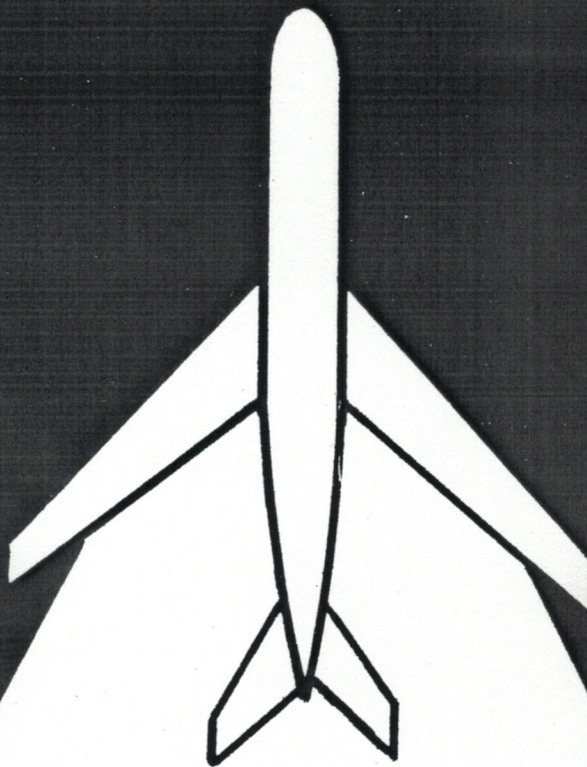


# Airports For Sale



## The Case For **COMPETITION**

*By*  
**SEAN BARRETT**  
*Trinity College, Dublin*



# **AIRPORTS FOR SALE**

## **The Case for Competition**

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‘A monopoly granted either to an individual or to a trading company has the same effect as a secret in trade or manufactures. The monopolists, by keeping the market constantly under-stocked, by never fully supplying the effectual demand, sell their commodities much above the natural price, and raise their emoluments, whether they consist in wages or profit, greatly above their natural rate.’

Adam Smith, *The Wealth of Nations*, Book 1, Chapter 7.

# 1. PRESENT POLICY AND OBJECTIVES

Current proposals for airport privatization aim to transfer as many of Britain's airports as possible to the private sector, and cover airports run by the British Airports Authority, local authorities, and the Civil Aviation Authority [Conservative Party, 1983].

The *British Airports Authority* operates the South East's airports at Heathrow, Gatwick, and Stansted, and the Scottish airports of Edinburgh, Glasgow, Prestwick, and Aberdeen. Together these recorded a profit in 1982/3 of £38.6m. The Authority's profits are made overwhelmingly at Heathrow, which had a surplus of £45.7m in 1982/3. Small profits are made at Gatwick (£0.775m in 1982/3), Aberdeen (£0.591m), and Glasgow (£0.740m), and losses were incurred at Stansted (£4.6m), Edinburgh (£1.3m), and Prestwick (£3.4m).

There are twenty-three airports run by *local authorities*. They range in size from Manchester, which had an income of £44.2m in 1982/3, to Sunderland, where the income was only £40,152. The local authority airports, together, had a surplus of £6.9m in 1982/3.

The *Civil Aviation Authority* airports are in the Highlands and Islands at Sumburgh, Inverness, Islay, Tiree, Benbecula, Stornaway, Wick, and Kirkwall. Although these airports are judged to be essential because they provide vital links with the outside world for those communities which they serve, all except Sumburgh (with its strategically important oil trade), are loss-making: the loss in 1982/3 was £3.6m and was recouped from the Scottish Development Department.

Table 1 shows the profits in 1982/3 for airports that handled over 100,000 passengers, and their operating authorities. The difficulties in comparing the profit figures have been illustrated by Doganis [1984]. The non-BAA airports do not include depreciation as a cost. Instead loan redemption and interest on any loans are charged in lieu of depreciation. A second anomaly is that the financial results for the BAA Scottish airports do not include any interest charges.



## The benefits sought from privatization

The primary objective of airport privatization is to reduce the present monopolistic powers and to encourage competition. This is in turn seen as a means to improve efficiency and sensitivity to consumer demand. Commercial freedom for management would replace the restraints of control from Whitehall [Boyfield, 1984].

**Table 1**  
**British Airports Traffic and Profits 1982/3**

	Operator	Passengers ( <sup>'000</sup> ) in 1982	Profit (£ <sup>'000</sup> ) in 1982/3
Heathrow	BAA	28406.1	45721
Gatwick	BAA	11154.2	775
Manchester	LA	4991.4	7334
Glasgow	BAA	2407.3	740
Luton	LA	1802.1	1650
Birmingham	LA	1565.5	1739
Edinburgh	BAA	1201.7	(1258)
Aberdeen	BAA	1139.5	591
Newcastle	LA	1131.6	1555
East Midlands	LA	874.4	1146
Leeds-Bradford	LA	384.6	462
Cardiff-Wales	LA	370.6	(656)
Sumburgh	CAA	351.5	66
Stansted	BAA	300.2	(4551)
Tees-side	LA	278.4	(281)
Prestwick	BAA	253.4	(3387)
Liverpool	LA	251.1	(2623)
Bristol	LA	248.1	113
Southampton	P	235.4	n/a
Norwich	LA	154.4	(182)
Inverness	CAA	128.7	(484)
Southend	LA	127.8	(546)
Bournemouth	LA	123.3	(211)

*Notes:* (1) BAA = British Airports Authority; LA = Local Authority; CAA = Civil Aviation Authority; P = Private.

(2) Figures in brackets denote losses.

In addition, airport operators will be able to diversify into fields such as hotels and catering. This diversification is presently prevented by the Airports Authority Act 1975, but a privatized airport operator will have access to private capital markets and will not be limited by the public sector borrowing requirement.

The policy of privatization seeks the following goals:

- (a) an increase in competition;
- (b) an increase in managerial efficiency;
- (c) a wider consumer choice;
- (d) a reduction in political interference;
- (e) the removal of the public sector borrowing requirement constraint on investment programmes; and
- (f) a reduction in the PSBR [Webb, 1984].

We will see in the course of the remaining chapters just how far these goals will be achieved by single-entity privatization of airports.



## 2. PROBLEMS OF PRESENT THINKING

There are a range of options in implementing a privatization policy. These range from a mere asset-stripping exercise to a coherent programme to change the structure of the industry in the interests of greater efficiency. Economists have been critical of the former approach in the case of British Telecom, where the privatization of a public monopoly without liberalization of the market is likely to lead to the worst of both worlds: the disadvantages of privatization without any of the benefits, apart from extra cash for the Treasury [Whitehead, 1983].

In other areas, privatization policy has changed the underlying market structure. The Post Office monopoly for certain traffics has been weakened, British Gas's monopoly purchasing right for North Sea gas has been ended, private electricity generation has been allowed, and intercity coach services have been liberalized.

These changes in the underlying structure of industries are more important than changes in ownership. Observing that 'selling off the ownership of an enterprise does not of itself guarantee any improvement in the performance of that enterprise', Harrison proposes forms of competition within the public sector without the public sector losing either ownership of the assets or ultimate control of the operations. While Harrison stresses changing the ground-rules under which industries operate, rather than their ownership, two of his recommendations are important in the context of the privatization of airports:

(1) 'there is no public sector monolith that cannot be broken up into structural segments which can be treated separately for the purposes of introducing competition'; and

(2) 'from this it follows that varying degrees of competition can be introduced into public enterprise' [Harrison, 1983].

The reviews of privatization by economists thus stress that privatization without changes in the industry ground-rules and market structure is merely a one-off gain to the Treasury. It accomplishes only one of the goals of privatization listed in Chapter 1. The goals of increased competition, greater efficiency, wider consumer choice,



better investment decisions, and reduced political interference will not be met by privatization alone but require *competitive* privatization.

The British Airports Authority 'has already made known its firm view that the Authority should remain as one unit' when privatized [BAA, 1983], but this structure would not yield the benefits sought from privatization, as can be seen by running through the points individually:

(a) *Competition*: Single entity privatization would not increase the number of competing firms. It merely replaces a public sector firm by a private sector firm;

(b) *Managerial efficiency*: Single entity privatization retains the present management structure of airports and does not change the rules under which they operate in terms of market structure and competition. There is no competitive pressure to secure improved managerial efficiency;

(c) *Consumer choice*: A widening of consumer choice would not be secured by single entity privatization since the number of airport operators would not increase;

(d) *Political interference*: The transfer of a public sector firm with market dominance to private sector ownership with market dominance will not reduce the government's regulatory role. Government intervention to regulate monopolies and dominant firms is still necessary because of market domination, and whether ownership is public or private makes little difference; and

(e) *Investment decisions*: Removing the constraints imposed by the PSBR would indeed allow privatized airports access to extra funds for investment, but the *efficiency* of overall investment is the crucial consideration. The privatization of airports as a single entity will not of itself cause the efficiency of investment to improve, since it would retain the market and management structures presently determining investment policies.

### Competitive privatization

*Competitive* privatization of airports *would* attain the goals of the privatization policy. Competitive privatization is superior to single entity privatization on the following grounds:

(a) *an increase in competition* occurs because competitive privatization increases the number of competing firms;

(b) *an increase in managerial efficiency* occurs because of



the new competitive environment under which airports have to operate;

(c) *a widening of consumer choice* results from the increase in the number of competing firms;

(d) *a reduction in political interference* results from the extra competition compared to single entity privatization. Government regulation of a single entity privatized airports body would have to cover all its activities. In the case of competitive privatization, such regulation might not be required at all or might be confined to the dominant firm; and

(e) *better investment decisions* result from competitive privatization. The present single entity structure under public ownership has permitted the subsidization of three loss-making airports from the profits of Heathrow, indicating that the Authority has not pursued correct investment policies. A single entity privatized Airports Authority would also be able to use cross-subsidization for incorrect investment choices.

In addition to these objectives that have been outlined already, competitive privatization would generate other benefits:

(f) a competitive environment for airports would promote *competition among providers of services to airports, such as security and air traffic control*. It is shown later that the noncompetitive provision of these services has generated inefficiency; and

(g) competition between airports is *an integral part of the present policy of promoting greater competition between airlines*. The gains to the consumer from price competition between airlines will be greater if the airlines are enabled to benefit from price competition between airports, with the airports seeking to secure competitive provision of their inputs.

Competitive privatization of airports is therefore part of a coherent strategy to promote greater overall efficiency in aviation to the benefit of consumers and to the entire economy. Single entity privatization, on the other hand, would retain the restrictions on competition in aviation in Europe and would promote inefficiency. The wide disparities in airline charges in the United States and Europe are a function of *both* airline and airport efficiency differences. Competitive airport privatization tackles the problem on both fronts: single entity privatization fails to do so.



### 3. AIRPORT CHARGES AND AIRLINE COSTS

Airport charges are an important and increasing share of airline costs. Airport charges comprise landing and departure fees, aerodrome, *en route* and other navigation charges, handling charges, and parking fees.

In 1980, British airlines paid £294.9m for these airport services. This was 9.6% of the airlines' total operating costs, but the percentage borne by individual airlines varied widely because of their different routes and other expenses. Airport charges accounted for 9.5% of the total operating costs of British Airways, 9.5% for British Caledonian, 15.4% for Air Ecosse, 15.6% for Dan Air, 16.8% for British Midland, 18.5% for Loganair, and 19.2% for Air UK. Charges therefore seem to be a particular obstacle for smaller airlines operating short-haul routes, and their depressive effect on market entry should be noted [CAA, 1983].

The burden of airport charges on short-haul routes was confirmed by the General Manager, Tariffs, of British Airways in evidence to the House of Lords Select Committee on European Air fares in 1980. He stated that airport charges, security funds, and navigation charges 'on quite a lot of routes would range up to 20%, perhaps even 25% on the short routes' as a proportion of costs [House of Lords, 1980].

Charges in Britain and Europe are high. In a submission to the House of Lords, the international airline price-fixing and trade association, IATA, maintained that 'landing fees in the US represent between ten per cent and thirty per cent of European levels. US airport charges are substantially lower and *en route* charges in the US are not counted as costs but added to the passenger ticket'. The IATA Secretary General explained the airport cost differences between the US and Europe in these terms: 'to put it very bluntly, in the United States the airports are put on a commercial basis. They are built, planned and financed on a commercial basis and then they are run commercially, whereas in Europe the airports are government organizations'.

The rapid growth of European airport and related charges was emphasized in the European Commission *Report on Scheduled Passenger Air Fares in the EEC*. The Commission



found that, between 1973 and 1979, landing and route charges rose by 214%. this rate of increase was faster than for any other item except fuel. In 1973, land and route charges ranked eighth of ten cost categories incurred by European airlines. In 1979, however, they ranked fourth [EEC, 1980].

The European Commission warned that 'with the percentage cost increases as they are at present they [fuel and landing and route charges] could become soon the two largest cost items. Specifically with respect to the landing and route charges, governments should realize that these costs are no longer a minor item in the total operating costs and further increases are bound to influence the level of fares'.

The Air Transport Users Committee [AUC, 1981], confirmed that British *en route* and airport charges were high compared to other routes. For a Trident Three with ninety-five passengers, the Committee estimated *en route* and airport charges for the return trip London-Glasgow at £17.87 per passenger. This compared with Paris-Bordeaux £9.70; Munich-Hamburg £16.11; London-Paris £13.19; Madrid-Lisbon £6.28; Stockholm-Oslo £14.32, and New York-Washington £4.50.

The European Commission currently estimates that airport charges are 25.9% of scheduled airline costs within Europe [EEC, 1984]. The components of this cost are:

Aircraft and passenger handling	12.22%
Airport passenger charges	5.15%
Landing charges	4.07%
En route navigation	3.61%
Airport navigation	0.85%

Airport charges are therefore a major item in airline costs, especially on short-haul services. Both their share of total costs facing airlines and their absolute levels have risen rapidly. British levels compare unfavourably with those charged elsewhere. It is surprising therefore that Foster states that 'it is difficult for airports to compete on price, since airport charges are only a small proportion of airline costs - rarely more than five per cent - so that even large differentials in charges are unlikely to have a significant effect on which airport an airline chooses to operate out of' [Foster, 1984]. Airport charges are in fact far more important than Foster allows. They would be an important factor in



price competition between airlines, especially on short-haul routes.

### **Privatization and charges**

Competitive privatization will undoubtedly have a substantial impact on airport charges. In a competitive environment, airports would have to be more careful about their costs and less inclined to allow the persistence of practices that might be administratively or politically convenient but which raise charges for airport users.

The granting of monopoly rights to fuel suppliers, as found in East Midlands and other airports, for example, is an unpopular one with airlines because it precludes the possibility of searching for cheaper supplies. But far more important in terms of costs to passengers are the restrictive working practices that the BAA has agreed with its unionized staff - the 'brown army' of security staff being a case in point.

It is doubtful that security on domestic flights, except those to and from Northern Ireland, needs to be as heavy as it is at present; but even so, it could undoubtedly be more efficient. At Heathrow, it costs between £1.25 and £1.75 per passenger to provide security checks. Part of the reason for this is that, instead of a central control point for searching domestic flight passengers and hand baggage (as found routinely at US airports and with international flights even at Heathrow), security staff and x-ray machines are installed at every departure gate. This obvious waste is exacerbated by the working agreement for there to be a minimum of six security staff for each x-ray machine, and a maximum flow-rate of passengers through the security points. Airports working in competition could hardly afford such luxuries, with the results that organizational savings would be passed on to airlines and passengers alike.



## 4. AIRPORTS IN COMPETITION - ISSUES AND ANSWERS

The case made here is that the goals of privatization will be attained only by competitive privatization. Only competitive privatization will achieve the efficiency gains in airports and air traffic control that are an integral part of extending price competition in aviation. Single entity privatization would retain the restrictions which have brought about our high-cost aviation system.

### **The case against competition**

The case against competitive airports has recently been made by economists supporting the BAA case that it should be privatized as a single unit. Boyfield states that 'it should be emphasized that government planning restrictions affecting capacity and the number of air transport movements preclude the establishment of a totally free market... The practical difficulties of gaining official approval to build a new airport, and the long lead time before the substantial capital investment required begins to show returns, virtually rule out the competitive threat which would be posed by new entrants' [Boyfield, 1984].

Foster recommends the sale of the airports as a single entity since 'it would provide the benefits of careful planning in a reasonably well-defined environment, as well as the lower costs that come from the efficient use of economies of scale and particularly of joint production. This in turn means that the Authority would be able to raise funds more cheaply and its sale price would better reflect its true value'.

Foster believes that competition between airports 'is likely to prove largely illusory'. He gives the following reasons for this view:

(a) the product is diverse, varying by time as well as place. different consumers want different attributes not readily provided at each of these airports;

(b) 'it is difficult for airports to compete on price, since airport charges are only a small proportion of airline costs - rarely more than five per cent';



(c) 'only a small number of airports can be viable, given economies of scale in operation';

(d) 'the long-run planning of an airport system almost inherently requires agreement on an overall strategy for investment or entails the risk of underinvestment'; and

(e) revenue from privatizing the airports separately 'may well be less than if the Authority is sold as a single entity because of greater uncertainty and difficulties of adjustment as well as more limited monopoly power... and uncertainty about how the new airport system would operate' [Foster, 1984].

### The charges answered

Unfortunately, none of these arguments is very substantial: most are simply wrong, as a moment's consideration shows.

(a) *Product diversity* is not an argument against competition in airport provision or any other business. It is not necessary that every product in the market be an exact replica of the others in order that the benefits of competition can be enjoyed: consumers make trade-offs between products which are not identical. For example, customers of the road freight industry have different requirements in the trade-off between the speed and quality of service and the price charged. Road freight is nonetheless highly competitive.

(b) Foster's second point, airport charges being 'small', has been covered already. Airport charges are in fact much greater than five per cent of airline costs. Sources such as the House of Lords Select Committee on European Air Fares, the Civil Aviation Authority, IATA, the European Commission, and the AUC find the level of airport charges to be substantially higher than Foster allows. This means that the ability of airports to compete on price is not as limited as Foster assumes.

(c) Table 1 above covers Foster's third point on *airport economies of scale*. The table shows many examples of cases in which economies of scale are apparently unimportant. Manchester made a profit of £7.3m with 5 million passengers, whereas Gatwick made only £775,000 with 11 million passengers. Edinburgh lost £1.3m on 1.2 million passengers, while East Midlands made a profit of £1.1m on 900,000 passengers. The smallest profitable airport, Gloucester-Cheltenham, made a profit of £50,000 on an income of



£166,000: the biggest loss-making airport, Stansted, had an income fourteen times greater than Gloucester-Cheltenham.

In fact, Foster subsequently casts doubts on his earlier claim on airport economies of scale: 'as far as direct costs are concerned, the empirical evidence suggests that they are roughly constant with volume, so that separation would not impose additional costs. But overheads, bulk buying and personnel costs, may however fall with size, while the benefits of management expertise and learning may increase'.

(d) On *investment planning*, Foster argues that competing airports would make investment forecasting difficult and could lead to price-cutting at airports. There would be an incentive, particularly at Heathrow, to underinvest.

Investment planning of infrastructure projects such as airports seeks to anticipate and respond to consumer demands. This occurs either through the market or through the type of planning recommended by Foster. Through the market, incorrect investment choices may be made, but on balance, correct choices are more likely. Bureaucratically-determined investment policies, such as those of the British Airports Authority, show investment choices which are clearly questionable. For example, the expansion of Heathrow has been restricted in favour of Stansted. Heathrow's largest customer, British Airways, supports the construction of a fifth terminal at Heathrow using land now owned by the Thames Water Authority. But the BAA has sought, by administrative pressure rather than pricing, to transfer traffic from Heathrow to Gatwick and to promote Stansted rather than a fifth terminal at Heathrow.

The public inquiry appointed to consider the BAA case for developing Stansted has yet to decide between development there and a fifth terminal at Heathrow as proposed by British Airways. The extent to which the limit to expansion of Heathrow, as supported by the BAA, is the correct overall economic decision remains to be established, but there are already much larger airports which operate efficiently, casting doubt on the wisdom of this bureaucratically-determined choice. Chicago in 1981 handled 37.7 million passengers, Atlanta handled 34.7 million, and Los Angeles handled 32.3 million, compared to Heathrow's 26.4 million.

Foster holds that privatization would give an incentive, 'particularly at Heathrow' to underinvest, thus increasing the monopolistic powers of airports, enabling them to charge



higher prices in response to excess demand. It is, however, the *current* policies which have promoted underinvestment at Heathrow and used its revenues to cross-subsidize other airports. In addition to promoting overinvestment at Stansted, the BAA has built up substantial excess capacity in central Scotland where both Prestwick and Edinburgh are heavy loss-makers. The degree of internal cross-subsidization within the BAA shows the extent to which it has made incorrect investments.

Competitive privatization would not allow profits from Heathrow to cross-subsidize Stansted and Prestwick. Under independent managements, however, these airports could seek new roles in the market. Prestwick might develop as a freight centre based on its freeport status, while Stansted might become a small regional airport. Both would be freed from contributing to the BAA's overheads.

When the long run marginal cost of airlines using Heathrow turns sharply upward, there will be an incentive both for the airlines to look for other airports and for the competing airports to renew their search for new business. The other airports will be able to compete on the basis of their costs, and will have an incentive to keep charges as low as possible. The division of traffic between airports will then be on the basis of relative costs. At present, the development of Heathrow is restricted by policy decision, with non-price methods used to apportion traffic between the airports.

(e) Regarding *market dominance*, Foster also fears that 'in any conceivable scenario Heathrow would be dominant because of its geographical and inter-lining advantages'. His view is that 'a private Heathrow would have the incentive to maximize profit subject only to the constraints imposed by the Monopolies and mergers Commission or by direct government regulation', but regulation would lose the efficiency gains sought under the privatization policy, thus giving 'the consumer and the nation a worse deal than at present' [Foster, 1984].

In the United States, the increase in competition in aviation following airline deregulation has produced competition between airports in many cities such as Chicago, New York, Washington, and Dallas. The sale of airports in Britain under competitive privatization will allow new producers to enter the business of running airports. The economic literature stresses that potential new entrants can be a restraint on the conduct of market-dominating firms.



The arrival of new producers under competitive privatization will *reduce* rather than increase Heathrow's market dominance. The theory of contestable markets, as applied to airports, is examined later.

It may still be necessary to use the Monopolies and Mergers Commission to regulate the charges at Heathrow if it were seen to exercise market dominance against the public interest. An advantage to the Commission of competitive privatization over sale of the airports as a single entity would be the ability to compare different airports under diverse ownership. These comparisons were valuable in the Commission's report on the Civil Aviation Authority where it compared different ways of providing airport air traffic control. They also provide a stimulus to the service producers to evaluate different methods and to explore less costly means of operation.

(f) Turning to Foster's next point, the *sale revenue* from airport privatization should not be the dominant consideration but should be secondary to the impact on overall efficiency in the economy. Assuming that large enough buyers could be found, the sale of a public monopoly to the private sector would of course yield a higher sale price if the transfer were to include the monopoly 'rents' enjoyed in the public sector. The sale price would include not only the normal assets one would expect of any competitive commercial firm, but also the present value of the monopoly mark-up on the income of the enterprise. For example, the privatization of the National Freight Corporation might have yielded more revenue if Britain had restored quantity licensing for road freight; but the benefits of free competition in road freight to the economy as a whole were correctly seen to be more important than their effect on the share value of a privatized company.

Even so, while the sale revenue should not be allowed to dominate considerations of overall economic efficiency, there is no guarantee that the sale of airports as a single entity would yield a greater sale revenue than competitive privatization. It may in fact be the reverse. The sale price from the privatization of the BAA as a single entity may be reduced by the existing policies of the authority as discussed above, such as the opposition to growth at Heathrow (especially if the chosen method of privatization produced little change in control structures), and by the inclusion in the package of the large loss-making airports at Prestwick and Stansted.



(g) Boyfield's claims that airports require substantial capital investment and long lead times are not supported by the example of the London docklands airport. Here an investment of £7m will cater for a million passengers per year with a construction time of only forty weeks [Brymon, 1983].

### **Airports in competition — the precedents**

In his discussion of the sale price of the BAA upon privatization, Foster stresses the reduction in the sale price which would follow from *uncertainty* about how competitive privatization would work. His argument is that there is no precedent in the world for the separate operation of a system of airports so closely linked as those in either the South East or the Scottish lowlands [Foster, 1984].

On the other hand, there is evidence that in a price-competitive aviation environment, airlines and their passengers have sought competition between airports. Glasgow, for example, has attracted traffic from Prestwick. In Belfast, the Harbour Airport, owned by the Shorts Aircraft Company, has attracted traffic from Aldergrove, which previously had a monopoly in the area. The proposed London docklands airport will not be part of BAA.

In the United States, airline deregulation has encouraged new carriers to develop separate operations in competition with the main airports. According to Eades:

'Some new entrants, finding access to the most desirable airports difficult and/or expensive, have concentrated on these less desirable airports, in some cases turning their very remoteness into a competitive virtue. The airline doing the best job of this has been Midway, which built a hub at Chicago's relatively unused but conveniently located Midway Airport. Several times per day the entire Midway fleet converges on this single airport to deliver passengers from other cities to the Chicago area and, more important for Midway, to exchange passengers, enabling the carrier to offer a wide variety of connecting schedules with remarkably short connecting times' [Eades, 1983].

People Express has developed a similar operation at Newark, bypassing Kennedy and La Guardia. People Express uses Baltimore-Washington International Airport, forty minutes north of Washington, rather than Washington's own and very central National Airport.



Southwest and Muse serve Love Field rather than Dallas-Fort Worth.

Eades finds that Chicago O'Hare, New York Kennedy and La Guardia, Washington National, Denver Stapleton, and Los Angeles International have a serious airport access problem. In two cases — Denver and Boston — 'they are the only major airports within convenient distance of the major population centres they serve. In other cases, alternative airports serve the metropolitan areas'. These alternative airports may be less convenient and have fewer connecting flights: but they have permitted the new carriers to bypass congestion at the main airports. They provide the UK with a precedent for separate and competitive operation of airports in the same area.

### The theory of contestable markets

*Airports in competition.* The economist's traditional model of perfect competition with many producers and consumers and perfectly substitutable products has recently been supplemented by a theory of contestable markets postulated by Baumol [1982 and 1983].

In a perfectly contestable market, an entrant has access to all production techniques available to incumbents, is not prohibited from wooing the incumbent's customers, and entry decisions can be reversed without cost. Efficient allocation of resources is assured by ease of potential entry, even though the number of firms may be small. Whereas the traditional model of perfect competition requires many producers to secure optimal resource allocation, the theory of contestable markets elicits efficiency in industries with few producers through *potential* entry. This is sufficient to ensure that no firm can earn monopoly profit in the long run, that the industry will always be composed of the number of firms that can produce its output at minimum cost, and that in the long run the price of the product must equal its marginal cost [Baumol, 1983].

Baumol finds that 'some industries with small numbers of firms are highly contestable', and that 'in other cases the contestability of the market can be increased by public policy and in those cases this will sometimes prove to be the most effective means to serve the public interest' [Baumol, 1983].

In his presidential address to the American Economics Association, Baumol states that 'a history of absence of



entry to an industry and a high concentration index may be signs of virtue, not of vice'. An efficient industry may have prices so low that new entrants are not attracted. Baumol also warns of 'the questionable desirability of artificial impediments to entry such as regulators were long inclined to impose. The new analysis merely reinforces the view that any proposed regulatory barrier to entry must start off with a heavy presumption against its adoption' [Baumol, 1982].

The theory of contestable markets can be applied to airports. There is easy access to production techniques, and customers can be attracted away from other airports. The remaining condition for the operation of contestable markets is freedom of entry and exit: both may be easier than has been assumed in the past.

The Belfast Harbour Airport and the proposed London docklands airport are examples of new entrants to the market. As we have seen, the estimated construction time for the London docklands airport is forty weeks [Brymon, 1983], while the capacity of the airport is 1 million passengers per year. The entry time for new airports can thus be less than previously supposed. More immediate entry is possible through civilian use of former military airfields. In the US, several new carriers have developed the use of smaller airports since airline deregulation.

Total exit from the airports business is unlikely since overall traffic is still rising rapidly. In 1982, the UK's airports handled ten times as many passengers as in 1958 [Maiden, 1984]. Exits are more likely to occur by airports redefining their roles. Britain's provincial airports, for example, have developed charter services, while their international scheduled traffic has been sluggish. The total charter market grew 40% between 1978 and 1982 and the regional share of it grew from 31% to 40% [Maiden, 1984].

Airports meet most of the conditions for the operation of contestable markets and are appropriate candidates for competitive privatization. The 'freedom of exit' criterion could be met by allowing airports such as Prestwick and Stansted to redefine their roles under privatization.

In conclusion, it can be said that the obstacle to applying contestable markets to airports is administrative rather than economic. The obstacle would remain if airports are privatized as a single entity. Competitive privatization introduces more firms into the airports business. For the advantages of contestable markets to prevail, it is not



necessary that the number of new producers should be large.

### Privatization and regulation

Carsberg and Lumby point out that 'whether privately or publicly owned, airport operators are subject to statutory obligations and are constrained by national and international regulations '[Carsberg and Lumby, 1984]'. Hence, any privately-owned airport is likely to be subject to substantial regulation which will set it apart from most commercial businesses, and limit the managerial freedom gained by removal from government control'.

Competing privatized airports will still require many quality controls over their operations and planning, although this is true of many competitive businesses. Such controls are required because of the public interest in matters of safety and the environment, but should not be confused with *quantity* controls. In the road haulage industry, for example, the Foster Committee [Foster, 1978] warned that the government should resist introducing quantity licensing to improve the quality and efficiency of the industry. The Committee made forty-four 'major' recommendations and forty-seven 'minor' recommendations to improve the *quality* controls over the industry, but concluded that *quantity* licensing for the purpose of improving the quality and efficiency of the industry 'would be misguided in principle and that the government should resist any pressures — internal or external — for the introduction of such a system'.

Regulation in the public interest can be transformed readily into protection for producers unless the market is liberalized. The case for competitive privatization of Britain's airports is that potential new entrants to the business should be able to attain market entry. Competitive privatization avoids the problems of the British Telecom privatization. According to Whitehead 'a major fear must be that the government will be unable to avoid replacing public ownership by a restrictive system of regulation which hinders entry and competition and protects existing firms. To avoid this, it would be best for the government to opt for a very simple form of regulation, and at the same time to do everything that it can to assist liberalization' [Whitehead, 1983].



## 5. PRIVATIZING NON-BAA AIRPORTS

The announced official policy, which aims 'to transfer as many as possible of Britain's airports to the private sector' [BAA, 1983] would certainly seem to include privatization of the airports of the local authorities and the Civil Aviation Authority. These, however, require some detailed thought, since many are presently loss-makers and some are too remote to attract much interest from investors. From a practical point of view, competitive privatization would afford the best opportunity to privatize each one with due regard to its special character and problems.

### The CAA airports

The CAA airports in the Highlands and Islands of Scotland pose problems because only Sumburgh is a (borderline) profit-maker, the other seven — Inverness, Islay, Tiree, Benbecula, Stornaway, Wick, and Kirkwall — generating losses. However, the local communities in those places argue that they could operate these airports at a considerably smaller loss than that incurred by the CAA, and some argue that the airports could be operated at half their present cost.

Certainly it may be that, as a large organization, the CAA is unsuited to deal with the special problems of managing a string of small Scottish airports, and that more responsive working practices would cut the losses and might even bring some installations into profit. The correct policy would therefore seem to be a two-stage approach. Firstly, the airports can be offered for sale individually to commercial concerns: those which are potentially profitable, given a suitably innovative commercial approach, will go at this stage. Secondly, the operation of the remaining airports can be put out to tender, so that whoever can provide the airport service at lowest cost will be contracted to do so for a given period.

In the case of the smallest airports, it is possible that only the local authority will be interested in running the airport; but a reduction in cost may still be possible, provided that the same, regular tendering process allows newcomers to offer some competition.



## Municipal airports

The municipal airports are even more of a mixed bag. Some are large, many are tiny, some are very profitable and some are large losers.

Four of the largest airports, Manchester, Birmingham, Liverpool, and Newcastle, should be easy to transfer to the private sector because they are presently controlled by metropolitan counties that are due to be abolished in 1986. Such a transfer is to be preferred because it offers new scope for innovation and investment, and because of the bureaucratic awkwardness of the alternative of having the airports controlled by collections of smaller local authorities already facing major reorganization.

The most efficient strategy with these and other profitable municipal airports is probably to float off holdings in them to institutional and private investors. Since the profitable airports are net contributors to local rates funds, it would be desirable to confer the proceeds from the sale direct to the local authority: which in many cases would provide a substantial 'one-off' boost to depressed areas. Although there is a case for allowing the authorities to retain a small stake of perhaps 25% in the newly-privatized airports, it is probably better to make the break a clean one as far as is possible.

Such straightforward sale techniques would be appropriate for the other profitable local authority airports as well. In the case of loss-making local airports, the same two-stage process as that proposed for the CAA airports in Scotland suggests itself. Commercial enterprises may be able to perceive changes that would make certain small airports profitable, and should be free to buy airports with that objective where possible: in other cases, least-subsidy tendering would ensure that the airport is operated at competitively low cost. Again, the present airport administration would be able to tender along with outside concerns.



## 6. PRIVATIZING AIRPORT AIR TRAFFIC CONTROL

Once independent commercial airports have developed price competition between each other, pressures will increase to improve services that are at present financed by monopolistic charges on the airlines and ultimately passed on to the passenger in higher fares. Among the services needed is airport traffic control.

Air traffic control has two principal elements: the control of traffic in the near vicinity of airports, including landing and taking off, and the management and separation of traffic while it is *en route* between airports. In Britain, private sector participation has been small and confined to airport navigation services.

The Monopolies and Mergers Commission report on the Civil Aviation Authority, however notes the gains from competitive tendering for the air traffic control service at airports: 'The evidence from Bournemouth and Liverpool [where the Authority's contracts came to an end], together with that from other non-NATS [National Air Traffic Services] airports suggests that others can provide airport ATS [air traffic services] at considerable savings when compared to the Authority' [Monopolies and Mergers Commission, 1983].

Already, independent companies are active in the market. IAL (International Aeradio, a subsidiary of Standard Telephones and Cables) operates ATS at Bournemouth Airport with twenty-six staff compared to the Civil Aviation Authority's forty-two; both employ the same number of ATC staff, but the CAA required fifteen engineers compared to International Aeradio's six. The cost of IAL for ATS operation at Bournemouth in 1979-80 was £316,400, compared to an estimated £456,000 by the Authority for 1977-78 (when the CAA gave notice that it would withdraw from providing the service).

In April 1981, IAL was awarded the ATS contract for Liverpool. Its tender was for £932,000 as against the Authority's tender of £1,057,000. IAL employs forty-four staff at Liverpool, compared to the CAA's sixty-five in 1982. As in Bournemouth, the number of ATC staff was the same



under public and private operation, but support staff numbers were greater under the CAA. IAL employs six engineers and a secretary, while the CAA employed fifteen engineers, four teleprinter operators, four other staff, and six telephonists.

Airwork Ltd is a subsidiary of British and Commonwealth Shipping and operates Exeter, Perth, and airports in the Shetlands. Its output in 1982 was 37,855 adjusted movements at Exeter (the adjusted movements calculation reduces overflights by a factor of 1.75 to reflect the lower workload compared to airport movements), and Exeter had an adjusted total staff of 22.25 in ATS. By contrast, Edinburgh, operated by the BAA and the CAA, had an additional two hours per day opening time and 82% more adjusted movements, but required 3.6 times the staff numbers.

While there are obvious difficulties in comparing airports which are open less than twenty-four hours a day, the Monopolies and Mergers Commission found that the privatized air traffic control services at airports achieve significantly more movements of aircraft per person employed. In the case of airports open for twenty-four hours, the Commission estimated significant differences, as summarized in Table 2 [Monopolies and Mergers Commission, 1983].

**Table 2**  
**Adjusted ATS movements per employee**

Non-National Air Traffic Control Service	
Southend	2,140
Liverpool	1,497
Liverpool	1,086
East Midlands	1,071
National Air Traffic Control Service (CAA)	
Birmingham	895
Glasgow	891
Stansted	536
Prestwick	389

The work of the Monopolies and Mergers Commission therefore shows that significant savings are possible in the supply of air traffic control services. Single entity



privatization would retain the present inefficiency. Competitive privatization, on the other hand, would probably enable these savings to be attained, since the pressures of price competition between airlines and airports will cause both to examine their costs in areas such as air traffic control. Such pressures are not likely to be felt in an environment where price competition in aviation is limited and airports are privatized as a single entity.

### National air traffic control

Even in the field of providing air traffic control *en route* between airports, there is much scope for privatization, as international practice shows. IAL provides ATC services in Commonwealth countries in the Caribbean and in large portions of the Persian Gulf. In Saudi Arabia, the government contracts out the ATC service for five years at a time: in 1980 the contract was awarded to Bendix Field Engineering Corporation, the previous contractor being the Lockheed Aircraft Corporation. In the United States, Aeronautical Radio Inc (ARINC) contracts with the FAA to provide ATC communications for all international flights out of New York, Miami, San Juan, San Francisco, and Honolulu. In Switzerland, the ATC is provided by Radio Suisse, a private corporation.

Robert Poole finds that private sector control tower operations in the US have cut the costs of FAA operations by as much as a third or a half [Poole, 1982]. The corporations concerned are Barton ATC, Air Traffic Control Services Inc, Midwest ATC Services, and Pan American World Services Inc (a subsidiary of the airline). Poole proposes the privatization of both the individual *en route* and approach and departure control centres, while a top-level ATC System Corporation, founded by user organizations, would have responsibility for overall system design and co-ordination. Similar proposals have also been made by Gilbert [1975] and the Futures Group [1977].

Air traffic control costs (and thus the charges passed on to passengers) can therefore be reduced by changing the ways in which the services are provided. There is already strong evidence that privatization of the airport portion of ATC in Britain and the US has brought savings: there are precedents from other countries which make the privatization of ATC between airports worth examining.



## 7. SUMMARY AND CONCLUSIONS

1. The present policy is to transfer as many as possible of Britain's airports to the private sector. The benefits sought from this privatization are increases in competition, efficiency, and consumer choice, and reductions in the public sector borrowing requirement and political interference. Privatization also seeks to remove the public sector borrowing requirement constraint on investment programmes at airports.

2. Privatization of the BAA airports as a single entity would not attain the goals of the privatization policy. It would merely replace a public sector organization by a private sector one. But privatization affords the opportunity to change the structure of the airports industry.

3. The optimum policy is therefore to link privatization to changes in the structure of the airports industry. Competitive privatization would steer the market structure and conduct of the industry towards the goals of the privatization policy. Single entity privatization would not.

4. Airport charges account for as much as a quarter of the cost of short-haul flights. Developing competition between airports and air traffic control service suppliers is therefore an essential part of the present aim of promoting price competition between airlines.

5. The proponents of single entity privatization suggest that airport charges are relatively unimportant as a proportion of overall air fares, that economies of scale will seriously limit the competition between separate competing airports, and that such competition is unprecedented between airports as closely linked as those in the South East and the Scottish lowlands. These claims are found, on examination, to be insubstantial: airport charges *are* important in the determination of air fares; many small airports have *better* results than larger ones; and airline deregulation in the United States has *increased* competition between many neighbouring airports.

6. Competitive privatization of airports would result in an increase in competition, more consumer choice, more competition in the provision of services such as air traffic



control, increased managerial efficiency, and better investment decisions. Competition will ensure that these benefits will be passed on to the consumer in lower air fares.

7. Non-BAA airports pose special problems and need care if they are to be privatized successfully. Profitable local airports can be sold, with the proceeds going to the local community. Some small airports that are presently loss-making could become profitable under commercial management, and are therefore also candidates for sale. Other airports which are deemed vital for the support of remote communities or for strategic reasons, are best operated under contract following competitive least-subsidy tendering procedures.

8. Privatization could include the air traffic control services at airports and the national air traffic control network.

9. Heathrow, under present policies, accounts for virtually all of the profits of the BAA. These are used to cross-subsidize Edinburgh, Stansted, and Prestwick, but under competitive privatization new roles or better organizational structures will have to be found for the loss-makers. At the same time, the bureaucratically-determined policy of not investing in a fifth terminal at Heathrow would have to be reviewed. The fifth terminal is supported by British Airways, the biggest single customer at Britain's airports, and since Heathrow is smaller than several US airports, its further development should not be precluded.

10. The revenue from the sale of airports is a one-off gain to the taxpayer, but this gain is less important than the efficient operation of airports in the interests of the economy as a whole. Competitive privatization of airports might reduce the potential sale revenue by eliminating the monopoly 'rents' that exist at present because of the current lack of competition, though in these circumstances the overall economy would gain. On the other hand, sale of the airports as a single entity would involve the purchaser in taking over some heavily loss-making airports such as Stansted and Prestwick, which might also reduce the sale price, and would not have the saving grace of a net gain to the economy. There is no necessary difference to the Treasury in terms of the one-off revenue from separate compared to a single entity sale, therefore, but a large difference to the general public.



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## GLOSSARY

- ATC/ATS: Air Traffic Control/Services
- BAA: British Airports Authority
- CAA: Civil Aviation Authority
- FAA: Federal Aviation Administration
- IAL: International Aeradio
- NATS: National Air Traffic Services