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Abuse of dominance in the airport sector

[Abuso de dominância no setor aeroportuário]

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Abstract

This paper investigates the efficacy of the Competition Law in dealing the abuse of dominance in the European airport sector. Starting with discussion of whether airports are natural monopolies or may face real competition, it is followed by an analysis of special features about the sector and a comparison between the policies of the European Union Member States. It is found that above the variety of regulatory frameworks, scarce capacity issues and public subsidies, the EU Competition Law stands as a universal mechanism to protect customers from the abuse of the airports´ dominant position. However, in reviewing the case law it concludes that EU Competition Law has been rarely enforced in the sector, which seems to be the result not only of the lack of incentives for airports to explore their dominant position but also of the risk of reducing the revenues generated from their commercial activities. Another possible reason is related to the fact that some airlines have shown that airport switching can be a credible threat. Finally, it follows the agreement that competition is a "first best" policy which provides the firms with the strongest incentives to give consumers what they need in terms of price and quality. In the airport sector, it can be a good instrument against a regulator that has been acting in the interests of the national airline or even be part of a liberalization process.

Key words: airports; regulation; competition; law.

Resumo

O presente artigo investiga a aplicação do Direito da Concorrência Europeu na repressão ao abuso do poder econômico no setor de aeroportos do Velho Continente. Partindo-se da discussão se aeroportos constituem um monopólio natural, segue-se uma análise das características especiais do setor e uma comparação entre as políticas aeroportuárias dos Países Membros. O estudo revela que, em meio a uma variedade de marcos regulatórios, problemas de escassez de infraestrutura e subsídios públicos, o Direito da Concorrência Europeu se apresenta como uma ferramenta universal para proteger os consumidores dos possíveis abusos decorrentes da posição dominante dos aeroportos. Por outro lado, a análise da jurisprudência das Cortes Européias demonstrou que o Direito da Concorrência foi raramente invocado. O artigo sugere que isso pode ser resultado da ausência de incentivos para que os aeroportos aumentem excessivamente seus preços, arriscando perder voos e reduzir suas receitas comerciais. Além disso, algumas empresas aéreas já demonstraram que a ameaça de transferir voos entre aeroportos por causa do preço da infraestrutura é factível. Por fim, o artigo concorda com a parcela da doutrina que define a livre concorrência como a política pública mais favorável aos consumidores e afirma que, no setor aeroportuário, pode ser um bom instrumento para lidar com um regulador que visa beneficiar uma empresa aérea nacional ou até mesmo como parte de um processo de desregulamentação da infraestrutura.

Palavras-Chave: aeroportos; regulação; direito da concorrência.

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1. Introduction

The aim of this paper is to analyse the efficacy of the European Union Competition Law (hereafter "EU Competition Law") in dealing with the abuse of dominance in the airport sector. It should be borne in mind that, from the outset and for a long time, airports have operated as natural monopolies. Public policies have treated the infrastructure of the airport as a monopoly like other utility industries insofar as each airport has been created as a public service organization or a publicly owned corporation in its region.

This scenario began to change with the privatization of public industries when countries began to adopt different approaches to their airport infrastructure. However, the main innovation in Europe was the emergence of small regional airports as bases for the operation of low cost airlines.

The transformation of the sector as a result of privatization (or the simple removal of the authority of public administration) resulted in a world of business models and different approaches toward airport regulation. This new airport policy has changed the way airports relate to each other as well as their relationship with the airlines, especially after the introduction of the liberalization of air services that fostered competition in aviation and put pressure on the airports to improve their performance. This has led some academics and even the industry itself to state that airports compete with each other. Even though this competition has many limitations and is affected by different types of demand on the airport´s infrastructure.

Airport competition is also limited and probably distorted by the wide range of regulations it is subjected to. These include the regulations enacted by the European Union and are aimed at levelling the playing field in the airport sector.

However, in Europe, the national regulators cannot exclude the powers of EU Competition Law as was confirmed by the decision of the General Court in Deutsche Telekom v Commission (Case T-271/03, C 128, 29, 24/05/2008). In fact, an airport is within the jurisdiction of EU Competition Law as long as it satisfies the liability conditions of Articles 101, 102 and 107 of the Treaty on the Functioning of the European Union ("TFEU"). The

focus of this study is on competition law with regard to the abuse of dominance, and which falls under the jurisdiction of Article 102. According to the terms that govern the application of this law, an airport can be found to be in breach of Article 102 provided that: (i) it can be considered an undertaking or a group of undertakings, (ii) it holds a dominant position within the internal market or a relevant part of it, and (iii) it is capable of affecting trade between Member States.

Given the broad scope of EU Competition Law, the policy-makers in Europe may choose either to impose a strict price regulation on the airports or simply rely on the application of Article 102 when it is a dominant airport. Yet even the application of EU Competition Law has to take account of the particular features of the industry, such as issues related to market definition, the countervailing buyer power of the airlines and the economic incentives provided by the commercial activities in the airport area.

In the light of what has been described above, this Paper is structured as follows:

The first section examines how the European airport industry is regulated and how competition takes place in this business environment. It begins with a description of the historical background of the sector´s development. Following this, there is an explanation of why economic regulations emerged and how they are used to set the charges for the airport´s services. The second half of the first section describes how the airports compete and what kind of obstacles may be hindering the competitive process.

The second part of the Paper is devoted to examining the application of EU Competition Law to the sector. Following introductory remarks about the procedure of EU Competition Law, especially with regard to its attempt to combat abuses resulting from a dominant position, the section will explain the particular situations faced by the competition authorities when applying the competition provisions to the sector. This will be an input for the assessment of case law and the conclusions about the efficacy of EU competition law in dealing with dominance in the sector.

2. Regulation and competition in the European airport sector

2.1 Airports in Europe

Historically airports were regarded as natural monopolies, which in the view of the policymakers were a mere part of the transport infrastructure that required public funding and a national flag carrier. They were initially conceived as public service organizations or as public corporations rather than undertakings that could stimulate the creation of a competing market structure[1].

This scenario began to change with the privatization of public enterprises in the 1980s when European countries adopted a new approach to their airport infrastructure. The United Kingdom paved the way through the privatization of the British Airports Authority in 1986 and the reorganization of its infrastructure which forced the medium-sized airports to choose between becoming public or private corporations.

The changes in the governance structure of the European airports were later boosted by the effects of new policies to liberalise the civil aviation. As Barrett (2000, p. 14) points out: "In the world of non-competing airlines, airports were also seen by their managers as a minor branch of the public service rather than as a major business which the sector was to become". The airports had no difficulties in passing on the higher costs of inefficiency resulting from this mentality to the airlines, which meant that they were reflected in the price of passenger tickets.

The emergence of low cost carriers (hereafter called "LCC") and their close links with regional airports was another key factor in the new industrial climate. Many of the small regional airports had formerly been airbases that relied on public subsidies and could offer very cheap or no charges for the low cost airlines. This gave rise to complaints by the network carriers and led to investigations by the European Commission (hereafter "Commission"), the most notable being that between Brussels South Charleroi airport and Ryanair (Commission Decision 2004/393/EC OJ 2004 L 137/1).

[1] When defining the infrastructure policy of the airports, other factors are usually taken into account such as political issues (the public interest, national defence etc).

There are broadly three patterns of ownership structure in the EU airports (ACI, 2010): publicly owned airports (operating as part of the public administration or as private corporations), the mixed public-private operator, and the fully private airport operator. The Table below shows the ownership structure of the European airports:

Table 1 - Ownership of airport operators

ABSOLUTE FIGURES	Number of airports	Number of publicly owned airports	Number of mixed owned airports	Number of privately owned airports
All airports	404	317	52	35
EU-27 airports	306	237	43	26
Non-EU airports (18)	98	80	9	9

Source: ACI-Europe (2010)

According to the study by ACI (2010) referred to above, the airports with mixed public-private or only private shareholders account for 48% of all passengers travelling in Europe. This is because the private investors tend to focus on the larger airports, such as London-Heathrow and Frankfurt. Moreover, 74% of the publicly owned airports operate as corporations. These figures reflect their need to become self-sustainable in what they view as a competitive business environment (ACI, 2010).

2.2 Airport regulation

2.2.1 Justification

The need for economic regulation of airports is related to the natural monopoly characteristics that have been considered to be found in that type of infrastructure, namely: the costly infrastructure and the economies of scale of a single operator (Wolszczak, 2009).

First there are the sunk costs involved in building the infrastructure. Sunk costs are relevant barriers to entry in the market as the airport investment is lumpy and highly specialized (runway, taxiways). They will not be recovered unless the traffic reaches the level necessary for generating the revenues (Hancioglu, 2009). This is a relevant barrier to entry that reinforces the natural monopoly position.

The economies of scale in the airport sector is the most traditional argument and takes into consideration the runway investments and passenger movement[2]. But this reasoning has lost strength over the last years as the studies began to show that the economies of scale may be restricted to small to medium sized airports. Doganis et al (1995) have found diseconomies of scale appearing at 5 million passengers per annum, whereas Salazar de la Cruz (1999, as cited in Hancioglu, 2008) claims that airports may have decreasing returns to scale and increasing average costs if they have more than 12,5 million passengers per annum. These discrepant results are partially due to the different analysis carried out but also related to the profile of the airports analyzed (hub airports enjoy economies of scale until higher values of passenger throughput according to Wolszczak, 2009). In common, all these studies have shown that the average cost of expanding capacity is increasing instead of decreasing as it would be the case in a natural monopoly (Starkie, 2008).

Another source of market power, as pointed out by Starkie (2008) is the agglomeration economies derived from the network externalities of the airline traffic in the airport. Both airlines and passengers benefit from the concentration of air services in the airport. The

[2] Kunz (1999) suggests that the terminal area does not generate significant economies of scale as there are efficient airports operating with competing terminals.

passengers gain from increased frequency and more options of destinations. The airlines expand their network and reduce costs by using larger and more economic aircraft.

2.2.2 Price regulation

The airport regulations were originally established in the Chicago Convention, in 1944, and in the guidelines from the International Civil Aviation Organization - ICAO, laid down in 1947. The Convention's rules were binding on the signatory states and governed sensitive areas such as discrimination against foreign airlines, whereas the ICAO's rules concerned best practices and were designed to provide a harmonious relationship between the airlines and airports.

The economic regulation of airports began to take its current shape at the end of the 1980s, especially with the privatization of the British Airports Authority in 1987 and the rapid expansion of airport privatization that followed in the 1990s.

Different models of economic regulation have been put in practice as they are influenced by the governance structure of each airport system and political conditions of each country. Since most airports remain under state ownership and are operated as a public undertaking, the economic regulation is sometimes confined to being a simple government authorization to levy charges.

In the countries that have airports that are privately owned or operated, economic regulation is designed to prevent the abuse of market power by the airport by restricting its freedom to fix charges. The regulation act in a way that allows the operators to recover their investment while conducting business efficiently and expanding capacity in a reasonable way. Moreover, regulations can be designed to encourage competition between airports as part of a phased process of removing or smoothing regulatory controls.

The three types of price regulation commonly applied to the sector are: (i) regulation by the internal rate of return or cost plus, (ii) price cap, and (iii) the price monitoring. There are, nonetheless, other regulatory methods that can be adopted, notably those that are incentive-based. Each of these mechanisms has benefits and drawbacks, depending on different policies and market structures but there is a general consensus that incentive-based mechanisms provide better conditions for cost reduction.

The Table below shows the regulatory methods adopted in a selection of 25 countries in Europe:

Table 2 - Regulatory methods for airports employed in the EU in 2006

Country	Regulatory Method	Country	Regulatory Method	Country	Regulatory Method
Austria	Non-pure price cap	Greece	No regulation	Poland	No regulation
Belgium	Yardstick competition	Hungary	Pure price cap	Portugal	ROR
Czech R.	No regulation	Ireland	Revenue cap	Slovak R.	No regulation
Cyprus	No regulation	Italy	No regulation	Slovenia	No regulation
Estonia	ROR	Latvia	No regulation	Spain	ROR
Denmark	Pure price cap	Lithuania	No regulation	Sweeden	Pure pride cap
Finland	No regulation	Luxembourg	ROR	UK	Pure price cap
France	Revenue cap	Malta	Pure price cap		
Germany	Non-pure price and revenue cap and ROR	The Netherlands	ROR		

Sources: Gillen and Niemeier (2006) as cited in Marques and Brochado (2008). The information given only applies to the main airports. For example, in the UK it only applies to BAA and in France to Paris airports (ADP).

2.2.2.a Rate of Return / Cost Plus

The “rate of return” (ROR) or “cost plus” regulation is the best-known form of regulation of natural monopolies. It aims to establish a price which can cover all the costs of the company, as well as providing an additional remuneration for the operator in return for the capital invested.

This model is criticised for its lack of incentives to lower costs as well as its stimulation of excessive capacity expansion; this is because the rate of return is directly related to the regulatory asset base. Put in another way, the cost plus regulation offers little incentive for firms to pursue productive efficiency.

The German and Polish airports are two examples of different ways of regulating the prices by using the rate of return method[3]. The former use projected costs to fix the prices while the latter relies on historical costs.

2.2.2.b Incentive-based Regulation

The incentive-based regulation is a range of regulatory methods drawn up to deal with the problems of the rate of return and other regulations that failed to offer suitable conditions for innovation, cost reduction and increased efficiency. These goals can be achieved even when there is asymmetric information between the regulator and the regulated firm because the latter will try to improve its efficiency to gain rewards and not because its activities are sanctioned by the incentive scheme.

Price-cap regulation

This regulatory method is based on setting a ceiling for the prices of the firm, which have to be adjusted to a consumer or retail price index, less a percentage corresponding to the productivity factor (the “x factor”). The discount rate adjustment for the “x factor" aims to provide incentives for the firm to reduce its costs (increase of productive efficiency) as well as transferring efficiency gains to the consumers. Moreover, in some instances, the “x factor” can become positive as a result of investments or as a result of the need to improve the quality of services.

Basically, the formula for price adjustment via price cap is RPI – X.

One of the advantages of regulation through price cap is the incentive it gives to the airport administration to increase production efficiency. Moreover, when there is a competitive climate between the airports, setting a price cap rather than a fixed price may result in lower rates (when compared to the cap), and thus benefit consumers and increase allocative efficiency.

The first airports to be subject to a regime of price caps were the BAA in London (Heathrow, Gatwick and Stansted) and Manchester airport. The British model of regulation through price

[3] The German airports of Hanover, Hamburg and Frankfurt are exceptions and subject to price-cap regulation.

caps comprises a group of airport charges for landing, takeoff and the permanent use of aircraft and passenger terminals. The price cap is not based on the value of tariffs, but on the total revenue per unit of passenger. Every five years the price cap is reviewed by the regulator (Civil Aviation Authority) in association with the antitrust authority (Competition Commission).

It should also be noted that in determining BAA's price cap, both the commercial and aeronautical revenues (single till) are taken into account. By this means, the undertaking can make use of non-aeronautical revenues to offset the increase in airport charges.

Yardstick competition

This method was first set out by Shleifer (1985) to promote indirect competition between regulated firms. It involves a benchmarking of the regulated firm's performance with regard to a group of similar firms and it is often used in combination with other methods, especially price cap regulation. For example, the calculation of the "x factor" of BAA airports is based on the yardstick competition (Marques and Brochado, 2008).

Price monitoring

The United Kingdom applies price monitoring to the airports whose turnover is over £1 million and has not been subject to heavy regulation by the Secretary of State. The regulator interferes in pricing in only two situations: (i) first when abuses have been discovered by the airport authority (ii) if it is impossible for the airport authority to reach an agreement with the consumers (the regulator acts as an arbitrator). In other words, it is the threat of regulation that discourages the infrastructure operator from exploiting its market power (Graham, 2005). Hence it is important for the threat of regulatory intervention and even of an antitrust prosecution, to be sufficiently credible to ensure that the practices of airport authorities are properly regulated.

2.2.3 European Union Airport Regulation

The European Union ("EU") has three main regulations for its airports: Directive 96/67/EC, Council Regulation (EEC) 95/93[4] and the Directive 2009/12/EC. They cover most of the infrastructure services provided and apply to the most critical areas of their operation. Directive 96/67/EC deals with the vertical relations between the airport and groundhandling providers. Council Regulation (EEC) 95/93 lays down the slot allocation rules that are intended to regulate the airlines access to congested parts of its infrastructure. The Directive 2009/12/EC is concerned with levying charges in the EU airports. Since the scope of this Paper competition between not within airports and the abuse of market power, the last of these will be examined here.

In March 2009, the European Union issued Directive 2009/12/EC on airport charges and stipulated that it must be implemented by all Member States by March 2011. This directive supplements the recommendations already set out by the ICAO and is designed to "establish a common framework regulating the essential features of airport charges and the way they are set" (Recital 2). Like the ICAO, the Directive only sets out principles that must be embodied in national law.

This Directive is clearly intended to level the playing field between the major airports as there has been some tension in the past over the airports´ charges policy. Directive 2009/12/EC was expected to affect 150 of the EU´s airports by the time that it came into force (Marques and Brochado, 2008), since it applied to airports that have an annual traffic of over five million passenger movements and those with the highest passenger movement in each Member State.

Directive 2009/12/EC applies to all airport charges apart from the provision of air navigation and groundhandling services which are already subject to Commission Regulation (EC) No 1794/2006 and Council Directive 96/67/EC respectively[5].

In summary, the Directive set up the following principles:

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[4] Amended by Regulation (EC) 793/2004, on 21 April, 2004.

[5] Security charges are also beyond the scope of Directive 2009/12/EC as they were the object of another Directive proposal in 2009.

Non-discrimination - the airport charges should not discriminate between airport users, except for reasons of public interest (e.g. environmental issues) and should comply with relevant, objective and transparent criteria.

Consultation – a compulsory consultative procedure regarding charges and service quality must be put into effect by the Member States' airport managing body.

Transparency - the Directive stipulates the minimum standards required for the disclosure of information by the airport before the consultative process. It also requires the airport users to provide the airport managing body with relevant information such as traffic forecasts, fleet composition and use, etc.

New infrastructure – Member States must ensure that airports operators discuss any project for developing new infrastructure with the airport users before it is finalized.

Charging system – Changes to the charging system or the level of airport charges should be decided on the basis of an agreement between the airport managing body and the airport users, whenever possible. In the event of a disagreement, either party may seek the intervention of an independent supervisory authority whereas Member States that have legislation that governs the fixing or approval of airport charges by an independent authority can enforce their national laws.

Differentiation of services – Airport operators can vary the quality and scope of particular airport services to provide tailor-made services or a designated terminal, as long as airport users have access to it on a non-discriminatory basis. The level of airport charges may vary in accordance with the tailor-made services provided and airport operators have access to them on a non-discriminatory basis. Where access is not possible, it must be ensured that this is decided in a relevant, objective, transparent and non-discriminatory way.

Independent supervisory authority – the Directive requires the Member States to establish or appoint an independent supervisory authority to implement the measures once they have been ratified by national law.

The scope of Directive 2009/12/EC is restricted to procedural matters that affect the economic regulation of airports. As a step towards regulatory convergence, it seems to be a reasonable

framework vis-à-vis the variety of airport infrastructure policies, the range of regulatory methods applied (sometimes a total lack of regulatory oversight) and the different features of the airports in the European Union (see below).

Table 3 - Regulation of Large European Airports 2007

Rank	City	Code	PAX Million	Regulation Form	Single/dual till	Regulator	Private share %
1	London	LHR	68.1	Incentive	Single till	Independent	100
2	Paris	CDG	60.0	Incentive	Single till	Dependent	32.5
3	Frankfurt	FRA	42.2	Cost-based	Dual till	Dependent	47.2
4	Madrid	MAD	52.1	Cost-based	Single till	Dependent	0
5	Amsterdam	MAS	47.8	Cost-based	Dual till	Independent	0
6	London	LGW	35.2	Incentive	Single till	Independent	100
7	Munich	MUC	34.0	Cost-based	Single till	Dependent	0
8	Rome	FCO	32.9	Cost-based	Dual till	Dependent	97.0
9	Barcelona	BCN	32.8	Cost-based	Single till	Dependent	0
10	Paris	ORY	26.4	Incentive	Single till	Dependent	32.5
11	Istanbul	IST	25.6	Cost-based	n.a.	Dependent	14.0
12	Milan	MXP	23.9	Cost-based	Dual till	Dependent	0.88
13	London	STN	23.8	Incentive	Single till	Independent	100
14	Dublin	DUB	23.3	Incentive	Single till	Independent	0
15	Palma de Mallorca	PMI	23.2	Cost-based	Single till	Dependent	0
16	Manchester	MAN	22.7	Incentive	Single till	Independent	0
17	Copenhagen	CPH	21.4	Incentive	Dual till	Dependent	77.3
18	Zurich	ZRH	20.7	No regulation	-	-	42.0
19	Oslo	OSL	19.0	Incentive	Single till	Dependent	0
20	Vienna	VIE	18.8	Incentive	Dual till	Independent	50.0

Source: Adapted from ACI-Europe *apud* NIEMEIER, Hans-Martin (2009).

Finally, Directive 2009/12/EC makes no reference to the existing competition between airports or its relationship with EU Competition Law, but its impact assessment report (2007) stated that one of the objectives of the Directive was to bring about fair competition between EU airports by introducing common charging principles.

2.3 Airport competition

Competition, as defined by the OECD (1993), is "a situation in a market in which firms or sellers independently strive for the patronage of buyers in order to achieve a particular

business objective, e.g., profit". Professor Whish describes it as "a striving for the custom and business of people in the market- place" (Whish, 2009, p. 3).

As Morrell (2009) points out, competition between airports can take many forms but it ultimately occurs in two areas: pricing and services. First, they compete to attract airlines; then they attempt to attract other service providers that may or may not compete with their other services (groundhandling and commercial).

The passenger also plays a significant role in airport competition. Barbot (2008) states that often a passenger chooses an airport and airline at the same time, citing as an example the passenger who can fly from London to Marseille either by Ryanair from Stansted or Easyjet from Gatwick. However, the passenger´s decision is less likely to be based on factors such as the airport activities than in relation to the accessibility of the airport, the boarding charges and the price of the ticket.

In that case, how do airports compete? There has been a good deal of literature on this in the last few years and there is consensus that some level of airport competition takes place in some or all of the following dimensions compiled by ACI-Europe (1999):[6]

- Competition to attract new airline services – passengers and freight
- Competition between airports with overlapping hinterlands;
- Competition for a role as a hub airport and for transferring traffic between hubs;
- Competition between airports within urban areas;
- Competition for the provision of services at airports;
- Competition between airport terminals.

The airport market that is being investigated in this Paper is the airport offer of aeronautical services, which means a large number of activities that an airline has access to once it is

[6] Forsyth (2010) offers a more extensive list that was compiled with the aid of several authors but is not as straight-forward as the one adopted in this Paper.

granted slots to land or take-off. Thus airport competition, viewed from a ¨demand¨ perspective, will restrict this analysis to items 1, 2, 3 and 4[7].

Competition for new airline traffic – airports compete to offer their spare capacity to the new airline services in various ways e.g. by stressing the quality of the infrastructure and the attractiveness of their amenities to the passengers served by the airlines.

Some of the strategies used by airports to attract the airlines include the provision of good facilities (check-in, lounge, gates etc) and discounts on the cost of landing and take-offs. They can also try to influence the cost of other services offered by concessionaires in the airport area.

Competition between airports with overlapping hinterlands – Airports with overlapping catchment areas may be based in the same city or in different cities but they are capable of reaching a common group of passengers for whom the time (and cost) of access is similar in both airports.

The size of an airport's catchment area depends on the type of airline that it attracts. This is because the passenger compares the time required to gain access to the airport with the total origin-destination time. Hence, the passenger is prepared to travel longer to reach an airport for a long haul flight than for a short haul flight. It has been suggested that the passenger also compares the cost of access with the ticket price (Morrell, 2010).

Competition for a role as hub airport and for transferring traffic between hubs – hubs are airports that have a large amount of transfer passengers. A hub airport in Europe is mainly responsible for transferring domestic flights to long-haul or intercontinental flights (ATG, 2002). They are also characterized by the provision of a complex infrastructure capable of handling continuous waves of arriving and departing flights.

[7] This section draws heavily from the Air Transport Group (Hereinafter "ATG") study on Airport Competition (2002).

Competition between airports within urban areas – two or more airports operating in the same city offer the greatest scope for competition as they can provide the residents and the visitors with a real choice (Forsyth, 2010). However, in many cases there is no potential for competition between these airports owing to the distribution of the airline traffic (e.g. domestic and international) or when the airports are put under common ownership. The latter situation has been recently debated in the United Kingdom following the Competition Commission's decision to break up the airport operator BAA[8].

The inherent characteristics of the industry (spatial setting, common ownership within a region etc) make it likely that most airports will face limited competition from other airports. In addition to the issues of common ownership cited above, there are other factors that restrict the level of competition faced by airports:

Airports under separate ownership and overlapping catchment areas may choose not to compete in a situation of fixed capacity and difficulties of expansion (Forsyth, 2006). The oligopolistic features of this market create the right conditions for a tacit collusion, which will result in high prices and efficiency problems. The airports may also collude to use their additional capacity to try to deter secondary airports from entering the market (Forsyth, 2006).

Entry barriers are factors, which prevent or deter new firms from entering an industry (OECD, 1993) and these may be due to the market structure or the behaviour of the incumbent firms. Entry barriers affect the airport industry in many ways as it will be explained in a further Section.

Excessive demand for an airport and congestion are also limiting factors to competition. An airport with little or no capacity has no incentive to lower its prices as it cannot accommodate new demand. Its competitors may not offer enough competition for the congested airport if they are in a worse location and the congested airport cannot fix its prices in accordance with its value because of regulations (Forsyth, 2006).

[8] The BAA owns and operates the following airports in the UK: London Heathrow, London Stansted, Aberdeen airport, Edinburgh airport, Glasgow international airport and Southampton airport. London Gatwick was sold in December 2009.

Economic regulation affects competition between airports. The degree of interference depends (to some extent) on the regulation method adopted. For instance, cost plus regulation will give the airport less incentive to maximize profits as any increase in costs can be passed on as an increase in charges. As Forsyth (2006, p. 351) points out: “a competitor may reduce prices and win customers from the regulated major airport, but it may not respond – it may increase prices to remaining customers to cover its costs”.

Subsidies to regional airports are a common feature in the European Union and many decisions made by the Commission have addressed this issue[9]. A subsidy can be used to finance the infrastructure or maintenance of an airport, reduce charges, and cross-subsidize between profitable and non-profitable airports among other things. This will inevitably affect competition by giving an advantage to the subsidized airport and it is likely to create inefficiencies as there is a distortion in the allocation of airline traffic between airports (Forsyth P, 2006). Moreover, the subsidy is likely to affect the airline competition downstream.

3. Abuse of dominance in the airport sector

It is thus clear that some degree of competition is faced by the European airports. This section will outline how EU Competition Law deals with the monopoly power of the airports while recognising that the competition provisions and the sector-specific regulations often operate in parallel in the airport sector. The idea is not to propose a market test to define whether the sector should be strictly regulated, but to verify how effective EU Competition Law can be when dealing with market power. It will also examine the specific features of the sector with regard to the question of dominance.

[9] Since the adoption by the Commission of the "Community guidelines on financing of airports and start-up aid to airlines departing from regional airports"(OJ C 312 of 09 December 2005), many Member States have notified the Commission of the measures within its scope.

3.1 EU Competition Law

In contrast with the network industries, most markets operate in a competitive way. Although conditions for perfect competition in the economic sense[10] are rarely found, it is accepted that a certain level of competition is usually present and government intervention through competition law should only be applied in specific circumstances.

Competition law can be broadly defined as the rules that guide the Government's intervention to stop or prevent anti-competitive conduct and preserve competition in the markets with the aim of enhancing economic welfare.

The way competition law is enforced is constantly evolving as it is influenced by political, economic and institutional factors (Monti, 2007). For instance, the United States has seen the rise and fall of the structural approach and the emergence of the Chicago School whereas in Europe other factors such as the primacy of the internal market have played an equally significant role as other traditionally accepted goals. Whatever the approach adopted all or most of the competition authorities share the same targets, namely:

Mergers – aimed at preventing the emergence of less competitive conditions in the market by controlling corporate transactions generally known as merger regulation.

Cartels and other anti-competitive agreements – this is one of the main areas of competition law as it is concerned with cooperative practices between competitors that may have the object or effect of reducing competition.

Abuse of dominance – the competition authority intervenes to stop any abusive conduct that may arise from an undertaking holding a dominant position that may damage the competitive process by eliminating competitors.

[10] A market in perfect competition, as defined by OECD, comprehends four conditions: (a) A large number of buyers and sellers that none can individually effect the market price; (b) There are no barriers to entry and exit; (c) All market participants have full access to the knowledge relevant to their production and consumption decisions; and (d) The product should be homogenous.

The three dimensions of competition enforcement listed above are found in the EU Competition Law and are covered under Articles 101 and 102, TFEU. In addition, Article 107, TFEU deals with competition and State Aid.

3.2 Abuse of dominance

In European Union Competition Law, abuse of dominance may refer to either exclusionary practices carried out by a dominant undertaking in an attempt to avoid entry or exclude competitors or exploitative practices that harm consumer interests. These issues have been dealt with under Article 102, TFEU ("Article 102"). The provision was originally conceived to deal with abuse by a single dominant undertaking, but the Commission and the Courts have interpreted the words "one or more undertakings" as a prohibition against the abuse of collective dominance. It was also recognised as being applicable to changes in market structure that involved some form of abusive behaviour, although this was addressed by Council Regulation (EC) N. 139/2004.

The conditions for an undertaking to be liable under Article 102 are as follows: (i) holding a dominant position within the internal market or a relevant part of it, (ii) abusing that position in the market in which it is dominant (or another market) by leveraging, and (iii) having the capacity to influence trade between Member States.

The first condition is that a dominant position must be found. The concept of dominant position was not defined in the Treaty but it was established by case-law as a:

"(P)osition of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers" (Case 27/76 Case United Brands v Commission, [1978] ECR 207 paragraph 58 et seq.).

Although Article 102 provides some examples of abuses, the list is not exhaustive and the classic definition of abuse was set forth by the European Court of Justice (hereafter "ECJ") decision in Hoffmann-LaRoche:

"The concept of abuse is an objective concept relating to the behavior of an undertaking in a dominant position which is such as to influence the structure of a market where, as a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse of methods different from those which condition normal competition in products or services on the basis of the transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition" (Case 85/76 [1979] ECR 461, paragraph 91).

It should be mentioned that the fact that an undertaking possesses market power is not evidence of an abuse itself, but it imposes a "special responsibility" not to impair competition even further[11].

The final condition is that the abuse must create an appreciable effect on trade between Member States. The Commission and Courts accept that this effect may be "potential" rather than "concrete", as long as it is appreciable. The Commission adopted specific Guidelines regarding the issue of the effect on trade between Member States (OJ [2004] C101/7) to help drawing a line between the actions taken by the Commission and the national competition authorities ("NCAs")[12].

3.2.1 The relationship between EU Competition Law and national regulatory regimes

When the EU Competition Law is applied to deal with an abuse of dominance in the airport services, there is likely to be opposition to the Commission´s decision on the grounds that there already exist sector-specific regulations established by national law with the ability to permit or block a particular form of conduct. This issue was addressed in the dispute between the Commission and Deutsche Telekom (Commission Decision N. 2003/707/EC, OJ 2003 L263/9) in which the latter was accused of adopting a margin squeeze system of pricing to the detriment of its competitors. In its decision, the Commission found that the DT had abused its dominant position by charging prices for access to its network that were even higher than it

[11] Case 322/81 Nederlandsche Banden Industrie Michelin (Michelin I) v Commission [1983] ECR 3461, paragraph 57; Case T-83/91 Tetra Pak v Commission (Tetra Pak II) [1993] ECR II-755, paragraph 114; Case 139; Case T-228/97 Irish Sugar v Commission [1999] ECR II-2969, paragraph 112; and Case T-203/01 Michelin v Commission (Michelin II) [2003] ECR II-4071, paragraph 97.

[12] Article 3(1) of Council Regulation (EC) N. 1/2003 (OJ L 001, 04/01/2003).

charged to its own subscribers in the downstream retail market. DT defended itself by arguing that its fees had been approved by the German regulator and that any legal action should be taken against Germany under Article 258, TFEU (formerly Article 226, TEC). The Commission took the view, backed by the case-law[13], that the "competition rules may apply where the sector-specific legislation does not preclude the undertakings it governs from engaging in autonomous conduct that prevents, restricts or distorts competition" (paragraph 54).

The General Court upheld the Commission's decision by stating that DT could only have escaped prosecution under Article 102 if the anti-competitive conduct had been required by national legislation or if the latter had created a legal framework which in itself precluded the possibility of competition (Case T-271/03 Deutsche Telekom AG v Commission, C 128, 29, 24/05/2008, paragraph 86). The decision went even further by holding DT responsible for not correcting its conduct when the German regulator had failed to recognize its anti-competitive effects (paragraph 164).

The General Court's precedent also reinforced the Commission's decision in the Telefónica case (Case T-336/07, Telefónica and Telefónica de España v. Commission, 2007 O.J. (C 269) 55 and Case T-398/07, Spain v. Commission, 2008 O.J. (C 8) 17). This is a similar case where EU Competition Law was enforced in a dispute where a national regulator approved wholesale prices for network access, leading to a margin squeeze claim by competitors in the retail broadband market. The Commission publicly stated that it was not interfering with the duties of the Spanish regulator as these were designed for different purposes: the *ex ante* regulation seeks to implement a competition regime by relying on market and cost forecasts but this cannot prevent any future abuses from occurring whereas the competition authority acts ex-post and is capable of investigating the conduct on the basis of historical data[14].

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[13] Monti (2008, p.123) points out that the Deutsche Telekom precedent drew upon ECJ's decision in Ladbroke where it was held that "[w]hen the Commission is considering the applicability of Articles [81] and [82] of the Treaty to the conduct of undertakings, a prior evaluation of National legislation affecting such conduct should therefore be directed solely to ascertaining whether that legislation prevents undertakings from engaging in autonomous conduct which prevents, restricts or distorts competition".

[14] MEMO/07/274 of 04 July 2007.

Although neither the DT or the Telefónica[15] disputes have received a final word from the ECJ, the Court is expected to decide in favour of the Commission. This is due to the constitutional status of the Treaty that gives competition provisions primacy over national law, even when the latter has been set out in response to an EU Directive.

Surprisingly or not, the antagonism between EU Competition Law and national sector-specific law has never been addressed in the case law about airports. There have been few decisions by the Commission on purely anti-competitive issues involving airports (not involving strictly State Aid). They rulings were made under Articles 102 and 106(1) as they concerned discriminatory abuses by publicly owned undertakings.

The next section will analyze the jurisprudence on the question of the abuse of dominance by airports. This will underpin the discussion about the interrelationship of EU Competition Law and sector-specific regulation in this sector. However, as a first step, we will look at the main issues that arise in investigating dominance in the airport services market.

3.2.2 Market Definition

The first step in determining whether an airport has a dominant position is to define in which market (judged by its products and geographical dimensions) its competitors are capable of promoting effective competition or constraining the airport's conduct. Once the boundaries of this market have been defined, it is necessary to calculate the market share of the competitors to make a preliminary assessment of their degree of dominance.

The "hypothetical monopolist test" (or SSNIP – a small but significant non-transitory increase in price) has been the main antitrust tool used for the purposes of defining the relevant market, (as stated in paragraph 17 of the Commission Notice on market definition)[16]. The SSNIP test

[15] This case is under appeal to the General Court.

[16] "17. The question to be answered is whether the parties' customers would switch to readily available substitutes or to suppliers located elsewhere in response to a hypothetical small (in the range 5 % to 10 %) but permanent relative price increase in the products and areas being considered. If substitution were enough to make the price increase unprofitable because of the resulting loss of sales, additional substitutes and areas are included in the relevant market. This would be done until the set of products and geographical areas is such that small, permanent increases in relative prices would be profitable".

is sometimes applied by sector-specific regulators when it is necessary to investigate market power in the regulated sectors.

However, it is not common to see the SSNIP test being used to delineate a relevant market for the airport services. Both the regulatory and competition authorities have relied heavily on examining the overlap of arbitrarily-defined catchment areas to define the number of airports within a certain drive-time (Frontier, 2009). This approach is explained in more detail below.

As mentioned by the UK Competition Commission in its "Working paper on market definition" (2009), the demand for airport services is derived from the demand for air transport. Hence a change in price or quality of airport services can affect the demand in two – possibly cumulative – ways:

By inducing a direct airline to replace its current airport with another;

By affecting the airline's prices and indirectly inducing passenger to switch to another airline and/or airport (Competition Commission, 2009b, p. 2).

In terms of the products offered by the airports, the most appropriate way to treat them is by dividing them into aeronautical and non-aeronautical services. The aeronautical services include two types of activities that are correlated: the primary operational activities and the secondary (provided by airports and groundhandling agents as concessions). The charging policy for all these services can vary within the industry[17] but, as the Competition Commission argues, the fact that the price of a secondary product is usually constrained by its interaction with the primary product, leads that authority to the conclusion that all aeronautical charges can be addressed under the single but wider product market of "airport services" (Competition Commission, 2009b).

Non-aeronautical or commercial services are provided by the airports or by their concessions. Some can be found in every airport - like car parks and restaurants - but they can be as varied as business creativity and safety rules permits. There can be as many product markets as there

[17] There are usually three main airport charges: the landing/takeoff charge, the parking charge and the passenger charge.

are businesses within the airport and they are, in principle, confined to the airport in which they are based.

The approach of the European Commission is slightly different from that adopted by the Competition Commission when analysing concentrations involving airports. In the decisions made in Birmingham International Airport (Case N. IV/M. 786); Hochtief/Aer Rianta/Düsseldorf Airport (Case N. IV/M. 1035) and GIP/ Gatwick Airport (Case N. COMP/M.5652), the product market was divided into three classes of services: (i) provision of airport infrastructure services to airlines (including the development, maintenance, use and provision of the runway facilities, taxiways and other airport structure, as well as the co-ordination and control of the activities carried out in these infrastructures); (ii) provision (or contracting) of ground-handling services (e.g. ramp-handling, baggage handling, fuel and oil handling, ground administration and supervision, flight operations, crew administration); and (iii) provision (or contracting) of associated commercial services (e.g. food, sales of advertising space).

It is impossible to evaluate the approaches without examining a specific case. However, the Competition Commission's approach involving the merging of both types of aeronautical charges, makes more sense when the market power of an airport is analysed from the perspective of an airline as a means of airport substitution. This is because the competition between airports is primarily driven by the need to serve the airlines and the revenue comes mainly from the aeronautical charges (which includes the use of facilities such as runaways, telecommunication and the handling of the airplane within the airport area)[18]. While providing aeronautical services, the airports must handle the passengers who are the main consumers of their commercial activities.

Other factors that are important when trying to define a relevant market for an airport are the characteristics of the infrastructure such as runway length, facilities and environment issues. The runway, for instance, is the determining factor for the type of traffic (domestic or

[18] This does not mean that passengers do not choose which airport they want to fly from/to, on their own. Nor does it mean that the airport does not wish to attract more passengers. The point here is that the passenger´s decision is likely to be based on factors unrelated to airport activities, such as how accessible the airport is, the passenger boarding charges and the ticket prices etc.

international) that the airport can handle, as some airplanes require greater distances. The possibility of lengthening the current runaway or building a new one can also be a constraint on other competing airports (Competition Commission, 2009).

The geographical dimension is of central importance in defining the market. Traditionally, it was based on the airport's catchment area and this is calculated by measuring the time spent by each passenger to reach the airport. For instance, the British Civil Aviation Authority (CAA) discovered in a study on Stansted airport that this method applies to 70-90% of the passengers using the infrastructure on the basis of one hour access time for short haul flights and two hours for long haul flights (Pioner, 2008).

In its reference to the Competition Commission for an investigation of BAA, the Office of Fair Trading ("OFT") adopted a regional approach to market definition, based on the common sense idea that airports attract the majority of passengers from the regions where they are located[19]. Following this, OFT wondered whether the geographical area should be widened or narrowed by employing substitution patterns by air passengers and airlines. This substitution is influenced by the existence of long-haul services from an airport as this is likely to extend the airport's catchment area in comparison with the case of short haul services. This approach is similar to that adopted by the European Commission that "has tended to focus on the appropriate size of the catchment area of airports, taking into account factors such as the size and density of population, level of wealth and type and size of business in the area" (Case N. COMP/M.5648 - OTPP/ Macquari/ Bristol Airport, paragraph 12).

3.2.3 Dominance

As already mentioned, dominance is a position of strength that allows an airport to behave, to an appreciable extent, in an independent way from other airports and ultimately from the airlines and their passengers. If the market definition implies that there is no competing airport operating in its hinterland, it will be clear that the airport enjoys a dominant position. The dominant position is also (commonly) the result of a statutory monopoly (involving

[19] This fact has also been confirmed by the data from the Civil Aviation Authority presented in the document.

special rights) granted by the government and it is the reason why most of the abuses that have been subject to Article 106(1) together with Article 102. In addition, for the liability conditions of Article 102 to apply, the airport must have a substantial share of the internal market. The General Court ruled in Aéroports de Paris (ADP) v Commission (Case T-128/98 [2000] ECR II-3929) that this requirement should be assessed in terms of the size of the undertaking and volume of passengers that use the dominant airport in comparison with the airport capacity that exists in the European Union[20].

However, even a dominant position may not be enough for an airport to abuse its market power. According to the Commission's Guidance, at least two other factors must be taken into account: (i) barriers to entry and expansion; (ii) countervailing buyer power. There are also special features in airports that may not be observed by the paradigm structure-conduct-performance and these may prevent airports from abusing their market power.

3.2.3.a Barriers to entry.

Barriers to entry in the airport sector are an obstacle to airport competition and thus allow it to maintain and reinforce a dominant position. There is some divergence in the literature on what constitutes a barrier to entry (Bain, 1968, Stigler, 1968, Bork 1978). In their seminal study on airport entry and exit in Europe, Muller-Rostin et al (2010) adopted a broad definition similar to that of Bain who stated that it "extends the concept of barriers to all factors that limit entry and enable incumbents to make a supranormal profit and hence includes absolute cost advantages, as well as economies of scale and scope" (Acknolo, 2006, p. 148). The study found that in 25 countries analyzed, 21 entries and 14 exits occurred in 14 countries between 1995 and 2005. As the authors remarked, the first and most common barrier is the economies of scale. If an incumbent airport has a declining curve of average costs for all its products, its economies of scale will give it an edge over an entrant. Empirical studies are beginning to show that this applies to airports up to a certain size, beyond which the complexity of managing the infrastructure may give rise to diseconomies of scale (see Section 1.3.1).

[20] It should be mentioned, though, that a national court or NCA is not bound by a previous finding of dominance by the Commission (General Court, joined Cases T-125 & 127/97 Coca-Cola v Commission [2000] ECR II-1733 paragraph 85).

However, unlike the economies of scale, sunk costs remain a principal issue. Apart from the former air bases that could be easily converted to airports, the airport infrastructure remains very costly and highly specialized and cannot be used for other purposes if a firm decides to leave the market[21] (Muller-Rostin et al, 2010). The superior location is cited as a possible absolute cost advantage that acts as a barrier. This is usually the case of an incumbent airport (Muller-Rostin et al, 2010).

The network effects of a hub position (especially the economies of density achieved by a concentration of the flights) can be a barrier to entry if they have a lock-in effect on the airlines that establish their bases and restrict the contestability by the new airport (Muller-Rostin et al, 2010).

Legal barriers are an integral part of the airport market owing to their many regulations. They can take the form of monopoly rights granted to the existing operator of airport services in a region or city. The most remarkable example was the joint privatization of BAA airports in London. The barriers can also mean that a new airport is subject to planning or environmental restrictions (Muller-Rostin et al, 2010).

Muller-Rostin et al (2010, pp. 32-33) propose four types of strategic barriers that could be imposed on airports: (i) a strategy of excessive capacity can be a credible threat to price reduction in response to entry. There are many airports in Europe with spare capacity and the widespread use of cost-plus regulation incentives leads to over-investment in capacity; (ii) pricing limits before entry as a commitment to lower post-entry charges; (iii) predatory pricing is a strategy that has never been applied but has been investigated by the CAA after receiving a complaint from Luton airport that Stansted airport was pricing at below average costs; (iv) finally, the incumbent airport could try to raise the costs of its rivals, for example, by using its position to influence authorities to adopt stricter environmental regulations or planning restrictions.

With support from the literature analysis, the empirical results of this study have provided evidence that entry barriers are a serious obstacle to the increase of airport competition in

[21] Following Starkie (2005), the authors point out that airbases tend to be at some distance from the main populated areas.

Europe. The reduced level of entry that occurred was largely the result of the conversion of air force bases. The barriers are diverse and affect the industry in all of its dimensions (costs, policies, spatial setting).

3.2.3.b Countervailing buyer power

Countervailing buyer power is another feature of the analysis of the competitive structure of the market which can help identify a dominant undertaking. This concept can be defined as the ability of a buyer to exert some constraints on the seller's conduct in the market[22].

The Commission's Guidance on the abuse of dominance states that the countervailing buyer power is the combined result of a buyer's commercial strength (including size) and his/her ability to (i) switch quickly to competing suppliers, (ii) promote a new entry or vertically integrate. The undertaking should be able to credibly threat to use these countervailing strategies to constrain a dominant firm (paragraph 18). The Guidance also recommends that the buyer's ability to discipline the dominant undertaking must protect the whole market or it will not be effective (paragraph 18).

The extent of the countervailing buyer power in the airport services market is still an open question. As in other parts of this Paper, a broad answer to this question is needed, as the market conditions can change for each airport and airline involved.

Comparing the airline's position to that of the airports, it is evident that airlines are often bigger corporations than the airports that serve them. This especially applies to the mega-carriers who tend to establish hubs and invest in their airport basis (business lounges, aircraft maintenance etc). The effect of this relationship is two-fold: the hub airline pays for a high proportion of the infrastructure services on a suitable scale but at the same time, it has some switching costs, which include the relationship with other airlines operating in the site (code-share, alliances). These hub airports are more costly to operate than other airports with spare capacity but this factor can be offset by the network economies of the concentrating flights

[22] This general definition should not be confused with buyer market power which exists when there is a lack of competition between buyers of a given product.

and by charging more to passengers flying from a premium location, and in particular, business traffic.

The airlines ability to switch to a competing airport is the most effective constraint. Apart from a carrier operating a hub-and-spoke network, transferring flights to another airport is not difficult due to the nature of the business ("marginal costs with wings" as described by Alfred Khan). The entry and exist costs for airlines tend to be low as most of the assets can be hired or sold. The aircraft is usually leased and many services are hired at the airport (handling, maintenance, fuel). The main difficulty in switching would be the existence of an alternative airport with spare capacity. However, even this factor is relative as it depends on the airline's business model. A LCC is more likely to find another airport to base its aircraft than an airline with an international network. In fact, many regional airports have spare capacity and are more attractive to the LCCs because of their capacity to provide quick turn-around to their aircrafts and also because they have little bargaining power.

The airline's ability to switch between airports with spare capacity fact has been proved – at least twice – by Ryanair. In 1999, the airline moved part of its fleet to Leeds-Bradford airport because of Manchester Airport´s decision to levy charges. Ryanair later resumed its activities at Manchester Airport after reaching an agreement on charge reduction (Barrett, 2004). The other occasion was when it transferred operations from Luton airport to Stansted after negotiating better prices.

Another good example of the countervailing buyer power that the airlines may have in switching airports, can be found in the long- term supply contracts that have become common in the UK[23]. In the liberalized world of the airlines, these contracts can reduce the risk of demand for airports (Starkie, 2008) and they tend to regulate the relationship between different parties in many ways beyond simply giving a discount on charges. These include the following: quality standards, marketing support for the airline, and making an investment in the expansion of the infrastructure. On the airline side, the contract will require a certain

[23] Although the information available about these contracts is based on the UK experience, the two most important LCCs (Ryanair and EasyJet) have probably entered into similar agreements all over Europe. The conditions will change depending on the position of the airport. Ryanair have managed to achieve revenues even from car parking services at airports.

number of aircraft to be based at the airport and a minimum level of passenger traffic (Starkie, 2008). The airlines are able to pay a reduced charge that can be calculated on a per passenger basis so that the traffic risks are shared.

There is no record of an airline encouraging new entry by building airport facilities and it is unlikely that this strategy would be appropriate as a response to a dominant airport abusing its power. As mentioned in the previous section, entry in the airport sector faces many obstacles, including the legal barriers that seek to prevent any new airport from being built. Airlines have other alternatives at hand. They can help in the development of a small/regional airport whose hinterland intersects with the catchment area of the dominant airport.[24] Starkie (2008) cites the evolution of the regional airports in the catchment area of Manchester airport as an example of how the relationship with the airlines (long term contracts involving rebates in charges) can increase airport use. Only when Manchester changed its policy of not giving discounts to airlines to start flights it was capable of recovering its position and the traffic that had been lost.

It is uncommon to find a vertical integration of the airports with the airlines, but there are a few cases of airlines that have become shareholders in airport enterprises, such as Lufthansa and Frankfurt airport. This type of vertical integration is best explained as an engagement between the mega-carriers that use hub airports as their main platforms and that require a level of commitment to plan the development of their networks. [25] This has not been seen by the competition authorities as an attempt to create or strengthen a dominant position to lessen the competition.

In conclusion, it has yet to be proved that the airlines are capable of consistently providing a countervailing buyer power for an airport willing to raise the price for its services. Some of

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[24] In view of the fact that the catchment area of the airport is also related to the type of traffic that it attracts (see Section 1.4, p. 23), the airport's geographical market can be widened if the increase of airlines services lead to a diversification of routes, in particular long haul flights.

[25] This fact was addressed by Lufthansa's CEO when affirmed that the stake was intended to "intensify our partnership with Fraport and lastingly strengthen our airline's position at the major Frankfurt hub…competition in the industry is no longer between airlines and alliances, but between air traffic systems in their entirety, encompassing airlines, airports and air traffic control". Available at : http://www.centreforaviation.com/news/2009/07/24/the-airline-airport-charges-battle-intensifies-lufthansa-fraport-link-unraveling/page1. [Accessed 30 November 2011].

the features of the airline industry in its post-liberalization era seemed to have given them more bargaining power to negotiate their bases. This is particularly the case for the LCCs that were pioneers in entering into long- term supply contracts with the regional airports. These small or medium-sized airports benefit from the reduction in traffic risk and the result seems to be positive on both sides. Nonetheless, some LCCs have also proved that switching between airports is a credible threat and this, at least in the case of Manchester airport, has proved to be effective enough to lead to a change in the conduct of the airports. Finally, the fact that a LCC is capable of obtaining good terms for keeping its operations in an airport may not necessarily create a countervailing buyer power throughout the whole buyer market – as required by the Commission – or just for the airline. This is a stage in the investigation of a dominant position that needs further research. It may be that the new Directive on airport charges has some effect on the way airlines negotiate their charges since it requires a non-discriminatory treatment based on relevant, objective and transparent criteria. How effective it will be in levelling the playing field between the different types of airlines and the major airports in Europe is still to be seen.

3.2.3.c Additional factors

The airports have become complex businesses and many have highly developed retail activities in their area. According to research conducted by Oum and Fu (2009), when there are economies of scope in producing commercial and aviation services jointly at an airport, the airport manager tends to focus on commercial revenue opportunities and thus achieve a higher degree of efficiency. When one looks at the figures in Europe: in 2008, the non-aeronautical revenues[26] of the European airports reached an average of 47% of total revenue (ACI, 2009) while concessions from airport retail constituted the single largest contribution to non-aeronautical revenues (24.5%). The Airports Council International argues that these revenues are necessary to keep the charges at competitive levels – since they are an expected result of a single till approach to price regulation. As ACI-Europe stated, even in a dual-till regime the commercial revenues are important to reduce the operating costs of the airport by releasing the need for external funding and reducing the capital costs for the airport.

[26] Excluding groundhandling revenues. The numbers may be even higher at the busiest airports, such as London-Heathrow.

This complementarity between the aeronautical revenues and the commercial revenues, in particular those involving concessions, is regarded by Starkie (2010) as a "built-in" incentive for the infrastructure operation not to abuse its market power, even if it is interested in maximizing its profits. The idea behind this argument is that concessions can generate higher returns owing to their location (a busy airport)[27]. These revenues are likely to increase along with the increase in air traffic. Hence if an airport can combine both revenues it will have an incentive to stimulate the use of the runways even if it means that the aeronautical charges will be lower. Two factors must be present to make this a feasible strategy: the airport management must be profit-oriented and the locational rents must be significant to allow a reduction in aeronautical charges. Starkie (2010) argues that the latter depends on how sensitive passengers are with regard to charges (price elasticity), the level of passenger expenditure in airport retailing and the impact of these revenues on the airport's turnover.

Oum and Fu (2009), on the other hand, argue that the price elasticity of the demand for airport prices is very low. Thus in the absence of effective competition or regulatory control, the airport will benefit from the positive externality effects of the demand for air services for its commercial services and still charge higher prices. The authors cite the example of Australia and New Zealand, where the deregulation/light regulation was put in practice. The result was an increase in prices that, after a regulatory review and government intervention, had to be replaced with a price cap regime. The authors do not reject Starkie's viewpoint, but emphasise the need for competitive restraints as an effective incentive to keep prices lower, which they recognize was absent in the Australian / New Zealand context.

Neither of these arguments has received a definite validation by empirical studies and can only play limited role in an antitrust analysis until an accurate diagnosis of these elements has been carried out.

[27] These are called locational rents because they represent the opportunity cost of scarce space available at an airport and although they may be high, they are still be an efficient means of pricing. They are different from monopoly rents, which are the result an airport operator setting prices above an efficient level, thereby creating a dead-weight loss. (Forsyth, 2004).

3.3 Case law

In the previous section, it was concluded that airports have characteristics that will often allow them to be in a dominant position. In Europe, the small number of entrants and the wide range of barriers suggest that it is not a competitive market. It has also become evident that there are serious limitations to the countervailing buyer power of the airlines. In this section, we will look at the case law insofar as it applies to abuses by dominant airports and, as a result, will be in a position make some inferences about how effective EU Competition Law has been enforced in the sector.

A large part of case law in its application to airports has been based on State Aid but the focus here will only be on the cases where the abuse of dominance under Article 102 was brought into question.

In speculating about how airports might abuse their dominant position as infrastructure providers, the first thing that comes to mind is that they are charging excessive prices (Article 102(a)). Surprisingly, there has not been any investigation by the Commission aimed at revealing abusive prices charged by the airports.

On the other hand, on a national level, price undercutting has been found by an investigation carried out at Stansted airport[28] (Starkie, 2004). Basically, Luton airport made a complaint to the British regulator (CAA) that Stansted was levying very low charges and this caused Ryanair to transfer its services. Stansted confirmed that the charges were below its costs but justified its conduct on the grounds that the airport was relatively new and was still seeking to recover its initial operating costs. It also argued that the airport's revenues were still above the average avoidable costs and thus it could not be accused of being engaged in predatory pricing.

After examining the Stansted figures, the CAA admitted that discounts were below costs and could not be matched by Luton. However, the regulator found itself in a situation where it was bound by the airports policy (which allowed an early expansion of Stansted) and stated that:

[28] It was a sector-specific investigation as the CAA does not have the power to enforce EU Competition Law.

"Luton has been materially harmed but that harm stems from the Government's decision in 1985 that the next significant tranche of airport capacity to serve the South- East should be at Stansted … For the Authority to find that the policies Stansted has pursued should be inhibited or reversed because of their effect on Luton would be tantamount to saying that the decision to develop Stansted was wrong" (paragraph 61 as cited by Starkie, 2004, p. 398).

In the end, the CAA concluded that no remedy was feasible under its statutory discretionary powers to impose a price monitoring framework on the airport[29]. Unfortunately, the case was not analysed by the Monopolies and Mergers Commission (the predecessor of the Competition Commission) and there was no additional information available to verify whether or not the airport had been guilty of predatory pricing. It is worth mentioning, though, that shortly after this episode, Easyjet decided to open a base at Luton Airport, and this allowed the airport to recover its traffic loss and increase its passenger numbers by 171% between 1997 and 2002 (Francis, Humprheys and Ison, 2004).

Other anti-competitive practices by airports, with an EU dimension, have involved discounts on landing fees. These have been investigated by the Commission for being allegedly discriminatory under Article 102(c) in combination with Article 106(1).

The first case that was prosecuted was at Brussels-Zaventem Airport (Commission decision 95/364/EC OJ L 216, 12/09/1995) in which British Midlands Airways complained that a discount system based on the volume of traffic put the small carriers at a competitive disadvantage and did not have any objective justification. As part of their assessment, the Commission ruled that the airways authority (the public body responsible for managing the airport and setting its prices) was a public undertaking to which was given exclusive rights under the provision of Article 106(1). According to the case law (Case 311/84 [5)], "Telemarketing"), it could also be classified as a dominant undertaking under Article 102. In addition, the decision declared that the airport's position as the eleventh busiest airport in the internal market in terms of passenger movement and the fifth busiest in terms of freight, made it a substantial part of the common market. Having proved its undertaking liability under Article 102, the Commission analyzed the following arguments brought forward on behalf of

[29] S.41(3)(c) of the Airports Act (1986).

the defendant: (i) the right of an undertaking to introduce a system of reductions as part of its commercial policy, (ii) the right to grant larger discounts to loyal customers, particularly in view of the financial security they provide, (iii) the economies of scale by which it costs less (in terms of administration and staff) to supply services to a national carrier with a large volume of traffic at the airport, and (iv) the airport is made more attractive when there is a national carrier offering an extensive network of destinations (paragraph 16).

The first two arguments were rejected by referring to the "special responsibility" doctrine (Case 322/81 Michelin v Commission [1983] ECR 3461, paragraph 57) that the dominant undertaking must not to impair competition even further (as had been the case with regard to the loyalty-inducing rebates). The Commission argued that the defendant had failed to prove that there were economies of scale since the services provided were the same, regardless of how often they were supplied and it dismissed the idea that the concentration of flights by the national airline would have the effects that had been alleged.

In assessing the merits of the case, the Commission interpreted the undertaking's conduct as demonstrating discriminatory abuse and following the reasoning adopted in the Corsica Ferries II (Case C-18/93 [1994] ECR I-1783), decided that, by acting through an intermediary, The Kingdom of Belgium had benefited the national airline. The discount system was found to be in breach of Articles 102 and 106(1), formerly Articles 86 and 90 (1) of the EC Treaty.

Other later cases followed a similar rationale. In Portuguese Airports (Commission Decision 1999/199/EC OJ L 069, 16/03/1999 0031-0039), the state-owned operator of Lisbon, Faro and Porto airports (ANA) implemented a pricing policy that constituted a State measure under Article 106(1). It was ruled that the airports´ activities affected trade between Member States (Corsica Ferries II) and the traffic volume carried in the Portuguese airports gave it a substantial part of the common market, as laid down in Article 102. Thus, ANA's exclusive operation rights (Article 106(1)) put the undertaking in a dominant position. In a substantive assessment, the Commission ruled that the system of landing charges applied unequal conditions to airlines for undertaking equivalent operations, thereby placing their competitors at a disadvantage, without any objective justification. The Portuguese airport operator tried to argue that the same scheme was in practice in Spain, but was unable to avoid being found in breach of Articles 102 and 106(1).

When the case was submitted for appeal to the ECJ, the Court provided an assessment of what could be regarded as an acceptable discount regime:

"The mere fact that the result of quantity discounts is that some customers enjoy in respect of specific quantities a proportionally higher average reduction than others in relation to the difference in their respective volumes of purchase is inherent in this type of system, but it cannot be inferred from that alone that the system is discriminatory" (Case C-163/99, Portugal v Commission [2001] ECR 1-2613, paragraph 51).

However, the Court went on explain that this regime could lead to the application of inequitable conditions for equivalent transactions if the "result of the thresholds of the various discount bands, and the levels of discount offered, discounts (or additional discounts) are enjoyed by only some trading parties, giving them an economic advantage which is not justified by the volume of business they bring or by any economies of scale they allow the supplier to make compared with their competitors" (paragraph 52). This was ultimately the result of a range of discounts which increased exponentially in relation to the number of take-offs and landings, and only allowed the Portuguese airlines to benefit from the higher thresholds.

The Finnish airports (Commission Decision 1999/198/EC OJ L 069, 16/03/1999) and the Spanish airport operator (Commission Decision 2000/521/EC OJ L 20, 18/08/2000) were also targets of investigations for similar practices with identical outcomes. A feature that was common in all of these landing charges cases was that they did not discriminate directly on grounds of nationality although they were clearly intended to. Moreover, although all of the discount regimes investigated by the Commission were applicable to any European Union carrier, in practice they benefited the national airlines.

Another form of discriminatory abuse by airports involved the vertical relations between the airport operator and the providers of groundhandling services in the downstream market. In Aéroports de Paris ("ADP") v Commission, it was decided that the fees charged by ADP for certain types of groundhandling services at Orly and Charles de Gaulle airports, in particular catering, aircraft cleaning and cargo services, were fixed at discriminatory rates. Following the decision in "Tetra Pak II" (Case T-83/91 [1993] ECR II-755), ADP argued that it could not be guilty of an abuse because the fees at issue, affected competition in markets in which it

was not involved (airlines and groundhandling services). The General Court rejected the appellant's interpretation of the case law on the grounds that it was only when the abuse is found in a market other than that dominated by the undertaking, that Article 102 could not be applied (paragragh 164). According to the Court, this was not the case, as the ADP's conduct in charging discriminatory fees affected the groundhandling market and, indirectly, the competition between airlines. In addition, it had originated in the market of airports management, where the ADP was dominant because it had been granted a statutory monopoly.

An interesting aspect of the case that was not taken into account in either the Commission or the ECJ´s decision, was that the groundhandling company that benefited from the favourable fees was a subsidiary of the main French airline (also publicly-owned at the time) which calls into question whether it was not another case of discrimination on national grounds.

3.4 The efficacy of EU Competition Law in dealing with dominance in the airport services market

The purpose of this study is to analyse how EU Competition Law can be used to tackle the abuse of dominance in the airport sector. By looking at the case law we found that there has not been a significant level of prosecutions by the European institutions. We could not find evidence that this fact is directly related to the many challenges faced by the enforcement of EU Competition Law, namely the complex economic conditions of the market, or the wide range of governance structures and regulatory frameworks that can be found in the Member States. However, this heterogeneous environment may be ideally suited to the expansion of the enforcement of EU Competition Law for the following reasons:

It is the very essence of competition law that it is horizontally applied to most markets. In other words, the competition provisions are of a sufficiently broad scope to deal with the abuse of an undertaking that possesses substantial market power. Though this can be problematic at times (e.g. it may be in conflict with the social goals of the network industries), it is important for the EU institutions to strike a balance between the *ex ante* use of sector-specific regulation and the *ex post* intervention of competition law;

The pervasiveness of the competition rules allows them to overcome the asymmetries that exist between Member States, since the economic regulations of the airports take on different forms and degrees. Some countries have designed their infrastructure to rely primarily on competition law (e.g. United Kingdom) while others have built their airport system around a single state-owned company with prices fixed by decree (Spain, Portugal, etc). This fact is of particular significance at a time when Brussels is implementing the Directive 2009/12/EC that is intended to lay down the basic principles for the way the main European airports should levy their charges. By adopting common rules, the legal barriers to airport competition in the sector may be reduced and more suitable conditions arise for the enforcement of competition law;

Another positive effect of the general application of EU Competition Law, which must be linked to the practice of the European Courts in cases like Deutsche Telekom, is that the competition provisions can be enforced in situations where the national regulators cannot be trusted to act in the interests of the market or avoid being subject to political influence[30]. This is in line with the jurisprudence on abuse of dominance where it was found that most anti-competitive conduct consisted of discriminatory measures by publicly-owned airports that tried to favour the national airlines[31]. It is clear that relying on state ownership to deal with market power has not been as effective as relying on economic regulation. The application of the competition rules to these cases has been effective in changing these discount practices in the EU airports.

Hence, it is clear that EU Competition Law is an appropriate tool to deal with issues arising from the existence of dominance in the airport sector. Owing to the limited scope of this study, it is impossible to go further in analysing how far regulations should be applied in this sector. However, it can be generally agreed that competition is always preferable to regulation and the reasons for this have been well summarized by Baldwin and Cave (1999):

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[30] Monti (2008) points out that the application of EU Competition Law to oppose a national regulatory regime may be justifiable to correct the weakness of a regulator but this should be a provisional policy that only remains in force until the national regulator becomes reliable enough to ensure that the competition rules show a full awareness of the sector-specific regulations.

[31] This was comparable to an extensive list of cases of State Aid involving airports and airlines that did not constitute abuses under Article 102.

"(F)irms have the strongest incentives to give customers what they want in terms of price and quality of service when they are in competition. In such circumstances firms also have a strong incentive to gain a temporary advantage over rivals through innovation and the development of new services".

It is suggested that this same exercise could be carried out in the other areas of EU Competition Law (Articles 101 and 107) to find out how compliant the sector has been to the competition rules. In addition, more research could be devoted to drawing up a market test that is able to determine the acceptable degree of market power in the airport sector to release it from the burden of price regulation.

Conclusion

The European airport sector is an industry that is in constant development. It has witnessed the first attempts at privatization and the emergence of small airports as bases for a low cost revolution, so that it can now consider itself to be a competitive environment. However, the question of whether airports are natural monopolies or may face real competition has still not been settled.

There are certainly a number of special features about the sector and some degree of competition exists, although this is affected by the disparity between the policies of the Member States; some countries rely on a well- planned policy to give priority to competition whereas most have long adopted a policy of local or national monopolies. There is a widespread lack of any price regulation as well as the predominance of questionable regulatory methods and the absence of independent regulators. Congestion and public subsidies are also restrictive factors, although the Commission has taken steps to try to level the playing field in the sector. It has achieved this by first adopting rules for the allocation of capacity to airlines (slots), then by regulating access to the ground-handling market and more recently, by laying down the minimum requirements for the fixing of charges.

In this world, EU Competition Law stands as a universal mechanism[32] to protect the airport's customers from the abuse of its dominant position, even if it means overruling national laws. So far EU Competition Law has been effective in supporting any necessary prosecution but it has also been very restricted. It is not clear what has caused this lack of enforcement. One possible reason is that airports do not explore their substantial market power as much as they could and this may be due to the fact that the biggest and most congested airports benefit too much from their commercial activities and thus lack any incentive to exploit their customers by means of excessive pricing. On the other hand, the LCCs have shown that airport switching can be a credible threat and their long-term contracts are a strategic attempt to reduce this and avoid risks by improving their vertical relations with the infrastructure provider.

Nonetheless, there is a general agreement that competition is a "first best" policy that provides the firms with the strongest incentives to give consumers what they need in terms of price and quality (Baldwin and Cave, 1999). In addition, there are many factors that suggest that competition law should be enforced and encouraged to deter anti-competitive conduct in the airport sector: EU Competition Law is applied to all the Member States on a similar basis and owing to its pervasive nature is designed to be applicable to any market. Moreover, it can act as a good political instrument against a regulator that has been acting in the interests of the national undertaking rather than the goals pursued by the European Union and ultimately the consumers. Finally, EU Competition Law can form part of a liberalization process, by reducing the scope of regulation until it becomes negligible.

[32] As long as the airport falls under the conditions of liability for law enforcement.

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Appendix

EU Cases

- Case N. IV/M. 1035 Hochtief/Aer Rianta/Düsseldorf
- Case N. IV/M. 786 Birmingham International Airport
- Case N. COMP/M.5648 - OTPP/ Macquarie/ Bristol Airport
- Case N. COMP/M.5652 AirportGIP/ Gatwick Airport
- Case 27/76, United Brands v Commission [1978] ECR 207
- Case 85/76 Hoffmann-La Roche v Commission [1979] ECR 461
- Case 322/81 Nederlandsche Banden Industrie Michelin v Commission (Michelin I) [1983] ECR 3461
- Case 311/84 Télémarketing v SA Compagnie luxembourgeoise de télédiffusion and Information publicité Benelux (Telemarketing) [1985] ECR 3261
- Case T-83/91 Tetra Pak v Commission (Tetra Pak II) [1993] ECR II-755
- Case C-18/93 Corsica Ferries Italia Srl v Corpo dei Piloti del Porto di Genova (Corsica Ferries II) [1994] ECR I-1783
- Case T-336/07, Telefónica and Telefónica de España v. Commission, 2007 O.J. (C 269) 55 and Case T-398/07, Spain v. Commission, 2008 O.J. (C 8) 17
- Cases T-125 & 127/97 (Joined) Coca-Cola v Commission [2000] ECR II-1733
- Case T-128/98 Aéroports de Paris v Commission [2000] ECR II-3929

- Case C-163/99, Portugal v Commission [2001] ECR 1-2613
- Commission Decision 1999/199/EC OJ L 69, 16/03/1999
- Commission Decision 1999/198/EC OJ L 69, 16/03/1999
- Commission Decision 2000/521/EC OJ L 20, 18/08/2000
- Commission Decision 2003/707/EC, OJ 2003 L263/9; Upheld in Case T-271/03 Deutsche Telekom AG v Commission, C 128, 29, 24/05/2008.
- Commission Decision N. 2004/393/EC OJ 137/1, 12/02/2004

Legislation

- Council Regulation (EC) N. 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty
- Council Regulation (EC) N. 139/2004 of 20 January 2004 on the control of concentrations between undertakings
- Council Directive 96/67/EC of 15 October 1996 on access to the groundhandling market at Community airports
- Council Directive 2009/12/EC of the European Parliament and of the Council of 11 March 2009 on airport charges
- Community guidelines on financing of airports and start-up aid to airlines departing from regional airports (OJ C 312 09/12/2005)
- Commission notice on the definition of relevant market for the purposes of Community competition law (OJ C 372 of 09.12.1997)
- Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings" (OJ C 45 of 24.2.2009)
- Guidelines on the effect on trade between Member States (OJ C101/7 27/04/2004)
- Regulation (EC) N. 1794/2006 of 6 December 2006 laying down a common charging scheme for air navigation services