

Managing Globalization

Managing Globalization:

*New Business Models,
Strategies and Innovation*

Edited by

Demetris Vrontis,
Stefano Bresciani
and Matteo Rossi

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CHAPTER ONE

NEW STRATEGIES IN ITALIAN AIRPORTS

GIOVANNI OSSOLA, GUIDO GIOVANDO
AND CHIARA CROVINI

Introduction

The following chapter deals with the impact of new international airport strategies on the business models adopted by Italian air management companies. It presents a qualitative study of the Italian airport system and its evolution over the past few decades. As this is a topical study, one of its aims is to understand why this system continues to expand, despite the economic crisis.

After a brief review of the literature on this topic and sectors of air transport, the study scrutinizes Italy's airport infrastructure and air management companies. This theoretical background aims to explain the structure of airports and the way they are managed. In addition, the chapter discusses the process of deregulation in the USA, Europe and Italy. In particular, we will concentrate on its effect in Italy, viz., the rise of low-cost airlines.

The study's most important aim is to monitor the effects of deregulation on airport business models and the associated strategies in Italy. Investigating the impact of these new laws and provisions on air management companies can help in gaining a better understanding of globalization's role and influence on business strategies.

Accordingly, the study attempts to answer the following research questions: i) How extensively has the air transport sector changed over the past few decades? ii) How have these changes influenced the Italian setting? And iii) What effects has globalization had on air transport companies, in terms of developing new strategies and business models?

The research presents some limitations: first of all, it should be emphasized that this is the first phase of a far deeper analysis that can also involve quantitative data. For example, this qualitative study can be combined with a financial analysis of the overall performance of full-service and low-cost airlines to quantify the value created by both groups.

In addition, what is happening in different countries can be compared in order to analyze the impact of deregulation and its effects.

Literature Review

There are many studies on the airport sector. In particular, the business of airport management has been analyzed:

- Through the study of its functional areas as a whole (Doganis, 2000; Ossola, 1996, Pellicelli, 1996; Dominici, 1982), or of certain selected areas, such as marketing (Jarach, 2002; Corvi and Bonera, 2006; Starkie, 2005), organization (Ashford et al., 1997), finance (Ashford and Moore, 1992) and logistics (Rossi, 2006);
- Through quantitative analysis of samples of data from the financial statements of airport management companies, in order to ensure stable financial results and standing (Tsekeris, 2011; Teodori et al., 2006; Giannetti, 2006).

In recent decades, airport services have been liberalized to varying extents in all countries (de Neufville, 1999; Forsyth, 2002). This liberalization has broken up monopolies and created a more competitive system (Bertoli, 2006; Ponti, 2002; Read, 1994).

Many scholars have focused on corporate governance, particularly as regards government participation in the equity of airport management companies in many countries around the world (Vasigh and Erfani, 2009; Oum et al. 2008; Graham, 2003). As regards carriers, deregulation has led to the birth and growth of new airlines, the so-called low-cost companies (Morrell, 2008; Morrison and Winston, 1995).

Some scholars have pointed to the correlation between local development and the airport structure, which has indirect positive effects on the surrounding areas (Baccelli, 2001; Shearman, 1992), producing an increase in economic activity and an economic impact on the reference context (Bresciani and Oliveira, 2007; Brueckner, 2003; Senn and Zucchetti, 2001, Zucchetti et al. 2001; Button and Taylor, 2000). Some studies have focused on assessing these economic effects on individual

countries (Bresciani and Ferraris, 2012; Kim, 2007, Cooper and Smith, 2005; Ossola, 1996).

With particular reference to airport management companies, strategic behavior has been examined by several scholars (Bruni, 2004; Kleymann and Seristo, 2004; Grant, 2002; Bronzetti, 2002), as have the companies' business models (Rispoli, 1998). Several studies have analyzed the development of the strategies adopted by low-cost carriers (Pellicelli 2008, Falini, 2006 Binggeli and Pompeo, 2002). Other researchers have focused on airport hub management (Button, 2004; Kahn, 1993; Doganis and Dennis, 1989).

Our research combines several aspects contained in previous studies. Thus, though we do not employ quantitative data, our chapter offers an analysis of the impact of the worldwide deregulation of air transport on air management companies and consequently on their business models and strategies.

Research Methodology

This chapter presents a qualitative study (Myers, 2013) of the evolution of the air traffic system. As mentioned in the introduction, there are three research questions:

- *RQ 1*: How extensively has the air transport sector changed over the past few decades?
- *RQ 2*: How have these changes influenced the Italian setting?
- *RQ 3*: What effects has globalization had on air transport companies, in terms of developing new strategies and business models?

As regards *RQ 1*, the first paragraphs are mainly theoretical and explain the background for our research. They deal with the sectors of air transport, airport infrastructure and air management companies. The crux of this question is addressed in the paragraphs about air transport deregulation and how it has spread throughout the world.

RQ 2 and *RQ 3* should be analyzed together. By considering the impact of the new regulations, we focus on the advent of low-cost airlines and consequently on the evolution of the business models adopted by air management companies in Italy.

In addition, to assess the role of these new airlines, we concentrate on the traffic data provided by ENAC, the Italian Civil Aviation Authority, and on the respective market shares of the full-service and low-cost airlines between 2005 and 2013.

As the graphs resulting from an analysis of these data emphasize, low-cost airlines have been enormously successful. Consequently, it is necessary to understand how a large number of air management companies decided to change their business models to adapt to the market's new competitive balance and satisfy consumers' new preferences.

This is why the chapter concludes with an analysis of the situation in Italy in 2013, in terms of the number of airports which decided to base their business on low-cost carriers. Specifically, we decided to select those with a low-cost market share of over 35%.

Sectors of Air Transport

Air transport has undergone a major transformation in recent years (Ossola and Giovando, 2012). Several sectors revolve around air transport. The main ones are (Pellicelli, 1996):

- Passenger air transport,
- Passenger services,
- Services to airlines or to airport management companies,
- Airport management.

The Airport Infrastructure

In Italy, every airport is “licensed” to a company for management.

“The airport management company holds the exclusive right to manage the airport, performing its instrumental activity in fulfilling the ‘human need’ in the economic field (Ferrero, 1987) of the airline, to have an adequate and efficient structure to handle its aircraft and the passengers and cargo carried by it” (Giovando, 2012).

The airport is considered as the infrastructure that enables an aircraft to land or take off on a straight, level surface.

In the definition of “airport” given by the EC Directive¹, we understand that there can be no separation of the land from the infrastructure for the flight. The Directive states that the airport is “any area of land especially adapted for the landing, taking-off and manoeuvres of aircraft, including the ancillary installations which these operations may involve for the requirements of aircraft traffic and services including the installations needed to assist commercial air services”.

The airport company’s main objective is to allow carriers to transfer goods and people using air routes from one place to another. Carriers thus have a crucial role in the economy of an airport management enterprise (Ossola, 1996).

Carriers are aircraft owners or leaseholders who provide a commercial air transport service to meet people’s mobility needs.

Carriers with their aircraft fly from one airport to another along routes. These flights may be:

- “Scheduled”, i.e., flying on predetermined routes at a particular time that is “scheduled” and published.
- “Unscheduled”, when the route is decided by the passenger, or anyone else who chooses the airport and time. This type is used in charter flights with travelers (or groups) who hire an aircraft.

The airport infrastructure can be divided into three areas (Giovando, 2012): landside, airside and terminal.

The landside area includes all the access routes to the airport. It provides access to the services of the airport company. These services can be both those of embarking and disembarking goods and passengers from the aircraft. All the spaces surrounding the landside area, defined as “commercial”, can be put to additional uses. Indeed, this exploitation of the surrounding areas can lead to new lines of business for airport management companies.

The airside area is reserved for aircraft. Its dimensions differ from country to country, according to local law. In addition, people, baggage and cargo must be screened in order to access this area, because it should be protected. In fact, this area is commonly referred to as “secure”.

¹ Council Directive 96/67/EC of 15 October 1996 *on access to the groundhandling market at Community airports*, published in *O.J.* No. 272 of 25 October 1996.

The terminal includes the airport building. This structure is usually located between the landside and airside area.

The building features (Giovando, 2012):

- An area where passengers arrive at the airport or stop while waiting for a connecting flight.
- The departure area, where passengers and luggage are checked in, documents are controlled, and where the x-ray machines for security checks are located.
- The boarding area and waiting room, which are near the gate where passengers embark and disembark.
- The passenger waiting area.
- The concourse area with shops, restaurants, lounges and toilets.
- The storage area, where freight or luggage in transit are received and handled.

The airport has always been classified as a “natural monopoly” (Reed, 1994); first, because the business can satisfy market demand alone at the lowest cost, and second, because there are high entrance barriers, such as town planning and environmental restrictions (Sebastiani, 2009).

This view of airports as a natural monopoly has been expanded to include the notion of essential facility². A structure is defined as being an essential facility when its characteristics make it essential to the community.

Several studies (Cavaliere, 2006) have led to the conclusion that in order to qualify as an essential facility³, an infrastructure must satisfy certain specific conditions, viz.:

- Dominance,
- Irreplaceability,
- Non-duplicability,
- Sharing by several operators.

When these conditions are attained, the legislature is required to regulate access to the infrastructure for any applicant and should define a complex

² CERTeT – Centro di Economia Regionale, dei Trasporti e del Turismo Università Commerciale L. Bocconi. Il rapporto tra vettori ed aeroporti: analisi e valutazione del sistema di regolazione in Italia – *Final Report*, June 2006, p. 11, note 5.

³ The legal basis of the doctrine of *essential facilities* is Section 1 of the Sherman Act – the United States antitrust law – and Articles 81-82 of the EC Treaty.

and varied system of prices that the companies apply to the final consumer (Giovando, 2012).

As many studies have shown, enterprises normally grow up around essential facilities (Graham, 1995). It has also been demonstrated that, as an essential facility, the airport (Ossola, 2006):

- Allows rapid movement of people and cargo, and
- Contributes to the development of the economic area around it.

Moreover, the airport infrastructure generates benefits in terms of:

- Wealth creation,
- Job creation,
- Creation of international industrial districts.

The airport, with its activity, has a direct economic impact, represented by the value of the activities of both carriers and airport management companies.

In addition, there is an indirect economic impact, represented by the group of activities performed outside the structure, which produce benefits for travel agencies, hotels and restaurants. Lastly, there is also the induced economic impact, represented by the spending of the revenues earned in the categories mentioned above.

In fact, the airport can encourage industrial development of companies operating in the area in which it stands. Through this development, simple industrial districts in the local area can be extended through the creation of international industrial clusters in areas far afield.

Companies operating near the airport can take advantage of a range of benefits, such as (Ossola, 1996):

- Fast distribution of goods worldwide.
- Ease in procurement, which can make it possible to apply just-in-time management techniques.
- Quick movements of people between companies located all over the world.
- The ability to reach new markets.

The Process of Deregulation in Air Transport

Air transport has traditionally developed under the control of national authorities. In Europe, this approach resulted in the monopoly of national

carriers and the ownership / management of public airports. International air transport, based on bilateral agreements between states, has grown and was long characterized by the rigid control of carrier ownership structure and market access. This fragmentation in national markets and the absence of effective competition was less and less in line with the rise in living standards and the resulting increase in demand for air transport services. From the mid-Seventies, civil aviation moved from a managed to a market economy as economic and cultural exchanges led to an increase in mobility, which boosted transport demand. This obliged countries to come to grips with new demands.

The instrument that was used to deal with this problem was deregulation, first adopted in the USA and then in Europe. This solution was intended to improve supply and make it more flexible in its ability to meet the demand for transport. In addition, deregulation led industrialized countries to compete in offering good value-for-money solutions.

Deregulation in the USA

The liberalization process started in the United States in 1930, when the need to regulate the market emerged in order to avoid forms of competition that would bring negative results.

In 1938, however, the *Civil Aeronautics Act* (CAA) led to a price war, which did not allow the creation of a free competitive market (Mencik von Zebinsk A.A., 1995).

It was only with the *Airlines Deregulation Act* in 1978 that the US government tried to bring down prices for the benefit of consumers, to improve efficiency and encourage the creation of new businesses.

This initiated a second stage, which spurred the growth of the low-cost carriers that first appeared in the Sixties.

These companies began to gain market share by offering lower costs than mega national carriers.

Since 1984, traffic has increased, and carriers have begun to turn to mergers and acquisitions as a means of avoiding bankruptcy proceedings, as well as outright bankruptcy.

This is when *the hub and spoke system* was born. It consists of using large airports (*hubs*) as a clearinghouse for air traffic, from which routes (*spokes*) branch to peripheral destinations.

During the Nineties, new low cost airlines were founded, such as Kiwi Airlines, Western Pacific and Carnival Airlines.

Liberalization of Air Transport in Europe

Since 1957, when the European Economic Community was created, there has been a need to establish a single market for air transport, to ensure proper operation and to include certain third countries⁴.

But the liberalization process began only in 1986 with the signing of the Single European Act in Paris, which delivered the first package, or Phase 1, implemented in 1987.

This group of laws eliminated the bilateral regime and enabled other carriers, the so-called “non-flag carriers”, to enter the market (Zunarelli S., 2008)⁵.

In 1989, the European Commission presented the Second Package of regulations to the Council. This package came into force in 1990. With Phase 2, airlines’ flexibility in fare setting was expanded. However, there were no substantial changes in the air transport field.

The system was effectively deregulated with the introduction of the Third Package in 1992. The goals to achieve with the Third Package were the elimination of the bilateral system and the establishment of a multilateral one, based on free market access and freedom in setting rates.

For cabotage, the Council of Transport Ministers of the EU had planned a complete liberalization of traffic only from January 1997.

As for tariff plans, carriers were granted full authority to decide what fares to charge. The EU institutions could interfere only when prices were either too high or too low, resulting in dumping (selling below cost).

⁴ *Treaty on the Functioning of the European Union*, Art. 100, paragraph 2.

⁵ EU Parliament (2013), Overview of the air services agreement concluded by the EU.

The Third Package also established the requirements that air carriers must meet to start or continue operations, in particular:

- They must be owned by Member States and/or citizens of Member States that effectively control them, and their headquarters must be located in a country belonging to the European Community.
- They must have a solid financial position and be adequately insured against accidents.
- They must have the professional ability and organization to ensure safety in operations, in accordance with current regulations. This capacity is confirmed by a certificate.

Finally, in 1999, the Single European Sky initiative was launched⁶. It aimed at increasing the efficiency of air traffic management and air navigation services by reducing the fragmentation of European airspace.

In practice, the Single European Sky should reduce flight times (through shorter paths and fewer delays) and, consequently, decrease the cost of flights and aircraft emissions.

The effects of deregulation in America have been significant: traffic has increased, rates have been significantly reduced and the number of potential new competitors has grown rapidly. These effects have been less pronounced in Europe, but the entry of new operators, whose objectives and strategies differ from those of flag airlines, has changed the dynamics of competition within the industry.

In Europe as well as in America, airport facilities have been seriously undersized and saturated in recent times. Currently, the trend towards liberalization has been reversed, as the smaller airlines are not able to increase their networks of destinations, given the shortage of runways, airport terminals and slots.

Liberalization of the Air Transport System in Italy

The Italian transport sector was long monopolized by the national carrier Alitalia.

Forms of regional air transport were difficult to create. For many years, the national airline's position of market dominance and the concentration of

⁶ Regulation EC 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky.

traffic at the airports in Rome and Milan limited penetration in new and unexplored markets. Partly thanks to the advent of deregulation, the country has seen the entry of new and aggressive competitors.

In the period from the early Sixties to the late Eighties, a new company called Alisarda was founded: it carried streams of tourists to and from Sardinia in the summer. Currently, the company is known by the name of Meridiana. Another carrier operating at that time was ATI (Aero Trasporti Italiani), a subsidiary of Alitalia, based in Naples. It covered domestic routes between North and South Italy.

In 1987, the regional company Avianova was founded as a joint venture between Alisarda and Alitalia. This alliance did not last, as Alisarda backed out of the operation and Alitalia acquired full control. Avianova began to serve the minor routes departing from airports in Milan and Rome, focusing both on the distribution of traffic from these hubs and on point-to-point connections on secondary routes that were not served by other operators.

Despite the enforcement of the EEC First Package, Alitalia's monopoly lasted uninterrupted until the Nineties (Rossi Dal Pozzo, 2008; Alderighi and Bacelli, 2006).

The table below shows the situation of the Italian air transport sector before deregulation.

Table 1: Italian airlines before deregulation

| Airline Companies |
|--------------------------|
| Alitalia |
| ATI |
| Alisarda – Meridiana |
| Aertirrenia |
| Avioligure |
| Aligiulia |
| Itavia |
| Alinord |
| Aliblu |

Source: Calculated from data provided by ENAC – www.enac.gov.it

Table 2 shows the situation as of January 2015, indicating the national airlines which are licensed to operate according to European JAR-OPS. These companies are allowed to use aircraft with more than nineteen seats.

Companies whose licenses have been suspended are not shown.

Table 2: Italian airlines in 2015

| Airline Companies |
|---------------------------------|
| Air Dolomiti |
| Air Italy |
| Air Vallée |
| Alitalia Cityliner |
| Alitalia Società Aerea Italiana |
| Blue Panorama |
| C.A.I. First |
| C.A.I. Second |
| Meridiana Fly |
| Mistral Air |
| Neos |

Source: Calculated from data provided by ENAC – www.enac.gov.it

As can be seen by comparing the two tables, deregulation in the air traffic system has changed the country's competitive scenario. One of the direct effects is the increase in the number of Italian airline companies.

Consequently, this is one of the possible answers to the second research question.

Airport Management Companies in Italy

In Italy, airports, including all buildings or installations for air navigation services, are government property. These “essential facilities” are granted in concession.

There are three types of concession in Italy:

- Total concession, where the operator coordinates the entire airport and in return receives all revenues and airport charges.
- Partial concession, where the operator has the sole task of managing and maintaining passenger and freight terminals, and in return receives the revenues they generate.

- Direct concession, where the civil aviation administration constructs and maintains the airport infrastructure, while the airlines themselves usually take care of groundhandling.

In the past, the State granted total concessions to airport management companies through individual ad hoc⁷ laws. As these laws were specific for each company, concession durations differed.

The table below lists six companies operating airports under total concessions, together with the term of the concession.

Table 3: Italian airports in total concession and the associated term of concession

| Airport management companies | Airport | Concession term |
|-------------------------------------|-----------------------------|------------------------|
| AdR S.p.a. | Roma Fiumicino and Ciampino | Up to 2044 |
| SEA S.p.a. | Milano Linate and Malpensa | Up to 2041 |
| SAVE S.p.a. | Venezia Tessera | Up to 2027 |
| SAGAT | Torino Caselle | Up to 2035 |
| Aeroporto di Genova S.p.a. | Genova | Up to 2020 |
| SACBO S.p.a. | Bergamo | Up to 2042 |

Source: Data provided by Assaeroporti – “Regime giuridico dei principali aeroporti italiani” – www.assaeroporti.com

Current legislation⁸ has also extended total concession to other companies that meet certain requirements. Under the new rules, airport companies are allowed to manage the airport for forty years, after which time, the assets under concession revert to ENAC ownership. In order to receive such a

⁷ Genova Sestri by Law 156/54 Art. 9; Milano-Linate and Malpensa by Law 194/62; Torino-Caselle by Law 914/65 Art. 1; Roma-Fiumicino and Ciampino by Law 755/73 Articles 1 and 2; Bergamo-Orio al Serio by Law 746/75; Venezia-Tessera by Law 938/86.

⁸ Law 537/94. Legislative Decree 251/95, converted into Law 351/95, and Ministerial Decree 521/97 (Regulation).

concession, the current legislation requires the operator to enter into program contracts and agreements with the Civil Aviation Authority⁹.

Table 4 lists the airports for which a total concession was granted under the new legislation¹⁰, together the concession's term, which varies from case to case depending on the date it was originally granted.

Table 4: Italian airports under management and total duration of the concession

| Airport management companies | Airport | Concession term |
|-------------------------------------|----------------------|------------------------|
| SEAP S.p.a. | Bari | Up to 2043 |
| SEAP S.p.a. | Brindisi | Up to 2043 |
| SEAP S.p.a. | Foggia | Up to 2043 |
| SEAP S.p.a. | Taranto | Up to 2043 |
| GESAC S.p.a. | Napoli | Up to 2043 |
| AdF S.p.a. | Firenze | Up to 2043 |
| GEASAR S.p.a. | Olbia | Up to 2044 |
| SAB S.p.a. | Bologna | Up to 2044 |
| SAT S.p.a. | Pisa | Up to 2044 |
| SOGAER S.p.a. | Cagliari | Up to 2047 |
| SAC S.p.a. | Catania | Up to 2047 |
| GESAP S.p.a. | Palermo | Up to 2047 |
| Aeroporto FVG S.p.a. | Ronchi dei Legionari | Up to 2047 |
| SOGEAAL S.p.a. | Alghero | Up to 2047 |

Source: Data provided by Assaeroporti – “Regime giuridico dei principali aeroporti italiani” – www.assaeroporti.com

There are thus fourteen Italian airports managed under total concessions, with terms that vary from airport to airport, according to when they were granted and the law concerned.

⁹ Ministerial Decree 521/97, Art. 7, indent 3.

¹⁰ Ministerial Decree 521/1997.

The Effects of the Liberalization of Italian Air Transport: the Rise of Low-Cost Airlines

The introduction and implementation of European regulatory packages gradually replaced the previous regulatory regimes that protected the national airlines of each country, with effects that appeared in particular in the Noughties (Arrigo and Giuricin, 2006; Pellicelli, 1998).

In the Nineties, the effects of European legislation on liberalization were limited and competition was very modest.

Since the early years of the 21st century, this phenomenon has made itself felt mainly through the rise of low-cost airlines.

This type of company has developed thanks to certain characteristics which have provided competitive advantages in terms of cost and price. The most notable features can be summarized as follows (Cinosi and Rizzo, 2013):

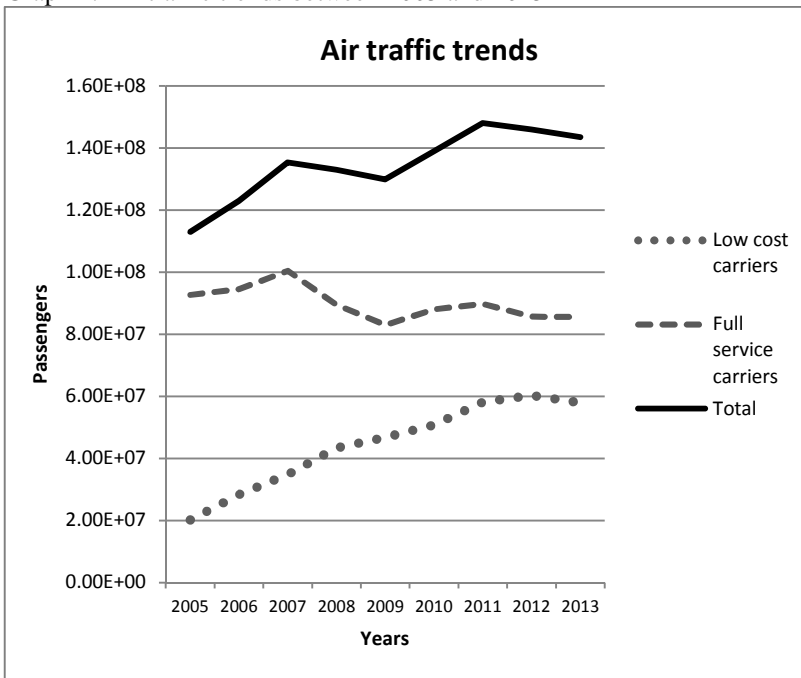
- Low-cost companies base their organization on “point-to-point” links between secondary airports.
- They use the Internet as the main channel for distributing and marketing tickets.
- They use aircraft with high seating density.
- There is a high level of aircraft utilization and standardization.
- No catering services are provided on board.
- Personnel management aims to maximize motivation, and forms of incentives-based compensation are preferred.

These features have allowed low-cost carriers to increase efficiency and reduce costs. They have thus been able to lower prices by developing a business model that allows passengers to save money by eliminating all of the services offered by traditional operators.

In Italy, this development has been under way since 2005, the first year in which ENAC published statistical data on the market shares of low-cost carriers compared with those of full-service carriers.

First, it is necessary to understand if deregulation has affected the number of passengers. For this analysis, we used traffic data provided by ENAC between 2005 and 2013. The trends that we have found are shown in Graph 1.

Graph 1: Air traffic trends between 2005 and 2013



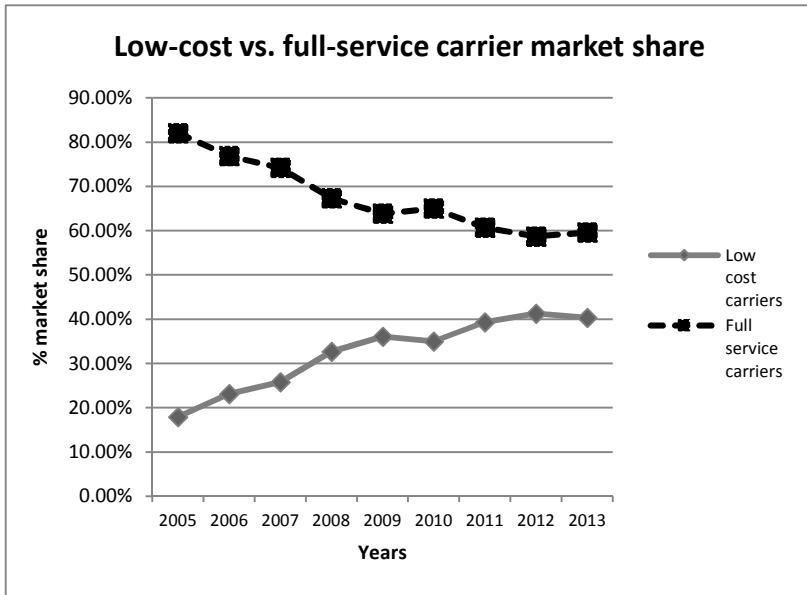
Source: Calculated from data provided by ENAC between 2005 and 2013 – www.enac.gov.it

As can be seen from the graph, the total number of passengers has increased, despite a slight decline in 2009. This growth is related to the rise in the market of low-cost carriers. Thanks to the policy mentioned above, these airlines were able to lower their ticket prices and attract more and more consumers.

By contrast, full-service carriers were adversely affected by market liberalization, despite the fact that larger numbers of passengers used their services than those of their competitors.

It is thus useful to analyze how the market changed with the entry of new competitors such as low-cost airline companies, as shown in the following graph.

Graph 2: Low-cost and full-service airline market share between 2005 and 2013



Source: Calculated from data provided by ENAC between 2005 and 2013 – www.enac.gov.it

Graph 2 shows trends in the market share held by flag carriers and by new players. As the graph makes clear, the former lost competitiveness over time. Their market share dropped from over 80% to 60%, while many low-cost airlines grew significantly compared to the competitors who had dominated the market in 2005.

This fact testifies to the Italian airline industry's passage from a managed economy to a market economy, as it went from a condition of monopoly to free competition. This phenomenon has had an impact on the airport system.

As mentioned above, low-cost airlines based their business strategy on point-to-point links, allowing the development of secondary airports.

The National Airport Plan drawn up by the Civil Aviation Authority in February 2012 emphasizes the importance of service airports¹¹. This led to a reduction in airport charges, allowing these low-cost companies to pursue cost leadership strategies (Cotta Ramusino and Onetti, 2009; Ferrucci, 2002).

Through this development, the airport system tried to solve the problem of traffic congestion. The use of service airports made it possible to increase the number of flights, so that the infrastructures were able to satisfy consumer demand.

Several benefits of the airport infrastructure should also be stressed. For instance, the increase in the number of passengers led to the growth of a variety of economic activities closely related to aviation services, such as handling, catering and commercial services, parking and car rentals, as well as businesses in the area surrounding the airport.

Consequently, the airport infrastructure has gradually changed its business model over the past few years in order to attract low-cost airlines, leveraging their potential for growth.

Until the early years of the 21st century, the prevailing idea was that of the so-called main hub airport model, such as Roma Fiumicino and Milano Linate. Such a model is not compatible with the new players in the aviation market, as it relies on national airlines and has also reached a certain maturity.

Later, airports such as Milano Malpensa moved towards a model, called a multiservice hub, which opened the market to low-cost carriers, encouraging the development of non-aviation activities in order to take advantage of further opportunities for the structure.

¹¹ The ENAC National Plan groups airports into principal and service airports. The former are divided into strategic (including intercontinental hubs) and primary airports.

There are three intercontinental airports: Milano Malpensa, Roma Fiumicino and Venezia Tessera.

The strategic airports include Bari, Bergamo, Bologna, Cagliari, Catania, Firenze, Genova, Lamezia Terme, Milano Linate, Napoli, Palermo, Pisa and Torino.

The primary airports are Alghero, Brindisi, Roma Ciampino, Olbia, Trapani, Treviso, Trieste and Verona.

Lastly, we come to the advanced spoke model, prevalent in regional or tourist airports, such as Pisa and Trapani. This particular business model is focused exclusively on low-cost airlines and on the growth opportunities afforded by marketing strategies for non-aviation activities.

The table below shows which Italian airports based their business primarily on low-cost airlines in 2013.

Table 3: Principal airports which benefited from low-cost carriers in 2013

| AIRPORTS | LCC market share |
|------------------------|-------------------------|
| Alghero | 69.90% |
| Ancona | 72.50% |
| Bari | 62.50% |
| Bergamo | 90.70% |
| Bologna | 47.90% |
| Brindisi | 65.70% |
| Cagliari | 55.60% |
| Comiso | 93.60% |
| Cuneo | 78.90% |
| Elba | 75.60% |
| Forlì | 98.90% |
| Lamezia Terme | 52.60% |
| Milano Malpensa | 44.20% |
| Perugia | 96.00% |
| Pescara | 87.20% |
| Pisa | 80.60% |
| Roma Ciampino | 99.30% |
| Trapani | 93.30% |
| Treviso | 93.30% |
| Trieste | 38.40% |

Source: Our calculations from low-cost traffic trends in 2013 provided by ENAC – www.enac.gov.it

We selected airports where low-cost airlines account for more than 35% of the total passenger market and we extracted a sample, emphasizing the growing importance that airports assign to these new companies.

It should also be noted that some airports, such as Comiso, were set up solely in order to base their business on low-cost airlines, while others, such as Cuneo and Milano Malpensa, changed their business models.

This analysis shows how globalization has profoundly influenced our country and an industry that is constantly expanding and growing, despite the global economic crisis.

Conclusion

This qualitative study emphasizes how the airport system has changed thanks to the liberalization of air transport, which has led to the development of new business models (Mangia, 2006; Mercurio and Testa, 2000; Baker, 1992). Air management companies have shown and continue to show their ability to adapt to the needs of consumers, who are increasingly attentive to the services that the airport infrastructure offers. Indeed, the market has changed with the entry of new competitors such as low-cost airline companies, which have shown strong growth over the past few years because they were able to meet their customers' needs. They thus adopted a business model which attracted more and more consumers.

As stated in the manuals of business economics, the airline industry is so prosperous because airport management companies have found ways to provide goods and services which can satisfy all stakeholders with a smoothly organized system.

As mentioned in the introduction, this study is the first step towards a far deeper analysis that should also involve quantitative data.

For example, qualitative considerations stemming from this study can be combined with a financial analysis of the overall performance of full-service and low-cost airlines to quantify the value created by both groups.

In addition, this type of analysis can be extended to the airport system in different countries to assess the impact of deregulation and its effects.

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