

Why Privatize Airports?

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Abstract

This paper examines the arguments for the privatisation of airports in Australia. The general arguments for privatisation are evaluated and found not to be universally applicable. There is no a priori argument in that all activities operate optimally in the private sector. Rather, the costs and benefits of each particular case need to be examined. This is then done with respect to airports. Firstly, the question of whether airports should be operated as networks or as individual optimizing entities is considered. It is shown that with respect to both pricing and investment decisions, efficiency requires retention of the network. Due to the nature of the product, the market will not deliver an efficient, competitive outcome. In this light the specifics of the Australian privatization proposals are examined, and found wanting. The case for privatization of airports is extremely weak.

“I have come to bury Caesar, not to praise him”

Introduction

The debate about the pros and cons of privatization have been raging for some while, and, as is usually in debates where politics, economics and special interests all clash much heat has resulted, and little light. Rather than rehearse the whole debate, this paper presents some of the key issues relevant to the question of privatization of airports in Australia. In doing so, it first considers the general arguments for privatization, before concentrating on the specific arguments for airports. In discussing the privatization of

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airports within the context of the current Australian debate the arguments for network versus individual ownership need to be evaluated, as this is an important issue within the policy suggestions, as well as the economic and political arguments on privatization.

Privatization: The General Case

In recent years, microeconomic reform has become the buzz word for 'fixing' the problems of the Australian economy. Although there is no agreement as to exactly what this may entail, the one aspect of microeconomic reform which appears to have gained wide approval is that of privatization of much of the public sector. There seems to be a mystical belief that by moving operations into the private sectors, the efficiency of markets will infect these bodies. Implicit in this is the belief that it is primarily the ownership of an asset which influences its efficiency. While it may be true that in some case efficiency can be improved by such transfers, it is by no means apparent that this is true in general.

In evaluating this position, it is important to realize that economic policy follows fashion. After the second world war, fashion dictated that any market failure was met by nationalization, and economists oversold the efficacy of government intervention. In the 1970s, there was an overreaction in discarding of these ideals, with economists now overselling the efficacy of markets. The state came to be seen as a liability, with the general rule becoming the less state intervention, and the smaller the role of the public sector, the better. This has come to be the creed for much policy throughout the OECD, with Australia being no exception. In other words, privatization seems to be pursued for its own sake, rather than in order to achieve specific aims.

At this stage it is important to note that there is no evidence, theoretical or empirical, to back the view that privatization will guarantee enhanced economic performance.¹ Quite the opposite. When the economic performance of all countries is examined we see that there is no definitive relation between the size of a country's public sector and its performance.² The Asian tigers provide a perfect example, with some relying on heavy government intervention to promote growth, while others have relied equally on markets.

Similar arguments are relevant to the question of privatization. Certainly there are no conclusive theoretical or empirical arguments which consistently show privatization as improving the allocation of resources.

To understand why this may be the case, it is important to examine the reasons why certain activities have come into the public sector. There have

been two main types of enterprises which economists have argued should be considered for public ownership, those involving monopolies and those where community/social services may lead to benefits accruing to the community if alternatives to private sector profit maximizing principles are adhered to.

In the case of monopolies, which is of particular relevance in the discussion of airports, the argument for privatization rests on extremely shaky foundations, since the benefits are supposed to flow from increased competitiveness. Since, due to the nature of the beast, competition can not be encouraged, problems arise. Economic theory maintains that there are conflicts between monopolies and economic efficiency. As a result, privatization of monopolies is usually associated with a regulatory body. This means that resources are being wasted monitoring and regulating an activity that previously did not need this.³ The position seems to require a contradictory assumption, namely that although governments are not good at managing these enterprises they are good at regulating them.

In any case, this loses sight of the main point, which is that it is not ownership, per se, that is important, but the state of competitiveness in the market. Competitiveness can be encouraged within public sector enterprise, as has been shown in the fact (discussed below) that many have experienced increased efficiency and profits just prior to privatisation!.

The supposed benefits of privatization are dubious. If markets are efficient, then the government should not make any profit on the sale. All it is doing is selling future income streams at their current price, to improve the current budgetary position. This is assuming that the price of the asset has been correctly determined, so that it is not undervalued (as was the case with much of the privatization in both the UK and in New Zealand).⁴ In fact there is strong evidence of bias towards selling public assets for less than their market value due firstly to the 'political imperative associated with privatisation, and because of moral hazard problems associated with the sale of a regulated monopoly'.⁵ This later refers to the perception that the higher profits associated with the private sector monopoly may lead the government to tighten regulations. In addition, the transaction costs associated with the transfer of the asset from the public to the private sector, may be substantial,⁶ reducing the realized value of the sale. In other words, there are costs associated with privatization, these are the transaction costs involved in the whole process of the sale, coupled with the costs of regulation. Additional problems associated with the impact of privatization include the negative impact on financial markets and the resultant fall in private sector savings available to finance private sector investment.⁷ These are two effects which the Australian economy can ill afford.

In any case, the government is often unclear about what benefits it expects to flow from privatization. In many cases, it is the one off revenue gain, rather than any long run improvements to efficiency. This has been compared to selling the family jewels, which leads to the question of why privatize unless there is some gain to the economy as a whole from the sale?

When pushed, supporters of privatization will answer in terms of an improvement in efficiency from privatization. However, this is far from clear. While it is true that many public sector enterprises have not been run at maximum efficiency, this is a problem with management practices rather than with ownership. Experience has shown that, prior to privatization, in order to make sale attractive, these same enterprises have been made profitable while still in the public sector.⁸ In other words, it is not the question of who own the enterprise which determines efficiency, but rather how they are run.

The public sector has also been important in the provision of infrastructure and of certain services which benefit the whole community. In these cases economics has shown that the private sector is bad at allocating these efficiently.

Problems with private sector allocation have been reinforced by recent developments associated with deregulation of the financial sector, which have meant that private sector enterprises in general, and the financial sector in particular, have become much more myopic. As a result, there is a lack of desire to undertake and fund long term projects within the private sector. However, it is precisely these projects which have spillover effects on efficiency and growth and which must form the basis of any macroeconomic reform.

What we are arguing is that there are no general rules. Just as there are some activities which produce a socially optimal outcome in the private sector, so there will be others which will do so within the public sector. Rather than espouse a naive belief in general rules, it is much more appropriate to consider the arguments for privatization or nationalization in each individual case, evaluating the likely costs and benefits. The important question, then, is whether privatization of the airports represents a net benefit to society.

Why Privatize Airports?

There are two related areas which need to be discussed when considering the question of privatization of airports.⁹ The first is the question of whether they should be privatized at all. The second, and related question, is the form such privatization should take. Clearly these questions are related, as the

form of privatization will vitally influence any potential gains. In the next section, the nature of airport interrelations will be considered, and it will be argued that it is socially desirable to keep them together as a network. This result will be used to throw some light on the desirability of privatization.

Airports As Networks

Elsewhere it has been argued that pricing and investment decisions of aeronautical services by airports can only be made efficiently when the individual airports do not act as separate optimizing agents; but rather act as elements within a network.¹⁰

Relationships between airports are extremely complex, they are both 'complements of and substitutes for each other' [Woods, 1971: 298]. As (almost) all flights involve flying from one airport to another, individual airports must be considered to act as compliments to each other. On the other hand, to the extent that the purpose of a flight can be achieved via a choice of airports, then they the potential competitors are substitutes. Clearly though, the relationship between airports is more often that of compliments. The related question of whether the correct unit of analysis for the purposes of investment decisions is the individual airport or the network depends, to a large part, on the exact nature of the product. In other words, is what is being analyzed air transport as a whole, or is it flights to a particular airport? To answer this question, it is helpful to differentiate domestic and international flights. In doing so we can introduce the distinction between open and closed aviation systems. An open system is one where either flights originating from outside the system arrive into the system or where flights originating from within the system have a destination outside it. Within a closed system all flights both depart from and arrive to destinations within that system. With respect to the Australian airline system, international flights represent an open system while domestic flights represent a closed one.

With respect to international flights, to a large extent the product being sold is travel to or from Australia. As it is an open system, the international airports act as gateways for entry or exit to the country. In Australia's case, the fear of competition from outside the system, from other international airports, is not a concern, as it would be, for example, for a European country. Although this has important implications for both pricing and investment decisions, I will concentrate on the latter. With respect to investment, taking this into consideration, and given the earlier argument that the demand for international air travel is exogenous, allowing investment decisions to be taken on the basis of individual airports will lead to

over investment. If each airport acts as an isolated individual in making their investment decisions, then they will tend to expand facilities in order to attract demand, as a form of strategic behavior. However, as total demand is fixed, the airports are involved in a zero sum game, so that any airports gain will be at the expense of another airport. Consider the following example:

If we assume that investment decisions are now taken by individual airports and that Melbourne International Airport wishes to expand its facilities in order to reduce costs and capture a larger share of international travel. If other international airports believe that such an expansion will give Melbourne a relative advantage, then they are likely to follow suite. Each airport in attempting to expand or maintain their share of international flights will increase their investment. However, notwithstanding this total increase in investment there will be no resultant increase in total flights. So, the increased investment will not generate any increased revenue for the system as a whole.

This example allows consideration of the essence of the problem. Individual airports are concerned both with the total number of international flights but also, importantly, with their share of that total. It is in their interest to try to maximize both of these, although they can really only influence share. As it is a zero sum game, attempts by individual airports to increase their share will lead to over investment. Such investment will not increase overall usage, but, rather will lead to switch effects between airports. Total international traffic will, however, remain unchanged. From the social viewpoint, the resultant overinvestment is inefficient.

In addition, there are clear welfare advantages from investment decisions for overseas services being taken on the basis of a network rather than individual airports. With networks, peak loads can be spread, therefore reducing the total capacity (and, therefore, investment) requirements.¹¹ As well, there are clear informational advantages from the size and resources of a network unavailable to individual airports.

We can contrast this discussion of international flights, with domestic flights. As noted above, domestic flights form a closed system. Any such flight will be from one airport within the system to another one, also within it. As a result, neither the demand for nor the supply of flights or airport facilities within one airport can be independent of the whole system. The implications of this is that it will not be rational for investment decisions with respect to airport capacity to be made at the level of the individual airports. Without the pooling of information implicit in network decisions, individual airports may reach incompatible investment decisions on the basis of less perfect information. If decisions were made at the level of

individual airports, then, for example, one airport could decide to expand, even though no other airport within the system expected any expansion in the demand for their services. Clearly this indicates incompatible expectations as any increase in the demand for the services of any one airport must be matched by an equal increase in demand for services over the rest of the system. In other words, because the demand for the services of any one domestic airport is linked to the demand for services of other airports within the system, it is not rational for investment decisions to be made at the level of individual airports, thereby ignoring the interdependent nature of those demands. Rationality would require investment decisions to be made on the basis of network considerations.

To measure values of individual airport improvements within the framework of a general aviation airport *system*, benefits must be quantified in such a manner that *incremental* improvements at individual airports can be evaluated with respect to the contribution they make to the entire system. [Wood, 1971: 295, emphasis in original]

In addition, there is the possibility, as with the case of international facilities, that individual airports will expand in order to increase their attractiveness in terms of both cost and noncost factors. As such expansions are unlikely to change the total volume of air transport, the only likely effect is to induce switching behavior:

On the one hand, it is quite often alleged that variations in the landing fee will have little or no effect on the demand for runway capacity, since the landing fee is but a small fraction – perhaps about 2% or at most 7% – of the total cost of the trip. On the other hand, one hears, often in the same speech and sometimes in the same sentence, that, if landing fees are increased too much at Heathrow, London will lose much valuable traffic to Paris Thus, while it is quite sensible to conclude that if *all* the competing airports in a region raised landing fees there would be little effect on air transport movements, it is misleading to suppose that there would be no effect on the demand for a particular airport's operation if it, and it alone, put up its fees. [Walters, 1978: 133, emphasis in original]

This indicates that the only likely effect of changes in airport charges come from switching behavior. In other words, an individual airport *may* generate increased air traffic by a reduction in fees but only at the expense of air traffic to other airports.¹² In this case, other airports will also expand their facilities as defensive measures. The net result of this will be a bias within the system for the generation of inefficient excess capacity as a result of the competition between airports.

So far we have considered both domestic and international travel, but not the link between them. The argument for network considerations to dominate investment decisions is reinforced by the interrelation of these types of travel. To a large extent domestic and international travel are interrelated. The international airports serve as gateways to the domestic system. Residents in order to partake of international travel must first get to an international airport. Non-residents rarely stay the full length of their visit in their initial city of arrival

In other words, there are important interdependencies in all types of air travel. These may be the interdependencies where one type of flight acts as a service link to others, or they may be more direct, where routes involve many airports:

Th[e] viewpoint of airports and air transport as an ever-widening circle of inter-acting consequences is compounded by the need for compatibility of airports and airplane schedules. The planning unit in airline economics is the route. Airports on the route must satisfy minimum requirements in terms of runway length, navigation aids, etc. Hence there is a powerful motive to 'keep up with the Joneses' so that a country or city is retained on the route. If a route is fixed, then upgrading one airport on the route will usually mean that all the others should be considered for upgrading also. **Piecemeal investment is likely to be inefficient;** and this applies *a fortiori* to navigation systems. [Walters, 1978: 127, emphasis added]

The above analysis suggests that the interrelations and linkages between airports within a country like Australia are so strong that airport investment decisions are unlikely to be efficient if they are taken in isolation of the rest of the network. The strong links indicate that the capacity decision of any individual airport will have important implications for the other airports in the network. Economic efficiency would require that investment decisions be made on a network basis.

To Privatize Or Not To Privatize, That Is The Question

I should note at the outset that the evidence suggests that airports in Australia in general, and the FAC in particular, are extremely efficient. One report concludes that:

The FAC is a highly efficient enterprise, both compared with other airports and airport systems, and relative to its past performance. There is little scope for gains in operational efficiency. (Paddon and Carman, 1992: 3).¹³

The economic main argument in favour of privatization of economic assets is that an increase in efficiency will result. An important requirement for this is that there be an increase in the level of competition, particularly when the government asset was run as a monopoly. Monopolies result from barriers to entry in the market. Where the barriers to entry are not caused by government license or regulation, serious doubts exist as to the possibility of competitive gains. In such cases, privatization will simply be associated with the monopoly moving from the public sector to the private sector. In the case of airports, the large capital expense of setting up and maintaining them means that they are virtually natural monopolies. The lumpy and indivisible nature of the investment decision, alluded to above, implies high fixed costs with relatively low marginal costs. The net result of these are decreasing costs per unit, so that the output can most efficiently be delivered (that is, at least cost) by a single producer. This is reinforced by the fact that airports do not compete, rather it is destinations which do. This has been reinforced by the Department of Prime Minister and Cabinet who, in a leaked Cabinet submission, admitted that there is 'little scope for effective competition between airports, even those as close as Brisbane and Coolangatta'.¹⁴

Due to the nature of demand for aeronautical services, which is extremely price inelastic, economic theory tells us that a profit maximizing private sector airport will radically increase price and, therefore profits. The higher price will enable excess investment, which will result in a tendency for excess capacity. The net result will be a substantial reduction in welfare and efficiency. In other words, due to the monopolistic nature of airports, public sector ownership has served as a way of preventing them from reaping the excess profits that the noncompetitive nature of the market would otherwise allow.

Privatization [of airports] is unlikely to achieve much; it would enhance the incentive to abuse monopoly power and while it would also enhance the incentive to produce efficiently, there is no evidence that productive efficiency is much of a problem. (Dwyer and Forsyth, 1992: 235)

To overcome the increased inefficiencies associated with this would require the formation of a regulatory body. The problems and ironies associated with this have been discussed above.

In addition to these considerations is the problem associated with externalities. Airports create both positive and negative externalities. Although at present most concern is on the negative externalities, especially given the problems with noise pollution associated with Sydney's third runway, there are also positive externalities related to the benefits of transport and com-

munications systems at the local, regional and nation levels.¹⁵ Where such externalities exist, private sector decisions, which operate on the basis of private benefits and costs cannot provide socially effective outcomes, as they do not deal with the social content of required for efficient decision making.

As a final consideration, it is important to note that the sale of airports will reduce the net worth of government assets. As was noted above, assets tend to be undervalued during the privatization process due both to the political imperative and to moral hazard.¹⁶ In the case of airports this undervaluation is likely to be more significant for two additional reasons. Firstly the valuation of the large capital assets associated with airports is extremely difficult to calculate. Given the traditional problems associated with valuing such assets, reinforced by the fact that their value outside the aviation industry is likely to be low, it is likely that it will be undervalued. Secondly, the value of the airports as a network is much greater than the sum of the value of the airports sold individually. Given the Federal government's commitment to sell them as separate units, this will result in their sale value being lower than the market value of the network.

The Political Argument

One of the important arguments raised, both in the economic literature and the media for privatization is that it will reduce the incidence of 'pork barreling'. The argument is best summarized as follows:

Airports seem to breed effective lobby groups, which succeed in blocking good proposals and getting poor proposals accepted. Building or expansion of airports involves gains and losses to geographically concentrated groups (who could be voters in marginal electorates).... In some areas, airports for which economic justification has been dubious have been constructed. (Dwyer and Forsyth, 1992: 226)

In other words, the argument seems to be that political considerations may sometimes overcome economic ones. There are two responses to this charge. The first is that this sort of decision making is part of the democratic process, and that the alternative is that the decision is made by a private corporation, and there is no guarantee that they will choose more appropriately. The second, and related response, point to the fact that privatization will not remove the role of noneconomic factors, merely change the nature of them. In the USA, for example, where airports are not run by the Federal government, municipal governments compete, in terms of tax subsidies, cheap energy, and so on, to attempt to attract airports. The impact of a major

airport to a particular region may be very great, and, as a result, local communities, local government, business and other regional interests will intervene in order to attract the investment. The important question is the degree to which the effects and costs of this differs from the situation where it is a government agency which is making the decisions.

Conclusions

When examining the arguments for privatization of airports, the potential benefits are unclear. There is unlikely to be any gain in efficiency resulting from increased competition. If the aim is to improve the Federal budgetary position, then privatization will have the exact opposite effect. As the sale value is likely to be significantly lower than the market value, the impact will be to impoverish the government, by adding to current income an amount less than the current value of the asset.

This paper asks the question: why privatize airports? The answer is that there is no good reason for doing so.

Notes

1. cf. Rowthorn and Chang (1992) and Williams (1992).
2. Saunders (1993).
3. Williams (1992). For a discussion of the English example of privatisation and ineffective regulation of water, see Johnson (1992).
4. See Rowthorn (1989) and Williams (1992).
5. See Quigin (1994).
6. It has been estimated that the total costs associated with the privatisation of British Airways and the British Airports Authority was £158 million [Paddon and Carman (1994) p. 12].
7. See Williams (1992), Quiggin (1994) and Paddon & Carman (1994).
8. See Rowthorn (1989) and Rowthorn & Chang (1992).
9. There is the further question of the impact of the manner in which airports are to be privatized on the effect of privatization. Time prevents me from dealing with this, but interested readers are referred to Paddon and Carman (1994).
10. See, for example, Favotto, Kearney, Kriesler & Stegman (1994), Kriesler (1994), Paddon & Carman (1994) and Stegman (1994).
11. Similar comments on the benefits of 'pooling' with respect to energy generation is made in Industry Commission (1991) Appendix 10.
12. In the Australian case, with large distances between airports, it is unlikely that small differences in prices will lead to any switching effects.
13. See also Dwyer and Forsyth (1992).
14. Cited in Paddon and Carman (1992) p. 22.
15. See Stegman (1994).
16. See Quiggin (1994).

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