was played by size and this factor became even more relevant in the liberalized environment and airlines all around Europe tried to exploit their resources in order to maximize economies of scope and economies of density. In order to do so some carriers tried o expand their operation through direct takeovers, however international routes are still determined by bilateral agreements. These agreements, that go under the name of “Open Skies”⁴ agreements, often demand that the countries involved are the owners and the supervisors of the carriers destined to operate on such route, prohibiting the access to that same course to other companies.

These bilateral agreement could be undermined by mergers and acquisitions, and as a consequence the national airline would lose the privileges derived from such agreement. In order to prevent this kind of risks European airlines often choose a different way of expansion

⁴ Byerly, John; and Calleja, Daniel; Air Transport agreements; *Official Journal of the European Union* 50, (2007)

rather than the takeovers, they try to improve their market position by signing alliances, cooperatives or partnerships. Those movements allow the parties involved to reduce costs through joint marketing and joint buying, higher economies of scale and other several benefits without losing those coming from the above mentioned agreement.

2.2 – The birth and development of a new format: Low-cost carriers

The first airline to introduce the idea of costs optimization, through low fares and no frills policies, which will provide for a base for the low costs carriers to come, was the Southwest Airlines, founded in the United States as far back as 1971 previous to the huge revolution of the American aviation market derived from the Deregulation Act of 1978.

The earliest measures taken in order to decrease costs and be competitive in the market, in a completely unseen way, were the reduction of services offered to passengers and the full exploitation of both ground and onboard personnel. The first intervention was towards the reduction of the space in between the seats as much as to meet the minimum level required in terms of safety and comfort provided by the law, and the decrease or even elimination of food services, services which when available were not free. More challenging was the staff's productivity maximization, as the objective was to provide to costumers the same service offered by the incumbents of the market but with a lesser number of employees. To reach this goal it was adopted an awareness campaign intended to raise interest for the company in its employees through the selling of a stake of the company to the personnel.

In response to the birth of this new low-cost business model, the carriers already established in the market tried to oppose with action more or less licit, they imposed the Godfather's rights (rights for companies which were already in the business), sabotage and operating anomalies of CRS's systems (computer reservation system), pressure from the labor unions (they wanted to lead to believe that low-cost's staff was not adequately trained and prepared for the minimum safety requirements) and policies which led to the assignation of low profile routes and the creation of a minimum required price, all of this was done hiding behind the intention of wanting to prevent the decay of safety and comfort standards.

As explained previously, with the Deregulation Act of 1978 began the free competition of the American air transport industry. The earliest achievement derived from the Act were the free allocations of airport landing's slots, the possibility to freely choose and adopt its own fares plan and a guaranteed competition among airlines with same legal rights.

The European market, however, was experiencing an opposite situation, there was, indeed, a large number of air carriers strongly tied to governments which were often the owners of such companies and as such they started to be called “Flagship Companies”. The complete absence of competition in the European aviation environment was explained by the fact that such market functioned thanks to the stipulation of bilateral agreements between the involved countries following the “Six Freedom”⁵ scheme, which allowed only some passengers and cargo operations.

The Six Freedoms of commercial aviation

Freedom	Description	Example
1st	the right to fly over a foreign country without landing	Toronto – Mexico City by a Canadian company, overflying the USA
2nd	the right to refuel or carry out maintenance in a foreign country without embarking or disembarking passengers or cargo	Toronto – Mexico City by a Canadian company, stopping for fuel in the USA
3rd	the right to fly from one's own country to another	Toronto – Chicago by a Canadian company
4th	the right to fly from another country to one's own	Toronto – Chicago by a US company
5th	the right to fly between two foreign countries on a flight originating or ending in one's own country	Doha – Bangkok – Kuala Lumpur by a Qatari company
6th	the right to fly from a foreign country to another while stopping in one's own country for non-technical reasons	Dubai – Cairo – Paris by an Egyptian company

Tab1: Source: *Manual on the Regulation of International Air Transport* (2nd ed.). International Civil Aviation Organisation. 2004

⁵ Liu, Fang; *Manual on the Regulation of International Air Transport*, (2nd ed.) International Civil Aviation Organization, *icao.int*; (2004)

Moreover, there were several other dissimilarities between the US air market and the European market, driven mostly from the different geographical composition. The European continent is much smaller and there is a much higher concentration of different nations, the vicinity of cities and the competition between the different way of transportation which were well established, such as highways and railroads. The heavily regulated European sector was driven by the economic interests that each country was seeing in the development of its own aviation sector. With the introduction of the deregulation, started a rapid and deep process of transformation in the air transport industry and large companies started to perceive major airports as an opportunity to gain economies of scale in order to drive down operating costs.

Differently from traditional Full Service Carriers, Low-costs airline adopted a point-to-point routing system, adopting secondary airport or regional ones that were almost disused. This strategy saved to low cost carriers significant amount of money for hub's lease and taxation imposed by the airport managing agencies, and in addition a shorter waiting time between landing of a flight and take off of the next of almost thirty minutes allowing a larger number of flights and increasing productivity of each aircraft, thus reducing operating costs.

The exploitation of secondary airports by low-cost airlines, allowed the development of airport related services, such as restaurants, bars, shops, rental car, shuttles services, creation of parking lots and the possibility to advertise inside such airports. All of this, is not just beneficial for the carriers but also for the surrounding environment, allowing an increase of demand for labor and the posing favorable conditions for the establishment of firms.

The abandonment of the traditional hub-and-spoke model, characterized by delays and organizational complexity, brought advantages to travelers who have experienced at the same time an increase of routes available as well as a decrease of ticket prices.

There were several additional innovation introduced by low-cost companies flourished after the liberalization of the air transport market, such as the reduction of services offered to passengers to whom are guaranteed only the mandatory services, the elimination of different passenger classes with the adoption of a unique class for all the costumers, prices segmentation, meaning that on a same flight with one passenger class there can be several different prices for the ticket deriving from the booking time and promotional offers. Furthermore, it was introduced the practice of direct booking through the internet or by phone with a consequent reduction of costs. Significant importance has had the adoption of a unique aircraft model for all the operation with a decrease of personnel's training costs and maintenance. Moreover were

eliminated assigned seats, and was adopted a policy of fuel hedging, through which the airlines bought large volumes of fuel to prevent the rise of gas price.

Based on this business model, in Europe started to appear and build up their position in the market the first low-cost carriers, the first of which was the Irish Ryanair that in 1985 broke the Aer Lingus- British Airways oligopoly over the Dublin-London route, launching on the market an airfare of more than a half less than that offered by the traditional companies.

Ryanair experienced an exponential growth going from the 82.000 passengers in 1987 to the 2.250.000 clients served in 1995. But the ultimate acceleration was given by the introduction of the third liberalization package, which completely deregulated the market, allowing the Irish carrier to offer to its customers more alternative routes in different European countries, making it possible for Ryanair to become in 2014 the sixth larger company for passengers carried with over 86 million, and the leading carrier in the European low-cost outlook.

Scheduled Passengers Carried 2014

Rank	Airline	Type	Thousands
1	Delta Air Lines	FSC	129,433
2	Southwest Airlines	LCC	129,087
3	China Southern Airlines	FSC	100,683
4	United Airlines	FSC	90,439
5	American Airlines	FSC	87,830
6	Ryanair	LCC	86,370
7	China Eastern Airlines	FSC	66,174
8	EasyJet	LCC	62,309
9	Lufthansa	FSC	59,850
10	Air China	FSC	54,577

Tab2: Source: WATS 59th Edition by IATA

The table above shows how successful the low-cost business model has proven to be. Indeed, the American Southwest Airlines, already mentioned as the first low cost carrier ever, is going to become in the next future the largest company for passengers capacity, offering only domestic routes in the U.S.A.

The difference in the strategies adopted by traditional full-service carriers and low-cost ones explained above had brought to a strong separation of the market in two big categories of customers. Business travelers are served by the full-service airlines, which have access to landing slots in more central airport closer to the economic and political centers of the different cities, thus reducing the travelling costs for business people in terms of time lost far from work, which is a major concern in economical terms for business travelers.

On the other side, are travelers whose interests is focused on tourism and leisure. For this segment of the market ticket price is the most relevant feature that affects which company to choose to book a flight. Moreover, this segment is not particularly sensitive on whether the landing airport is close or not to the city center as long as there are good connections from and to the airport.

The latest trend for low costs maximization is to apply the strategy even to airport's structures, with the birth of low cost airports, such as that located in Marseilles (Mp2), which was rearranged as airport from an old disused warehouse, with concrete floor, no computer service, no air conditioned, without escalators, and no chair where to sit and wait apart from those of the single bar.

Given all these factors it is not unlikely that the development of this new business format has brought a significant increase of tourism, spread throughout the year and not focused only during weekends, and affordable to people of every social class thanks to the reduced prices. The strategic choice to rent peripheral airport has, thereby, incentivized the development of minor routes and of rural economies through the flow of people, thus bringing consistent benefits to the whole economic system of such regions.

2.3 – 9/11 attack and the subsequent crisis of the aviation industry

Before September 11, the aviation sector was already experiencing a period of pressure caused by the economic recession, the increase of the prices of oil and customer's complaints about delays and congestion were growing. Nevertheless the situation went from bad to worse. In the months preceding the attack, the American Trans Airlines, ATA, expected a net loss for \$1.5 billion for the U.S. airline sector in 2001, due to the negative impact that was expected to have

the previously mentioned economic downturn, the average profit in August was, indeed, 12.5% less than that of 2000, moreover incomes from business-types rates were down by 30%. However the worst was yet to come.

At 8:45 a.m. on 11 September 2001, two Boeing 767s were hijacked by Islamic terrorists and crashed into the twin towers of the World Trade Center in the heart of Manhattan, New York. Simultaneously two other vehicles were hijacked and crashed into the Pentagon, the headquarter of the U.S. defense department, and in a field in Pennsylvania. In the catastrophic attack, nearly 3.000 people loss their lives, of which more than 400 policemen and women and firemen. Shortly after the crashes, the Federal Aviation Administration (FAA), imposed a shut down of the U.S. commercial traffic over the American ground. It was a first time measure taken by the American government. This decision revealed several consequences, firstly, every flight on ground was impeded to take off, and secondly, planes that were currently on flight were left with two options:

1. Continue the flight towards the designed destination
2. Turn away and land at the closest airport

Most carriers choose the second option, thus leaving an incredible number of passengers in location far distant from what they planned. The days after the attacks were catastrophic under an economic perspective for airlines, as the FAA ordered to the companies to interrupt operations for several days, resulting il losses of millions of dollars.

According to the FAA, around 4.000 vehicles were on service the day of the attacks and thousands more were about to take off when the tragedy occurred, among them there were also cargo aircrafts operated by FedEX and U.P.S., the sector had to face logistic problems it never had to before.

In the earliest days after the attacks, most North American and European carriers had cut capacity and personnel, with numbers reaching almost 80.000 layoffs accounting only for the U.S. segment. At the end of year 2001 it was registered a total net loss for the airline industry of \$7 billion. The American air transport services were interupted for two days and a half after 9/11's attacks, with a loss for the nation accounting for \$4.75 billion. Along those economic issues the sector had to face the phsicological effect of the attacks with the "fear of flying"⁶ phenomena all around the world and particularly in the U.S..

⁶ Preston, Alex; Fear of flying: the spectre that haunts modern life; *Guardian*; (2014) Available at: <http://www.theguardian.com/world/2014/dec/28/fear-of-flying-phobia-we-cant-overcome>

Even if the fear and panic naturally derived from September 11th has weakened, the new security measures of screening and the increased feeling of risk felt by costumers have modified the demand and perception of air transportation, and this effect can be recorded in the aviation industry of every nation of the world, and especially, of course, for the U.S. market. The aftermath of the 9/11 attacks has affected significantly either U.S. and foreign markets. The uncertainty about the recovery of costumers demand, following the disaster, has been a major concern for air carriers. Moreover, there were contrasting theories within the air transport market concerning the length of the negative effect of 9/11 on the industry, which could be of longer due to the poor economic situation antecedent to the attacks.

Immediatley after the attacks, the FAA began to think about new procedures and measures in terms of security in order to provide protection to airlines and airports to avoid future attacks. The first implemented decision regarded the checkings, of luggages and travelers, which was improved and became more thorough. Since the tragedy, the U.S. federal governemnt proposed sveral improvement to airport security, one of which was the creation of the Transportation Security Administration (TSA), in November 2001, that has given a great help to the development of airport security, for instance with the introduction in 2010 of several measures to protect travelers, such as the adoption of screeners for passengers and for luggaes, screen checked baggages made with explosives detection devices and systems, a reinforced canine team, the expansion of the Federal Air Marshal Service and an hardened cockpit door to prevent hijacking onboard. Those security procedures are experienced in every segment of the aviation industry, not only that of commercial flights, also cargo airlines are sujet to heavier inspections since 9/11.

Furthermore the U.S. Congress, in 2007, promulgated the “Implementing Recommendations of the 9/11 Commission Act of 2007”⁷ in which was stated that in three years would have been established a system that would screen the total amount of cargo transported on commercial flights. The great majority of the measures provided by the American Act were also accepted and implemented by the European commission under the regulation (EC) 300/2008.

To implement the proposed procedures and rebuild the security system from scratch, according to an article form The New York Times, the U.S. governemnt spent an amount close to \$40

⁷ Public Law-110 – 53 -; Implementing Recommendations of the 9/11 Commission act 2007; U.S. Government Publishing Office; (2007)
Available at: <http://www.gpo.gov/fdsys/pkg/PLAW-110publ53/content-detail.html>

billion. And even though there are no precise reports it is fairly assumable that the European Union has undergone through a similar process and expense. As well as the U.S., European countries had to invest in reforming the security network in the aeroportual system.

However, the impact of the terroristic attack of September 11th has affected in a much heavier way the traditional full-service carriers rather than the low-costs airlines, which thanks to their pricing policies were still attractive to the market, especially in Europe, where low-costs carriers operated only on intra-European routes, away from risky destinations, and moreover because they were not yet active in politically sensitive regions.

The result of all this unprecedented crisis, brought to airlines a pressing necessity to reduce costs in order to face the difficult financial environment that was unfolding. Particular strain was suffered by full-service airlines which were the most affected by the drop in demand and were already facing the fierce competition against the emerging low-costs.

Thorough this difficult times, characterized by terroristic attacks and economic downturns, those who had suffered the greatest damages were the national flagship carriers and full service airlines which had a slow and at times not relevant recovery ever since countermeasures were taken. On the other side there were the low-cost carriers who had the chance to increase their market share and gain a dominant position in the aviation sector.

Chapter 3:

3.1 – Alitalia's birth and early development

Alitalia's first appearance can be retraced as far back as September 1946, just after the end of WWII, with the financial aid of the British and the Americans whom invested in the company an initial capital of L900 million and at the start of 1947 another L1.5 billion. During the spring of this second year the company started its operations with the first national flight on the Turin-Rome-Catania route.

In the first year of activity Alitalia expanded its fleet with the acquisition of another ten aircrafts of different size and capacity, and by the end of 1947 data shows that the company had successfully transported around 10,500 passengers and 100 tons of freight. In its second year of service, in 1948, Alitalia had already expanded as far as to offer to its client its first intercontinental route, flying from Rome to Buenos Aires, and in the following couple of years it increased its fleet with the purchase of new modernized aircrafts (Douglas DC-4s and DC-3s). After ten years of activity Alitalia's development led the company to success with several achievements, data from 1956 show that in ten years the airline had carried almost 120.000 clients and had employed 1.120 people with a total of the company's capital reaching L4,5 billion.

In 1957 Alitalia had a major role in the Italian airline outlook and intended to expand further by merging with the second Italian player Linee Aeree Italiane (LAI), which was a regional carrier partly owned by the US airline Trans World Airways, the remaining 60% was owned by the Istituto per la Ricostruzione Industriale (IRI), which owned Alitalia too and was the big company owned by the State which had control over most of the strategic participation of the government. Thanks to this merger the newborn Alitalia-Linee Aeree Italiane SpA became the unique domestic and international Italian air carrier, in addition to that this operation allowed the centralization of all airlines operations on the Italian ground increasing exponentially the ability of the company to compete on pair terms with the other air national operator all around the European continent. The new entity had also a substantial increase for what concerns its net capital, which more than doubled going from the L4.5 billion, mentioned above, of 1956 to around L10 billion, and its personnel employed, which grew to reach the number of over 3.000 employees. By the end of 1957 the company was approaching another big goal which was the almost half a million passengers carried by the fleet which had an ulterior expansion.

In 1960 the Olympic Game were to be held in Rome, this signed a milestone for the history of Alitalia. The company was selected to be the official carrier for the global event, and during this mandate it presented its first jet aircrafts, the first was a French model the Caravelle SE201 which was adopted for medium length flights and the second vehicles were the DC-8s aimed at serving the intercontinental routes. With this big innovation Alitalia was able to reach a long pursued objective which was that of transporting one million passengers in one year. The following year to encourage the growth of the national carrier, its headquarter was transferred from the modest airport of Ciampino to the newer bigger Leonardo da Vinci International airport located in Fiumicino, near to Rome. During the rest of the decade Alitalia continued its expansion through the acquisition of several other jet for the medium range distances to serve the European and Middle Eastern areas, and by the end of 1968 the company finally completed the renovation process by retiring the last of its non-jet aircrafts. Data show that the company during that period was the third European airline company for volume of transportation:

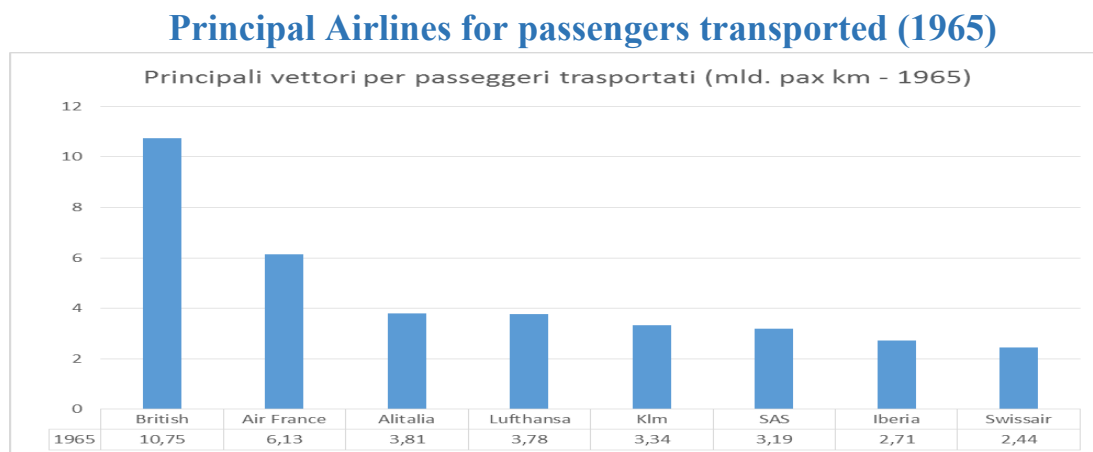


Fig 1: Source: Min. Trasporti, 30 anni di trasporti in (Italia, 1996)

This was also a period of great innovation for the aviation industry. As mentioned in chapter 1, in 1969 the Boeing manufacturer introduced the first wide-bodied plane the Boeing 747 which could carry twice the passengers of every other aircraft until that moment, guaranteeing an increase in profitability for the airlines who would adopt it. As a matter of fact Alitalia followed the trend and in may 1970 it was able to deploy its first Boeing 747 for international flight with high density.

The crisis of the 70s, which is already been covered, put Alitalia in a delicate financial situation. The prices of oiled increased dramatically, and the airlines experienced a strong fall in demand. One possible method to overcome such a difficult situation was for airlines to

operate with more fuel-efficient airplanes, and in 1976 Alitalia was able to replace its aircrafts with the more efficient Boeing 727.

Even if there was this renewing program, during the first couple of years of the 80s, Alitalia's fleet was becoming obsolete and inefficient, with an average age of aircrafts that exceeded that of other European competitors. In order to replace the outdated Boeing 727s, the company landed an order for the newer McDonnell Douglas Super 80s aircrafts to serve the medium-haul courses, and it programmed the acquisition of more Boeing 747s to replace the DC-10s, which were considered unsafe given the occurrence of some accidents involving the aircraft model.

To increase profitability Alitalia began to diversify the business into related business which served as support companies whose main purpose was to provide the clients with information and travel services. Some of the most significant among these subsidiary were the Societa Italiana Gestione Sistemi Multi Accesso (SIGMA), Italtour and Alidata with the first two focusing on the tourism sector and the third one being a software marketing company.

During this period, Alitalia undergone a process of deep restructuring thanks to the managing director of that time Luciano Sartoretti. By the end of 1986 he was able to cut Alitalia's debt. In the following year the company registered a profit of L73 billion thanks to a substantial recovery and expansion of the whole European aviation. However, even if the sector was experiencing a thriving period, during the 80s, the company had to face some major problems. An important one concerned its market share, which despite the satisfactory performances was significantly decreasing, on both the European and intercontinental routes, in favor of the major European competitors, namely, Air France and Lufthansa A.G. of West Germany. Those two rivals took the chance of an expansionary period in order to enforce aggressive expansion programs that consisted for both companies in re-equipment of aircrafts, which allowed them to increase the passenger's capacity on the major routes, thus boosting profits. On the other hand Alitalia focused its efforts on the diversification project, above mentioned, missed the chance to expand the main corporate body, thus failing to exploit the benefits that could had derived from the profitable period of the airline industry.

3.2 – The failed alliance with KLM

As already said in chapter two, the mid 90s was a period of great transformation for the aviation industry, and it was a period in which major national carriers began to understand the need to form alliances and partnerships in order to reduce costs and increase volume of operations and market share. Alitalia for its part started this search for a partner in 1993. The

first company on which the Italian carrier posed its interest was Air France. However the partnership never really had any development.

The most relevant attempt to form an alliance during the late 90s involves the Dutch airline KLM. The first contacts between the two companies began in 1997, when the Leo Van Wijk and Domenico Campella, respectively CEO of KLM and CFO of Alitalia, understood that the two businesses needed each other in order to maintain the competitiveness in the market compared with the other larger European rivals. The two managers also comprehended that the operations of the two companies were complementary, as on one side there was Alitalia with a vast and well established domestic market, but still facing the aftermath of the crisis and poor of long-haul network. On the other hand there was KLM, which had almost no domestic operation, but had a very strong network of intercontinental flights passing through the Amsterdam Schiphol hub. When it entered negotiations with KLM in December 1997, Alitalia, was close to financial collapse after 10 years of unprofitability, repeated management shuffles and bitter battles with unions. And during 1996 was already spread among analysts the belief that the company was technically failed. However Alitalia kept on going thanks to a government bailout, which allowed the carrier to continue its operation and to establish this partnership with the Dutch airline.

In late 1999 the two business started two joint venture, one regarding passengers and the other for freight. The two airlines were working toward linking their networks and most of their operations to act as one carrier with major hubs in Amsterdam, Milan and Rome, even though they remained two separate entities, revenues and costs were shared evenly, with the agreement that they would equally split profits and aiming at saving E400 million in three years.

This partnership was supposed to be the first European vector in terms of volume and routes, with a total of 39 million passengers and 377 destinations as 1998 data reveal, in front of Lufthansa and British Airways. The major operations concerning transportation of passengers was given under the control of the Dutch branch of the alliance while the cargo side of the joint venture was assigned to the Alitalia's board.

In 1998 opened to the public the Malpensa hub, in Milan, which was one of the cardinal points of the Alitalia-KLM partnership, however this hub did not have the success the two companies hoped for. The agreement was based on the fact that, once the Malpensa Hub would open every major operation passing through Milan would have been transferred from Linate to the new hub. KLM had betted on this and financed E100 million for the development of the Malpensa project and as soon as the new hub operations began the Dutch company placed a Boeing 747

with its crew flying from Malpensa to Sydney through Singapore. The two managers started to discuss about a merger of the two companies in April 2000. However the situation took an unexpected turn and later that same month the board of KLM rejected the project and declared terminated the partnership with Alitalia. In the case of the KLM-Alitalia partnership, the Dutch carrier was already privatized and was considered as a better performer than Alitalia, which was almost one and a half times larger than KLM. That balanced the distribution of power within the alliance establishing a situation of equality that seemed to work well until the conditions turned when the problem with the Malpensa hub arose. Furthermore, the two carriers were undergoing a period of huge strain as they were both facing losses during that year, particularly Alitalia as stated before was in a dramatic financial situation, and the global aviation sector was undergoing through a period of big transformation with the creation of large and powerful international alliances.

KLM blame, however, was pointed towards the Italian government and not on Alitalia's management, as they stressed the fact that the schedule of operations agreed had been delayed too much with Malpensa's operations still far from what it was expected by the Dutch airline, and, furthermore the Italian government pointed out that a privatization of Alitalia would not occur prior to the end of the year. KLM had said it was considering taking a stake in Alitalia when it was privatized. The Italian government had said it would sell its 53% stake in the carrier by June 30th, deadline which was then postponed as just said to the end of 2000.

Alitalia was then in chaos. And while KLM stock's value increased by 30% in the following month and rumors spread of a possible acquisition of the company by British Airways, the Italian carrier did not know where to turn its head. Moreover Van Wijk demanded a restitution of the E100 million borrowed from Alitalia for Malpensa's development, but this time around Campella responded with a formal request international arbitration provided for a case of controversy, asking for a compensation amounting to E250 million, while the E100 million remained in Rome in a frozen bank account.

At this time Alitalia was in deep trouble. With the vanishing of the great partnership and the usual internal problem, the company had to explore new courses of action. In 2001 Campella was replaced by Francesco Mengozzi. The new CFO several months after its establishment signed an alliance with the French national carrier Air France, an alliance which is still ongoing even if unbalanced in favor of the French airline. In 2002 KLM was starting to be interested in joining the alliance formed by Alitalia and Air France. During the same year the verdict of the arbitration regarding the KLM-Alitalia controversy gave reason to Alitalia, imposing the Dutch

carrier to pay E250 million plus the interest and the court expenses. It was proposed to Alitalia a payment in KLM stocks rather than cash in order to put less strain on the financial situation of the Dutch carrier. This alternative was examined by Alitalia's board whose decision remained that of a cash payment, which physically occurred in January 2002 when KLM deposited E171 million in Alitalia's account, amount to be added to the E100 million already retained by the Italian company.

This cash outflow drove KLM balance sheets in deep default, thus accelerating the contacts between the Dutch company and Air France in order to merge the two airlines. Such a merger, indeed, was announced in September 2003 and was enacted in 2004. This merger left Alitalia in a marginal position within the alliance, situation that could have been avoided if the board had accepted a compensation in stocks rather than cash, resulting in an ownership between 5-10% of the new born Air France-KLM after the merger.

3.3 – Low cost carriers Vs. Alitalia: economic consequences of the new emerging format:

As previously said the global aviation sector, was experiencing a period of deep transformation starting from the third air liberalization package in 1993, and Italy was of course involved in this process. Until the end of the 90s, the Italian national carrier, Alitalia, was facing almost no competition on domestic routes and a limited one for what concerned international flights, but this was going to change soon with the already mentioned introduction of the third liberalization package which gradually allowed competition to grow. This period signed the end of Alitalia's monopoly over the Italian air transport industry, mostly given to the entrant of competitor carriers and the birth and rapid expansion of Low-cost carrier which were able to steal from the traditional carriers market share rapidly. The Italian airline industry experienced this phenomenon of Low-cost carrier development starting from 2004 and it affected both the domestic and the international branches of the business. More in detail, in 2004 low-budget airlines had a 6.2% market share, which grew exponentially reaching in 2013 about 41% of total operation of the Italian sector.

The two predominant airline in the Italian air transport outlook were, the flagship carrier Alitalia and the Irish low-cost carrier Ryanair. The latter has established 10 of its bases in Italy, which is now second only to the UK, and it took advantage from the financial and management trouble Alitalia was and is facing to capture a larger slice of the total market share, achieving in

2013 to transport almost as many passengers as Alitalia for what concerns domestic flights and even outperformed the Italian carrier in the international segment.

Back to 2005 the authority argued that the potential benefits deriving from the liberalization and from the growth of low budget airlines were being obstructed by administrative barriers, the major of which was the usual problem of slot availability. Furthermore a strategy adopted by the traditional sector was that of disguise the real advertised fares in order to capture consumers interest and then put additional fees to return to the former price.

In order to take effective countermeasures against the emerging increase of competition and low-costs advancement and to maintain its predominant position in the Italian airline business, in November 2005, Alitalia's B.o.D. approved a rights issuance in order to balance the financial structure and to provide the needed flexibility to properly manage the enterprise. This issuance provided Alitalia with an inflow of E1 billion which was applied for the dilution of the Italian government ownership stake to under 50% and for the reduction of the net debt which had accumulated in the past decades.

The business plan studied by the Italian flagship to turnaround the company was to be implemented between 2005-2008, it had several general targets, among them there was the reduction of personnel, reduction of almost 25% of unit costs, 41% increase of onboard staff productivity and a 10% increase of airplanes utilization, in order to exploit as much as possible economies of scale. Furthermore the business plan could be separated in two different phases: Restructuring to be completed by the end of 2006 and Relaunching which was to be implemented in the 2007-2008 period.

During the first restructuring step the main objectives were to return to profitability after a long period of negative balances and to gain a financial equilibrium. In order to achieve the designed targets the measures to be adopted were to focus on core business, adopt current aircrafts with no further purchases and a deep cost rationalization. By focusing on core business Alitalia was able to dismiss Alitalia Servizi, and holding 49% of voting rights internally, with the rest being controlled by the government through Fintecna, the company was able to outsource all ground services, such as maintenance, ground handling and shared services, thus reaching an important relative cost reduction around 13%.

Another point of the program concerned the reduction of Alitalia's fleet by 2006, although increasing the productivity of those which would remain in activity. Another focal step of the restructuring phase was cost rationalizations and augmented productivity. The main target of

cost rationalization were purchasing costs and labor costs. Purchasing costs were estimated to be around E2.5 billion in 2004, of which E1.4 billion were the designed target to be cut off, in particular it was planned to act over onboard services, IT and advertising. On the labor costs side Alitalia Servizi's termination reduced the total number of employees from 20.500 in 2004 down to 8.600 by the end of 2006. Those cutting actions were intended to produce a reduction of labor costs from 29% of revenues in 2004 to around 14% in 2006.

The second step of the turnaround business plan adopted by Alitalia was focused on relaunching the company. As the previous phase focused on cutting expenses and improve efficiency in 2007 the second phase began to be applied. This step consisted in fleet reinforcement and in strengthening the competitive position of the airline in the Italian aviation sector. The first point concerning a reinforcement of Alitalia's fleet consisted on the acquisition of 7 new long-range aircraft and 17 short to medium haul vehicles and on the disposal of 14 outdated airplanes which served medium routes. Those actions were fundamental for the Italian carrier in order to strengthen its competitive position on the Italian and central European environment for passenger's carriage, as the growing market required a fleet that was up to date to keep the pace of the rapid growth of the new low costs airlines. For what concerns the competitive positioning, the former plan developed by Alitalia's board was to become the leading player over the Mediterranean Sea and the Eastern European nations, by increasing significantly its operation in its two major hubs, Malpensa and Fiumicino, and to maintain and protect its national predominance challenging the emerging threat posed by low-costs carriers as Ryanair and Easyjet which were constantly increasing their market share in the Italian industry. In order to compete with the new threat, Alitalia proposed to improve its pricing policies for costumers.

3.4 – Causes and effects of Alitalia's bankruptcy

In the previous section was analyzed the plan of action intended to fight the emerging threat posed by the appearance of low cost carriers on the market. However, the plan did not work out as it was hoped by Alitalia's board and the company eventually went bankrupt shortly after.

The causes of Alitalia's failure can be identified by a dual and parallel breakdown: the private and the political industry. Although Alitalia has suffered several crisis in the last 20 years, many attempts have occurred in order to restore the company. However the numerous interventions, the airline company has never managed to successfully recover from its difficult periods. This is the reason why, in January 2009, the old Italian company announced its last

flight from Rome to Palermo. From that day the new company “Compagnia Aerea SPA”, known as the “good company”⁸, started to be operative.

As mentioned before, the question of which were the causes that brought the Italian flag company, founded in 1946, to bankruptcy were two, but to properly understand the drivers of 2008 crises it is necessary to look at what happened in the previous years. First of all the terroristic attack of 9/11 in 2001 led to an impressive drop in demand in the airplane industry. People were scared to fly and travel not only in USA but also all around the world, and for this reason many industry in the touristic sector suffered enormous losses.

Differently from other companies, Alitalia never managed to recover from this alarming situation and continued to reveal huge economic losses in the successive years. The main reason of this was that the Italian Airline, differently from all other European companies, as Air France, remained in the hands of the State and got not privatized. The subsequent years were tragic for Alitalia and, in 2006, the company was already very close to bankruptcy. The Italian government, under Prodi’s mandate, decided to put all its effort to save the company and therefore decided to give up and sell the control of the airline.

Soon this political action revealed to be disastrous. Differently from what the government believed, no investors were interested in acquiring the company’s shares. According to many economists and researchers the reason of the scarce interest of entrepreneurs was that the government intended to sell the company’s shares at an unrealistic price. The company was already close to bankruptcy and investors could not accept prices that could be reasonable only for a healthy, safe and profitable firm.

Failed the first selling attempt of the company, in 2007, Prodi decided to adopt a new strategy and give up the airline through a direct deal. After long discussions and counteroffers the first designated acquirer was Air France, that, from December 2007 became the only potential buyer to have contacts with the Italian company. Although for almost a year continuous contacts, offers, and conditions were exchanged between the two European airlines, in 2008 Air France decided to retire its offer. The reason of this unexpected change in the destiny of Alitalia can be identified again in Italian politicians. Indeed, Berlusconi, that at the time was leader of the opposition party, fought to keep Alitalia as the national airline company. Because of Berlusconi’s controversy to the sale, Air France was impossible to acquire the company for two

⁸ De Luca, Davide; La brutta storia di Alitalia; *Economic blog. ilpost.it.*(2013) Available at: <http://www.ilpost.it/2013/01/12/la-brutta-storia-di-alitalia/>

reasons: the first was that the 24th of January Prodi lost in Parliament, while Berlusconi seemed to be notably preferred; second that the France government absolutely did not want to go against the future Italian leading party and therefore decided to renounce to the purchase.

All the above mentioned political decisions can be recognized as major causes of Alitalia's bankruptcy. Politicians only cared about their personal interest and did not take strategic actions that could not only benefit the company, but also the entire nation.

But, how is it possible that a missed sale of an airline hit the Italian economy as a whole? The explanation of this is that contemporary to Berlusconi's decision to not sell Alitalia to AirFrance the society CAI was founded. CAI, that stands for "Compagnia Area Italiana", decided to buy the airline company at a much lower price with respect to AirFrance's. The difference between the French airline and the Italian corporation offer was of about 700 millions. With the liquidation of the company the Italian State lost 3 billion. Through this action the Italian state did not lost only this huge amounts of money but had also to find jobs for more than 7.000 workers rather than 2.000. The theories why the worse offer was accepted are several. First of all CAI was a society composed by several Italians groups as Benetton, Intesa San Paolo, Riva etc. which had, and still have, big relations with the state. Another important indictment that was made, was that there was a big conflict of interest in the family Colaninno, in which the father, Roberto, was a participant of the CAI, and the son, Matteo, was a minister of the Democratic Party. Even if these serious charges were made against CAI, it managed to acquire only the "good parts" of Alitalia leaving the "bad parts", with the debts, in the hands of the state. With the sale of the national airline Italy received 1 billion but had at the same time to guarantee seven years of layoffs to about 7.000 workers. Although the State and patriotic efforts to keep a national airline in the subsequent years to 2008 it was clear that not the right choice was taken. Indeed between 2012 and 2013 the company lost about 600.000 and from 2008 1,2 billion, accumulating debts that have reached the humungous amount of 700 millions.

After having seen the political actions that have occurred in the years close to the 2008s crises, it is important to underline how also private investor have played an essential role in Alitalia's destiny. Private investors have appeared and disappeared continuously, without being able to handle such a big company, in those years when the company only needed stability. Continuous changes to the administration and management of the company were made, focusing first on the national market and adopting therefore a strategy that was incomparable and very weak in respect to the other Europeans companies, especially those low cost.

Although, how mentioned before, there have been several private and public actions that brought the company to failure, it is important to recognize that Alitalia has also undertaken many improper and inadequate strategic actions, as already explained in the previous section. First of all the Italian company focused mainly on short, national flights and produced therefore primarily small vehicles. Initially this was considered a good strategy as many people needed weakly transportation from one region to another for work necessities. However soon the airline company had to face the competition of fast trains, as Freccia-rossa, which proposed to clients lower prices and easier transports not only from a region to another but also from the train stations to the city centers. The decisions that the company has undertaken for the Italian hubs have also played a major role in the problematic stagnancy of the company. Alitalia choose to have only two hubs Roma-Fiumicino and Milano-Malpensa. According to many researchers and economists this was not enough because of the Italian geographic configuration.

Another important strategic mistake that emerges in this Airline company is the choice of having operative five different aircrafts model. This choice caused the company to be static, not flexible, and not innovative and have huge unnecessary expenses. Because of Alitalia's high structural costs, the company was never able to lower its ticket flight prices and compete with the low-cost companies that were diffusing and having success all around the world. Another big differences between Alitalia and many other airline companies, that brought the company to failure, was its main focus of sales through travel agency rather than through the Internet. Also this strategic choice, indeed, represented huge costs for the company. The vast number of employees gave another notable cause of cash outflow for the company. Differently from other companies, like Ryanair, which counted only a couple of thousand employees, Alitalia employed about 20.000 workers. This expense would be justified if the number of passengers carried by the Italian company were much higher than the one carried by the other companies, but this was not the case. Alitalia had not only to pay regular salaries to its employees but also offered them special treatments. For example, in many cases, it has been revealed that the pilots had private cars with drivers that brought them from their homes to the airport.

3.5 – Today's performances and company economic position:

The Italian entrepreneurs, who subscribed CAI's capital investment, had accepted Berlusconi's request to not let Alitalia fall under the ownership of a foreign company. However, this move was not driven by the convincement of the real business potential of the Italian airline, instead

it was taken in order to take advantages from the good position gained under the government wing, benefitting of several facilitation.

Moreover, even the safeguard of the “italianity” of Alitalia was coming less with the immediate entry of Air France-KLM in the CAI group, with a 25% share, confirming the strong interest of the company over the Italian market segment, intending to establish a multi-hub network operating on the Amsterdam-Paris-Milan axe for the continental branch, and Rome for the intercontinental service especially towards Africa, South America and the Far- East.

Even if the majority of the debts accumulated in the previous years were left behind in the old Alitalia, which became the “bad company” graving on taxpayers as it remained a public entity, with a 50% market share on the Italian domestic outlook and being the third force on the international segment of the Italian air transport service. The new liquidity provided was inadequate due to the underestimation of the purchasing value of the company to one billion of Euro, obliged CAI to perform a policy of significant reduction, which led to severe delays and disservices. All of this had consequences on total number of travelers transported, which decreased, and the final balance sheet for year 2009 registered a loss of E252 million. Moreover, as a matter of fact, the management board of the company was still being decided by the government, not always implementing a strategy of value maximization for the airline, thus not achieving to properly launch the company from an industrial perspective.

Furthermore the severe crisis that hit the global economy was of no help for the financial recovery of the new Alitalia, which incurred in the following three years in additional losses, nullifying the E735 million of recapitalization provided in 2009, and forcing CAI, in 2013, to increase capital by E300 million, decision which was not approved by Air France-KLM, who had decreased its share in CAI to 7%.

Company's Balances

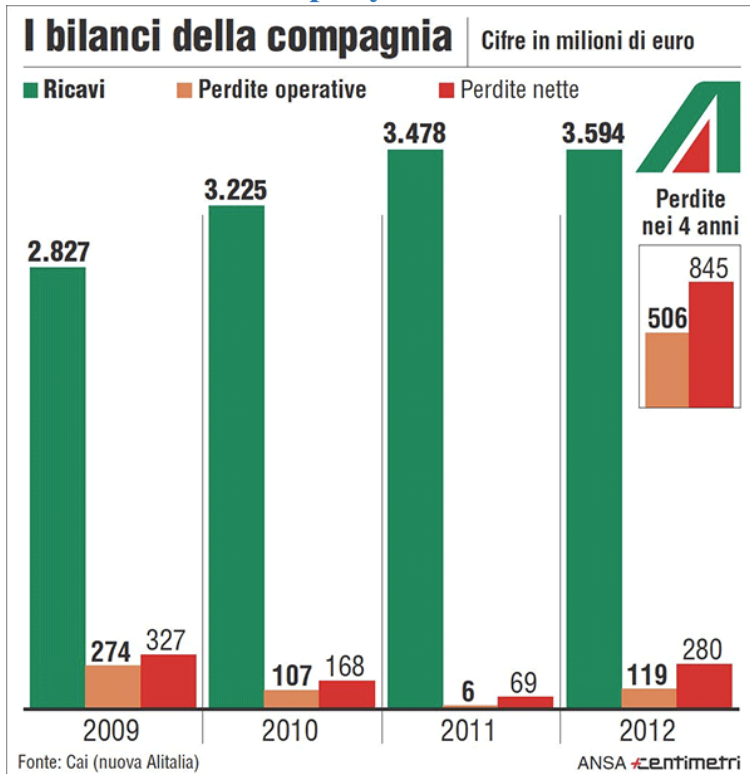


Fig2: Source: CAI (nuova Alitalia), 2013

During the same year, a new board of directors proposed the new industrial plan for the 2013-2016 period, which included additional costs reductions, staff cuttings, increase of international and intercontinental flights to the detriment of medium and short-haul routes, which are subject to competition from high-speed rail, and a development of infrastructural partnerships to improve efficiency and increase passengers satisfaction.

Alitalia's Accounting data

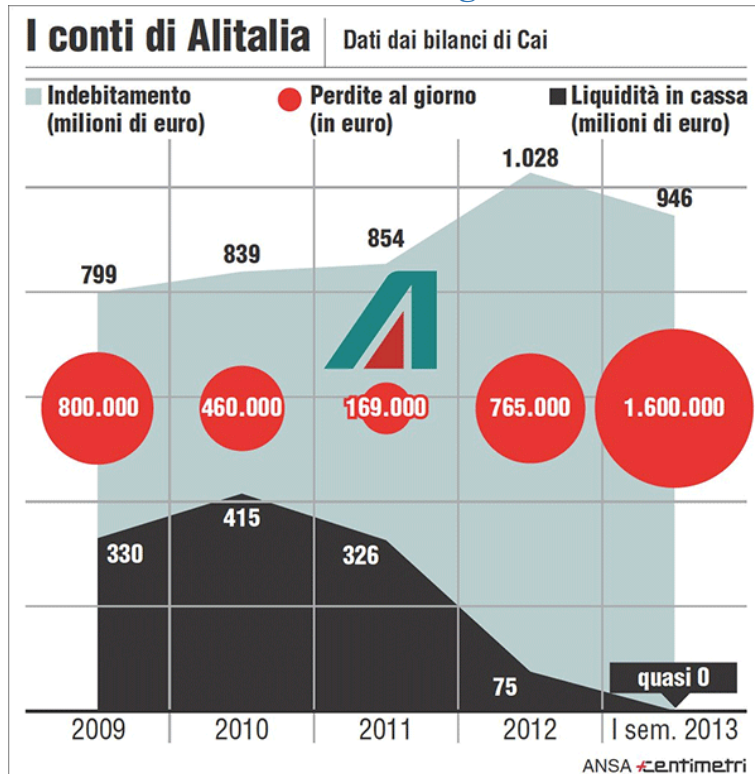


Fig3: Source: CAI (Nuova Alitalia), 2013

CAI's bad governance led the government to have the necessity to start to look for a new buyer for the company's shares. This new partner was found in 2014, and was Etihad Airways, the airline located in Abu Dhabi.

The agreement, signed august 8th 2014, provided for the establishment of a new company, named Alitalia – Società Aerea Italiana S.p.A., with a 49% shares controlled by Ethiad and the remaining 51% in the hands of MidCO S.p.A., which was under the control of CAI that provided for all of its assets.

The new Alitalia started its activity on January 1st 2015, after the recapitalization by the hands of Ethiad Airways and the remaining investors of Alitalia. The CEO of the newborn company, Luca Cordero di Montezemolo, former Ferrari's CEO, proposed shortly after a new plan of action, which had its main focus on three fundamental features:

- A new three-hub strategy involving both of Milan's airports, Malpensa was to increase its long-range operations, while Linate was to foster the connections between other hubs. Also Fiumicino's Leonardo da Vinci airport, located near Rome, had to improve its long-haul services but at the same time it had also the priority to expand the medium and short-range flights in order to maintain the market share in the Italian domestic environment.

- Increased connectivity with Ethiad's hub in Abu Dhabi, allowing further connection to the Middle East, Africa, India, Far-East, and Australia.
- Promote a new brand image and identity with major concerns focused on aircrafts, personnel's uniforms and every satisfaction-related features.

In order to reach the predetermined objectives, during May 2015, Alitalia announced that it will not renovate the partnership, and the relative agreements of joint venture, with the Air France-KLM group once they come to expiration date in 2017. This decision was driven by the assumption that those agreement posed significant limitation and constraint to the development of Alitalia's long-haul expansion project, even if the large advance in which the announcement was made leave space for an intention to continue with the joint venture but on more equilibrated terms.

Alitalia's balance sheet regarding the first half of 2015 revealed a net loss of E130 million, 80 of which accounted for the damages caused by a fire occurred in Fiumiccion's Terminal 3 hub. However, the stipulation of the partnership with a strong and expanding company, such as Ethiad Airways, and with the introduction of highly specialized professionals of the air transport sector gives hope for a successful future for Alitalia.

Conclusion

In this thesis I have analyzed how the air transport industry works and what are the factors driving competition in the sector. The study revealed the several different branches and stages that have shaped the aviation industry into what has become today.

The first stage is the composed by the early development of the industry characterized by a strongly regulated environment in which the different airline companies had relatively no competition, as there were only few players that had taken great advantages from the entry barriers posed by the strict regulation of the air markets.

In the second phase, which began in 1978, the airline business experienced a process of deregulation, first in the U.S. and then in Europe as well, which had weakened the strong position of the traditional carriers, encouraging the development of a new business model, that of low-cost carriers, which has had a constant and rapid growth ever since its first appearance, posing a real threat to full-service airlines and having a great impact over the increase in competition within the industry. Moreover, I tried to analyze how one of the worst events of our recent history, namely the World Trade Center's attacks on September 11th 2001, affected the air transport industry.

The study revealed that the economic impact of the terroristic attack was enormous, and resulted in bankruptcy of several already troubled airlines and billions of losses for the whole sector. Furthermore, I tried to explain how the industry intended to recover from this catastrophe and what measures have been taken from the American Federal government and the European authorities in order to improve the security systems of airports and aircrafts.

This has led to a deep transformation of the strategies adopted by airlines all over the world, which had to respond to the increasing competition with adequate measures.

I analyzed, in particular, the case involving the Italian Flagship Carrier, Alitalia, from its first establishment through every phases of its business life, trying to explain how and why the Italian number one airline never really had the strength to impose itself as a leading force in economical terms in the European environment having to face constant financial troubles until the business's bankruptcy. Explaining how poor strategic choice and mismanagement have had an important role in the collapse of the company. Finally reaching to the latest stage of the companies operations, which are currently happening with the new partnership, stipulated with the Ethiad airlines.

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