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# Portuguese Airport Charges

## (A Benchmark exercice)



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### **INTRODUCTION - SOME INDUSTRY CHANGE DRIVERS**

The airline and airport businesses are facing and have been facing dramatic changes. Some of the drivers for these changes are:

- The advent of the Low Cost Carriers (LCCs) and their introduction of a new airline business model
- The enormous security challenges and consequences posed by the September 11, 2001 attacks on the Twin Towers in New York City
- The progressive privatization of airports around the world, which had hitherto been essentially public monopolies
- The arrival of the A380 superjumbo with its market impact and new infrastructure requirements
- More recently the spiralling of fuel prices which again brings about the spectre of a major crisis for the industry as a whole and puts a stop to the growth rates enjoyed over the last few years



- Airport charges are regulated and cannot be freely set by the airport companies. They must also not discriminate between users. This leaves little room for pricing and competition as we know them in other activities.
- But despite the rigidity of airport pricing the new operating environment that is dawning on the industry makes it relevant to assess its competitiveness.
- As the airport industry in Europe changes from government-run monopolies to privatelymanaged concessions the issues of regulation and competition are put on the agenda.
- The debate on regulation centres essentially on the single till or dual till models. The single till regulation model uses commercial activities results to reduce the allowed cost for aeronautical charges. The dual till model separates the two activities and incorporates into charges the full aeronautical cost.
- While airports tend to be natural monopolies there has been progress in fostering competition within the airport itself and between airports.



**1. AIRPORT AND ENROUTE CHARGES ON THE AIRLINES'S COST STRUCTURE** 

2. PORTUGUESE AIRPORT CHARGES (A Benchmark Exercice)

**3. AIRPORTS' REVENUE STRUCTURE – AVIATION VERSUS NON AVIATION INCOME** 

CONCLUSION



### 1.1. easyJet versus British Airways





### 1.2. easyJet versus British Airways

- Airport and enroute charges are the number one cost item for easyJet. In contrast they do not weigh much for BA.
- On the contrary payroll expenses are heavy for BA being their main cost whereas they are far less significant for easyJet.
- The huge impact of the rise of fuel prices on both companies can be seen. It has doubled in weight from 2003 to 2007 and will likely be their largest cost in 2008.
- Handling costs, in relative terms, are about fifty percent higher at BA.
- It is also worth to notice the fleet financing policies. easyJet relies more on aircraft leasing while BA has a larger share of conventional depreciation.
- If we were shown this data blind we might say that these two companies were in different industries. And to a certain extent they are. But we can see that they share similar economic fortunes in the market as shown by their cost-to-income performance – almost equal, year by year, over the period analyzed.
- From the above it is clear why LCCs are and MUST BE so aggressive in their pursuit of lower and more competitive airport charges and navigation services and/or in the use of secondary and cheaper airports and facilities.



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### 2.1. THE CHOICE OF PEER AIRPORTS AND OF AIRCRAFT

- A most important decision for this paper was the choice of airports against which the benchmark exercise would be conducted.
- The objective was to have for each of the Portuguese airports peers that were of about the same size in terms of passengers handled and aircraft movements as well as sharing similar traffic patterns in terms of passenger type, main airline operation and seasonality. A mix of privately-owned airports or with significant private shareholding and publiclyowned airports was also sought where possible.
- It was also important to include one Spanish airport against each of Lisbon, Porto and Faro. Madrid was not to be avoided as the major Spanish airport for comparison with Lisbon, the major Portuguese one, although they are not exactly comparable either in size, configuration or user pattern. Bilbao is directly comparable with Porto in movements, passengers and user pattern with the incumbent national airlines, IBERIA and TAP respectively, as the major customers but with just as much LCC activity and their traffic having little seasonality. The same comparability applies to Jerez de la Frontera and Faro though the former handles significantly fewer passengers. Both have a strong LCC presence and considerable traffic seasonality with the peak during the summer holidays.



### 2.2. THE CHOICE OF PEER AIRPORTS AND OF AIRCRAFT

- A perfect charges benchmark assessment would take the critical aircraft for each of the airports and compare it with the same aircraft at the other airports. It would also account for the actual average load factor experienced in each case.
- For Lisbon which has an important intercontinental traffic, as it hubs for TAP Portugal, the choice fell on the airline's A340-300 long-haul plane with a 75% load factor and 120 minutes turnaround time. For the short / medium-haul TAP Portugal's A319 was used with 70% load factor and 60 minutes turnaround time.
- Porto has little long-haul movements and so the TAP Portugal A319 was used with the same configuration as for Lisbon.
- In Faro easyJet is the largest user so we chose the airline's A319 with 80% load factor and
  45 minutes turnaround time.
- A note must be made on handling and fuel costs. Both these elements should be taken into account in determining the overall competitiveness of turnaround costs at a facility. But our aim remains the assessment of the core airport activities and their cost to users as reflected in airport charges.



### 2.3. TABLE WITH LISBON CHOSEN PEERS

		Lisboa Portela	Madrid Barajas	Helsinki Vantaa	Copenhagen Kastrup	Athens Eleftherios Venizelos Int'l	Vienna Schwechat
IATA Country + Airport code		PTLIS	ESMAD	FIHEL	DKCPH	GRATH	ATVIE
ICAO code		LPPT	LEMD	EFHK	EKCH	LGAV	LOWW
Biggest customer airline		TAP	Iberia	Finnair	SAS	Olympic	Austrian
Hubing activity for the major airline		Yes	Yes	Yes	Yes	Yes	Yes
Ownership		(a)	(a)	(a)	(b)	(C)	(d)
Aircraft movements	Total	139.516	483.284	178.900	257.591	205.294	254.878
	% change	5,33%	11,11%	1,82%	-0,30%	7,56%	7,32%
Passengers	Total	13.392.059	51.584.969	13.090.744	21.409.526	16.538.390	18.768.563
	% change	8,75%	13,46%	7,76%	2,55%	9,67%	11,35%
Freight + mail tons	Total	94.751	357.810	151.314	395.506	118.972	272.362
	% change	-4,83%	-1,38%	4,32%	4,07%	-1,00%	2,48%
Notes: (a) State owned (b) Listed. Macquaire 53.4%, (c) Public private partnership (d) Listed. City of Vienna 209	Danish state 39.2 Danish state 55% A, Province of Lov	2% 5, Hochtief 40% ver Austria 20%,	Employee Fou	ndation 10%, F	Free float 50%		



### 2.4. LISBON AND PEERS - PASSENGERS HANDLED





### 2.5. LISBON AND PEERS - AIRCRAFT MOVEMENTS





### 2.6. LISBON AND PEERS - FREIGHT + MAIL TONS HANDLED





#### 2.7. LISBON AND PEERS - TAP PORTUGAL A340-300 BENCHMARK AIRPORT CHARGES





#### 2.8. LISBON AND PEERS - TAP PORTUGAL A340-300 BENCHMARK CHARGES STRUCTURE





#### 2.9. LISBON AND PEERS - TAP PORTUGAL A340-300 CHARGES BENCHMARK COMMENTS

- Overall Lisbon is the most expensive airport for the A340-300 (for the chosen configuration) closely followed by Copenhagen.
- The cheapest is Madrid, a full 21.4% less than Lisbon.
- Lisbon would be cheaper than Copenhagen at load factors below 65%. It would also be cheaper than Madrid and Vienna at load factors below 23% and 13% respectively. But these latter two load factor levels would make any route economically unviable and are therefore not realistic scenarios. Helsinki and Athens are always cheaper than Lisbon at any load factor level.
- Even if we compared Lisbon without airbridge against the others with airbridge, though the service rendered is obviously not the same, its position would not improve.
- The structure of charges differs between the airports but for all of them the major items are the Landing charge and the Passenger charge. Next comes the Terminal navigation and Security charges but these are not applied by all airports. Athens has no Terminal navigation charge while Vienna has no Security charge.



#### 2.10. LISBON AND PEERS - TAP PORTUGAL A319 BENCHMARK AIRPORT CHARGES





#### 2.11. LISBON AND PEERS - TAP PORTUGAL A319 BENCHMARK CHARGES STRUCTURE





#### 2.12. LISBON AND PEERS - TAP PORTUGAL A319 BENCHMARK COMMENTS

- For international flights Lisbon stands out again as high cost though Athens is slightly more costly.
- And again Madrid emerges as the cheapest of all, almost 30% less than Lisbon.
- Lisbon would be cheaper than Vienna, Copenhagen and Madrid at load factors below of 43%, 25% and 10% respectively. None would be sustainable. Helsinki is always cheaper and Athens always more expensive at any load factor level.
- On IntraEU flights Lisbon fares much better. Here, it beats Copenhagen, Athens and Vienna. It is still more costly than Helsinki on IntraEU non-Schengen but it beats Helsinki on the Schengen routes. Madrid keeps a comfortable competitive edge as it also charges less for IntraEU flights.
- The structure of charges for a medium / short-haul aircraft follows the same pattern as for the long-haul. Landing and Passenger charges are the major items and Terminal navigation and Security come next. In this case airbridge charges exist at Lisbon, Madrid and Athens but this is the result of the choice of operation type made and not of the tariff structure itself.



### 2.13. TABLE WITH PORTO CHOSEN PEERS

		Porto Francisco Sá Carneiro	Bilbao Sondica	Basel Mulhouse EuroAirport	Marseille Provence	Nottingham East Midlands	Bologna Guglielmo Marconi
IATA Country + Airport c ICAO code	ode	PTOPO LPPR	ESBIO LEBB	FRMLH / CHBSL LFSB	FRMRS	GBEMA EGNX	ITBLQ LIPE
Biggest customer airline	ajor airline	TAP	Iberia	EasyJet	Air France	Ryanair	Meridiana
Hubing activity for the m		Yes	No	No	No	No	No
Ownership		(a)	(a)	(b)	(c)	(d)	(e)
Aircraft movements	Total	50.745	63.079	82.025	120.618	62.208	66.698
	% change	7,81%	7,69%	0,20%	4,95%	9,12%	4,90%
Passengers	Total	3.986.748	4.233.551	4.269.124	6.962.773	5.413.360	4.361.951
	% change	17,16%	9,22%	6,29%	13,85%	14,50%	9,01%
Freight + mail tons	Total	36.737	3.241	44.036	51.420	302.705	16.881
	% change	-3,49%	-5,87%	22,35%	3,33%	1,48%	4,98%
Notes: (a) State owned (b) French state and Swiss s	state jointly					_	

(c) State owned through L'Union des Aéroports Français. Managed by the Chambre de Commerce et Industrie de Marseille Provence
 (d) Ten greater Manchester Concils. City of Manchester 55%, the other other councils with 5% each. Privately managed

(e) Bologna Chamber of Commerce 50.55%, Bologna authorities 26.75%, Emilia Romagna Region 8.8%, Aeroporti Holding 7.21%, others 6.69%



### 2.14. PORTO AND PEERS - PASSENGERS HANDLED





### 2.15. PORTO AND PEERS - AIRCRAFT MOVEMENTS





### 2.16. PORTO AND PEERS - FREIGHT + MAIL TONS HANDLED





#### 2.17. PORTO AND PEERS - TAP PORTUGAL A319 BENCHMARK AIRPORT CHARGES





#### 2.18. PORTO AND PEERS - TAP PORTUGAL A319 BENCHMARK CHARGES STRUCTURE



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#### 2.19. PORTO AND PEERS - TAP PORTUGAL A319 BENCHMARK COMMENTS

- Porto is the second most expensive airport for international flights and the selected configuration behind Nottingham East Midlands
- Bologna is the cheapest with Bilbao following close
- As load factors increase up to full aircraft capacity Porto's cost comes close to Nottingham East Midlands' though it remains less expensive. It would be cheaper than Bilbao at load factors below 18%. Not a real scenario. Against the others Porto is more expensive under any circumstances.
- For IntraEU flights Porto comes closer to its cheaper competitors but it still remains higher than them. It increases its advantage against Nottingham East Midlands. For Schengen flights Porto also becomes slightly less costly than Basel-Mulhouse.
- The charges structure differs between the airports analyzed though the Passenger charge is the most important cost at all of them. Landing charge is common to all but weights more significantly at Nottingham East Midlands and at Bilbao.
- Porto is not the most expensive airport in any particular item but its tariffs for each item are on the high side. The outcome is an overall high cost.



### 2.20. TABLE WITH FARO CHOSEN PEERS

		Faro	Jerez	Naples	Pau
			de la Frontera	Capodichino	Pyrénées
IATA Country + Airport code		PTFAO LPFR	ESXRY LEJR	ITNAP LIRN	FRPUF LFBP
Biggest customer airline		EasyJet	Iberia	AirOne	Air France
Hubing activity for the major airline		No	No	Yes	No
Ownership		(a)	(a)	(b)	(c)
Aircraft movements	Total	40.253	50.364	72.330	58.380
	% change	7,54%	8,23%	17,21%	6,05%
Passengers	Total	5.470.472	1.603.222	5.775.838	763.018
Ŭ	% change	7,48%	16,04%	13,34%	-0,12%
Freight + mail tons	Total	718	90	7.863	2.895
	% change	-25,74%	-15,92%	-5,84%	53,58%
Notes:					
(a) State owned					
(b) BAA owns 65%					
(c) State owned through L'Ur	nion des Aéroports F	rançais. Managed	by the Chambre de C	Commerce et Industrie	e de Pau Béarn



### 2.21. FARO AND PEERS - PASSENGERS HANDLED





### 2.22. FARO AND PEERS - AIRCRAFT MOVEMENTS





### 2.23. FARO AND PEERS - FREIGHT + MAIL TONS HANDLED









#### 2.25. FARO AND PEERS - EASYJET A319 BENCHMARK CHARGES STRUTURE





- Charges at Faro are higher than at the other airports. The difference for Pau Pyrenées is small but for Jerez de la Frontera and Naples it is very significant, 33.8% and 34.0% respectively.
- All four airports have lower tariffs for IntraEU flights but their relative positions remain mostly the same. Faro is cheaper than Pau Pyrenées on Schengen routes.
- All airports charge the same items except that Naples does not apply any cost for the Airbridge. But charge levels for each item are very different for each airport.
- Share a star a star



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#### 3.1. AIRPORTS' REVENUE STRUCTURE – AVIATION vs NON-AVIATION INCOME

- As we have seen airport charges are regulated and regulation models vary from country to country but they centre on variants of the dual till or single till concepts. This means that the split of revenues between aviation and non-aviation is important in the determination of the level of airport charges – today and in the long run.
- It is thus pertinent to see how the airport companies that manage the airports chosen for this paper have fared in this respect.
- We have examined ANA of Portugal, AENA of Spain, Finavia of Finland, MAG of the UK, AIA of Greece, CPH of Denmark, GESAC of Italy and VIE of Austria.
- The first four are Network airport companies meaning they manage a range of airports including some which have large Non-Aviation activity potential while the others have little such potential; the second four are Individual airport companies all with good Non-Aviation activities potential.



### 3.2. AIRPORT COMPANIES



Managers Lisbon, Oporto, Faro and four airports in the Açores. Excludes ANAM (Madeira) and subsidiaries.



Manages 47 airports and 1 heliport in Spain. AENA reports consolidated accounts so while activity indicators are for its individual operations, financial information is for its consolidation universe.



Manages 25 airports in Finland including Helsinki Vantaa. Excludes subsidiaries.



Manages Manchester, East Midlands, Bournemouth and Humberside airports. Fiscal years' end 31st of March.



Manages Eleftherios Venizelos International. AIA benefits from an Airport Development Fund (ADF). Copenhagen Airports 🔛

Manages Copenhagen and Roskilde airports. The latter is quite marginal so CPH has been considered an Individual airport company.



GESAC is majority owned by the BAA Group and manages Naples International Airport.



Vienna International Airport manages the airport of the same name.



### **3.3. AIRPORT COMPANIES ACTIVITY INDICATORS**





### 3.4. AIRPORT COMPANIES ECONOMIC INDICATORS





### 3.5. AIRPORT COMPANIES PRODUCTIVITY





### 3.6. AIRPORT COMPANIES PERFORMANCE COMMENTS

- There seems to be a difference between the performance of Network airport companies and Individual airport companies.
- MAG ranks better among the former but it has just four airports and only one Bournemouth – drags its operational results. The others – ANA, AENA and Finavia – are burdened with many more economically dragging facilities. AENA generates no Net profit as we have already seen.
- Interesting is the almost equal relative performance of ANA and Finavia.
- The individual airport companies, with the exception of Naples, perform better. Noteworthy is AIA which is ahead of all the others.
- ANA performs in line with the other Network airport companies but less than proportionately to its activity indicators compared to the Individual airport companies.



### **3.7. AIRPORT COMPANIES AVIATION INCOME**





### **3.8. AIRPORT COMPANIES NON-AVIATION INCOME**





### **3.9. AVIATION vs NON-AVIATION INCOME COMMENTS**

- It cannot be peremptorily said that, across the board, Non-Aviation income's share of total airport revenues is on a clear rising trend over the past four years.
- There has been a steady increase for some Vienna, GESAC and MAG and both the minimum and maximum shares are higher in 2007 than they were in 2004. Vienna was lowest in 2004 at 21.1%; AIA is now the lowest at 23.3%. CPH was highest in 2004 at 46.9%; MAG is now highest at exactly 50.0%.
- Non-Aviation income is clearly a large and essential source of revenue for all the airport companies considered. In many cases it comes a very close second to Aviation income.



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### CONCLUSIONS (i)

- As we have seen, airport and navigation charges are an important cost item for a traditional airline like British Airways. But for a LCC like easyJet they are THE most important cost only to be eventually exceeded by fuel.
- It is thus very relevant the evaluation of how airports fare in their charges level. Not only for the airlines, but also for the customers of air travel and ultimately for the region airports are located in. It is obviously not the only performance indicator, we could name many others, but it is a critical one.
- Lisbon is relatively well placed in IntraEU non-Schengen and competitive, except against Madrid, on the Schengen routes. But Lisbon is an expensive airport on international routes when compared to the chosen peers. This poses a very important challenge for the future Alcochete airport (the new Lisbon facility to be ready by 2017) if it wants to fight for hub passengers and be the essential tool TAP Portugal will need to remain competitive against an Iberia (or any other Madrid based airline) that will sooner or later fight for the Europe to Brasil routes.



### CONCLUSIONS (ii)

- Porto has, like Lisbon, lower charges on IntraEU non-Schengen flights and even lower on Schengen routes but this is not enough to clearly change its relative position. Porto is expensive today but because of its recent capacity expansion it may have room to become more competitive over time if it continues to be successful in increasing its throughput quickly. Attracting LCCs routes is crucial for this. More passengers and movements will allow for lower tariffs without jeopardizing total revenue growth. The latter is a must for Porto to be profitable as it should.
- Saro, like Porto, is also costly when compared with the chosen peers. It fares marginally better on the Schengen routes but unlike Lisbon or Porto which have most of its passengers on these routes, Faro has 68% of its passengers on IntraEU non-Schengen flights. Its development and lower charges may hinge on Non-Aviation business growth.



### CONCLUSIONS (iii)

- The analysis of Non-Aviation income as a share of the airports' total revenues did not show a direct correlation with the level of Aviation charges. Higher Non-Aviation income does not necessarily translate into more competitive Airport charges. AENA's airports are very competitive in the benchmark assessment and AENA has a low overall Non-Aviation income. Of course AENA does not perform in terms of its Net profit, so to have the same level of result as the others its charges would have to be higher. For most of the airports the high Non-Aviation income share is mostly reflected in good EBITDA and Net profit performance, not in lower Aviation charges. But it is clear that a high proportion of Non-Aviation income allows for more competitive Airport charges. Actual practice is then subject to the regulatory and airport companies' objectives and policies.
- ANA seems costly in terms of Airport charges, its Non-Aviation income is lower than the others we have compared it with, and its financial performance, while in line with other network airports, is not outstanding when compared with the individual privately owned airports. There seems to be room for improvement.



### CONCLUSIONS (iv)

- Our look at the three major Portuguese airports' charges has not, in most cases, been favourable to them. The reader should nevertheless be cautioned that this holds true for the chosen peers and assumptions. A different choice of airports might have resulted in different conclusions but the ones reached by this paper would still remain valid.
- I am conscious that this essay is limited in scope and that the time available for producing it and the time I could spare for research is insufficient for a more in-depth and sophisticated analysis. Nevertheless, it has shown where Portuguese airports stand in terms of their charges against some of their comparable peers and where ANA stands in terms of its overall performance. It is what was sought.





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# **END**

