

# Airport Capacity for Sydney

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**Expanding Airport Capacity in Large Urban  
Areas**

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# The Issue...

**As with other cities, Sydney has a problem of ensuring adequate airport capacity**

**How well has this issue been handled in the past?**

**How well might it be handled in the future?**

# Which Issues are Common With Other Cities?

- **Clash between economic and environmental aspects**
- **New sites for airports are distant**
- **In some cases, Institutions (eg, Like London's)**
- **Slots used to ration excess demand**
- **Privatised, like some other airports (eg London's)**
- **Hub issues, connectivity issues**
- **Externalities such as noise and emissions**
- **Will be affected by a possible HST**
- **How to evaluate inbound tourism?**

# In What Ways is Sydney Different?

- **Light handed regulation- more scope for pricing options**
- **Good evaluation so far?**
- **Evaluation using two techniques - CBA and Computable General Equilibrium (CGE) models**
- **Special issues with regional flights**
- **High foreign ownership of airport and airlines poses the question of whose costs and benefits?**

# Agenda

**History and Background**

**Location, Hubbing, Connectivity and Competition**

**Rationing Excess Demand**

**Evaluation of the Options**

**Externalities**

**Conclusions: Is Sydney a Disaster?**

# Background

# Facts 1

- **Kingsford Smith (KSA) the only RPT airport for Sydney**
- **Canberra 290 km away ( London-Manchester), Newcastle**
- **8 km from CBD**
- **Coastal site- little room for expansion**
- **Access: car and taxi; expensive railway; bus discontinued (too competitive)**
- **High use of air in Australia**
- **Sydney to Melbourne 800 km**
- **11hrs by car, slow train**
- **Ongoing study for HST**

# Facts 2

- **Bankstown airport**
- **GA only; could handle small aircraft- eg Dash 8s**
- **Close to CBD but not convenient**
- **Richmond Airport**
- **On NW fringe of Sydney**
- **Air Force base, long runway**
- **Regional flights**
- **“Ring Fenced”**
- **Affects slots, prices**

# Institutions 1

- **Airport arrangements quite similar to UK**
- **BAA/FAC; privatisation; price cap regulation**
- **Sydney privatised in 2002 (Macquarie Bank)**
- **Difference: Light Handed Regulation from 2002**
- **Monitoring with periodic reviews**
- **Airports have pricing freedom**
- **Sydney the most expensive and productive in Australia**
- **Price capped for regional services**

# Institutions 2

- **ATC- Airservices Australia, corporatised**
- **And a Slot Coordinator**
- **Rail link provider (private)**
- **SACL the owner of KSA**
- **Has rights to build second Sydney Airport (SSA)**
- **Federal / State interface**
- **Federal govt controls airports, State govt the surface access (Roads, rail, Taxis)**
- **Australian Competition and Consumer Commission (ACCC) – monitoring etc**

# A Second Airport?

- **Major study (MANS) in late 1970s/1980s**
- **Similar to Roskill**
- **Looked at several sites on the urban fringe**
- **Preference for Badgery's Creek- 45km from CBD**
- **A Third Runway for KSA (Parallel)**
- **Two options:**
- **Early start to SSA or Third Runway**
- **Third Runway opened in 1995**
- **Pressure of demand led to further study**
- **Joint Study 2012- make the best of capacity increases, then then build SSA –but where? Wilton 65km? Canberra? Perth?**



# Growth of Demand

- **Sydney close to capacity sometimes– some hours full**
- **Capacity 80 aircraft per hour (policy not technical)**
- **But problems of storms and wind**
- **Capacity could be increased to 85-87**
- **Noise sharing affected**
- **But regional flights have a fixed minimum allocation**
- **Bankstown and Richmond could be used a little**
- **A HST would take some pressure off demand**

# Location, Hubs, Connectivity and Competition

# Sydney as a Hub

- **Sydney the end of the line- not a big hub role**
- **Connect international with interstate – eg to Adelaide**
- **Connect international and domestic with regional- eg, to Wagga Wagga**
- **Hub questions:**
- **Make use of smaller airports or build SSA soon?**
- **Invest to maximise KSA capacity or build SSA soon?**
- **Joint Study makes judgement to max KSA use**
- **These questions are about how valuable is the hub role of KSA**



# Handling Hubs and Connectivity

- **Different though related**
- **Is there an externality or not?**
- **If no externality, efficient pricing should be enough- the efficient level of hubs /connectivity will come about**
- **But if there are externalities, policy will need to foster them**
- **An externality with connectivity is plausible**
- **And it will be important to evaluate how big these externalities are (not easy, but there are some suggestions, such an analogy with telecoms)**
- **Value of externality will affect where to build and when to build**



# Competition

- **KSA does not face much competition at present**
- **Some hub competition from Melbourne, Brisbane**
- **Bankstown and Richmond could provide a little competition if allowed**
- **In the LR the SSA could provide competition**
- **But the owners of KSA (Macquarie Bank) have the right to build the SSA**
- **Could they be bought out (like owners of hen licences in NSW)?**
- **Possible clash- what if the owners do not want to invest in the SSA but the govt wants them to? (see below on this)**



# Rationing Demand

# Rationing Excess Demand

- **A little excess demand at the moment**
- **(Do we need to have a new airport as soon as delays appear?)**
- **Capacity can grow at KSA and Bankstown and Richmond can enter the market**
- **Demand can be rationed by: (a) delays (US);(b) slots; (c) pricing**
- **KSA has the beginnings of a slot system**
- **Currently, administrative allocation (not efficient)**
- **Auctions good, but unlikely**
- **But a market could be established- trading could be quite efficient**
- **The ACCC has become interested in slot systems (ships etc)**

# Options for Rationing

- **Slot trading can be efficient- will there be trading?**
- **Will non regional airlines be able to buy regional slots?**
- **With light handed regulation, Sydney will have the ability to ration by prices**
- **Unlike most airports**
- **But price *structure* is possibly very important**
- **Excess demand would be reduced if weight based charges were replaced by uniform charges**
- **Sydney has experience in the past- minimum charge until the third runway**
- **To what extent will pricing be allowed?**

# Timing

- **Can use slots or prices to delay the need for additional capacity, thereby saving money**
- **But will the private airlines and airport build capacity when it is efficient to do so?**
- **If both airlines and airport share the slot rents/profits, both will have an incentive to delay investments**
- **How will airlines respond if they realise that a shortage of capacity means they enjoy high slot rents?**
- **“The extra capacity is not needed yet”**
- **Heathrow?**



# Will the Investment come about?

- **Cases of strong regulation (P2)**
- **Then the airlines gain slot rents, and the airport does not**
- **Which are NOT passed on to their passengers**
- **Investment comes about**
  
- **Or deregulation/light handed**
- **Airport gains profits**
- **Airlines gain profits**
- **So both Airlines and airports prefer K1 to K2**
- **But passengers, and overall welfare, are worse off compared to K2**

# Evaluation of the Options

# The Parallel Universe of Two Evaluations

- **By and large, the Joint Study is a good one**
- **The Joint Study provides TWO evaluations of the needed for a SSA**
- **A CBA evaluation of the benefits of doing the SSA**
- **A CGE (Computable General Equilibrium) study of the costs of NOT building the SSA**
- **And they are not integrated**
- **Has happened before- Eddington Report on Melbourne transport**
- **Are they the same or different or what?**
- **Seems like a scene from “Red Dwarf”**

# CBA vs CGE

- **There are differences but they are looking at the same question**
- **To get a better overall evaluation, we can take advantages of the two**
- **There are several limitations of CBA**
- **There are several limitations of CGE**
- **They are complementary**

# CBA and CGE

- **CGE constrained by the model (and thus the detail), but CBA can include all benefits and costs**
- **CGE has difficulties in location specific issues like noise**
- **CGE can handle externalities like emissions better than CBA**
- **CBA has difficulties in handling macro effects and general equilibrium effects**
- **CBA does not do distributional issues well**

# Advantages in Using Both in Evaluating Airports

- **Checking consistency: CBA assumes full employment, but the CGE study argues that additional jobs have a value**
- **CBA has trouble measuring the benefits of inbound tourism (and costs of outbound)- a big issue for evaluating international airports**
- **Easy to do using CGE (Australian, UK studies)**
- **Measuring GG emissions- CBA measures in the Joint Study is too partial**
- **Easy to fix using a CGE model which has a “Green” component**

# Improving Evaluation

- **Joint Study is novel in that it uses both CBA and CGE models**
- **But does not take the next step and integrating them**
- **Doing this would improve evaluation of airports**
- **Difficult to do perfectly, but easy to improve on current evaluations**

# Externalities

# Externalities

- **Sydney airport has the usual externalities**
- **Noise: several options to lessen noise, and some of these have implications for operations and capacity**
- **Emissions: Australia has an ETS which covers domestic but not international flights**

# Conclusions

# Conclusions- Sydney Airport is *not* a Disaster

- **Australia has its share of infrastructure disasters**
- **Sydney Airport is not one of them**
- **Investment timely, processes democratic, assessment scientific, capacity rationed fairly efficiently**
- **What will happen in the future?**
- **The processes for good decisionmaking are understood- sound evaluation, efficient rationing of capacity and understanding about vested interests**
- **But there is no guarantee that things will go well: wrong locations, no competition, poor capacity rationing, excessive investment and undemocratic processes are all possible**

# Thank You!

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