

**OCCASIONAL PAPER 21**

**CRI**  
CENTRE FOR  
THE STUDY OF  
REGULATED  
INDUSTRIES

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**ECONOMIC REGULATION OF  
AIRPORTS IN THE UK**

**Peter Scott**

 UNIVERSITY OF  
**BATH**  
SCHOOL OF MANAGEMENT

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# **ECONOMIC REGULATION OF AIRPORTS IN THE UK**

CRI Occasional Paper 21

**Peter Scott**

**Desktop published by  
Jan Marchant**

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# PREFACE

The CRI is pleased to publish Occasional Paper 21 on *Economic Regulation of Airports in the UK* by Peter Scott, who is director of an independent business economics consultancy company, MMD.

The paper focuses on the potential for deregulation, particularly as airports' customers are the 'powerful' airlines. Airports have always been regulated differently from other utility and network industries, not least by having the Competition Commission directly involved in each periodic review, rather than only on appeal, and this is an opportunity to take advantage of the particular characteristics of the airports' business. If negotiated outcomes can be the objective, without regulatory intervention, but with regulatory oversight to monitor, encourage self-regulation and provide a failsafe, lighter touch regulation is in prospect. The CAA's recent consultation paper demonstrated that it is willing to engage in discussion aimed at more cost-effective regulation, and success in the airports' sector will surely have lessons for the other regulated industries.

The CRI would welcome comments on the occasional paper. Comments should be addressed to:

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The views of authors are their own, and do not necessarily represent those of the CRI.

**Peter Vass**  
Director, CRI  
September 2004

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## Synopsis

- The Civil Aviation Authority has been regulating airport charges since 1986. Is it time for it to stop?
- Fifty airports are subject to its economic regulation but only four to the ‘heavy’ version considered here: Heathrow, Gatwick, Stansted and Manchester. The CAA has resisted calls to add to this number.
- These four airports are used by two-thirds of UK air travellers and have some market power, though not unlimited and in varying degrees. The main barriers to entry are the cost of new facilities and the planning system. Last year’s White Paper has reinforced these barriers, notably in the South East.
- But airports are unlike other regulated utilities: they only have a few, powerful customers and they have a common interest with their customers in maximising the number of passengers.
- The major issues affecting the development of airport capacity in these airports are not issues of economic regulation but of public policy (planning, transport policy, limits on aircraft movements, constraints on runway use).
- Economic regulation of airports is not an exact science but rather a matter of making judgments in the midst of great uncertainty. Whether it is worth making the judgments depends on the effect they have and the likely alternative.
- Regulating airport charges has had, and is expected to have, very little effect on passenger prices – and the prices actually charged to airlines are often below the allowed maximum.
- Regulating airport charges does not seem to have had much effect on the efficiency with which airport assets are used. Using airport charges to clear the market at congested airports would mean a vast transfer of resources from airlines to airports and is, in any case, prohibited under the UK-USA air traffic agreement.
- Regulating airport charges has had very little effect so far on the quality of service provided by airports. Attempts are now being made in this direction, but it is hard to see why the regulator should be expected to guess right about the different trade-offs airlines want to make between price and quality.
- Regulating airport charges has costs in the regulator and the regulated.
- International obligations do not appear to prevent a move away from ‘heavy’ economic regulation of airport charges.
- There accordingly seems to be a strong case for removing the designation of these four airports as subject to ‘heavy’ economic regulation.

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## Introduction

The Civil Aviation Authority (CAA), which regulates the major airports in the UK, is the oldest of the UK's industry-specific economic regulatory bodies. It was set up in 1972, long before the utility privatisations of the 1980s. However, its economic regulatory remit originally extended only to airlines. When the British Airports Authority was transferred intact to the private sector as BAA plc (BAA) in 1986, the presumption was that the behaviour of such a large, market dominant provider needed regulating. The CAA was given new powers for the purpose under the Airports Act 1986.

Twenty years on from the major utility privatisations, there is considerable experience of how regulators and regulated industries behave and considerable questioning of whether economic regulation has turned out to be a good idea.<sup>1</sup> The CAA itself said, near the outset of its last review of airport charges:

“It is widely accepted that economic regulation should only be adopted where it is clear that a serious loss of economic efficiency would otherwise exist, where other solutions are not available, and where it is clear that the regulatory system itself, with the distortions that it can create, will not make the situation worse than it would otherwise be”.<sup>2</sup>

Also, there is now a Competition Commission to investigate and punish any abuse of market power.

There is, however, evidence that the habit of economic regulation is hard to break. Regulators are set up and staffed to regulate and it is not easy for them to consider dispassionately the possible merits of not regulating. It is a striking feature of the “*fundamental review of its approach*” signalled by the CAA in the consultation paper with which it launched the last price control review, that ceasing to set a ceiling for airport charges was an option not even mentioned.<sup>3</sup> When some of the respondents to the consultation paper raised this option, the CAA backed away on the grounds that that was a matter for government, an accurate but specious point since government relies in this field on advice from the CAA.<sup>4</sup>

More generally, this government shows no sign of wanting to dismantle the apparatus of economic regulation it has inherited. On the contrary, it is expanding it. The Royal Mail has lost its monopoly and has a new regulator. While most of us might think that some reasonable limit on increases in the price of a 1<sup>st</sup> or 2<sup>nd</sup> class stamp might be all the price regulation the Royal Mail needs, the Postal Services Commission took 120 pages of text and 20 pages of equations to set out its current price control.<sup>5</sup> After the long fight between

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<sup>1</sup> See for example Winston C (2004 forthcoming), *Deregulation: Government Failure Versus Market Failure*, in the series of Beesley Lectures on Regulation organised and published by the Institute of Economic Affairs and the London Business School; Crandall R (2003), *An End to Economic Regulation?* in *Competition and Regulation in Utility Markets*, Edward Elgar for the Institute of Economic Affairs and the London Business School.

<sup>2</sup> CAA (2000a), *The CAA Approach to Economic Regulation and Work Programme for the Airport Reviews*, Position Paper, paragraph 2.11, page 8.

<sup>3</sup> CAA (2000b), *Issues for the Airport Reviews; Consultation Paper*.

<sup>4</sup> CAA (2000a), paragraph 2.15, page 10.

<sup>5</sup> Postal Services Commission (2003), *Review of Royal Mail Group plc's Price and Service Quality Regulation, March 2003; Second Price Control, Quality of Service Targets and Compensation – Licence Modification and Decision Document*.

government and the Mayor of London over the new public private partnership for the London Underground, there has emerged a government-appointed ‘arbiter’ with clear aspirations to become a fully-fledged economic regulator.<sup>6</sup>

This paper looks at the arguments for and against economic regulation in the specific context of airports and draws some conclusions.<sup>7</sup>

### Economic regulation of airports

The statutory basis for the economic regulation of airports in the UK is the Airports Act 1986, together with its implementing regulations. Airports in the UK are subject to economic regulation if their annual turnover has exceeded £1m for two years, unless they are directly managed by government or the CAA or are in the Channel Islands or the Isle of Man. There are currently 50 airports in the UK subject to economic regulation, including two in Northern Ireland under specific, parallel regulations and ten in the Highlands and Islands of Scotland.<sup>8</sup> Regulation is of two significantly different kinds, which may be described as ‘light’ and ‘heavy’.

#### *‘Light’ regulation*

In effect, the economic regulation of airports on the grounds that they exceed the turnover threshold is little more than an industry-specific version of general competition law. A qualifying airport can only levy airport charges with the permission of the CAA. However, the CAA cannot refuse an application for permission and neither the level of the charges nor any change in their level is subject to CAA approval. The CAA can require the supply of information, including accounting information which shows separately the revenues and costs of activities for which airport charges are made. It can also impose what are called ‘discretionary conditions’ if an airport, with CAA permission to levy charges, violates in levying them any of three principles of competition law:

- unreasonable discrimination, between users or classes of user;
- abuse of market dominance, described as unfair exploitation of its bargaining position relative to users generally;
- pricing which is predatory in effect (whatever its motive), described as levying charges which are both unduly low and cause damage or are designed to cause damage to another airport.<sup>9</sup>

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<sup>6</sup> Bolt C (2004 forthcoming), *Regulating London Underground* in the series of Beesley Lectures on Regulation organised and published by the Institute of Economic Affairs and the London Business School.

<sup>7</sup> This paper was substantially completed before the issue in May 2004 of the CAA’s consultation paper reviewing the process which led up to the last set of price controls and proposing some significant changes for the future (briefly noted below); CAA (2004), *Airport Regulation: Looking to the Future - Learning from the Past*.

<sup>8</sup> The complete list is given in CAA (2003a), *Economic Regulation of Airports - General Guidance*, Appendix 1.

<sup>9</sup> Ten years ago, the then Chairman of the CAA emphasised the importance of the ability to disregard motive; see Chataway C (1994), *Regulating Utilities: The Way Forward*, Institute of Economic Affairs and London Business School, page 52.

Failure to comply with accounting or discretionary conditions is the one basis on which the CAA can revoke a permission to levy charges; the airport concerned has a right of appeal to the Competition Commission.

### ***‘Heavy’ regulation***

Four airports are in a different category for the purposes of economic regulation. These are BAA’s three London area airports (Heathrow, Gatwick and Stansted) and Manchester Airport. These four were ‘designated’ by the government for ‘heavy’ regulation under section 40(1) of the Airports Act in 1986 and have remained so ever since.<sup>10</sup> As the CAA put it when considering a request in 2000 to designate Luton Airport:

“Designation implies detailed regulatory oversight of an airport which is likely to entail significant costs and may create distortions of its own. As such it is not to be undertaken lightly”.<sup>11</sup>

There are no criteria for designation set in the act. There have been various suggestions over the years for additions to the list of those designated, including BAA’s Scottish airports in the 1990s. Looking at the Scottish airports, the government suggested four criteria:

- market position, including the extent of competition;
- *prima facie* evidence of excess profitability or abuse of a monopoly position;
- the scale and timing of investment, and the implications for profitability;
- efficiency and quality of service.

The CAA decided that the first test was the key in the case of Luton. If Luton had market dominance, then it would be worth exploring the other tests; if not, not. Market dominance was a necessary condition for designation but not a sufficient condition:

“even a finding that Luton Airport is dominant within the meaning of Article 82 of the Treaty of Rome or Chapter 11 of the Competition Act 1998 would not, in itself, be sufficient for the CAA to conclude that designation is appropriate”.<sup>12</sup>

In the case of Luton, the CAA held that the case for dominance had not been made, and so advised rejection of the application to designate; government accepted its advice.

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<sup>10</sup> The CAA (Economic Designation of Airports) Regulations 1986 (SI 1986/1544).

<sup>11</sup> CAA (2000c), Easyjet Application for Designation of Luton Airport, paragraph 5, page 2.

<sup>12</sup> *ibid.*

### **Economic regulation of designated airports**

This paper is mainly concerned with the economic regulation of the four ‘designated’ airports.

New limits were set by the CAA in 2003 for the airport charges which operators can levy on airlines which use the four designated airports.<sup>13</sup> The process of reaching the decisions on those limits was long, complicated and quite controversial, with disagreements between the Competition Commission and the CAA on a number of major issues, including:

- whether to set charges for the three London area airports as though they were a single system or for each airport separately, that is, whether investment needs at, say, Stansted should affect landing charges at, say, Gatwick: the CAA proposed separation; the Competition Commission disagreed; the CAA decided on separation;
- whether to set limits for airport charges in relation to the total revenues and costs of the airport(s), notably including their retail business (‘single till’) or only in relation to the revenues and costs associated – not a simple process – with the provision of the services for which airport charges are levied, or with monopoly services (‘dual till’): the CAA proposed to move to dual till; the Competition Commission disagreed; the CAA gave way;
- how quickly to require Manchester Airport to reduce its charges: the CAA proposed a limit 5% below inflation (RPI-5); the Competition Commission recommended 8.9% below inflation (RPI-8.9); the CAA again upheld its original view.

In the process a great deal of information relevant to the decisions was made public. That information is the source from which most of the material in this paper has been drawn.

The limits imposed from April 2003 will apply until March 2008. The preliminary work to consider what might replace these limits, from April 2008, is beginning now in 2004. The CAA has reviewed the three-year process that produced the limits announced in 2003 and has consulted on its findings (CAA, 2004). The prime change proposed by the CAA is a shift to greater reliance on commercial negotiations between airports and their customers, as being better placed than the regulator to understand the trade-offs between airport charges, capital investment and quality of service. This is an interesting and welcome shift. It remains to be seen how far it can be achieved in a framework where the CAA retains the right to decide the allowed level of airport charges.

A decision is awaited later this year on the process for deciding the limits to apply from 2008. This paper is intended as a contribution to the debate on whether, and if so how, a new set of price limits should be set by regulation for these airports, as well as on the wider question of the future of economic regulation in markets open to a degree of competition.

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<sup>13</sup> CAA (2003b), Economic Regulation of BAA London Airports (Heathrow, Gatwick and Stansted) 2003-2008, CAA Decision; CAA (2003c), Economic Regulation of Manchester Airport 1 April 2003-31 March 2008, CAA Decision.

## Do airports need ‘heavy’ economic regulation?

The key issues in deciding whether the four designated airports should be subject to industry-specific, ‘heavy’ economic regulation are:

- do they possess market power?
- if so, are there reasons to expect that, unconstrained, they would abuse that power?
- if so, is economic regulation the answer?

## Market power

About 180m passengers used UK airports in 2001 as shown in **Table 1** and 124m of them (more than two thirds) used the four designated airports regulated by the CAA. These were the only four used by more than ten million passengers each; there were ten others used by at least two million:<sup>14</sup>

**Table 1: Passenger statistics 2001**

<b>2001 passengers</b>	<b>000s</b>	<b>Share</b>
Heathrow	60,454	33.4%
Gatwick	31,097	17.2%
Manchester	19,060	10.5%
Stansted	13,654	7.5%
<b>Total designated</b>	<b>124,265</b>	<b>68.6%</b>
Birmingham	7,712	4.3%
Glasgow	7,243	4.0%
Luton	6,540	3.6%
Edinburgh	6,038	3.3%
Belfast International	3,603	2.0%
Newcastle	3,376	1.9%
Bristol	2,673	1.5%
Aberdeen	2,525	1.4%
East Midlands	2,380	1.3%
Liverpool	2,251	1.2%
Others	12,625	7.0%
<b>Total</b>	<b>181,231</b>	<b>100%</b>

The market which the London area airports serve is the travel market from or to London and the South East of England, and from or to a much wider range of destinations through airport transfers. The three BAA London airports are different in scale and serve different segments of this market. Heathrow serves scheduled flights, substantially for business travellers (37%) and, as the world’s busiest international airport, has many transit passengers (30%). Gatwick has 20% transit passengers but specialises in charter flights for leisure travellers, a role in

<sup>14</sup> Competition Commission (2002a), Manchester Airport PLC: A Report on the Economic Regulation of Manchester Airport PLC, Appendix 7.1, page 326.

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which it is the UK market leader with 11.2m charter passengers in 2001. Stansted, Europe's fastest growing airport, serves primarily low-cost, 'no frills' airlines.

Meanwhile Manchester Airport serves primarily the North West region and, to a lesser but still substantial extent, Yorkshire and the Humber, the North, the North East and the Midlands. Less than 5% of Manchester passengers are in transit; half of them are on international charter flights (Manchester is second to Gatwick as a charter holiday airport), with a further third on scheduled international flights; 15% are on scheduled domestic flights.

The issue of market power turns on the competitive position of these airports and the barriers to entry. The competitive position is different in the different regions and market segments:

- as a transit airport between North America, Europe, Asia and Africa, Heathrow competes with, at least, Amsterdam, Frankfurt and Paris. As an airport serving business and leisure travellers between London and major cities in the UK and Europe, it competes with Gatwick, London City Airport, rail services and road travel;
- Gatwick competes for charter business with a number of other airports, particularly Luton, as well as less directly with other modes of transport; for scheduled air travel it competes primarily with Heathrow, although British Airways's attempt to develop it as a second hub airport failed;<sup>15</sup>
- Manchester is the dominant airport in the North West but has lost out to Liverpool and Leeds/Bradford in the growth of 'no-frills' air travel; it competes with airports in other regions and even other countries for other international business, charter or scheduled, and with rail and road for domestic business;<sup>16</sup>
- Stansted competes primarily with Luton for low-cost airline business, with London City Airport and to a lesser extent with a range of other airports, coach and rail services, depending on the place of origin and the requirements of its travellers. The Competition Commission and the CAA have both taken the view that the degree of marketing support at Stansted is evidence of the competitive nature of the market there.<sup>17</sup>

Airports are not, in general, natural monopolies. Given a reasonable population (or capacity in visitor attractions) within a reasonable travelling time, and enough flat land to build airports on, it is economically feasible to have more than one. They are quite capital intensive, so it helps if – as in the UK – the air force has built the basic infrastructure for more airfields than it any longer wants. But airports are noisy places and government sensitivity to public concern, together with the planning system, can make it difficult for competing airports to develop.

The competitive advantage of the four designated airports does not lie primarily in their location, important though it is for all of them that they are near major centres of population. It lies rather in:

- the high and 'lumpy' cost of new world-class runways and terminals (terminal 5 at Heathrow is estimated to cost £3bn, compared to a regulatory capital value in 2002 for the

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<sup>15</sup> Competition Commission (2002b), BAA plc: A Report on the Economic Regulation of the London Airport Companies, paragraph 3.41.

<sup>16</sup> Competition Commission (2002a), paragraph 2.15, page 10.

<sup>17</sup> CAA (2003b), paragraph 5.27, page 57; Competition Commission (2002b), paragraph 2.303, page 80.

three London area airports together of £6bn), which produces strong economies of scale and makes life harder for new entrants;<sup>18</sup>

- particularly for the London area airports, the extreme difficulty in planning terms for any other airport to develop in the South East of England;
- the network of airline services inherited and encouraged by the designated airports (especially Heathrow);
- the quality of the surface transport links between them and the major towns nearby (particularly central London in the case of the London area airports), which have been developed because they are major airports, mainly at public expense, except for the Heathrow Express rail link.

These are significant barriers to entry. The outcome of the government's consideration of future airport needs has recently reinforced these barriers in the South East, by encouraging further aircraft movements, terminals and runways (immediately at Stansted, later at Heathrow and Gatwick) at the three BAA airports in the London area and rejecting major development at any other site in the South East.<sup>19</sup> The position in the North West is not so clear, as encouragement for a new terminal at Manchester is matched by encouragement for further development at (at least) Liverpool, Birmingham and Newcastle.

The level of demand from airlines for facilities and slots at Heathrow demonstrates that it commands a strong market position. Even Heathrow is not impregnable. As noted above, it has direct and indirect competitors. There is a level of airport charges and of poor service quality which would, over time, encourage airlines to move, as well as encouraging passengers to switch to other modes of transport. The development of the port of Felixstowe is perhaps the clearest example in the transport sector in the UK in recent times of the capacity of the market to find an alternative if the provision it is offered comes to seem unacceptable, even if developing the alternative involves large expenditures on a less promising site and the rearrangement of long-established transport patterns.

The airline business can also change: the dramatic development of low-cost airline business at Stansted was not foreseen by BAA nor its regulators. The property development company which owns Liverpool Airport has recently obtained planning permission to develop a new civil airport near Doncaster. Nevertheless, it seems clear that certainly Heathrow, and probably also Gatwick and Stansted, do occupy positions of some market power in the South East, as does Manchester in the North West ("*substantial market power*", according to the Competition Commission), primarily because of the barriers to competitive entry presented by the cost of new capacity and by the planning system and, in the case especially of Heathrow, for airline network reasons.<sup>20</sup>

## Likelihood of abuse

But market power, on its own, is not enough. The next question is whether there is reason to suppose that these airports would abuse their market power if they were not constrained by

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<sup>18</sup> Competition Commission (2002b), paragraph 2.337, page 88.

<sup>19</sup> Department for Transport (2003), *The Future of Air Transport*.

<sup>20</sup> Competition Commission (2002a), paragraph 2.20, page 10.

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the economic regulation which accompanies designation. In this respect, airports have important differences from other utilities, notably:

- the fact that while millions of passengers use these airports, the airport's customers, those who pay its airport charges, are airline companies, of which there are only a few (British Airways alone carries 40% of Heathrow passengers, the (now) two main 'no frills' carriers dominate Stansted's traffic, ten airlines carry 70% of Manchester travellers);<sup>21 22 23</sup>
- the commonality of interest between airports and their airline customers in maximising the flow of passengers through the airports and their satisfaction with the experience.

There are other utilities (electricity, gas, water, telecommunications) with major corporate customers. However, to find a degree of countervailing customer strength comparable to what airports face, we have to look at other 'upstream' utilities, such as electricity generators selling to electricity distributors. It has been a characteristic of regulation in other utilities that major corporate customers are thought to need much less regulatory protection than members of the public. Even in the more pro-regulation days of the major electricity privatisations, there was not thought to be a need for regulatory price control on sales from electricity generators to electricity distributors.

There are other public services where retailing and property businesses depend on the number of passengers using the facilities. This was a characteristic of railways in many countries at the time they were built and retailing and property remain significant for both rail companies and ferries. But the scale in airports is without parallel. More than four fifths of BAA's profits from its London area airports come from retail and property businesses (the profit contributions are not split in the published statements of Manchester Airport's finances).<sup>24</sup>

In financial terms, these airports are shopping malls with unusually large parking areas. But it is the air traffic, and the time passengers wait around in airports, which make sense of the retail propositions which generate most airport profit. This means that, so long as the airport retains a financial interest in the retail business, the airport has an incentive to maximise passenger numbers. At least where the capacity of the airport is not physically constrained, that will make it likely to want to charge less for aircraft movements than otherwise. It has been commonplace for years to say that capacity at Heathrow Airport is physically constrained. Nevertheless between 1991 and 2000 Heathrow added 100,000 extra aircraft movements and 24m extra passengers (twice the total passenger numbers at Stansted in 2000). The fall in Heathrow traffic in 2001 was related to events in the USA, not to capacity at Heathrow.

It would be reasonable to expect, in the absence of economic regulation, that airports would not want to extract monopoly rents from the airlines, because the airport needs the airlines as much as they need it and it makes most of its money not from the airlines but from the large numbers of passengers they bring through the airport. Where that point is weak because demand outstrips capacity, at Heathrow, BAA still faces customers well able to negotiate with it. There might be a concern that the airport would collude with established airlines to restrict capacity at Heathrow and so sustain high prices for passengers there. In fact when the traffic has existed capacity at Heathrow has expanded quite fast, and it is the airlines using Heathrow which have been most vocal in seeking further capacity expansion there.

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<sup>21</sup> Competition Commission (2002b), paragraph 3.36.

<sup>22</sup> CAA (2003b), paragraph 5.31, page 58.

<sup>23</sup> Competition Commission (2002a), Appendix 7.2, page 327.

<sup>24</sup> Competition Commission (2002b), Table 4.8, page 166.

## Is economic regulation the answer?

Partly because of the automatic involvement of the Competition Commission as well as the CAA in the economic regulation of airports, even more effort in these cases than in most is devoted to setting out the evidence and the reasoning on which the decisions are based. Nevertheless, there remains an arbitrary quality about some of the key elements of the decisions. It is worth considering the scale and nature of the task faced by the economic regulator of airports.

The regulator has to take a view on the reasonable, efficient cost of operating an airport. It is tempting, in coming to this view, to compare different airports. But the comparison is complicated by the wide differences between the circumstances of different airports and the way they calculate their costs. An example is the way passengers travel to and from the airport on the ground, which may involve a variety of transport infrastructure, which may or may not belong to the airport or figure in its operating costs. The CAA's attempt to benchmark airport performance in the price reviews carried out in 2000-2003 was not regarded as a success.<sup>25</sup>

Airports are capital intensive, so the regulator has to be concerned with their capital investment. This is not just the usual question of how much is needed – in what sense? – and when, but the further question of how to spread its cost over time. Terminal 5 at Heathrow, for example, will represent a very large increase in the total capital invested in BAA's London area airports. It will take years to build and the start has been delayed for years. How far is it reasonable to charge today's users of Heathrow – or Gatwick, or Stansted – for a facility years away from being used, either to help BAA to finance its construction or to smooth the path towards the higher charges which will be appropriate when it is available? There is no single, correct answer to such a question. The answer which the regulator chooses makes a major difference to the charges BAA is allowed to levy.

In many regulated industries, regulators and regulated companies, and their advisers, have devoted a great deal of effort over the years to the issue of what cost should be attributed, in setting regulated prices, to the capital the regulated firm deploys to provide the services in question. This is a theoretical exercise, but it usually has a significant effect on the regulator's decision. In the present instance, the CAA has taken Manchester Airport's cost of capital as 7.75% in place of the Competition Commission's suggestion of 7.5%. The difference results in an increase of 0.3% a year – some £400,000 – in the allowed maximum airport charge.<sup>26</sup> This fine judgment, to the nearest 0.25%, comes when:

- the CAA says that 'there is approximately a 95% chance that the true mean return [on equity] lies between 2.75% per annum and 12.65% per annum' – a range of almost 10%;<sup>27</sup>
- there is a large, acknowledged margin of error in estimating the 'beta' (the appropriate divergence from the mean) for BAA plc, the nearest private sector comparison, "*there can be 95% confidence that BAA's true beta lies in a range of 0.36-1.08*";<sup>28</sup>

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<sup>25</sup> CAA (2004), pages 36-37.

<sup>26</sup> CAA (2003c), paragraph 4.20, page 21.

<sup>27</sup> CAA (2003b), paragraph 4.43, pages 39-40.

<sup>28</sup> CAA (2003b), paragraph 4.46, page 40.

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- since Manchester Airport is in the public sector, it is in any case a matter of fairly arbitrary judgment how much of its theoretical cost of capital to attribute to equity and what beta to attribute to it.<sup>29</sup>

It is clear that the particular maximum price set by the regulator is not the result of the application of some clear economic rule but of informed judgment in the midst of great uncertainty. As noted above, the test proposed by the CAA of such a judgment is whether a serious loss of economic efficiency would result if it was not made and whether another solution is available.<sup>30</sup>

### **Has economic regulation worked?**

Is there evidence that economic regulation has affected the behaviour of these airports in economically or socially desirable ways? If so, the effects should be visible in at least one of these areas:

- the prices they charge;
- the economic efficiency with which their assets are used;
- the quality of service they provide.

Economic regulation of airports is complicated by the importance of revenue, and especially profit, from sources other than regulated airport charges. Over the five years to 2001/2 for the three BAA London airports taken together, airport charges represented on average more than a third of revenue but only a seventh of operating profit.<sup>31</sup> This means that the leverage of the regulator is less than in many regulated industries. Halving the regulated revenue would only reduce profit (assuming constant margins) by one fourteenth; doubling the regulated revenue would only increase profit by one seventh.

#### ***Prices***

Insofar as the objective of regulation is to serve the interests of the passengers who use airports, its leverage is also reduced because of the distance between regulated airport charges and air fares. At Heathrow, which is not used by low-cost airlines, the airport charge per passenger is typically a small proportion of the ticket price. At the margin, it is likely that changes in airport charges will feed through into airfares, but this is a long way from the usual position of an economic regulator limiting the retail price. The position is different at Stansted, where changes in airport charges could materially affect the much lower passenger prices. However, at Stansted, BAA knows well that it needs the low-cost airlines to continue to prosper and its market position is not as strong as at Heathrow. The airport charges it chooses to impose at Stansted are, and are expected to remain, below the ceiling allowed by the regulator.<sup>32</sup>

At Manchester the charges to airlines total some £145m a year, of which £130m is subject to CAA regulation. Manchester charges are significantly higher per passenger than those at the

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<sup>29</sup> CAA (2003c), paragraphs 4.10-4.11, page 19.

<sup>30</sup> CAA (2000a), paragraph 2.11, page 8.

<sup>31</sup> Calculated from Competition Commission (2002b), Table 4.8.

<sup>32</sup> CAA (2003b), paragraphs 5.18 and 5.33, pages 55 and 58.

London area airports (nearly £7 in 2000/2001 compared to £5.23 at Heathrow, £4.36 at Stansted and £4.06 at Gatwick) and compared to Liverpool (£3.69), although they are not out of line with airport charges at Newcastle (£8.29), Leeds/Bradford (£7.80) or Birmingham (£7.79).<sup>33</sup> As at Stansted, regulated airport charges at Manchester have in fact been below the regulatory cap for the last five years, albeit in this case partly to offset higher charges to airport users for services which fall outside the scope of CAA regulation; and they are projected to remain so for the next five years.<sup>34</sup> In addition, Manchester Airport has spent £6m a year (about 5% of its airport charge revenue) for several years on discounts for particular airline customers and is being allowed to continue to do so at a substantially higher rate (£16m a year, more than 10% of its airport charge revenue) for this purpose in the costs taken into account in setting its future charges.<sup>35</sup> As noted above, in the context of the £2m spent by Stansted on similar discounts, both the Competition Commission and the CAA have described such discounts as “*examples of competitive pressures on airport charges*”.<sup>36</sup>

Charges at Heathrow and Gatwick have been constrained by economic regulation, at least in the sense that BAA has argued for higher price caps than it has been given. For the last three years, BAA has in practice held its charges at both these airports below the maximum allowed by the regulator (in recognition of the delays in approving Terminal 5 and the consequent reduction in its level of capital investment compared to what was expected when the last maximum was set).<sup>37</sup> Charges are at present below the level at privatisation, although they are not required to remain so over the next five years; and they are currently more than 25% below the charges at Heathrow’s direct competitors in Amsterdam, Frankfurt and Paris.<sup>38</sup> The issue here is whether it can be said with confidence that this is a result different from what would have occurred in unregulated negotiation between BAA and its customer airlines.

The airlines using Heathrow are not, in general, particularly profitable and have not become notably more so over the last 15 years. Therefore it does not on the face of it look as if regulation has transferred monopoly rents from BAA to the airlines. As noted above, the link between airport charges at Heathrow and passenger fares is not strong, so that it would be hard to show major gains to passengers from regulatory restraint of airport charges at Heathrow. Primarily to ease BAA’s coming investment in terminal 5, the CAA has allowed a significant increase (6.5% a year above the rate of inflation) in airport charges at Heathrow over the next five years but has said that it “*does not expect its decision to materially affect air fares*”.<sup>39</sup>

Where the link between airport charges and passenger fares is strong, at Stansted, regulation has not in practice constrained the level of airport charges. The CAA has set a cap on airport charges for Stansted with the intention that it “*will not affect the actual net yields achieved*”, on the basis – unusual for an economic regulator – that a regulatory price constraint which bit would reduce the incentive to BAA to provide its services efficiently: “*the incentives provided by price cap regulation are likely to be weaker than the incentives provided by normal commercial operation*”.<sup>40</sup>

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<sup>33</sup> Competition Commission (2002a), Table 7.5, page 155.

<sup>34</sup> CAA (2003c), paragraph 5.26, page 30; Competition Commission (2002a), paragraph 2.49, page 15.

<sup>35</sup> CAA (2003c), paragraphs 5.20-5.23, pages 28-29 (the CAA overrode on this point the Competition Commission’s wish to limit allowable expenditure on discounts to a continuing £6m a year).

<sup>36</sup> Competition Commission (2002b), paragraph 2.303, page 80.

<sup>37</sup> Competition Commission (2002b), paragraph 2.27(d), page 17.

<sup>38</sup> Competition Commission (2002b), paragraph 2.385, page 100.

<sup>39</sup> CAA (2003b), page viii.

<sup>40</sup> CAA (2003b), paragraph 5.33, page 58.

### ***Economic efficiency***

Apart from customer prices, the case for economic regulation might be made in terms of the economic efficiency with which scarce airport assets are used. This does not look like a major issue. Heathrow and Gatwick have more aircraft movements per runway, and more passengers per aircraft movement, than any other airport in the world, primarily because of the common interest between BAA and its customers in maximising passenger numbers.<sup>41</sup>

The question of allocating this intensive use between users is complicated by the interaction between airport user charges and slot allocation. Capacity at a capacity-constrained airport can be allocated to those who value it most in one of two ways. The airport can charge a higher, ultimately a market-clearing, price for each aircraft movement. In the case of Heathrow, that would involve a massive transfer of money from airport users to the airport, with no obvious compensating gain in efficiency (and in the case of US airlines, a breach of the 'Bermuda 2' agreement, which limits airline charges to the reasonable cost of providing the services for which the charge is made).<sup>42</sup>

Alternatively, airlines can trade slots with each other, in which case the higher prices some airlines are prepared to pay will go to the holders of the more popular slots rather than to the airport, although the airport might then involve itself in the market for slots in a number of ways. The market for slots is constrained by European Union rules.<sup>43</sup> Trading in slots does in fact take place but there is little that either BAA or the CAA can do at present to organise or promote an efficient market in slots.

While that remains the case, and physical capacity and runway rules remain a constraint on aircraft movements at Heathrow, it is not clear that raising airport charges would in practice make much difference to the efficiency with which the airport assets are used. At the margin, it might; if so, then some exploitation of BAA's market power at Heathrow might improve economic efficiency. At Gatwick, with (outside peak hours) less constrained capacity, lower fares and fuller aeroplanes than are typical at Heathrow, higher charges per passenger appear likely to penalise very efficient use of the capacity; but BAA has less market power to exploit here.

Major past changes in the efficiency with which these airport assets have been used have not resulted from the level of airport charges but either from their structure (the shift to a flat-rate landing charge at Heathrow in the 1980s) or from extraneous government fiat (relaxation in 1991 of the earlier limit on aircraft movements at Heathrow). A greater change could be made in future by allowing mixed-mode use of Heathrow's runways than anything likely to result from changes in airport charges: a strong hint that this relaxation may come is given in last year's White Paper.<sup>44</sup>

### ***Quality of service***

The other area which economic regulation generally seeks to affect is service standards, if only to stop a regulated industry reacting to restrictions on the prices it can charge by

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<sup>41</sup> Competition Commission (2002b), paragraph 2.126, page 41.

<sup>42</sup> Article 10.3, quoted in Competition Commission (2002a), Appendix 3.2, page 292.

<sup>43</sup> EC Council Regulation 95/93, incorporated into English law by the Airports Slot Allocation Regulations 1993 (SI 1993/1067).

<sup>44</sup> Department of Transport (2003), paragraph 11.66.

reducing its quality of service. This has been a difficult area in airport regulation, for a variety of reasons:<sup>45</sup>

- measurement of service standards is difficult in several areas important to airport customers;
- disentangling responsibility for the quality of service between the airport operator, the airlines and, in some instances, the provider of air traffic control services (NATS), is not straightforward;
- averaging service performance across a range of indicators may give the airport operator an incentive to focus on the easiest to improve, while airlines might prefer action to tackle the least satisfactory; on the other hand, a system of penalties and rewards calculated separately for each of a large number of indicators would be complex and expensive;
- most airlines have proved reluctant to negotiate service level agreements with BAA which are symmetrical, so that they might have to pay more if BAA does well; and virtually no progress at all has been made in concluding service level agreements at Manchester;
- setting targets at levels of service presently achieved increases the airport's risk (and thus its cost of capital) without any clear gain to customers unless it slips back, while setting targets below present levels means that the airport can beat the targets (and perhaps be rewarded) without making any improvement.

For such reasons, economic regulation until now has not had much direct effect on the quality of service provided at the four designated airports. The Competition Commission found in the case of Manchester that, in relation to the quality of service, the airport had "*pursued a course of conduct that has operated and might be expected to operate against the public interest*" and the CAA has imposed a condition designed to remedy this behaviour.<sup>46</sup> There is evidence of airline discontent with BAA's service standards at the London area airports, and the Competition Commission remains concerned about BAA's productivity.<sup>47</sup> Attempts are thus to be made to tackle service quality in the coming five years but with what success remains to be seen. It is particularly difficult for service standards imposed by regulation to take due account of the quite wide range of trade-offs between quality and price that airlines visibly make in unregulated airports.

### **Costs**

Meanwhile the system of economic regulation has clear costs, both for the regulatory organisations themselves and for the airports and the airlines in dealing with them. Less clear, but probably also significant, is the effect on relations between the airports and their customers, arising from the presence of an economic regulator, behind their negotiations with each other, as a court of appeal or as a taker of decisions, about which, in its absence, they would have to reach a commercial agreement. As noted above, both the costs and the potential distortions are acknowledged by the CAA.<sup>48</sup>

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<sup>45</sup> See CAA (2000d), Quality of Service Issues - Consultation Paper.

<sup>46</sup> CAA (2003c), paragraphs 7.2-7.9, pages 40-41.

<sup>47</sup> Competition Commission (2002b), paragraphs 2.277-2.294, 2.348-2.360.

<sup>48</sup> CAA (2000c), paragraph 5, page 2.

### International obligations

The British government is not wholly unfettered in its dealings with British airports. There are international rules agreed through the International Civil Aviation Organisation (ICAO), there are regional rules agreed through the European Union and there are bilateral rules agreed in treaties with other countries, of which by far the most important is the 'Bermuda 2' agreement with the USA.

However, in practice, the existence of this web of international obligations does not constrain the decision whether or not to designate an airport for the purposes of economic regulation. The rules of the ICAO have become notably more flexible and permissive in relation to airport charges than they used to be, although they continue to require non-discrimination between national and foreign airlines.<sup>49</sup> The EU certainly constrains the development of a proper market for aircraft landing slots, and it has rules on the market for ground handling services at airports and the corresponding element in airport charges, but it does not dictate the form or the content of economic regulation of airports (outside the ambit of general competition law).<sup>50 51</sup>

Bermuda 2 is an agreement with specific provisions about airport charges, for example, relating them to costs so that market clearing is not an allowed objective. But the British government has never taken the view that the arrival of an American carrier at a British airport was, in itself, an argument for designating the airport concerned under section 40 of the Airports Act 1986; and the fact that American carriers are present in force at BAA's London area airports does not constitute a reason for keeping them designated.

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<sup>49</sup> Convention on International Civil Aviation (December 1944), Article 15.

<sup>50</sup> EC Regulation 95/93.

<sup>51</sup> EC Directive 96/67.

## Conclusion

The major issues affecting the development of airport capacity in major UK airports are public policy issues (planning, transport policy, limits on aircraft movements, limits on runway use) outside the reach of economic regulation. At Manchester and Stansted, airport charges have not reached the ceilings set by regulation, and are not expected to do so in the period covered by the new price control. That must call into question the point of going to all the trouble of setting the ceilings. Indeed it may even call into question their legality: the (then) Monopolies and Mergers Commission received a Counsel's opinion in 1987 which suggested that charges cannot legally be capped by the regulator at "*a deliberately non-binding level*".<sup>52</sup>

Even at Heathrow and Gatwick, airport charges have been below the regulatory ceiling for some years. There are special reasons for that, but it does not seem clear that economic regulation of BAA's airports has produced airport charges significantly below what they would have been in the absence of regulation, nor that, if it has, that has made much difference either to the prices paid by passengers or to the economic efficiency with which airport assets have been used.

Service quality has not been effectively regulated hitherto and it is not obvious that the new efforts to do so will produce results notably superior to what would otherwise be the result of unconstrained negotiation between the airports and their customers. Fifteen years of regulation do not seem to have sharpened BAA's focus on productivity. There is a strong mutuality of interest between airports and their airline customers resulting from the integration of airport charges and retail/property income for the airport.

The cases for designating, first, BAA's Scottish airports and then Luton were rejected by government on grounds which may also apply to the four currently designated ones. The Competition Commission now exists to deal with any abuse of market power. If industry-specific experience, rules or remedies are needed, the CAA has reserve powers to set 'discretionary conditions' for all significant airports. David Starkie asked a few years ago, "*Rather than link the implementation of economic regulation to evidence that market power exists (which appears to be the basis on which the four airports were originally designated), would it not be preferable to hold reserve powers which are put into effect only when there is evidence that market power is being exploited?*".<sup>53</sup>

The CAA's criteria for economic regulation, cited above, include "*where it is clear that a serious loss of economic efficiency would otherwise exist*"; this paper has argued that in this case that is very far from clear. The CAA criteria also include "*where other solutions are not available*".<sup>54</sup>

There is, in this case, another solution. There appears to be a strong case for repealing the 'designation' of the four airports currently designated as subject to 'heavy' economic regulation. To prevent an overhang of regulatory risk, it would also be advisable to set clear criteria which any future decision to 'redesignate' would have to meet.

<sup>52</sup> Competition Commission (2002b), paragraph 2.299, page 79.

<sup>53</sup> Starkie D (2001), A New Deal for Airports? in *Regulating Utilities: New Issues, New Solutions*, Edward Elgar for the Institute of Economic Affairs and the London Business School, page 150.

<sup>54</sup> CAA (2000a), paragraph 2.11, page 8.

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