How important are commercial revenues to today's airports?

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Abstract

This paper investigates the importance of commercial revenues to today's airports. It establishes that on average commercial revenues now account for about half of all revenues, although this varies considerably by region and individual airport, with retail being the most significant commercial source. It explores some of the key factors, such as consumer trends, security developments and political changes, which have led to a much more challenging time for commercial managers since the late-1990s. With growing pressure to control levels of aeronautical revenues, even greater focus on commercial revenues may be needed in the future and the paper concludes by discussing the implications of this.

1. Introduction

This paper determines the importance of commercial or non-aeronautical revenues to today's airports. Over the years, the development of commercial revenues at airports has been highly dependant on two key factors. Firstly the evolution of the airport sector from a public utility to a commercialised, and in some cases privatised, industry has given airports greater freedom, expertise and motivation to exploit the commercial opportunities that exist. Secondly there has been increasing pressure from the airline industry for airports to control the level of their other key revenue source, namely aeronautical charges. This is primarily because, as the airline industry has become progressively more competitive and yields have fallen, careful management of all cost items including airport charges, particularly for the low cost carrier sector (LCC), has become paramount. Moreover pressure on aeronautical revenues has grown as the result of increasing government economic regulation which has occurred, especially at privatised airports.

However alongside these long-term trends, there have been some significant recent developments that have made commercial revenue generation at airports that much more challenging. Some of these have been associated with general retail and consumer trends such as the growth of internet shopping, some have been related to political and economic changes particularly within the EU, and others have occurred as the result of airport operational developments, especially in the area of security. This paper places most focus on these recent trends, after having firstly identified the current role that commercial revenues play at airports. Specifically,

the next section provides an introduction to the nature and significance of commercial revenues at airports. This is followed by a more detailed consideration of retail revenues which are usually the largest and most important commercial source at airports. The rest of the paper then explores the current challenges associated with commercial revenues generation and assesses the implications for the future.

2. The nature and significance of commercial revenues

It is well known that as the airport industry has evolved it has increased its dependence on commercial revenues. For example for a sample of over 20 European airports (ranging in size now from around two million annual passengers to over fifty million), way back in 1983 only 41% of revenues came from commercial sources. This increased steadily to 46% in 1993 and then to 50% in 1998. In subsequent years, however, the commercial revenue share has dropped slightly to 48%. Likewise according to the Airport Council International (ACI) annual world airport economic surveys of over 650 airports of varying sizes, commercial revenues accounted for 46% of all revenues in 1995, peaked at 54% at the turn of the century but then again fell slightly to 48% in 2006 (Graham, 2008). Reasons for these recent fluctuations are explored later but overall these figures roughly show that on average commercial revenues now account for around half of all revenues. A further source of data, the Airport Retail Survey, which covers 46 airports from around the globe, also observed that commercial revenues represented 51% of all revenues in 2006–07 (Moodie, 2007).

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America they only represented 29% of all revenues. Even then these regional figures hide very considerable differences between individual airports as can be clearly seen in the European case in Fig. 1 where the Dublin Airport Authority (DAA) and the three London airports of Heathrow, Gatwick and Stansted generate around two thirds of their revenue from commercial sources whilst at Salzburg, Vienna, Florence and Cologne it is only around a quarter.

In spite of inconsistencies in the manner in which aeronautical and commercial revenues are sometimes reported (Zenglein and Mueller, 2008), the share of revenue from commercial sources can give a broad indication of the importance of this revenue source and is a popular airport statistic. However it is clearly misleading to use it as a measure of performance in the commercial areas because it is dependent on the nature and level of all revenues at an airport. For example the airport operators in Salzburg, Vienna, Florence and Cologne are all actively involved in providing ground handling services, unlike many of the other airports, and this changes the apparent share of revenues from commercial sources. By contrast, the DAA operates the duty/tax free shops itself rather than outsourcing this which has the effect of inflating the revenue share value.

Hence a more useful measure of relative success is commercial revenues per passenger. In 2006, the European region generated the most commercial revenue per passenger – averaging $12 – compared to a global mean of $8 (Table 1). Much of this is related to the large international traffic volumes within Europe and the relatively high income per capita, as well as the fact that many European airports are run on a very commercial basis (with a growing number being privatised) which has resulted in a very keen focus on exploiting commercial opportunities. Airports in the Asian/Pacific region and in Africa/Middle East generated around $7–8. However in the African/Middle Eastern region the figures are distorted somewhat due to very high revenues at Dubai which have pushed up the average value to a level which is too high for many of the other airports. Elsewhere, although North American airports generate over half their revenues from commercial sources, the amount per passenger is comparatively low – averaging around $6. This reflects a high proportion of both domestic terminal and transfer passengers who often do not make major purchases, and in addition there is much less of an airport shopping culture in this region and much more extensive competition from shopping malls and discount stores. The smallest amount of revenues is generated in the Caribbean and Latin America. This is largely due to the low traffic volumes, the limited spending power of the local population and less management pressures for many of the airports to fully take advantage of the commercial revenue potential that exists.

Within each global region and each country, commercial revenues will vary according to a multitude of factors including the volume and nature of passengers and other customers, consumer dwell time and stress levels, contractual agreements with commercial concessionaires and space/location considerations. They will also depend on whether the airport adopts a single till approach, when all revenues are considered when aeronautical charges are set or whether it uses a dual till when aeronautical and commercial activities are treated as separate financial entities. One of the most obvious influences is airport size as larger airports tend to have more international (and especially intercontinental) passengers who spend more. Moreover they can offer a much wider range of facilities, including speciality shops and food and beverage (F&B) outlets, which a smaller airport, which does not have such critical mass, would find hard to sustain. For example an analysis of the situation in UK, Italy and Germany in 2004/5 (albeit using the less than ideal commercial share performance measure) found that for airports of less than 4 million passengers commercial revenues represented 44%, 33% and 31% of revenues respectively, whereas the comparative figures for airports of larger than 10 million revenues were 57%, 46% and 39% (Graham, 2006). This is consistent with a study of 31 European airports which found that below 4 million passengers the share was 35%, between 4 and 20 million passengers, 45% and over 20 million, 56% (Vogel and Graham, 2006). The Airport Retail Study of 2006–07 which covers airports from all major world regions also found that commercial revenues

<table>
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<tr>
<th>Region</th>
<th>Commercial revenues ($billion)</th>
<th>Commercial as % total revenues</th>
<th>Commercial revenues per passenger ($)</th>
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<tr>
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<td>52.9</td>
<td>8.00</td>
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<td>Asia/Pacific</td>
<td>6.92</td>
<td>45.7</td>
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<td>Europe</td>
<td>16.61</td>
<td>48.1</td>
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<tr>
<td>Latin America/Caribbean</td>
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<td>North America</td>
<td>9.05</td>
<td>52.6</td>
<td>5.92</td>
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<td>Total</td>
<td>35.23</td>
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Fig. 1. The importance of commercial revenues at European airports 2006. Source: annual reports of airports.
per passenger were nearly twice as large for airports of greater than 20 million passengers compared with airports of less than 10 million (The Moodie Report, 2007).

3. The importance of retail revenues

Fig. 2 shows the average breakdown of commercial revenue sources in 2006. The exact definition of ‘retail’ can vary but in this case it is assumed not only to include shops but also F&B. ‘Other’, which covers many different items such as utility recharges and visitor, IT, business and consultancy services, is the largest composite revenue item but the most significant single revenue item is retail – accounting for over a fifth of all commercial revenues. This is the situation in most world regions, except in North America, where car parking (31%) and car rental (14%) are more important than retail (10%) (Airport Council International, 2007). Moreover at North American airports, F&B is a much more important retail source than, for example, in Europe. This is another reason for the lower overall commercial revenues in North America as the average consumer spend tends to be lower for F&B and also more space is required for the kitchen, food storage and eating areas that limits the number of outlets which can be provided.

Airport retailing has become much more sophisticated in recent years and a growing number of high street managers and best practices are now being employed at airports. However whilst there are similarities with other types of retail, significant differences exist with airport retail which must be taken into account. In general airports have a captive customer market of a higher than average socio-economic group but this market may be subject to more external ‘shocks’ such as security scares that can cause fluctuations in demand. Moreover passengers are generally less familiar with the airport shopping environment and so may be more stressed. Their motivation for shopping will be different (a high percentage of purchases are on impulse) and shopping is not the primary reason for the presence of the passengers at the airport. Likewise for the airport operator, unlike the high street operator, retail is only one part of the airport business and a balance between the commercial and aeronautical aspects must be achieved. This raises operational concerns, such as ensuring that the retail function of the airport does not interfere with the normal flows of passengers through the airports, as well as financial issues, most notably associated with whether a single till, when all revenues and profits are considered when airport charges are set, or a dual till, which treats aeronautical and commercial areas as separate financial entities, should be used.

Clearly any airport operator, like any retailer, needs to understand its mix of customers and plan facilities to match as closely as possible the needs and preferences to maximize revenue generating opportunities and return on investment. For example, Figs. 3 and 4 show the comparative importance of retail items at London Heathrow and Stansted. Heathrow with its high proportion of intercontinental passengers generates over two thirds of its revenue from duty-free and other airside retail. By contrast F&B (especially ‘grab and go’ outlets) is more important to Stansted airport which serves primarily European destinations and has a very high proportion of low cost carrier (LCC) flights that do not offer free in-flight catering.

In the end, of course, it is the profits from the commercial facilities rather than the revenues that are the key interest to the airport operator. Firstly this will clearly depend on whether the airport adopts a single till or dual till. However as most airports choose concessionaires to provide the commercial facilities, there tends to be very little direct costs and capital investment associated with such activities for the airport operator as this will be the responsibility of the concessionaire. Consequently this results in relatively high profit margins. For example for Europe for seven major fully or partially privatised airport companies it has been...
found that whilst on average retail revenues account for only 13% of total revenues, they represent 41% of profits in terms of the earnings before interest, tax, depreciation and amortization (EBITDA) ratio (Credit Suisse, 2006). Moreover at Heathrow in 2006 the profit margin (profit as a percentage of revenues) for retail was 76% compared to 39% for airport charges and 16% for terminal property. At Gatwick the profit margin for retail was again 76% whilst both airport charges and terminal property were loss making for the airport (Competition Commission, 2007).

4. Recent trends and developments

Having identified the significance of commercial revenues to the airport business, consideration is now given to recent trends in the last ten years. Generally global traffic growth has ensured that absolute commercial revenue levels have continued to rise. However for a number of airports, particularly in more developed regions, the real spend per passenger has decreased. This largely explains the slight drop in the average global and European commercial share of revenues which was identified earlier. It is even more evident by looking, for example, at the average of 17 UK airports commercial revenues per passenger (in 2007 prices) that has decreased from £6.43 in 1998/99 to £5.14 in 2006/7 (Fig. 5).

The last decade or so has been particularly challenging for airport commercial managers (Freathy, 2004). At the beginning of this period (30 June 1999) intra-EU duty and tax sales were abolished. Then in May 2004, 10 new European countries joined the EU which further reduced the opportunities for duty/tax free sales in Europe. Bulgaria and Romania joined the EU in January 2006 which also had a similar, albeit much smaller, effect and any future EU enlargement (for example with Turkey) will shrink duty and tax free sales even further. Another impact of EU developments has been the adoption of the euro by the majority of countries which has decreased the need for bureau de change outlets at airports at the same time as when additionally automatic teller machines (ATMs) have become more and more popular.

There have also been a number of external ‘shocks’, such as 9/11, SARS in 2003 and the liquid, aerosols and gels (LAGs) terrorism scare in 2006, which have had an impact on commercial revenue generation. Firstly these have caused downturns in traffic growth which has created a more volatile trading environment at airports. Moreover 9/11 and the LAGs issue have led to more stringent security measures being introduced which in turn has impacted on commercial facilities and affected passengers’ perceptions of the airport experience. For example in the US post 9/11 more restrictions on areas that farewellers, meeters and greeters could use reduced the number of commercial facilities that they had access to and also the lucrative source of car parking revenues was affected in some cases by car parks having to be redesigned to conform to new security standards.

Of even greater significance, particularly in Europe, was the banning of LAGs in hand baggage due to the terrorism scare in August 2006 and the subsequent regulations which have been introduced to respond to this threat. In Europe, the regulations now allow LAG items brought from an airside shop from another EU/EEA airport in a tamper evident bag but do not permit such items that are purchased at airports outside this area. This has resulted in many unsuspecting passengers, who are transferring through EU airports, having their LAG purchases confiscated. For example, in 2007 it was estimated that 1000 liquids a day were being confiscated in Amsterdam and Madrid and 2700 in Frankfurt. In monetary terms Zurich was taking away LAG items worth $29 540 whilst the comparable figure at Heathrow was estimated to be $211 000 (Jane’s Airport Review, 2007). Moreover other regulations exist elsewhere, for example in Australia and New Zealand, and so overall passengers are very confused. Whilst bodies such as International Civil Aviation (ICAO) and the EC are working towards improving this situation (for example the EU will now give recognition to countries which have implemented ICAO guidelines related to LAGs) this is clearly damaging consumer confidence in airport shopping.

Finally general retail and lifestyle trends have also had an impact. For example internet shopping has enabled passengers to become much more informed consumers and this type of shopping has become a major competitor both in terms of prices offered and ease of purchase. As a result, airports have had to develop the retail features of their own websites and a number now offer pre-ordering of goods, collection of goods on arrival or money off vouchers. As regards lifestyle trends restrictions on the sale of tobacco and its use in public and work places has reduced the demand for such products at airports, whilst greater emphasis on healthy living has had an impact on the type of F&B facilities provided and has encouraged health and fitness treatments such as massages to be offered. Tobacco sales are likely to continue to decline and health concerns may also have a growing influence on alcohol sales in the future.

5. Future challenges

In spite of the more volatile aviation environment in recent years, and the current uncertainties due to the unprecedented fuel price fluctuations, the credit crunch and economic slowdown, at many airports traffic is still continuing to rise. In some cases this is bringing increased congestion in the terminal and producing delays for the passengers. This may have a number of impacts on the passengers. Firstly it may reduce the space that will be available for the passengers. This may have a number of impacts on the dwell time, check-in accounted for 23%, general dwell (e.g. seeing off friends and family) 25%, customs and immigration 16%.
and security 12% (Moodie, 2007). It should be noted that these figures do not take account of most recent developments such as the LAG restrictions and increased use of self-service and internet check-in since 2006.

Undoubtedly the LAGs development has increased the amount of time spent in the security process, just as stricter security regimes did after 9/11. Further security developments in the future may have similar effects. However it is not entirely clear as to whether in the longer-term such developments have a negative or neutral effect on dwell time. A negative impact would occur as the result of passengers spending the same amount of total time at the airport with more of their time involved with the security processes whereas a neutral impact would arise if passengers took into account the more lengthy security processes and consequently arrived earlier at the airport. With check-in the trend is generally going in the opposite direction to security with new technology allowing passengers a faster way through this process. It has been estimated that currently 18% of passengers check-in via for internet which will increase to 30% by 2009, whilst 17% use self-service kiosks which will rise to 26% next year. A further 7% will use mobile phone check-in (Jenner, 2008). Again it is not entirely clear as to whether this will have a positive impact (passengers spending the same time at the airport but with more dwell time) or neutral (passengers spending less total time at the airport).

Another impact of such technology is that it can free up space, by removing some traditional check-in desks, for other purposes. This could include more commercial facilities although these may not be located in the optimal positions unless some major re-configuration of all airport facilities is undertaken. In the more longer-term technology may perhaps allow the check-in process to be integrated with activities such as security and border control, for example with the self-service kiosks scanning biometric data to check the traveller’s identity against data which is stored on travel documents or secure databases. Such developments, which are being encouraged by the ‘Simplifying Passenger Travel (SPT)’ programme which was set up jointly by the airlines, airports, handling agents, government authorities and technology providers, could again have major implications for commercial revenue generation at airports both in terms of dwell time and airport design.

In a few cases the answer to growing demand if it has been from LCCs has been to provide dedicated facilities for these airlines. Purpose built terminals have been opened in Kuala Lumpur and Singapore whilst in Europe it has been more common to convert old terminals such as at Marseille and Budapest. A few other airports, for example Brussels, are planning to introduce such facilities. The key features of all these terminals are that they are simple and functional, being designed for point-to-point rather than transfer passengers, with no frills such as airline lounges or even airbridges and they have low construction and operating costs. Commercial facilities are provided but the very nature of the simple design of these terminals means that the range of facilities is not as extensive as it may be in a ‘normal’ terminal and it may also not create the right atmosphere and experience to encourage travellers to shop. Experience varies but passengers on LCCs are by no means always ‘budget’ shoppers at airports and particularly have the need for F&B facilities because of the lack of free in-flight catering. Hence such low cost terminals may not be able to fully take advantage of the commercial opportunities that exist with such passengers. An alternative option exists at Amsterdam airport where the LCC passengers have access to all the normal airside commercial facilities before being directed to simpler and cheaper gate facilities.

Overall, the pressure on airline costs, both for the low cost and traditional sector, is now even greater than ever because of the unprecedented uncertain fuel costs. This is subsequently putting greater demands on airports to limit their generation of revenues from aeronautical sources and to place even greater emphasis on growing commercial revenues to compensate for this. Further airport privatisation is also encouraging airports to take additional steps to exploit their commercial potential. In some cases, this may be as simple as providing more appropriate or additional facilities operated by suitable concessionaires. This is particularly the case in airports in more developing areas which have previously not had the commercial drive or expertise to develop this area of business or are alternatively reaching the critical mass of passengers which can support a much wider range of facilities.

If there is sufficient space surrounding an airport, there may be the possibility of expanding beyond the boundaries of the traditional airport business and diversifying by developing facilities such as business parks, enterprise zones and leisure facilities. Such an airport is often defined as an airport city or ‘aerotropolis’ (Abeyratne, 2007; Reiss, 2007). Two notable examples of such developments are the new Dubai World Central Complex and the Sky City Program at Gimpo airport in South Korea. Elsewhere other airports may be able to take advantage of developments related to the specific nature of their traffic. For example some medium-sized European airports which lost out very significantly when intra-EU duty and tax free sales went may now find that in future they will have the opportunity to. This may be a key advantage such as deregulation of traffic rights (e.g. between US and EU) will provide new opportunities to serve non-EU and more long-haul destinations. Other airports may be able to develop successful arrival duty and tax free shops, particularly if there are large numbers of returning expatriate workers, for example as in Colombo in Sri Lanka and Manila in the Philippines, or if they can offer some competitive advantage such as in Norway since it is the only Scandinavian country not in the EU and is still able to sell such goods.

At other mature airports, which already have a developed offer of retail facilities, alternative strategies may have to be adopted. For example at BAA airports since 1990 the retail space has been significantly expanded from 40 000 m² in 1990 to over 100 000 m² now (excluding terminal 5 at Heathrow). This growth in space has been faster than the corresponding rise in passenger numbers and has provided passengers with a greater range and choice of facilities. Hence the scope for further increasing revenues by expanding facilities (with the exception of T5) is much more limited. In this case and with other similar airports, the way forward would seem to be in improving the actual commercial performance of the commercial areas. This may be done by making sure that the correct mix of retail is on offer to match the preferences and needs of the specific market segments which the airport serves and by ensuring that there is a correct balance of shops and F&B, and that the facilities are in the optimum location. To undertake this successfully requires detailed understanding of consumer motivation and behaviour in the commercial areas and maybe the development of different airport shopper typologies which has been suggested, for example, by Geuens et al. (2004).

For such airports, the provision of F&B facilities is likely to come under increased scrutiny – particularly as demand is rising with more and more airlines offering no or less free in-flight catering. Whilst F&B may be comparatively less significant in revenue or profit terms, it is very important because more passengers use these facilities than the shops. For example the penetration rates (i.e. those passengers using these facilities) for international passengers F&B tend to be above 40%, compared with around 30% for duty-free and news/gifts and less than 10% for bureau de change (The Moodie Report, 2007). This means that F&B facilities can have a major impact on the passengers’ image and perception of an airport and, for example, if they feel that these are overpriced they may form the same opinion of the shops. In addition the F&B facilities have to be appropriately designed and located so that can act as a magnet to attract the passengers to the shops.
Airdside retailing has tended to be the area that brings the most revenue to the airport as most passengers have a preference to shop then when they are more relaxed, having completed all essential processes such as check-in and security screening. Duty and tax free purchases can also only be made here. The Airport Retail Study shows that on average 55% of retail space is in the departures airdside area followed by 34% in the departures landside area. With the ongoing security restrictions it is likely that airports will have to consider placing even more emphasis on airdside retail, albeit that in some cases passengers may buy lower value and essential travel items airdside, which they previously would have bought landside or packed in their hand luggage, which could potentially reduce the money and dwell time which they have airdside to make more high value and impulsive purchases. Interestingly between 2000 and 2007 at BAA London airports, real revenue per passenger from ‘other’ retail which includes all landside revenue decreased by over 26%. The same data shows the growing importance of F&B as revenue per passenger from this source by contrast increased by 39% (Competition Commission, 2007).

As well as considering the mix between retail and F&B and airdside and landside facilities, the penetration levels of passengers in the commercial facilities can also potentially be improved with consideration of their specific location. A recent trend in this area which seems set to grow in popularity has been the development of so-called ‘walk-through’ shops that require passengers to walk-through shops to get to the departure lounge or gate which can guarantee a ‘footfall’ value of 100%. For example such facilities have been developed at Heathrow (Terminal 3), Copenhagen, Oslo and Berlin Tegel. In some cases, such as at Toulouse and Hamburg airport when there is more than one terminal, passenger flows have been combined to go through a central security area which then leads to a walk-through shopping area which enables the airport to minimise the amount of duplication in its retail offer whilst at the same time giving a greater choice for passengers.

In conclusion, in answering the question which was posed at the Hamburg Conference and is the title of this paper, it is probably fair to say that commercial revenues for better profits are more important than ever to today’s airports as the pressures on the sector to improve its financial performance whilst at the same time keeping strict controls on its aeronautical revenues seems set to intensify. However, unlike in the earlier stages of airport development, when the opportunities for growing commercial revenues were plentiful, the more mature industry and the more volatile and competitive trading environment means that successful commercial management at airport is now a much more challenging task.

References