

## **Open Access Repository**

www.ssoar.info

# Airports and Low Cost carriers in the Era of Airline Deregulation: the Sicilian case

Carlucci, Fabio; Cirà, Andrea

Veröffentlichungsversion / Published Version Arbeitspapier / working paper

#### **Empfohlene Zitierung / Suggested Citation:**

Carlucci, F., & Cirà, A. (2009). *Airports and Low Cost carriers in the Era of Airline Deregulation: the Sicilian case.* (ZERP-Arbeitspapier, 4). Bremen: Zentrum für Europäische Rechtspolitik (ZERP) an der Universität Bremen. <a href="https://nbn-resolving.org/urn:nbn:de:0168-ssoar-62533-8">https://nbn-resolving.org/urn:nbn:de:0168-ssoar-62533-8</a>

#### Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.



#### Terms of use:

This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.

By using this particular document, you accept the above-stated conditions of use.



### ZENTRUM FÜR EUROPÄISCHE RECHTSPOLITIK

Universität Bremen



Fabio Carlucci / Andrea Cirà

Airports and Low Cost carriers in the Era of Airline Deregulation: the Sicilian case

The whole paper has been jointly discussed and developed by the authors. Nevertheless, sections 2, 3 and 4 are by Fabio Carlucci, sections 1, 5 and 6 are by Andrea Cirà.

### **IMPRESSUM**

Herausgeber/ Zentrum für Europäische

Redaktion/ Rechtspolitik

Vertrieb: Universität Bremen

Universitätsallee, GW 1

28359 Bremen

Nachdruck: Nur mit Genehmigung des

Herausgebers

ISSN (Internet): 1868-7520

Bremen, im Juni 2009

## Inhaltsverzeichnis

Abstract	1
1. Introduction	2
2. The air transport liberalization process and management of airports in Italy	3
3. The regulation and deregulation of airport infrastructure	4
4. The impact of low cost airlines on the organization of the terminals	6
5. The liberalization effects in an Italian region: the Sicilian airport system	10
6. Policy implication and conclusion	12
References	14

#### **Abstract**

Over the last few years, the European liberalization and deregulation processes have involved all aspects of the air transport activity, producing significant change to the supply side of the air transport market. All the European air companies have tried to expand their market share, efficiency, and above all, they have tried to specialise their activity focusing on specific demand targets. As a consequence, even airports have had to change their management activity, increasingly modifying their strategy to attract new carriers and plan new goals, such as, for example, increasing accessibility.

The aim of this work is to analyze the Italian air transport market after the deregulation process, and its implications for airports, in particular in peripheral areas such as Sicily. This paper is set out as follows. After the introduction, the second section illustrates the consequences of airline liberalization on the Italian market. The third part describes the regulation of airports. In the fourth section, we examine the influence of the low-cost experience on airport competition. The study ends with a look at Sicilian airports. The conclusions provide indications useful to authorities who need to make decisions regarding the enhancement or construction of new regional airport infrastructures.

#### 1. Introduction

Public intervention in the transport sector is a widely debated theme in the literature of economics. The frequent occurrence of competitive situations incompatible with the requirements of an efficient allocation process for economic resources caused by a high degree of concentration in the industrial market, the social relevance of the investments that need to be made, the widespread presence of externalities, the inefficiency of the market structure, which, in turn implies "low efficiency-oriented" industry, are the main causes contributing to greater public sector involvement in the transport sector.

Since the early days, the European air transport sector has always been subject to tight control from the economic and social points of view. In other words, for economic, political and social reasons, European air transport has developed within a monopolistic and heavily regulated system, with the national companies enjoying a high degree of government protection.

Only in the late 80's did Europe see a process of gradual liberalization<sup>1</sup> which began to allow the operation of competitive mechanisms in terms of the contestable market, according to the theoretical approach developed by Baumol, Panzar and Willig (1982) and on which the deregulation of U.S. air transport has been based.

In Europe, the will to benefit from the great potential of the free market has led, on one hand, to a trend towards a progressive reduction of "red tape", thus favouring the free interplay of economic forces, while on the other hand, there is greater involvement of venture capital in activities predominantly carried out by public companies.

The deregulation of the aviation market is a process that involves the area of travel itself, mainly the carriers, the area concerning slot allocations<sup>2</sup> and airport charges<sup>3</sup>, as well as the ground handling market<sup>4</sup>. Indeed the "regulatory asymmetry" between infrastructure activity and flight activity in the strict

The "deregulation packages" were released by the European Commission in 1987, 1990, and 1992.

In the European Union this area is disciplined by Regulation EC No 793/2004 of the European Parliament and of the Council of 21 April 2004 amending Council and Regulation (EEC) No 95/93 on common rules for the allocation of slots at Community airports, OJ L 138, 30.04.2004, p. 50-60.

In the EU this area is disciplined by Directive 2009/12/EC of the European Parliament and of the Council of 11 March 2009, OJ L 70, 14.03.2009, p. 11-16.

In EU this area is disciplined by Council Directive 96/67/CE, O J L 272, 25.10.1996, p. 36-45.

sense, may jeopardize the achievement of the main aim of deregulation, which entailed developments in air transport and a higher degree of economic efficiency. For this reason, airport facilities in Europe have also been affected by processes of deregulation and privatization with different degrees of dependence on local situations.

In summary, the deregulation of air transport has increased airline competition and placed airports in a competitive environment (Barros, Dieke, 2007). Here, we aim to analyze the case of the Sicilian airport system.

## 2. The air transport liberalization process and management of airports in Italy

In the air transport sector, travel activities can be regulated according to three principles, based on differing interpretations of the relationship between air space and the national territory. In fact, international air traffic can be regulated by multilateral national agreements, bilateral national agreements and bilateral agreements at regional level.

Multilateralism is based on the "open skies" principle whereby the legal status of the skies can be equated to that of international waters (Turco Bulgherini, 1984), in which shipping is free.

"National Bilateralism" is the practice whereby the negotiation concerning air transport should take place between pairs of States, where the principle of full sovereignty of the State prevails over the airspace above its territory.

With the development of new economic areas and supranational policies it is now possible to draw up agreements not only between individual countries, but also at a broader level. In Italy, the process of liberalization of air transport has followed the same route as Europe's, but even if domestic legislation has substantially acknowledged the provisions of the European Union, the growth of a competitive market has been slowed down due to the paucity of private capital in the airline industry.

In January 2009 the privatization process of the main national carrier, Alitalia, was completed. It should be noted that in the field of airports, full privatization is not easily achievable, and particular problems concerning airport management and plant capacity allocation mechanisms come to light in the field of air transport infrastructures.

At the moment, the Italian legal framework envisages different management patterns for the airport sector. These are the "total management" pattern where, upon payment of a fee, the aerodrome and air terminal, in other words

the total airport infrastructure, are entrusted to a dealer for a period of time not exceeding forty years. In this case, the concessionaire is responsible for ground handling, the construction of new infrastructures and the ordinary and extraordinary maintenance of the existing ones. The second kind of airport infrastructure management pattern, known as "partial management", makes the public administration responsible for the management of the infrastructure, while the air station and the land side services are entrusted to a concessionaire.

Finally, in "direct management" the air carrier deals with the ground handling directly, while the public administration handles all the activities concerning new buildings and the maintenance of airport facilities.<sup>5</sup>

Of course, the total management contract is the most attractive for the airport handler; for this reason, in view of a more open market; we can assume that at national level other forms of management will gradually disappear.

Traditionally, Italy's airport infrastructures have been considered as public interest goods, and have therefore been entrusted to companies whose capital is largely owned by the State or local authorities, with heavy consequences on financial and operational performance.

### 3. The regulation and deregulation of airport infrastructure

Transport infrastructures needs to be regulated not only to avoid market failures, but also taking into account political and social considerations.

Sometimes, the State may act in response to requests for protection coming from groups with an interest (such as enterprises, consumers, etc.) which push the Government to adopt specific measures.

From a regulatory point of view, the notion of essential facility falls within the scope of article 82 EC Treaty, which generally pre-empts the possibility of abuse of a dominant position in all situations where you can "limit production, or market opportunities, damaging the consumers".

In Italy, the aviation authorities identify four types of players that interact in the aviation sector and which may be subject to a system of privatization and liberalization: the airport concessionaire, the air carrier, also when it performs ground-handling services, and finally, air traffic control and supervision (ENAC). Flight navigation control is not included in this list, because it is considered that this activity must remain under the direct public control of a na-

4

Law 537 of 24 December 1993, concerning "Integrations to Public Finance"; Ministerial Decree 521 (Minister for Transport and Navigation) of 12/11/1997, implementing law of 24/12/1993 no. 537; Directive of Minister for Transport of 12/9/2007.

tional body (ENAV) for safety reasons.

For the regulation of air transport terminals, different solutions have been identified, ranging from direct management and administration to private management that can be carried according to specific taxation and administrative regulations ordered by the public authority.

In Italy, direct management is the formula used for most airports. After an initial phase when management was entrusted to the Ministry of Transport, it was preferred to transfer these competencies over time to specially created public companies which were later transformed into joint stock companies, the majority of whose capital is wholly, or partly, controlled by the State or local authorities.

Although airport privatization is now common in Europe, very few airports in Europe's peripheral areas are private (Halpern, Pagliari, 2007).

Nevertheless, the air transport sector deregulation process could lead to an improvement in the use of public and private resources if certain basic conditions are met.

Firstly, we must outline that the objectives of the deregulation of business travel are different from those pursued by the recovery of the market economy in the airport sector, particularly in the field of infrastructure investments. In this context, indeed, the processes of deregulation must create the necessary conditions so that private companies can be persuaded to invest their capital in the implementation and management of airports.

Besides the presence of a current or potential demand, the construction or enlargement of an airport also requires a real prospect of investment recovery comparable in terms of timing and risks to the alternatives offered by the financial market. To this end, the system of rules imposed by the State constitutes a basic element on which the profitability of investments may depend, and therefore acts as a catalyst for new capital needed by the infrastructure supporting aviation activities.

Therefore, since air transport requires a huge amount of capital to construct the infrastructure, upgrading the market economy through deregulation can only be achieved by attracting private capital for projects to develop new airports or the expansion of those already in operation.

## 4. The impact of low cost airlines on the organization of the terminals

Analyzing the territorial distribution of airports in Italy, we can see how the location of these infrastructures has been dictated by military requirements or the desire to provide an airport site for all urban centres.

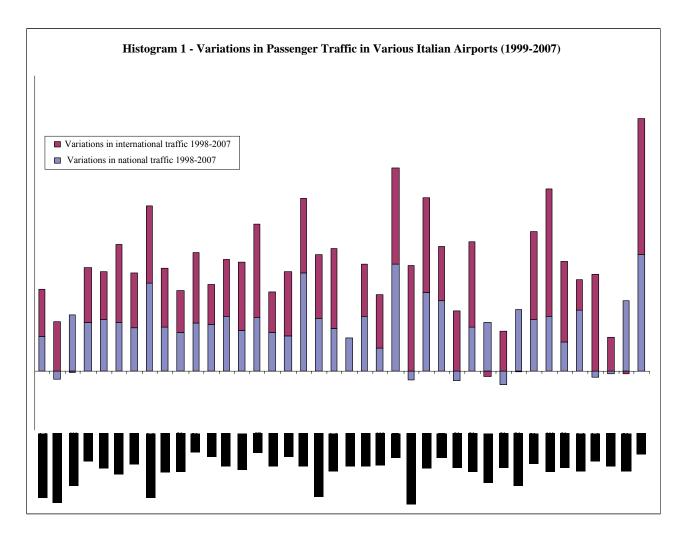
Transformation has occurred relatively recently in the air transport sector, from an economic, regulatory and environmental point of view, and has revealed new needs regarding both the territorial distribution of airports and infrastructure capacity. The qualitative and quantitative adjustment of airport capacity has only occasionally led to changes to the infrastructures with a view to creating new sites or to a substantial expansion of existing ones.

The reduction of administrative burdens in the air transport market has shown itself to be an innovative element consisting of a strong interest by airport companies in meeting the needs of airline companies for services offered by the airports they manage. Recently, we have noticed that most intercontinental airport sites have adopted management strategies aimed at substantially matching the supply of services to the needs of the major international carriers, where regional airports tend to reinforce relationships with low cost carriers through commercial partnerships.

In this area we have to include the theme of the role of airport infrastructures in supporting local economies, and in particular in supporting the economic integration of peripheral areas. The traffic of goods and passengers is certainly a factor that acts positively on competitiveness and local development, improving economic, social and territorial cohesion.

The deregulation of air transport in the EU has enabled the birth of new carriers, some of which have developed their own networks concentrating on some airports which, even in comparison with the main currents of traffic, have the advantage of a good degree of capacity still available and an excellent potential in terms of catchment areas. In this regard, it should be outlined that the increase in traffic in the peripheral airports has not entailed the reduction of the flow of goods and passengers to and from the main airports. In other words, the strategies adopted by low cost carriers have shown, also in Italy, the potential of the air transport market, which is not exploited because of the lack of competitiveness in comparison with modes of surface transport.

The traffic data (Histogram 1) for the period from 1999, when the low-cost market was just starting out, to 2007, the year in which the phenomenon became well established, show that the smaller airports made the most significant increase.



Data Source: ENAC (Ente Nazionale per l'Aviazione Civile)

A further confirmation of the role played by the low cost supply in enhancing the secondary airport phenomenon comes from an analysis (table 1) of the percentage composition of the national airport traffic served prevalently by liner services.

Table 1 - Figures for the Air Traffic Composition for Various Italian Airports (Years 2004 and 2007)

ROME CIAMPINO BERGAMO ORIO AL SERIO         2,540,854         2,298,457         90.46         4,933,487         4,858,991         98.49         8.03           BERGAMO ORIO AL SERIO         3,312,550         2,172,702         65.59         5,226,340         4,431,414         84.79         19.20           ROME FIUMICINO         27,608,482         795,124         2.88         29,726,023         2,523,739         8.49         5.61           PISA         2,013,293         927,323         46.06         3,002,621         1,854,719         61.77         15.71           VENICE         5,838,008         601,899         10.31         6,268,649         1,542,715         24.61         14.30           TREVISO         884,268         808,133         91.39         1,328,318         1,292,985         97.34         5.95           CATANIA         5,075,433         709,038         13.97         5,370,411         1,692,754         31.52         17.75           MILAN LINATE         8,944,991         867,664         9.70         9,692,652         1,111,747         11.47         1.77           PALES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI </th <th>AIRPORT</th> <th>TOTAL PASSENGE RS 2004</th> <th>LOW COST PASSENGERS 2004</th> <th>LOW COST % 2004</th> <th>TOTAL PASSENGERS 2007</th> <th>LOW COST PASSENGE RS 2007</th> <th>LOW COST % 2007</th> <th>LOW COST Δ % 2004- 2007</th>	AIRPORT	TOTAL PASSENGE RS 2004	LOW COST PASSENGERS 2004	LOW COST % 2004	TOTAL PASSENGERS 2007	LOW COST PASSENGE RS 2007	LOW COST % 2007	LOW COST Δ % 2004- 2007
ROME FIUMICINO         27,608,482         795,124         2.88         29,726,023         2,523,739         8.49         5.61           PISA         2,013,293         927,323         46.06         3,002,621         1,854,719         61.77         15.71           VENICE         5,838,008         601,899         10.31         6,268,649         1,542,715         24.61         14.30           TREVISO         884,268         808,133         91.39         1,328,318         1,292,985         97.34         5.95           CATANIA         5,075,433         709,038         13.97         5,370,411         1,692,754         31.52         17.55           MILAN LINATE         8,944,991         867,664         9.70         9,692,652         1,111,747         11.47         1.77           PALERMO         3,758,285         444,981         11.84         4,246,555         1,278,638         30.11         18.27           NAPLES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386 </td <td></td> <td>2,540,854</td> <td>2,298,457</td> <td>90.46</td> <td>4,933,487</td> <td>4,858,991</td> <td>98.49</td> <td>8.03</td>		2,540,854	2,298,457	90.46	4,933,487	4,858,991	98.49	8.03
PISA         2,013,293         927,323         46.06         3,002,621         1,854,719         61.77         15.71           VENICE         5,838,008         601,899         10.31         6,268,649         1,542,715         24.61         14.30           TREVISO         884,268         808,133         91.39         1,328,318         1,292,985         97.34         5.95           CATANIA         5,075,433         709,038         13.97         5,370,411         1,692,754         31.52         17.55           MILAN LINATE         8,944,991         867,664         9.70         9,692,652         1,111,747         11.47         1.77           PALERMO         3,758,285         444,981         11.84         4,246,555         1,278,638         30.11         18.27           NAPLES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386         34.83         1,068,015         489,578         45.84         11.01           MILAN MALPEINSA         18,421,598         152,899<	SERIO	3,312,550	2,172,702	65.59	5,226,340	4,431,414	84.79	19.20
VENICE         5,838,008         601,899         10.31         6,268,649         1,542,715         24.61         14.30           TREVISO         884,268         808,133         91.39         1,328,318         1,292,985         97.34         5.95           CATANIA         5,075,433         709,038         13.97         5,370,411         1,692,754         31.52         17.55           MILAN LINATE         8,944,991         867,664         9.70         9,692,652         1,111,747         11.47         1.77           PALERMO         3,758,285         444,981         11.84         4,246,555         1,278,638         30.11         18.27           NAPLES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386         34.83         1,068,015         489,578         45.84         11.01           MILAN MALPENSA         18,421,598         152,899         0.83         21,619,797         1,965,240         9.09         8.26           BOLOGNA         2,867,315         125,202<	ROME FIUMICINO	27,608,482	795,124	2.88	29,726,023	2,523,739	8.49	5.61
TREVISO         884,268         808,133         91.39         1,328,318         1,292,985         97.34         5.95           CATANIA         5,075,433         709,038         13.97         5,370,411         1,692,754         31.52         17.55           MILAN LINATE         8,944,991         867,664         9.70         9,692,652         1,111,747         11.47         1.77           PALERMO         3,758,285         444,981         11.84         4,246,555         1,278,638         30.11         18.27           NAPLES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386         34.83         1,068,015         489,578         45.84         11.01           MILAN MALPENSA         18,421,598         152,899         0.83         21,619,797         1,965,240         9.09         8.26           BOLOGNA         2,867,315         125,302         4.37         3,954,544         463,077         11.71         7.34           OLBIA         1,722,523         222,033	PISA	2,013,293	927,323	46.06	3,002,621	1,854,719	61.77	15.71
CATANIA         5,075,433         709,038         13.97         5,370,411         1,692,754         31.52         17.55           MILAN LINATE         8,944,991         867,664         9.70         9,692,652         1,111,747         11.47         1.77           PALERMO         3,758,285         444,981         11.84         4,246,555         1,278,638         30.11         18.27           NAPLES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386         34.83         1,068,015         489,578         45.84         11.01           MILAN MALPENSA         18,421,598         152,899         0.83         21,619,797         1,965,240         9.09         8.26           BOLOGNA         2,867,315         125,302         4.37         3,954,544         463,077         11.71         7.34           OLBIA         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661	VENICE	5,838,008	601,899	10.31	6,268,649	1,542,715	24.61	14.30
MILAN LINATE         8,944,991         867,664         9.70         9,692,652         1,111,747         11.47         1.77           PALERMO         3,758,285         444,981         11.84         4,246,555         1,278,638         30.11         18.27           NAPLES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386         34.83         1,068,015         489,578         45.84         11.01           MILAN MALPENSA         18,421,598         152,899         0.83         21,619,797         1,965,240         9.09         8.26           BOLOGNA         2,867,315         125,302         4.37         3,954,544         463,077         11.71         7.34           OLBIA         1,532,717         125,223         8.17         1,761,888         387,792         22.01         13.84           BARI         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661 <t< td=""><td>TREVISO</td><td>884,268</td><td>808,133</td><td>91.39</td><td>1,328,318</td><td>1,292,985</td><td>97.34</td><td>5.95</td></t<>	TREVISO	884,268	808,133	91.39	1,328,318	1,292,985	97.34	5.95
PALERMO         3,758,285         444,981         11.84         4,246,555         1,278,638         30.11         18.27           NAPLES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386         34.83         1,068,015         489,578         45.84         11.01           MILAN MALPENSA         18,421,598         152,899         0.83         21,619,797         1,965,240         9.09         8.26           BOLOGNA         2,867,315         125,302         4.37         3,954,544         463,077         11.71         7.34           OLBIA         1,532,717         125,223         8.17         1,761,888         387,792         22.01         13.84           BARI         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661         9.48         3,300,378         319,807         9.69         0.21           BRESCIA         339,034         175,009         51.62 <td>CATANIA</td> <td>5,075,433</td> <td>709,038</td> <td>13.97</td> <td>5,370,411</td> <td>1,692,754</td> <td>31.52</td> <td>17.55</td>	CATANIA	5,075,433	709,038	13.97	5,370,411	1,692,754	31.52	17.55
NAPLES         4,608,083         554,352         12.03         5,083,675         1,222,624         24.05         12.02           FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386         34.83         1,068,015         489,578         45.84         11.01           MILAN MALPENSA         18,421,598         152,899         0.83         21,619,797         1,965,240         9.09         8.26           BOLOGNA         2,867,315         125,302         4.37         3,954,544         463,077         11.71         7.34           OLBIA         1,532,717         125,223         8.17         1,761,888         387,792         22.01         13.84           BARI         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661         9.48         3,300,378         319,807         9.69         0.21           BRESCIA         339,034         175,009         51.62         225,470         148,697         65.95         14.33           BRINDISI         753,706         156,243         20.73	MILAN LINATE	8,944,991	867,664	9.70	9,692,652	1,111,747	11.47	1.77
FORLI         808,031         517,705         64.07         621,228         588,551         94.74         30.67           ALGHERO         991,633         345,386         34.83         1,068,015         489,578         45.84         11.01           MILAN MALPENSA         18,421,598         152,899         0.83         21,619,797         1,965,240         9.09         8.26           BOLOGNA         2,867,315         125,302         4.37         3,954,544         463,077         11.71         7.34           OLBIA         1,532,717         125,223         8.17         1,761,888         387,792         22.01         13.84           BARI         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661         9.48         3,300,378         319,807         9.69         0.21           BRESCIA         339,034         175,009         51.62         225,470         148,697         65.95         14.33           BRINDISI         753,706         156,243         20.73         817,312         249,607         30.54         9.81           PESCARA         329,711         175,934         53.36	PALERMO	3,758,285	444,981	11.84	4,246,555	1,278,638	30.11	18.27
ALGHERO 991,633 345,386 34.83 1,068,015 489,578 45.84 11.01 MILAN MALPENSA 18,421,598 152,899 0.83 21,619,797 1,965,240 9.09 8.26 BOLOGNA 2,867,315 125,302 4.37 3,954,544 463,077 11.71 7.34 OLBIA 1,532,717 125,223 8.17 1,761,888 387,792 22.01 13.84 BARI 1,722,523 222,033 12.89 1,951,936 507,503 26 13.11 TURIN 2,612,459 247,661 9.48 3,300,378 319,807 9.69 0.21 BRESCIA 339,034 175,009 51.62 225,470 148,697 65.95 14.33 BRINDISI 753,706 156,243 20.73 817,312 249,607 30.54 9.81 PESCARA 329,711 175,934 53.36 333,036 177,575 53.32 -0.04 GENOA 1,041,000 148,655 14.28 1,070,448 176,624 16.5 2.22 TRIESTE 638,529 111,040 17.39 665,426 123,037 18.49 1.10 ANCONA 497,306 105,329 21.18 469,700 112,446 23.94 2.76 CAGLIARI 2,271,829 0 0.00 2,464,084 156,223 6.34 6.34 VERONA 2,612,459 32,917 1.26 2,933,672 208,877 7.12 5.86 LAMEZIA TERME 1,265,153 0 0.00 1,341,936 226,921 16.91 16.91	NAPLES	4,608,083	554,352	12.03	5,083,675	1,222,624	24.05	12.02
MILAN MALPENSA         18,421,598         152,899         0.83         21,619,797         1,965,240         9.09         8.26           BOLOGNA         2,867,315         125,302         4.37         3,954,544         463,077         11.71         7.34           OLBIA         1,532,717         125,223         8.17         1,761,888         387,792         22.01         13.84           BARI         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661         9.48         3,300,378         319,807         9.69         0.21           BRESCIA         339,034         175,009         51.62         225,470         148,697         65.95         14.33           BRINDISI         753,706         156,243         20.73         817,312         249,607         30.54         9.81           PESCARA         329,711         175,934         53.36         333,036         177,575         53.32         -0.04           GENOA         1,041,000         148,655         14.28         1,070,448         176,624         16.5         2.22           TRIESTE         638,529         111,040         17.39	FORLI	808,031	517,705	64.07	621,228	588,551	94.74	30.67
BOLOGNA         2,867,315         125,302         4.37         3,954,544         463,077         11.71         7.34           OLBIA         1,532,717         125,223         8.17         1,761,888         387,792         22.01         13.84           BARI         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661         9.48         3,300,378         319,807         9.69         0.21           BRESCIA         339,034         175,009         51.62         225,470         148,697         65.95         14.33           BRINDISI         753,706         156,243         20.73         817,312         249,607         30.54         9.81           PESCARA         329,711         175,934         53.36         333,036         177,575         53.32         -0.04           GENOA         1,041,000         148,655         14.28         1,070,448         176,624         16.5         2.22           TRIESTE         638,529         111,040         17.39         665,426         123,037         18.49         1.10           ANCONA         497,306         105,329         21.18         469,700 <td>ALGHERO</td> <td>991,633</td> <td>345,386</td> <td>34.83</td> <td>1,068,015</td> <td>489,578</td> <td>45.84</td> <td>11.01</td>	ALGHERO	991,633	345,386	34.83	1,068,015	489,578	45.84	11.01
OLBIA         1,532,717         125,223         8.17         1,761,888         387,792         22.01         13.84           BARI         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661         9.48         3,300,378         319,807         9.69         0.21           BRESCIA         339,034         175,009         51.62         225,470         148,697         65.95         14.33           BRINDISI         753,706         156,243         20.73         817,312         249,607         30.54         9.81           PESCARA         329,711         175,934         53.36         333,036         177,575         53.32         -0.04           GENOA         1,041,000         148,655         14.28         1,070,448         176,624         16.5         2.22           TRIESTE         638,529         111,040         17.39         665,426         123,037         18.49         1.10           ANCONA         497,306         105,329         21.18         469,700         112,446         23.94         2.76           CAGLIARI         2,271,829         0         0.00         2,464,084	MILAN MALPENSA	18,421,598	152,899	0.83	21,619,797	1,965,240	9.09	8.26
BARI         1,722,523         222,033         12.89         1,951,936         507,503         26         13.11           TURIN         2,612,459         247,661         9.48         3,300,378         319,807         9.69         0.21           BRESCIA         339,034         175,009         51.62         225,470         148,697         65.95         14.33           BRINDISI         753,706         156,243         20.73         817,312         249,607         30.54         9.81           PESCARA         329,711         175,934         53.36         333,036         177,575         53.32         -0.04           GENOA         1,041,000         148,655         14.28         1,070,448         176,624         16.5         2.22           TRIESTE         638,529         111,040         17.39         665,426         123,037         18.49         1.10           ANCONA         497,306         105,329         21.18         469,700         112,446         23.94         2.76           CAGLIARI         2,271,829         0         0.00         2,464,084         156,223         6.34         6.34           VERONA         2,612,459         32,917         1.26         2,933,672	BOLOGNA	2,867,315	125,302	4.37	3,954,544	463,077	11.71	7.34
TURIN         2,612,459         247,661         9.48         3,300,378         319,807         9.69         0.21           BRESCIA         339,034         175,009         51.62         225,470         148,697         65.95         14.33           BRINDISI         753,706         156,243         20.73         817,312         249,607         30.54         9.81           PESCARA         329,711         175,934         53.36         333,036         177,575         53.32         -0.04           GENOA         1,041,000         148,655         14.28         1,070,448         176,624         16.5         2.22           TRIESTE         638,529         111,040         17.39         665,426         123,037         18.49         1.10           ANCONA         497,306         105,329         21.18         469,700         112,446         23.94         2.76           CAGLIARI         2,271,829         0         0.00         2,464,084         156,223         6.34         6.34           VERONA         2,612,459         32,917         1.26         2,933,672         208,877         7.12         5.86           LAMEZIA TERME         1,265,153         0         0.00         1,341,936	OLBIA	1,532,717	125,223	8.17	1,761,888	387,792	22.01	13.84
BRESCIA 339,034 175,009 51.62 225,470 148,697 65.95 14.33 BRINDISI 753,706 156,243 20.73 817,312 249,607 30.54 9.81 PESCARA 329,711 175,934 53.36 333,036 177,575 53.32 -0.04 GENOA 1,041,000 148,655 14.28 1,070,448 176,624 16.5 2.22 TRIESTE 638,529 111,040 17.39 665,426 123,037 18.49 1.10 ANCONA 497,306 105,329 21.18 469,700 112,446 23.94 2.76 CAGLIARI 2,271,829 0 0.00 2,464,084 156,223 6.34 6.34 VERONA 2,612,459 32,917 1.26 2,933,672 208,877 7.12 5.86 LAMEZIA TERME 1,265,153 0 0.00 1,341,936 226,921 16.91 16.91	BARI	1,722,523	222,033	12.89	1,951,936	507,503	26	13.11
BRINDISI         753,706         156,243         20.73         817,312         249,607         30.54         9.81           PESCARA         329,711         175,934         53.36         333,036         177,575         53.32         -0.04           GENOA         1,041,000         148,655         14.28         1,070,448         176,624         16.5         2.22           TRIESTE         638,529         111,040         17.39         665,426         123,037         18.49         1.10           ANCONA         497,306         105,329         21.18         469,700         112,446         23.94         2.76           CAGLIARI         2,271,829         0         0.00         2,464,084         156,223         6.34         6.34           VERONA         2,612,459         32,917         1.26         2,933,672         208,877         7.12         5.86           LAMEZIA TERME         1,265,153         0         0.00         1,341,936         226,921         16.91         16.91	TURIN	2,612,459	247,661	9.48	3,300,378	319,807	9.69	0.21
PESCARA         329,711         175,934         53.36         333,036         177,575         53.32         -0.04           GENOA         1,041,000         148,655         14.28         1,070,448         176,624         16.5         2.22           TRIESTE         638,529         111,040         17.39         665,426         123,037         18.49         1.10           ANCONA         497,306         105,329         21.18         469,700         112,446         23.94         2.76           CAGLIARI         2,271,829         0         0.00         2,464,084         156,223         6.34         6.34           VERONA         2,612,459         32,917         1.26         2,933,672         208,877         7.12         5.86           LAMEZIA TERME         1,265,153         0         0.00         1,341,936         226,921         16.91         16.91	BRESCIA	339,034	175,009	51.62	225,470	148,697	65.95	14.33
GENOA         1,041,000         148,655         14.28         1,070,448         176,624         16.5         2.22           TRIESTE         638,529         111,040         17.39         665,426         123,037         18.49         1.10           ANCONA         497,306         105,329         21.18         469,700         112,446         23.94         2.76           CAGLIARI         2,271,829         0         0.00         2,464,084         156,223         6.34         6.34           VERONA         2,612,459         32,917         1.26         2,933,672         208,877         7.12         5.86           LAMEZIA TERME         1,265,153         0         0.00         1,341,936         226,921         16.91         16.91	BRINDISI	753,706	156,243	20.73	817,312	249,607	30.54	9.81
TRIESTE       638,529       111,040       17.39       665,426       123,037       18.49       1.10         ANCONA       497,306       105,329       21.18       469,700       112,446       23.94       2.76         CAGLIARI       2,271,829       0       0.00       2,464,084       156,223       6.34       6.34         VERONA       2,612,459       32,917       1.26       2,933,672       208,877       7.12       5.86         LAMEZIA TERME       1,265,153       0       0.00       1,341,936       226,921       16.91       16.91	PESCARA	329,711	175,934	53.36	333,036	177,575	53.32	-0.04
ANCONA 497,306 105,329 21.18 469,700 112,446 23.94 2.76 CAGLIARI 2,271,829 0 0.00 2,464,084 156,223 6.34 6.34 VERONA 2,612,459 32,917 1.26 2,933,672 208,877 7.12 5.86 LAMEZIA TERME 1,265,153 0 0.00 1,341,936 226,921 16.91	GENOA	1,041,000	148,655	14.28	1,070,448	176,624	16.5	2.22
CAGLIARI       2,271,829       0       0.00       2,464,084       156,223       6.34       6.34         VERONA       2,612,459       32,917       1.26       2,933,672       208,877       7.12       5.86         LAMEZIA TERME       1,265,153       0       0.00       1,341,936       226,921       16.91       16.91	TRIESTE	638,529	111,040	17.39	665,426	123,037	18.49	1.10
VERONA     2,612,459     32,917     1.26     2,933,672     208,877     7.12     5.86       LAMEZIA TERME     1,265,153     0     0.00     1,341,936     226,921     16.91     16.91	ANCONA	497,306	105,329	21.18	469,700	112,446	23.94	2.76
LAMEZIA TERME 1,265,153 0 0.00 1,341,936 226,921 16.91 16.91	CAGLIARI	2,271,829	0	0.00	2,464,084	156,223	6.34	6.34
	VERONA	2,612,459	32,917	1.26	2,933,672	208,877	7.12	5.86
FLORENCE 1,483,938 3,710 0.25 1,518,960 58,936 3.88 3.63	LAMEZIA TERME	1,265,153	0	0.00	1,341,936	226,921	16.91	16.91
	FLORENCE	1,483,938	3,710	0.25	1,518,960	58,936	3.88	3.63
TRAPANI 313,798 32,321 10.3 10.30	TRAPANI				313,798	32,321	10.3	10.30

Data Source: Conto Nazionale delle Infrastrutture e dei Trasporti (Italian Transportation Account)

Furthermore table 2 shows that the low-cost phenomenon in Italy is better developed for international flights. This is for two reasons. Firstly, since the majority of low-cost carriers belong to other European countries, they plan their flights to provide a higher frequency of connection to their bases, and secondly, this type of offer is more inclined to meet the needs of tourist traffic which is price sensitive and whose destination is mainly abroad.

Table 2 – Italian Market (Passengers 2006): Low Cost Carriers (%) vs. Full Services Carriers

Services	National Passengers (Figure)	%	International Passengers (Figure)	%	Total Passengers (Figure)	%
Low-Cost	7,055,349	13.39	21,349,971	30.37	28,405,320	23.10
Full Services	45,622,940	86.61	48,942,052	69.63	94,564,992	76.90
Total	52,678,289	100.00	70,292,023	100.00	122,970,312	100.00

Data Source: Conto Nazionale delle Infrastrutture e dei Trasporti (Italian Transportation Account) and ENAC (Ente Nazionale per l'Aviazione Civile)

There are different reasons why low-cost carriers prefer smaller airport facilities. The main ones depend on the potential of the catchment area, on the absence of congestion phenomena, prices, and on the characteristics of the airport's management (Potter, Warnock-Smith, 2005).

Deregulation and the economics of low cost airlines have led to a market orientation of European airports.

It should be noted that for a short time most of the airport management companies focused their management efforts on non-flight-related activities in order to improve financial performance. In Europe, the share of commercial revenues (non-flight-related) of the total has grown in recent years, reaching a value close to 45% and in some cases, generally at the larger airports, even attaining a value close to 80%. This is due to the prevailing trend of managing commercial activity efficiently in order to achieve an increase in the profitability of management as a whole. Furthermore, the increased time spent by passengers in the airport, caused by more security checks after "11 September" has led to an increase in spending in the shops located in the terminals.

This trend has transformed the traditional airport management model, based on the relationship between the airline company and the airport, into a more complex model in which passengers and the operators of commercial activities play a primary role.

In this scenario it is necessary to reflect on the changes introduced in civil aviation by the development of the low cost phenomenon that resulted, at the same time, in a considerable development of the smaller airports as well as in a decrease in flight-related revenues. In fact this relatively new type of carrier has created a sort of competitive mechanism, not only in the field of business travel, but also in the terminal activities segment, which has resulted in a reduction in the cost of services provided by airport operators interested in attracting new traffic.

The low-cost phenomenon has contributed to the growth of smaller airports: for example Stansted and Luton airports have been chosen as bases, by Ryanair and easyJet respectively.

Low-cost carriers, in particular the larger ones, diversify their supply of services focusing their network on different secondary airports, which are the main source of traffic. This leads to a clear asymmetry between the two partners, that benefits the airline company in terms of bargaining power (Barbot, 2006). This situation, together with a low tendency to spend which characterizes this type of carrier, means that the increase in airport traffic volume resulting from the use of airports by low-cost airlines is not translated automatically into an increase in revenue, as shown by Francis and other Authors (Francis, Humphreys, Ison, 2004).

In addition to exercising considerable market pressure in order to ensure that the rights granted for landing, departure, parking and admission of the aircraft are included, unlike full service airlines companies, the low-cost ones don't require high value added services, such as reserved areas for business traffic, acceptance and service for high quality luggage or special equipment for embarking or disembarking passengers. In order to maximize the efficiency of resources, the low cost airlines use the airport space for a time which is lower than full service carriers. According to these considerations it is clear that low-cost traffic is translated in an increase in revenues for the company only in large airports, which means that marginal costs are limited. For these reasons, several airport companies have stipulated very beneficial agreements with carriers operating in the low cost segment. But it is crucial that the excess capacity characterises both the segment of aeronautical activities and nonaeronautical services, otherwise the marginal cost of the entire production process could be higher than its marginal revenue, with obvious negative consequences on the budget of the airport company.

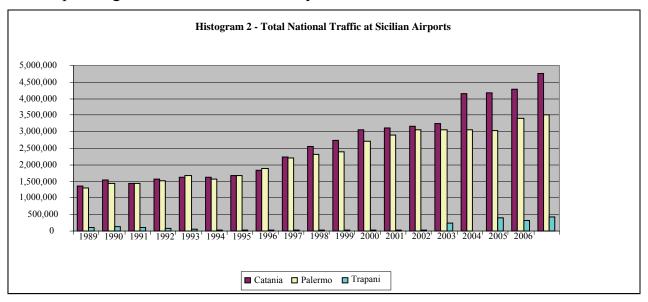
## 5. The liberalization effects in an Italian region: the Sicilian airport system

In order to assess the effects of the liberalization of airport services, we have analyzed the cases of the three Sicilian airports: Catania, Palermo and Trapani.

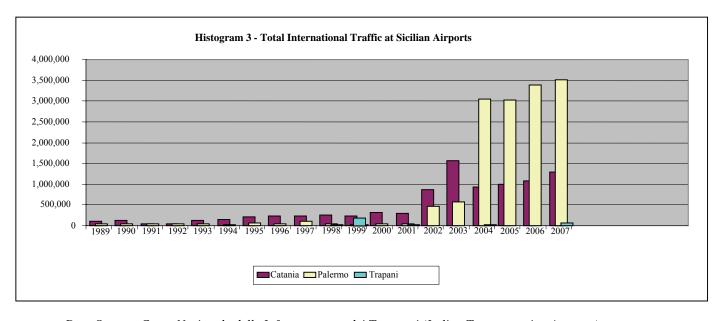
In the Sicilian airport system, 1995 saw the introduction of one component of deregulation: it was agreed to adopt a new formula for an administration closer to the private logic, even if the management's ownership has remained essentially public. As we can gather, from the data shown in Histograms 2 and 3, this transformation has not had much influence on the results achieved in

terms of traffic; the increase is in line with the national figure. The change in the legal form of airport management has not resulted in the adoption of more aggressive strategic decisions to acquire new traffic, because management continues to adopt local government policies.

From the perspective of the breakdown of the different traffic flows, as is the case for all airports (with the exception of Rome Fiumicino and Milan Malpensa), including the airports of Catania and Palermo, about 80% of the total passenger traffic is determined by movement at national level.



Data Source: Conto Nazionale delle Infrastrutture e dei Trasporti (Italian Transportation Account)



Data Source: Conto Nazionale delle Infrastrutture e dei Trasporti (Italian Transportation Account)

The clear dominance of international traffic, although attributable to the low socio-economic integration of Sicily within the European Union Area, is another consequence of operational decisions, scarcely attentive to the recovery of competitiveness of airports. In addition, the deployment of hub and spoke networks catalyses passengers on the international flights of the major airlines to hub airports, which are not found in Sicily.

Relatively recently, the development of the low cost segment has allowed us to capture new flows of traffic between airports in Sicilian and some European capitals.

Fig. 3 shows clearly that, by 2002 traffic on international routes had increased in scale. It should be noted that this increase relates to real increases in the volume of demand and is not a simple shift between domestic and international flights.

Another relevant fact that must be properly interpreted relates to the difference in the volume of traffic handled in the three airports. Catania has a higher traffic volume than Palermo, because its catchment area includes the population present in six of the nine provinces of Sicily. In addition, the province of Catania is characterized by commercial and industrial development which is more florid than in the province of Palermo. This airport is more attractive for airlines, particularly because of the highly profitable type of traffic.

This factor, exogenous to managerial skills, has enabled the airport management company of Catania to obtain better terms in its relationship with the airlines which are willing to pay higher charges. Finally the characteristics of the catchment area have allowed Catania airport to obtain the largest share of public funds intended for the regional development of Sicilian airport infrastructures.

## 6. Policy implication and conclusion

The analysis of low-cost carrier choices and airport choice factors show that an important element is the performance of non-aeronautical activities (Potter, Warnock-Smith, 2005). Firstly, the low-cost segment, whose philosophy is based on the total absence of ancillary services, is essential for good catering and shopping centres inside the airport. In addition, where there is good non-flight-related revenue, the airport management companies have low aeronautical charges.

The special features that currently characterize the market for airport services, for the management company interested in making agreements with low-cost companies, require a detailed knowledge of costs and revenues from busi-

ness activities, with particular attention to non-aeronautical ones.

Indeed, such agreements can lead to an increase in airport profits if the airport fees can be settled so as to ensure a cash-flow adequate to recover all the costs supported to adapt the whole infrastructure, the handling services and the air navigation services to the rise of commercial traffic.

These considerations must be taken into account when we plan investments in the airport sector, as in the economic analysis undertaken to evaluate the implementation of a new airport in the peripheral area of Agrigento in Sicily. The strong tourism in the area may not be sufficient to generate a volume of traffic that can financially sustain the massive investment needed for the realization of the structures.

#### References

- Barbot C., 2006. Low-cost airlines, secondary airports, and state aid: An economic assessment of the Ryanair–Charleroi Airport agreement, Journal of Air Transport Management 12, 197-203.
- Barros C.P., Dieke, P.U.C., 2007. Performance evaluation of Italian airports: A data envelopment analysis. Journal of Air Transport Management 13, 184-191.
- Baumol W. J., Panzar J. C., Willig R. D., 1982. Contestable markets and the theory of industry structures, Harcourt Brace Jovanovich.
- Francis G., Humphreys I., Ison S., 2004. Airports' perspectives on the growth of low-cost airlines and the remodeling of the airport–airline relationship, Tourism Management 25, 507-514.
- Halpern N., Pagliari R., 2007. Governance structures and the market orientation of airports in Europe's peripheral areas, Journal of Air Transport Management 11, 376-382.
- Potter A., Warnock-Smith D., 2005. An exploratory study into airport choice factors for European low-cost airlines, Journal of Air Transport Management 11, 388-392.
- Turco Bulgherini E., 1984. La disciplina giuridica degli accordi aerei bilaterali, CEDAM, Padova.

### Lieferbare ZERP-Diskussionspapiere

(in Papierform = P bzw. als elektronische Kopie =  $E^*$ )

- DP 7/91: Gerd Winter (Hrsg.), Die Europäischen Gemeinschaften und das Öffentliche, Dezember 1991 (P)
- DP 3/92: *Ines Katharina Gerwien*, Die Kontrolle von Pestiziden in exportierenden Industrieländern und Entwicklungsländern, am Beispiel der Bundesrepublik Deutschland und Malaysias, Oktober 1992 (P)
- DP 7/93: *Michelle Everson*, To the Constitutional Position of the Citizen of the United Kingdom, Dezember 1993 (P)
- DP 3/94: *Monika Jagels-Sprenger*, Der Fall PVC. Ein ungewisses Risiko und seine rechtliche Bewältigung, März 1994 (P)
- DP 4/94: Geoffrey Woodroffe/Philip Rawlings/Chris Willett, Financial Services in the United Kingdom, März 1994 (P)
- DP 5/94: *Edda Castelló*, Untersuchung von Beschwerdesystemen für Finanzdienstleistungen, März 1994 (P)
- DP 8/94: E. Alexandridou/M.-T. Marinos/C. Mastrokostas/G. Triantaphyllakis, Financial Services in Greece, Juli 1994 (P)
- DP 1/97: *Dorothee Eidmann*, Ausländer und Verwaltung. Eine Skizze am Beispiel des Ausländeramtes in Bremen, Januar 1997 (P/E)
- DP 2/97: *Josef Falke/Armin Höland*, Die Rechtspraxis der Beendigung von Arbeitsverhältnissen. Vorüberlegungen zu einem neuen Forschungsprojekt, März 1997 (P/E)
- DP 3/97: *Edwige Lefebvre*, A Historical Profile of Belgium: From Urban to Modern Belgian Citizenship, Juli 1997 (P/E)
- DP 4/97: *Edwige Lefebvre*, The Belgian Constitution of 1831: The Citizen Burgher, Juli 1997 (P/E)
- DP 5/97: *Edwige Lefebvre*, French Republicanism in Algeria: "Citouyen-Colon" versus "Sujet-Musulman-Français", Juli 1997 (P/E)
- DP 6/97 *Ulrich K. Preuβ/Armin Höland* (eds.), The Normative Foundation of the Polity, Oktober 1997 (P/E)
- DP 7/97 Konstanze Plett, Rechtliche Hindernisse auf dem Weg zur Gleichberechtigung der Frauen, Oktober 1997 (E)
- DP 1/98: *Wolf Sauter*, EU Regulation for the Convergence of Media, Telecommunications, and Information Technology: Arguments for a Constitutional Approach?, Januar 1998 (P/E)
- DP 1/99 *Jürgen Neyer/Dieter Wolf/Michael Zürn*, Recht jenseits des Staates, März 1999 (E)

<sup>\*</sup>siehe unsere Homepage: www.zerp.uni-bremen.de (Publikationen)

- DP 2/99 *Josef Heimann*, "Visa, Asyl, Einwanderung und andere Politiken betreffend den freien Personenverkehr" der neue Titel IV EGV unter besonderer Berücksichtigung des Schengen-Protokolls, Oktober 1999 (P/E)
- DP 1/00 Armin Höland/Uwe Reim/Holger Brecht, Flächentarifvertrag und Günstigkeitsprinzip. Zusammenfassung einer empirischen und rechtlichen Untersuchung der Anwendung von Flächentarifverträgen in den Betrieben, März 2000 (P/E)
- DP 2/00 Armin Höland/Uwe Reim/Holger Brecht, Association-Level Agreements and Favourability Principle, Dezember 2000 (E)
- DP 1/02 Anita Boeker, The Establishment Provisions of the Europe Agreements: Implementation and Mobilisation in Germany and the Netherlands, April 2002 (P/E)
- DP 2/02 Nikola Lafrenz, Die Pflegeversicherung als Teil der Krankenversicherung im Sozialrecht der Europäischen Union Die Entscheidungen des Europäischen Gerichtshofes, Oktober 2002 (E)
- DP 3/02 Ailine Wolff-Pfisterer, Sprache als Freizügigkeitshindernis in der EU Sprachliche Anforderungen an ausländische EG-Bürger im Rahmen der Anerkennung von Befähigungsnachweisen für den Berufszugang und die Berufsausübung, Oktober 2002 (E)
- DP 4/02 *Michael W. Schröter*, Lebensmittelrechtliche Vorsorge als Rechtsprinzip nationale, europäische und welthandelsrechtliche Aspekte, Dezember 2002 (E)
- DP 1/03 *Christine Godt*, Streit um den Biopatentschutz: Stoffschutz, Patente auf Leben und Ordre Public. Nationaler Gestaltungsspielraum bei der Umsetzung der Europäischen Biopatentrichtlinie, Dezember 2003 (E)
- DP 2/03 *Carl Otto Lenz*, Das deutsch-französische Verhältnis und sein Einfluss auf die Europäische Union, Dezember 2003 (E)
- DP 1/04 *Josef Falke*, Normung und Dienstleistungen. Anforderungen und Handlungsspielräume nach dem Allgemeinen Übereinkommen über den Handel mit Dienstleistungen (GATS), Februar 2004 (E)
- DP 1/05 Eric A. Engle, Alien Torts in Europe? Human Rights and Tort in European Law, Februar 2005 (E)
- DP 2/05 Aydan Bashlinskaya, Der rechtliche Gehalt der Gemeinsamen Sicherheitsund Verteidigungspolitik der Europäischen Union (GESVP) und ihre Vereinbarkeit mit dem deutschen Grundgesetz, Mai 2005 (E)
- DP 3/05 *Joanna Krzeminska*, Free Speech Meets Free Movement How Fundamental really is 'Fundamental'? The Impact of Fundamental Rights on Internal Market Law, August 2005 (E)
- DP 4/05 *Nuno Ferreira*, Revisiting Euthanasia: A Comparative Analysis of a Right to Die in Dignity, November 2005 (P/E)

- DP 1/06 *Christian Joerges*, Der Europäisierungsprozess als Herausforderung des Privatrechts: Plädoyer für eine neue Rechts-Disziplin, Januar 2006 (P/E)
- DP 2/06 Mel Kenny, Constructing a European Civil Code: Quis custodiet ipsos custodies?, Februar 2006 (P)
- DP 3/06*Klaus Sieveking*, ECJ Rulings on Health Care Services and Their Effects on the Freedom of Cross-Border Patient Mobility in the EU, April 2006 (P/E)
- DP 4/06 *Christoph U. Schmid*, The ECJ as a Constitutional and a Private Law Court. A Methodological Comparison, Juni 2006 (P/E)
- DP 5/06 *Ralf Michaels*, EU Law as Private International Law? Re-conceptualising the Country-of-Origin Principle as Vested Rights Theory, August 2006 (P/E)
- DP 6/06 *Maria Paola Ferretti*, Participation, Democratic Deficit and Good Regulation. A Case Study of Participatory Strategies in the European Regulation of GMO Products, September 2006 (P/E)
- DP 7/06 Norbert Reich, A Common Frame of Reference (CFR) Ghost or host for integration?, Oktober 2006 (E)
- DP 1/07 *Christian Joerges*, Integration durch Entrechtlichung? Ein Zwischenruf, August 2007 (P/E)
- DP 1/08 Aurelia Colombi Ciacchi, Internationales Privatrecht, ordre public européen und Europäische Grundrechte, März 2008 (P/E)
- DP 2/08*Christian Joerges/Florian Rödl*, Von der Entformalisierung europäischer Politik und dem Formalismus europäischer Rechtsprechung im Umgang mit dem "sozialen Defizit" des Integrationsprojekts, Ein Beitrag aus Anlass der Urteile des EuGH in den Rechtssachen Viking und Laval, März 2008 (E)
- DP 3/08 *Konrad Schober*, Vom Verfassungsvertrag zum Reformvertrag. Das Gesetzgebungsverfahren der Europäischen Union zur Polizeilichen und Justiziellen Zusammenarbeit in Strafsachen, Juni 2008 (P/E)
- DP 4/08 *Claudio Franzius*, Der Vertrag von Lissabon am Verfassungstag: Erweiterung oder Ersatz der Grundrechte?, Juli 2008 (P/E)
- DP 5/08 *Julia Cassebohm*, Beitritt der Europäischen Union zur Europäischen Menschenrechtskonvention Voraussetzungen, Wege und Folgen, Juli 2008 (P/E)
- DP 6/08 *Tobias Pinkel*, Das Buch VI des Entwurfs eines Gemeinsamen Referenzrahmens (DCFR): Nichtvertragliche Schuldverhältnisse aus Schädigung Dritter. Eine kritische Analyse des Modellgesetzes eines europäischen Deliktsrechts, August 2008 (P/E)
- DP 7/08 Sergio Nasarre Aznar, Eurohypothec & Eurotrust. Two instruments for a true European mortgage market after the EC White Paper 2007 on the Integration of EU Mortgage Credit Markets, September 2008 (P/E)
- DP 8/08 *Sjef van Erp*, Security interests: A secure start for the development of European property law, November 2008 (P/E)

- DP 1/09 Florian Rödl, Europäische Arbeitsverfassung, Februar 2009, (P/E)
- DP 2/09 *Poul F. Kjaer*, Three-dimensional Conflict of Laws in Europe, März 2009 (P/E)
- DP 3/09 *Andreas Fischer-Lescano/Lena Kreck*, Piraterie und Menschenrechte. Rechtsfragen der Bekämpfung der Piraterie im Rahmen der europäischen Operation Atalanta (E)

## Online verfügbare ZERP-Arbeitspapiere

(ZERP-Arbeitspapiere erscheinen nur online)

WP 1/2009	<i>Christoph U. Schmid</i> , Vom effet utile zum effet neolibéral. Eine Kritik des neuen judiziellen Expansionismus' des Europäischen Gerichtshofs, März 2009
WP 2/2009	Anja Hoffmann, Der Anspruch der Unionsbürger auf grenzüberschreitende Gesundheitsversorgung. Die gemeinschaftsrechtlichen Grundlagen, die Rechtsprechung des EuGH und eine neue Rechtsetzungsinitiative der Europäischen Kommission, Juni 2009
WP 3/2009	Dirk Veldhoff, Die Reduzierung von Informationsasymmetrien im Lauterkeitsrecht. Abkehr vom deliktsrechtlichen Irreführungstatbestand durch Unterlassen durch den Übergang zu einem allgemeinen Informationsmodell durch die UWG-Novelle 2008, Juni 2009
WP 4/2009	Fabio Carlucci / Andrea Cirà, Airports and Low Cost carriers in the Era of Airline Deregulation: the Sicilian case, Juni 2009